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IDENTIFYING AND INTERVENING WITH DRUG-INVOLVED YOUTH

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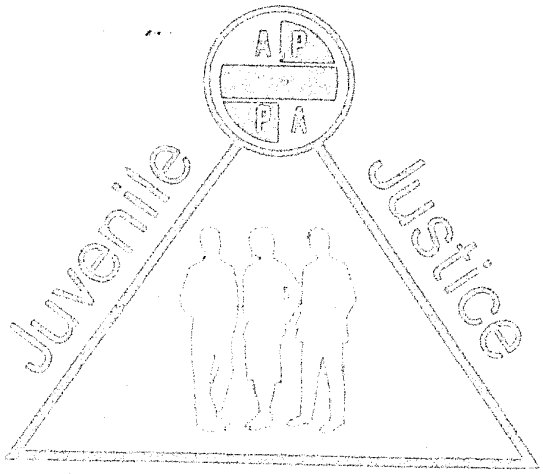

by the
American Probation and Parole Association

sponsored by the
U.S. Department of Justice
Office of Juvenile Justice and
Delinquency Prevention

in cooperation with
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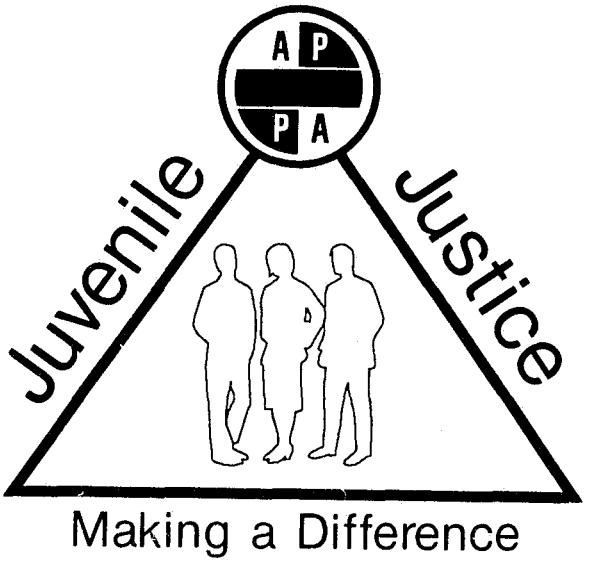

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AUTHORS

Ann H. Crowe

Pamela J. Schaefer

PROJECT STAFF

Mickey M. Neel, NCADC, NCAC II
Manager, Special Projects

Ann H. Crowe, MSSW, ACSW
Principal Investigator
Coordinator of Juvenile Justice Programs

Pamela Schaefer, MA
Research and Training Associate Associate

Michael F. Goodnow
Research and Training Associate

Jeff Konecke, BS
Training and Technical Assistance Consultant

Rhonda Reeves, MA
Writer/Editor

Juliana Siu
Secretary

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The following individuals provided consultation in the development and writing of this Manual. Their contributions are greatly appreciated.

Advisory Committee Members

Carroll T. Boswell
Program Manager, HITS
Washington, DC

John A. Cocoros
Executive Director
Harris County Juvenile Probation
Houston, Texas

Lloyd W. Mixdorf
Juvenile Projects Director
American Correctional Association
Laurel, Maryland

John M. Signorino
Intake Officer for Juvenile Court
Juvenile Probation Department
Erie, Pennsylvania

Jan Rivers
Information Resources Management
Probation, Parole, and Pardon Services
Columbia, South Carolina

Honorable Roy B. Willett
Chief Judge
Roanoke, Virginia

Project Monitor

Peter Freivalds
NIJJDP/OJJDP

Project Consultants

Carl Leukefeld, Professor
Director, Center on
Drug and Alcohol Abuse
University of Kentucky

Joan Merritt
Supervising Probation Officer
Orange County, California

Linda D. Penny, Attorney at Law
Legal Issues Training Consultant
St. Cloud, Florida

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FOREWORD

Juvenile justice professionals are confronting significant challenges presented by drug- and alcohol-involved youth. Although levels of substance abuse in the general population appear to be declining, the problem remains a serious one among delinquent youth. Agencies need to develop means for identifying juveniles with substance abuse problems and providing effective interventions to fulfill agency missions related to community protection and rehabilitation of youth.

This Manual was developed to accompany the training program, *Identifying and Intervening with Drug-Involved Youth*. The Manual will review and augment the information presented in the training program. The figure on the following page represents the conceptual model that was evolved to guide the development of this curriculum.

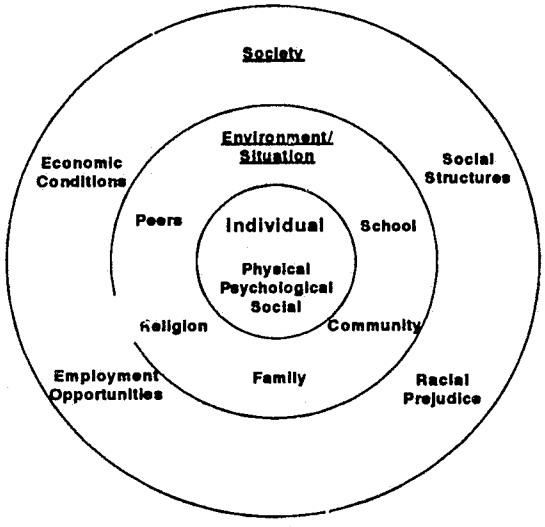
The individual youth is central to this conceptual framework. The curriculum examines the young person and his or her development, needs, and problems. It also looks at the environmental and social context within which each youth lives. Social and environmental factors impinge upon individual development, influencing both substance use and delinquency.

Module I provides a review of adolescent development (Chapter 1), and examines issues that are critical for youth who enter the juvenile justice system. Chapter 2 discusses adolescent drug and delinquent behavior. The progression of drug-involvement and risk factors for initiating drug use and delinquency are presented. Chapter 3 describes the effects of seven categories of mood-altering substances on adolescents. For many youth who continue drug use and become involved in delinquent activities, encounters with the juvenile justice system are inevitable. Chapter 4 describes the evolution of this system and how the problem of drug-involved youth has affected the system. The juvenile justice system is comprised of many components (e.g., law enforcement, detention, courts, community corrections, institutions, and aftercare), and it interfaces with other systems that affect the lives of adolescents, including their families, schools, health care, and social welfare.

Module II provides an overview for program development to address the problem of drug-involved juvenile offenders. Chapter 5 reviews the important aspect of developing a clear program purpose that correlates with the agency's mission and the way in which responses are made to drug-involved youth. Chapter 6 discusses program development and the decision-making processes involved in creating policies. Without adequate information about the problems and means available to address them, program development efforts can be frustrating and fruitless. Chapter 7 examines the need for and procedures for conducting an assessment of needs and resources. Chapter 8 explores legal issues associated with a drug-use identification program. Planners should be aware of these issues, particularly if chemical testing, a more invasive form of screening, is used. Chapter 9 presents information about the economic issues to be considered in developing a drug-use identification program. Staff involvement in the program is another major area covered in this chapter. Finally, Chapter 10 discusses the importance of program evaluation. This must be a central part of program planning and development from the beginning, and throughout the implementation of the program. Effective evaluation efforts can contribute substantially to a cost-efficient, successful program.

Module III provides technical information for three types of drug-use identification: Assessment Instruments (Chapter 11); Drug Recognition Techniques (Chapter 12); and Chemical Testing (Chapter 13). Each of these chapters provides resource

Conceptual Model for Drug-Use Identification in the Juvenile Justice System



Drug Involvement
Delinquent Behavior

Other Systems

Education
Health Care
Social Welfare
Religion
Family

Juvenile Justice System
MISSION

Community Protection
Accountability
Competency Development

- * Law Enforcement
- * Diversion
- * Court
- * Probation/Outpatient Treatment
- * Treatment/Correctional Facilities
- * Aftercare

Drug-Use Identification Program

Policies & Procedures

- Purpose
- Assessment of Needs and Resources
- Conditions
  - Legal
  - Cost/ Benefit
  - Staff
- Evaluation & Dissemination

Implementation

- Case Management
- Protection
- Community & Professional Awareness

- Assessment
- Drug Recognition Techniques
- Chemical Testing
- Interventions
- Staff Responsibilities & Training

information for decision making when considering these methods of identifying drug-involved youth. It should be noted that for most of these methods (especially Drug Recognition Techniques) additional training will be needed for staff who will be responsible for evaluating youth for drug-involvement.

When drug-involved youth are identified, a response must follow. Chapter 14 provides an overview of possible interventions, presented within a case supervision model. Various supervision and treatment strategies are briefly examined. Chapter 15 provides important information about staff responsibilities for each of the methods of drug-use identification discussed. Training of staff will be an essential component of the program. Some guidelines for developing an effective training program also are included in this final chapter.

Effective identification and intervention programs can assist juvenile justice agencies in managing drug-involved youth more effectively. With early identification and intervention, treatment outcomes are generally more positive. This endeavor can greatly benefit the youth, the agency, the juvenile justice system, and society as well.

MODULE I

ADOLESCENTS, DRUGS, AND THE JUVENILE JUSTICE SYSTEM

ADOLESCENTS, DRUGS, AND THE JUVENILE JUSTICE SYSTEM

Overview

Module I focuses on the needs of youth who are involved in substance abuse and delinquency. Adolescent development is reviewed in Chapter 1. Some aspects of development that are typical for most youth also constitute risk factors of drug use and delinquency. These include the process of individuation and identity formation that often precipitate risk-taking behavior and conformity to peers' expectations.

Progression from initiation to more serious levels of substance abuse are discussed in Chapter 2. Personal, environmental and social risk factors that are related to drug use and delinquency are reviewed. In Chapter 3, information is provided about the effects of seven categories of drugs. Specific problems associated with adolescent drug use are discussed.

Youth who come to the attention of the juvenile justice system because of their drug use and/or delinquent behaviors are the central focus of this manual. Chapter 4 describes the evolution of the juvenile justice system and presents information on how the system has been affected by drug-involved youth.

CHAPTER 1

ADOLESCENTS AND THEIR ENVIRONMENTS

ADOLESCENTS AND THEIR ENVIRONMENTS[1]

INTRODUCTION

Today's young people, and the adults who work with them, face many challenges. Added to the complexity of physical and emotional development are the pressures of today's environment on youth. In attempting to understand those youth who experience problems during adolescence, awareness and appreciation of typical adolescent development are helpful.

This chapter first explores adolescence as a period of transition in our culture. It examines some of the inconsistencies confronting youth. The physical and psychosocial development of adolescents is reviewed and some of the social and cultural factors that impinge upon that development are presented. Finally, some of the basic factors needed for healthy adolescent development are summarized.

After reading this chapter participants will be able to:

- summarize some of the major trends in the development of adolescence during the past century;
- list typical physical changes experienced by adolescents;
- discuss five areas of psychosocial development and the impact they have on each other;
- describe six environmental factors that impinge upon adolescent development;
- depict three cultural variables that have an impact on youth development;
- list five problem areas affecting many youth today; and
- describe four essential elements for healthy adolescent development.

ADOLESCENCE IN THE UNITED STATES

The period of transition from childhood to adulthood has been the focal point of interest and concern for many observers since ancient times. However, for this text, the characteristics of adolescence in this country for approximately the past century will be reviewed to illustrate our changing definition of adolescence. Many factors beyond the youth themselves contribute to the way in which adolescence is defined and the options available to youth in our society. These include cultural, economic, political, religious and other considerations.

In the mid-nineteenth century the United States was an agrarian society, and many people lived in rural areas and small towns. The sources of livelihood were often family-based farms or small businesses. Children and youth were a vital part of the economic survival of families. As soon as possible they began working, within or outside the family, to produce commodities or income the family needed. Many young people were apprenticed, or otherwise spent time away from their families during their developmental years. Few children who attended school at all continued formal education beyond the first few years. Many enrolled

[1] Contributions to this chapter were made by Carroll T. Boswell of the Superior Court of the District of Columbia.

in school only when there were no employment opportunities available (Conger & Petersen, 1984).

With industrialization came societal changes that influenced the course of adolescence. One of the most dramatic changes accompanying the industrial revolution was the growth of cities as families migrated toward factories and the jobs they provided. It was not uncommon for children to begin working in factories, mines and other industries at very early ages. Children and youth were often preferred for unskilled jobs, as they did not have to be paid as much as adults (Conger & Petersen, 1984).

Gradually, several changes followed that altered the course of adolescent development. Child labor laws, compulsory education, and special legal procedures for juveniles were instituted ostensibly to protect youth. However, in some cases they also were intended to keep young people out of the labor force for as long as possible, thus preserving more jobs for adult workers (Varenhorst, 1988).

As these changes occurred, social conditions became ripe for creating a segregated youth culture. Many youth were clustered for significant portions of time in schools and other youth-oriented institutions. Their interests and expectations became much more similar as they shared common experiences at about the same ages (Conger & Petersen, 1984).

There has not always been a consensus on the definition of adolescence. There is general agreement that it begins with puberty, the beginning of physical sexual development, which is occurring at younger ages now than in the past. However, the end of the period called adolescence is much more nebulous. Various events often mark passages into adulthood, such as marriage, full-time employment, and completion of education. However, today's youth generally are spending more years in school, delaying marriage, and often have difficulty finding jobs. Thus, in one sense the period of adolescence, and the concomitant dependence on parents, is being prolonged. Tension between physical maturity and economic, social, and emotional dependency exacerbates the complexity of adolescent development (Ross, 1990; Varenhorst, 1988).

The legal status of adolescents is often contradictory; they may encounter legal obligations or restrictions without the legal privileges granted adults. Adolescents may be old enough to have jobs and pay taxes, but not old enough to vote; some may risk their lives through military service, but not be old enough to buy alcohol legally. Legal responsibilities and rights vary markedly according to the activities being regulated and geographic localities.

Both historic and current events have shaped, to some extent, the way adolescents are presently developing in our society. In the next section, both physical and psychosocial development will be discussed.

ADOLESCENT DEVELOPMENT

Human growth and development is a lifelong process that often is studied by examining various stages, such as:

- infancy;
- childhood;
- adolescence; and
- adulthood.

Each of these stages may be categorized further into specific phases, such as early, middle, and late adulthood. The physical changes, and the issues and

challenges faced by those at each developmental stage, are very distinct.

Characteristic human development proceeds in a regular pattern. For example, infants learn to sit, then crawl, then walk. For appropriate progression to future stages of development, it is important that these patterns occur in the proper sequence. The interval of time during which developmental processes may occur is generally broad. Although it may be stressful for adolescents who are very concerned about the judgment of their peers, it is within usual limits for some adolescents to begin puberty as early as age ten, while others may be 13 to 15 years old before they experience the same changes.

Two broad categories of adolescent development will be reviewed in this section:

- physical development; and
- psychosocial development.

Physical Development

The physical changes experienced in adolescence include sexual maturation and physical growth to reach adult height and body development. Physical growth is affected by several factors, including genetic components, environmental conditions, and severe psychological distress. There is typically a close correlation between the height and physique of biological parents and their offspring. Environmental conditions that may interfere with optimal physical development include malnutrition and diseases. Severe psychological distress, such as abuse, neglect or other traumas also may affect physical development (Conger & Petersen, 1984; *Family Health & Medical Guide*, 1989).

Adolescents experience the most rapid and significant physical growth and change of any developmental stage other than infancy. Typically, boys undergo their most rapid growth at about age 13; for girls it is about two years earlier. This growth spurt, as it is often called, may begin in late childhood, about age nine to ten, and may continue for four to five years. However, there is usually a period of several months during this growth phase when the rate of growth reaches its peak and is remarkably rapid. In addition to increased stature, adolescents experience an expanded muscle mass and/or redistribution of fat, making the body more adult in appearance. Gradual growth may continue after this growth spurt for both boys and girls, with females typically reaching their full height and body development about two years earlier than boys (Conger and Petersen, 1984).

Puberty refers to physical maturation resulting in the ability to reproduce. The first evidence of these changes, triggered by increased hormonal activity, generally signals the beginning of adolescent development. The development of *primary sexual characteristics* includes those body parts (ovaries, uterus, and testicles) directly related to reproduction. *Secondary sexual characteristics* are those that distinguish males from females, such as breasts and facial hair (*Family Health & Medical Guide*, 1989).

The most significant physical changes occur in early adolescence, about ages 10 - 14 for most youngsters. In addition to those already mentioned, skin changes are common. Adolescents tend to get oilier skin and have increased perspiration production. This can cause acne and hygiene problems that require more attention to cleanliness than was necessary in earlier years. For boys, particularly, there are also vocal changes, sometimes causing embarrassing cracks in the voice (*Family Health & Medical Guide*, 1989).

These physical changes can be stressful for youth, especially those who are not well prepared for them or do not have supportive family members as they encounter them. Adolescents may find themselves

confused by their awakening sexual feelings. As peer influences are very important, they may be uncomfortable if their physical development does not coincide with that of friends. Moodiness and even depression can result from hormonal changes (*Family Health & Medical Guide*, 1989). Thus, while many youth eagerly anticipate physical maturation, many also experience anxiety and stress as a result of typical developmental processes.

Psychosocial Development

Not only must adolescents adapt to profound physical changes, they are developing in many other ways, as well. These include cognitive, social, spiritual, moral and emotional development, each of which will be explored briefly in this section. The major tasks of adolescence are seen as developing self-identity and establishing independence. They must face the difficult challenges of learning how to manage adult roles and responsibilities.

Cognitive Development

Cognition refers to the way people acquire and process knowledge. It occurs through perception, reasoning or intuition. According to Piaget's classifications, children think in concrete terms. They learn to deal with the properties of real objects and the relationships among them. Adolescents move from concrete thinking to the stage of formal operations, which includes the ability to think hypothetically and reason deductively. As these cognitive skills increase, adolescents can think in terms of *possibilities* and can approach problem solving in a more logical way, thus increasing their imaginations and flexibility (Conger & Petersen, 1984).

Cognitive development during adolescence also includes maturation of a future time perspective. For younger children, and often for those in early adolescence, imagining a future that is very different from the present is difficult. However, as they develop, adolescents' orientation toward future events becomes more pronounced, often resulting in contemplation of careers and future relationships (Conger & Petersen, 1984).

Cognitive development in adolescence varies highly from one individual to another. It does not occur suddenly, as physical growth often appears to do. Rather, it may take several years for some adolescents to achieve mature cognitive development; others may never reach a maximum level of development.

Social Development

Part of social development includes the ability to infer what other people are thinking and feeling and what their intentions are. This is closely related to cognitive development, as youth move from concrete to more abstract thinking patterns (Conger & Petersen, 1984).

The social lives of adolescents often are very different from their childhood experiences. As a part of their task of separating from their families and achieving an independent identity, youth begin to focus their attention on peer relationships. Concomitantly, they are likely to be more critical and rebellious toward their parents (*Family Health & Medical Guide*, 1989).

Peer groups provide a transitional object of attachment while youth are separating from parents during the course of development. As parental influence declines and peer dominance increases, youth tend to conform to peer norms. Thus, distinctive modes of dress, music, dance, and other activities tend to be identified as a "youth culture" (Nowinski, 1990; Schinke, Botvin, & Orlandi, 1991).

Spiritual Development

Spiritual growth and development includes a search for meaning and the evolution of hope and faith. For many youth this takes place within the context of an organized religion; for others it does not. Regardless of the setting, this is an important aspect of adolescent development.

As youth develop cognitively, they begin to explore relationships and abstract meanings. They question values they have been taught by their families, and societal institutions such as religions and schools.

As they start to contemplate the meaning of life, adolescents begin to form a future perspective that allows them to delay immediate gratification and develop hope for future rewards. For some, this involves religious convictions; for others, faith and hope are based on other belief systems.

Because of some of the characteristics of the "youth culture" mentioned previously, adults may not recognize the questioning and inner struggles occurring for individual youth. There may be a tendency to assume their values and beliefs are accurately reflected in the way adults interpret their dress, conversations and activities. The development of hope and faith are important for youth. Without these, they may find the struggles and conflicts of adolescence overwhelming. The elements of spiritual development are influenced and facilitated by positive adult relationships.

Moral Development

As with physical and cognitive development, moral development progresses by stages. While moral development is correlated with advances in cognitive maturation and the ability to think more abstractly, they are not synonymous. Moral development involves the ability to make ethical choices based on abstract concepts such as justice and social responsibility. In addition to cognitive abilities, social influences and modeling of moral behavior by significant adults have an impact on the moral behavior of youth (Conger & Petersen, 1984; Nowinski, 1990).

With increased moral maturity, youth are able to think beyond the immediate personal rewards or consequences of a situation to the best interests of other persons or a group. At earlier stages of cognitive and moral development, youngsters depend on external consequences for behavioral control. They are egocentric and do not consider the interests of others. They are most likely to behave in certain ways to avoid punishment. Younger children typically act to meet their own needs and let others do the same (Conger & Petersen, 1984; Nowinski, 1990).

With more maturity, youth can learn to control their behaviors because the welfare of the group is at stake. Their sense of cooperation becomes stronger than individual desires. They are aware of shared feelings, agreements, and expectations, and these take precedence over individual interests. Laws are to be upheld and individuals are expected to contribute to society (Conger & Petersen, 1984; Nowinski, 1990).

Finally, moral development leads to behavior that is governed by values and ideals that are constant across situations. There is a recognition that values and rules are relative to particular groups or cultures, but they should be upheld because of an implied social contract. Certain universal principles of morality prevail, even if they are counter to societally constructed laws (Conger & Petersen, 1984; Nowinski, 1990).

Emotional Development

Unlike physical development, emotional maturity is not a fixed condition that is established at one period of life. Rather, with life experiences and accomplishments in all other developmental areas, one

progresses toward emotional maturity. Emotions are the feelings a youth has about persons and situations, including anxiety, anger, sorrow, love, hate, and joy. Emotional reactions may be directed toward other persons and situations, or inwardly, toward oneself. Self-esteem, an important aspect of emotional development, is the evaluative aspect of self-image. Self-esteem is affected by experiences of success or failure that allow youth to feel positively or negatively about themselves. The reactions and judgments of others (especially peers) toward a youth also influence self-esteem (Nowinski, 1990).

Coping skills are resources for dealing with difficult situations. For healthy emotional development, youth must learn coping skills that combine cognitive, social, spiritual and moral facets of development. Coping mechanisms include the use of social support systems, problem-solving and assertiveness skills, and many other responses (Nowinski, 1990).

THE DEVELOPMENTAL ENVIRONMENT: SOCIAL AND CULTURAL FACTORS

Adolescents do not develop in a vacuum; rather, they are part of an environment which affects every aspect of their development. The major components of the environmental context for adolescents include family, peers, community, school, religion, and the media. Each of these will be reviewed briefly. For many youth there are additional important factors in the environment that influence their development. While awareness of typical influence is important, assessment of individual needs and resources is always vital in working with adolescents.

Families

In previous generations, the accepted connotation of "family" was rather simple: parents and children living together. This is no longer true. In contemporary society, many configurations of related and unrelated individuals are considered *family*.

Families serve a variety of functions, many of which have undergone changes as our society has become more industrialized and urbanized. One of the basic functions of the family is to provide economic security to ensure the survival of the family unit. For earlier generations there was often a division of responsibilities determined by gender roles. For example, the male head of household produced enough goods or earned enough money to support the family financially, while the wife/mother took care of the home and met the basic needs of the family for food and comfort. Children were taught responsibilities, and particularly in rural settings, contributed to economic survival of the family with their labors. Now, however, many families approach these tasks differently. The majority of women are now in the workforce, and there are fewer opportunities for youth to contribute to the financial security of the family.

Another family function is to provide members with a sense of belonging. Our society is both individualistic and group-oriented, and the family has typically served as the primary group to which most individuals belonged. However, again with changing conditions, this function is being modified. Two-parent or nuclear families are no longer the norm. Various other family formations are being created, including blended families, extended families, and others. Separation from their families may hinder family bonds and feelings of belonging for some youth. Abuse or neglect, family dysfunctions, economic conditions, and sometimes behavioral and emotional problems of the youth are some of the factors that can result in separations.

Families function to socialize children to community norms and values. Family members are the first teachers, and they instill beliefs and behavioral

expectations in children. Often, this is done through direct teaching. However, modeling (demonstrating) values and behaviors is also a powerful socializing mechanism. Another area in which families socialize youth is that of sex role identification. Children form ideas of what is appropriate masculine and feminine behavior through relationships with their parents. With the absence of many parents from the home, youth may obtain this information from other sources, such as peers, sports heroes, movie and television characters, and the like.

Finally, families provide support and services for their members. Typically, parents care for young, dependent children to ensure their health and safety. They provide food, care during illnesses, and other necessary services. They provide love and emotional support, especially during periods of stress and elation. Sometimes, children also provide support and services for parents, either short term, during crises, or regularly.

The *nuclear family*, as mentioned earlier, is no longer typical. However, it is still a viable family form, and the one we most often think of when talking about families. Table 1-A describes several family models that are important in today's culture.

The Developmental Influence of the Family

There are many family problems and situations that affect the development of children and adolescents. Not all can be explored in this curriculum. However, these family influences strongly determine the course of child and adolescent development. Verbal and physical abuse have reached significant proportions. Verbal abuse is language that intimidates and demeans a youth. It may include cursing, yelling, or expressions that "put down" the youth, conveying a message of worthlessness. Physical abuse is sometimes rationalized as discipline, but abuse is punishment intended to inflict pain, while discipline is intended to teach.

Some child-rearing practices limit positive risk-taking behavior that youth need for exploration and growth and development. Within reasonable limits, adolescence should be a time of experimentation and trying new things. Youth who encounter child-rearing practices that restrict exploration and experimentation often learn helplessness and hopelessness. Some family dysfunctions are highly correlated with juvenile delinquency and adolescent substance abuse. These include:

- drug use and criminal behavior;
- poor and inconsistent family practices;
- family conflict;
- social and economic deprivation; and
- child abuse.

Drug Use and Criminal Behavior. The risk of an adolescent's involvement in delinquent activities or substance abuse increases if a parent or sibling engages in crime and/or use of substances. Family criminality has been found to be a strong indicator of juvenile delinquency, whether measured by official records or self-reports of juvenile offenders. Initiation of substance use by youth is associated with parental drug and alcohol use (including both legal and illegal substances). There appear to be complex biological and environmental risk factors that increase a youth's vulnerability to chemical dependency (Hawkins, Lishner, Jenson, & Catalano, 1987; Kumpfer, 1987).

Youth reared in a chemically dependent environment are at greater risk for a variety of problems. Children of alcoholics have been found

Table 1-A

FAMILY MODELS

Nuclear Families:	Families consisting of two parents (usually married) and their children who have been born or adopted to constitute a family of all *related* members living in one household.
Single-Parent Families:	These families consist of one parent and one or more children. One parent has primary responsibility for child rearing because of choice or necessity. Circumstances resulting in single parent families include divorce, death of a spouse/parent, and parents who have never married or lived together.
Blended Families:	Families that consist of members who are not all "related" as nuclear family members are often called blended families. This may include parents who were previously married to other spouses and the children from previous marriages of either or both spouses. Family members are often referred to as "step" parents, "step" children or "half" siblings.
Extended Families:	Related individuals living together in the same household are referred to as extended families. This often includes three or more generations (i.e., grandparents, parents, children), but it also may describe other relationships, such as an aunt caring for nieces and nephews.
Surrogate or Augmented Families:	These families consist of non-related individuals living together in the same household for various reasons. Members of the household serve the usual functions of families despite their *non-related* status. These may be formal, agency-sanctioned family arrangements, such as foster families, or they may be informally constituted families, as when a youth lives with a neighbor or friend.
Youth without Families:	Unfortunately, many youth in today's society are not living with families as described above. Some youth reside in group homes, institutions, and hospitals. Others are homeless or runaway youth who do not have a residence or related family members. In some cases, these youth form family-like relationships to peers or other adults. However, these often lack the stability necessary for all family functions to be performed adequately.

more likely to be placed in foster care, to marry early, and to attempt suicide. They also are at higher risk of school problems, delinquency, and mental illness. Other common problems of children of alcoholics include: substance abuse; peer relationship problems; depression; hyperactivity; aggression; and low self-esteem (McGaha, 1991).

Poor and Inconsistent Family Practices. The risk of becoming involved in later delinquency and drug use is increased for youth from families that provide lax supervision or practice excessively severe or inconsistent discipline. Low communication and involvement between parents and children is also a predictor of delinquency and drug use (Hawkins et al., 1987).

Family Conflict. High rates of family conflict appear to place youth at risk for both delinquency and illicit drug use. It is the *conflict* that predicts delinquency and drug use, rather than the family structure such as a "broken home" or single parent family (Hawkins et al., 1987).

Social and Economic Deprivation. Factors of familial deprivation, including social isolation, extreme poverty, poor living conditions, and low-status occupations of parents appear to elevate the risk of delinquency and drug use (Hawkins et al., 1987).

Child Abuse. High rates of delinquency are correlated with childhood victims of physical and sexual abuse. Studies in a juvenile detention center also found that abuse corresponds to illicit drug use among youth (Dembo et al., 1988).

Peers

Social development during adolescence involves the formation of strong peer relations for most youth. As adolescence is a period during which youth establish an individual identity and independence from the family, the peer group often serves as a transitional object of attachment. Peers form a bridge as the youth questions parental attitudes, tastes and values and forms his or her own self-identity. It provides a group with which to try out new images and behaviors (Nowinski, 1990).

Peer influence is especially strong in the areas of dress, leisure activities, language and use of alcohol and drugs. Parental influence has a stronger impact on values, vocational choice and educational plans. The emotional closeness between parents and adolescents, as well as the characteristics and interests of their peer associates, are factors influencing whether or not a youth will become involved in drug and alcohol use. Drug use for recreation is often an accepted social activity among adolescent peers (Norem-Hebeisen & Hedin, 1988; Nowinski, 1990).

Association with delinquent peers is strongly correlated with delinquency; association with drug-using peers is a strong predictor of substance abuse. Adolescents tend to use drugs and alcohol because of the influences of their friends. Concomitantly, they tend to choose friends who reinforce their values and behaviors related to drug use (Hawkins et al., 1987).

School

Most adolescents spend a majority of their time away from home in formal educational settings. Schooling serves several purposes in our culture. It is a means of providing academic skills needed for life tasks. It is also a way of preparing youth for jobs and careers in the future. Education is part of the developmental process, and has a particular impact on the cognitive and social development of youth. Much of the socialization of young people to the norms and values of society is accomplished through the school.

There is both a formal and informal aspect of school curriculum. The formal curriculum includes

the subjects taught; the informal curriculum includes the "unwritten" rules of behavior that are passed on both from teachers to students and from students to students. With changes in family structures and with children and youth spending more time away from the direct supervision of their parents, schools have taken on many responsibilities that once rested with parents. Schools often are providing meals, counseling, recreation, health care and many other services. With these increased contacts, the school has gained responsibilities and opportunities to have an impact on the development of youth. Family values and expectations often affect the way in which students perceive and benefit from educational experiences. Socioeconomic status is often a factor, as well. Neighborhood characteristics usually determine the amount of resources available to schools and the quality of programs provided. Students may be guided into vocational or academic curriculum tracks based on perceptions of career potential, and these recommendations often reflect students' socioeconomic status (Colclough & Beck, 1989; Jackson, 1989).

Youth bring different talents and abilities to the educational setting, also. These affect their school performance and satisfaction. There are several different learning styles; some students are more comfortable with certain styles, while others have strong needs or preferences for different ones. For example, some may learn better by reading, others by hearing information, and still others by applying learning to task situations. However, traditionally, many subjects are taught in only one way. If the student does not learn easily from a particular instructional method, the school experience is likely to be less beneficial for him or her. Abilities and disabilities are important, as well. Some youth find educational experiences rewarding and have the necessary cognitive and social skills to master new tasks. Many students, however, have disabilities. Some are obvious, such as physical disabilities. Others are much more difficult to discover. Only recently has attention been given to understanding and remediating specific learning problems.

School failure, low commitment to education and lack of school bonding have all been found to correlate strongly with both delinquent behavior and substance abuse. Behaviors such as truancy, dropping out of school early, and poor academic performance are predictive of delinquency and drug-involvement (Hawkins et al., 1987).

Religion

For many youth, religion is a part of the environmental context. This may be an organized religion, including a church or synagogue in which they and their families participate. On the other hand, for some youth, religion may be centered primarily in the home where the family's values and activities are religiously motivated. Organized religion is one way that societal values and norms are transmitted from one generation to the next. Religion affects spiritual, moral, emotional and social development through its traditions, rites and rituals.

Youth often question the tenets of organized religion or challenge their families' beliefs and values as a part of the development process. Traditional values in many areas (e.g., sexual behavior, use of substances, school prayer, and literal interpretation of the Bible) frequently are being confronted and modified in our society. For youth, there is often competition or conflict between the adolescent subculture and traditional values, which may be supported by organized religion, their parents, and other societal institutions. Some adolescents place more emphasis on personal, rather than institutionalized, religion. This reflects an accent on personal values, relationships, and individual moral standards instead of traditional social beliefs and institutions. Simultaneously, the greatest growth among organized religious groups has been

among the more evangelistic and conservative religious groups (Conger & Peterson, 1984).

Religiosity among youth appears to play a role in their behaviors. Research indicates that adolescents who express more religious beliefs and attitudes and are involved in church activities are less likely to be involved in drug use and deviant behaviors (Conger and Petersen, 1984; Hawkins et al., 1987).

Organized religions are an important part of the environment for many adolescents. Churches, synagogues, and other religious institutions have the potential for socializing youth into traditional community values and behaviors. They can provide important opportunities for social, educational and other activities. Both peer-oriented and adult-adolescent associations are possible in religious organizations. Various community, cultural, and ethnic groups reflect different religious values and practices that must be understood and appreciated in working with youth. Religion is a more important aspect of the environment in some communities, and the help of religious leaders is important in effecting community change.

Community

The neighborhood and community within which a youth resides provides an important influence on development. Community and neighborhood characteristics may be very different from one locality to another. Communities may be very loosely organized with few linkages between members, or they may be structured so relationships among members affect the values and behaviors of each other.

With industrialization and urbanization came high population densities and often more transitional communities. There is greater mobility of youth as families move more frequently from one residential area to another. With this trend, there has been a tendency for community members to feel less attachment to neighborhoods and to provide fewer informal social controls. Community disorganization results in a decreased ability to transmit traditional social values. Youth from such communities are more likely to be involved in juvenile crime and drug use (Hawkins et al., 1987).

Media

The influence of mass media on culture and behavior is steadily increasing. Nearly all youth have access to televisions, radios, records and tapes, newspapers, and magazines; the environmental exposure to these forms of communication is nearly constant. Through these media a variety of messages are conveyed. Consumerism is especially strong with its emphasis on immediate gratification, physical attractiveness, feeling good, avoiding pain, and other similar messages. Many events and behaviors are glamorized beyond reality, and tragic occurrences are sometimes presented as thrills for the sake of excitement and entertainment (Gitlin, 1990).

These implicit messages are especially powerful for vulnerable youth. Glamorous adults may be depicted as using drugs and alcohol or engaging in risky sexual behaviors, without negative consequences. Even more subtle is the idea that pain must not be tolerated and one should feel good at all times. Therefore, chemicals that subdue pain (physical or emotional) and provide a sense of euphoria, however brief, become legitimate in the view of impressionable youth.

SOCIAL INFLUENCES ON DEVELOPMENT

At one time America was called a "melting pot" as we tried to mold and adapt all citizens to the "American way of life." However, more recently we hear of cultural pluralism or diversity, referring to the

notion that many cultural groups may co-exist. Despite such beliefs, there are still conflicts between various ethnic and cultural groups, and there is disequilibrium in the power, prestige and resources available to different groups. These have a tremendous impact on the development of adolescents in our society. It is difficult to separate socioeconomic, ethnic and gender variables that influence adolescent development; they are interrelated as they operate in society. However, for discussion, each will be briefly examined individually.

Socioeconomic Variables

Socioeconomic status influences adolescent development in a variety of ways. Economic resources determine the extent to which even the most basic needs of children and youth, such as food, clothing, and shelter can be met. Access to medical care, educational opportunities, transportation, and employment opportunities is often modulated by income level. Youth reared in poverty may experience health problems and malnutrition; poor physical health, depression, pregnancy and criminal victimization are problems that are found more frequently among poor youth (U. S. Congress, Office of Technology Assessment, 1991).

Adolescents from low socioeconomic backgrounds may have inadequate or no housing and lack suitable clothing. The absence of these resources, in turn, affects their physical and psychosocial development. As peer judgments become very important in adolescence, those who do not have resources to purchase the clothing and other accouterments of the adolescent subculture may find themselves excluded and without opportunities for adequate social interactions.

Youth from all socioeconomic levels are involved in both delinquency and drug use. However, it is postulated that those from lower income levels may encounter greater stress that could be a psychosocial precursor of drug abuse (Kumpfer, 1989).

Employment and educational opportunities for adolescents are strongly related to socioeconomic status. Youth from lower socioeconomic strata are more likely to live in inner city areas; these areas often have less than adequate educational and vocational training programs. The high school dropout rate is also higher among youth of lower socioeconomic status. In turn, these youth are less adequately prepared for employment, both in terms of their skills and their socialization to work-related norms and values. To complete the cycle, poor educational and employment opportunities often result in continuation of lower socioeconomic status.

Hagan (1992) reported original and supportive research findings indicating that, in general, lower socioeconomic youth involved in delinquency had poorer adult work outcomes. He suggested that this might be attributed to restricted legitimate employment opportunities and the concomitant availability of illegitimate opportunities. Additionally, increased likelihood of police and court contacts for these youth appear to exacerbate later employment problems as adults.

Finally, community resources are usually most limited in lower socioeconomic areas. This includes health care, educational opportunities, recreational facilities, social services, and employment opportunities. The lack of these resources may increase the stresses for youth living in the area. Although all are vital, employment and recreational opportunities appear to be especially important in preventing drug involvement.

Ethnic Variables

Despite civil rights efforts, our country remains one in which minority groups are often subject to

prejudicial treatment. This treatment affects the development of minority youth. Many of them try to abide by the traditional values of their ethnic cultures in their homes while striving to identify with the majority culture at school and in the community. The dissonance of this lifestyle can be very disturbing, and can negatively affect development.

Some of the life experiences that are different for minority youth include language, religion, family relationships and community norms. Minority groups are disproportionately represented among the economically disadvantaged. They are more likely to live in urban centers that have higher crime rates, poorer schools, substandard housing and few employment opportunities. Because of these disadvantages, many minority group members have required social and financial assistance. Often the bureaucratic structure required to administer these programs results in processes that can be demeaning, uncaring, and can foster dependency. This, and past injustices, may result in some minority group members having a difficult time accepting and cooperating with persons in authority (Sweet, 1989).

Language differences, whether a foreign language or an English dialect, can set apart minority youth from the mainstream culture and create communication difficulties (Sweet, 1989). These obstacles increase stress and interfere with psychosocial development. They can have an impact on cognitive and social development, especially.

Despite many struggles, ethnic group members often display remarkable strengths. In some instances, there are powerful religious beliefs that help sustain members through trying experiences. Family relationships and values may be different, and extended family members and non-related individuals may form bonds that are not typical of anglo-American groups (Sweet, 1989).

Adolescents from ethnic minority groups appear to be disproportionately represented among those who experience significant problems during their development. Black, Hispanic, and Native American youth drop out of school at higher rates than majority youth. Black male adolescents are more likely to die as a result of homicide. Black and Hispanic female adolescents have higher rates of pregnancy. Native American youth experience a number of health problems at disproportionately high rates, including suicide, alcohol and drug abuse, motor vehicle accidents, mental health problems, and pregnancy (U. S. Congress, Office of Technology Assessment, 1991).

Although their representation in the general population is much less, minority youth now constitute more than half of the youth in public and private juvenile facilities. Minority youth are more likely to be arrested than white youth; however, the rate at which black youth and white youth commit serious crimes is not significantly different. Nonetheless, minority youth are three to four times more likely to be incarcerated in public institutions than are white youth (Krisberg, DeComo, Herrera, Steketee, & Roberts, 1991; National Council of Juvenile and Family Court Judges, 1990).

Gender Variables

Although women's groups have advocated equality, gender differences are still apparent. The range of opportunities for adolescent female participation in sports, academic programs, and vocational pursuits has increased dramatically. Yet, examples of inequality remain.

Female adolescents are more likely to experience rape or sexual abuse. The risks and effects of pregnancy are unique to females. They are also more likely to report depression and to attempt suicide. Male adolescents, however, are more likely to die as a result of suicide, homicide or accidental injuries. They

are also more likely to be the victims of crimes such as robbery or assault (U. S. Congress, Office of Technology Assessment, 1991).

Male youth are about four times more likely than females to be incarcerated in public or private facilities. They also often remain in custody for longer periods. Male youth are more likely to be confined for delinquent offenses; female youth also are incarcerated for delinquent behavior, but a significant group are held for status offenses (Krisberg et al., 1991).

SPECIAL PROBLEMS FACING TODAY'S ADOLESCENTS

Getting a date for the prom or deciding where to go for spring vacation are no longer the most important challenges facing adolescents. There are a variety of problems that are affecting a significant portion of today's youth. The society in which today's youth find themselves is more violent and alienating than in the past.

The number of runaway, thrownaway and homeless youth is growing. These young people, who subsist on the streets by their wits, fortitude, and sometimes criminal activities, are at great risk for physical and psychosocial developmental problems. Their likelihood of encountering substance abuse, prostitution, delinquency, malnutrition and disease is multiplied exponentially. Many youth run away or are pushed out of families that are abusive or so dysfunctional they cannot meet the needs youth present. With time, homeless youth will lose the potential for continuing their education or obtaining productive employment.

Family violence and abuse of children is increasing rapidly, or at least it is being reported much more frequently. However, reported incidents of abuse probably represent only a small proportion of the violence and abuse that is actually occurring, as these problems tend to be highly protected family "secrets." Physical and sexual abuse interfere with adolescent development, and make it difficult for youth to achieve optimal physical and psychosocial maturation.

Cultural violence also is increasing. The problem of youth gangs and the violence they perpetrate is of grave concern. Many youth are carrying weapons, even to school. Substance abuse has grown remarkably among the adolescent population, and youth are beginning involvement at earlier ages than ever before. As will be shown in Chapter 2, drug involvement has many negative effects on youth, one of which is increased violence. Another form of violence is self-inflicted. The rate of adolescent suicides has been climbing steadily, as some youth find their current situations intolerable. As mentioned earlier, adolescent males are particularly vulnerable to violence, including homicide.

Adolescent sexual activity has increased rapidly, resulting in approximately one million teenage pregnancies annually. Through sexual behavior, youth are also placing themselves at risk for sexually transmitted diseases, some of which are deadly. Youth must be informed at earlier ages about sexuality and appropriate precautions.

These pressures on youth may be both the cause and effect of characteristic adolescent development. Adolescents tend to feel invulnerable, often believing that bad things will not happen to them. Feelings of immortality and invincibility also are common. Impulsiveness is yet another common trait. These patterns lead to risk-taking behaviors, some of which have devastating results. Once certain thresholds are crossed, youth are unable to go back, and they continue a downward spiral of more serious involvement in activities that further jeopardize their health and future well-being.

HEALTHY ADOLESCENT DEVELOPMENT

The many problems associated with adolescent development can be ameliorated. There are interventions that can help reverse these trends and ease youth through developmental periods that are sometimes difficult.

Development of Personal Qualities and Clarification of Values

Both youth and the adults in their environments must explore and modify values and attitudes that are detrimental. This is not an easy task, as values are transmitted in subtle, often nonverbal ways from very early childhood. However, every opportunity for interacting with youth (individually or in groups) should be captured and used to enhance motivation, self-esteem and leadership. Personal qualities of honesty, reliability, dependability and trustworthiness should be rewarded as often as possible. Youth also may need help in developing empathy and caring as they learn to look beyond their own needs to those around them.

Adult Mentors

Peer associations are strong in adolescence, and peers serve an important function for helping youth make the transition from dependency on the family to independence and self-reliance. However, it is still important for youth to have positive adult role models and persons they can turn to for help during periods of difficulty. Adult mentors may be family members, but there is also a range of other important adults who can have a positive impact on youth. This includes teachers, youth leaders, volunteers, and others who are willing to form personal relationships and share themselves with youth.

Basic Skills

Youth need to develop a core of basic skills for success in life, both now and in the future. Academic skills are essential, as our society requires a minimum level of ability in core academic subjects to be able to function adequately. Vocational skills are also important. Youth need to learn specific job skills, and they also need to develop skills and attitudes that will help them obtain and retain jobs. These include punctuality, interpersonal relationship skills, and willingness to follow directions. Other skill areas also are important for successful development and progression to adulthood. These include communication, social, coping, and conflict resolution skills. Many of these are learned through informal teaching in the family and among peers. However, it also is possible, and desirable, to provide them in a more systematic fashion. They can be included in the school curriculum as well as other youth-oriented groups, such as clubs or religious organizations.

Health

Health promotion is also important for young people. Physical and mental health are interrelated; youth who experience problems in their physical development are likely to experience psychosocial problems also. Nutrition and hygiene are important parts of healthy adolescent development. Disadvantaged youth are in particular danger where health is concerned. There may not be adequate food, clothing, and shelter to promote healthy development. They are unlikely to obtain adequate health and mental health services, also.

Not only must physical and mental health be optimal; youth also need to receive direct instruction in risk reduction. This includes education in the areas of cigarette smoking, substance use, safety, and sexually transmitted diseases, including AIDS.

CONCLUSION

This chapter has briefly described adolescent development. Adolescence was examined in its historical context and compared with the way it is experienced today. Physical and psychosocial development of adolescents was reviewed. Environmental and societal factors that impinge upon adolescent development were explored. Finally, elements required for healthy adolescent development were presented.

This chapter is an introduction to the remaining chapters in this module that will examine the behaviors and problems of youth who become involved with drugs and alcohol and become part of the juvenile justice system. The effect of drug use and delinquency on adolescent development also will be explored in this module.

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CHAPTER 2

ADOLESCENT DRUG USE AND DELINQUENCY

ADOLESCENT DRUG USE AND DELINQUENCY

INTRODUCTION

Adolescent development provides an important springboard for the discussion in this chapter: adolescent drug use and delinquency. Developmental stages determine physical, cognitive, social, psychological and moral functioning of youth, and it is important to understand the impact of these on adolescent drug behavior and delinquency. There is often a vast difference between the developmental abilities of a 13-year-old and a 17-year-old. However, for youth who become dependent on drugs or alcohol, the developmental cycle may be interrupted. Youth may retain characteristics of earlier developmental stages that are not commensurate with their chronological ages.

In today's world, adolescent drug use is inextricably intertwined with delinquent behavior. The mere use of mood altering substances, including alcohol as well as illicit drugs, is illegal for minors. In addition, drug use often leads to other kinds of delinquency, including income-generating crimes and violence.

This chapter will explore adolescent drug behavior, including the extent of drug use among adolescents, characteristics of youth at different stages of drug-involvement, and risk factors for adolescent substance abuse and delinquency. Special attention will be focused on the association between juvenile crime and drug use. The profound effects of drug use and delinquency on the individual, the environment and society will be presented.

After reading this chapter participants will be able to:

- discuss the history of substance use and abuse and describe how it has been addressed at different periods in the United States;
- describe general patterns of drug use among adolescents, both within the juvenile justice system and the general population;
- list four stages of drug involvement and describe the major characteristics of each;
- enumerate six areas of risk that are related to both drug use and delinquency by youth; and
- describe the consequences of drug use and delinquency to the individual youth, the environment, and the society.

HISTORICAL PERSPECTIVE OF SUBSTANCE ABUSE

The use and abuse of mood altering substances is not a new phenomenon. The production and consumption of alcohol is documented as early as 8000 B.C., and opium was in use around the year 4000 B.C. Cannabis (marijuana) has been used for recreational and medicinal purposes for several centuries (Doweiko, 1990).

The coca plant, from which cocaine is derived, is indigenous to the high mountains of South America. Approximately 97 percent of the world's supply of the coca plant is grown in Peru, Bolivia and Colombia, South America. There is evidence of its use in religious ceremonies and as a medium of exchange before the Spanish invasion of South America in the

16th century. During the 1800s Sigmund Freud experimented with cocaine, using it to combat depression and to alleviate withdrawal symptoms associated with opiate addiction. In the late 1800s and early 1900s, cocaine was widely used in a variety of products and medicines. *Coca-Cola* originally contained cocaine, but its use in the beverage was discontinued after passage of the Pure Food and Drug Act of 1906 (Doweiko, 1990).

Many substances of abuse were initially intended for other purposes. For example, alcohol, opiates, marijuana and cocaine have all been used for medicinal purposes. Additionally, benzodiazapines and barbiturates are used to relieve anxiety and Phencyclidine (PCP) was developed in the 1950s as an anesthetic for animals. Inhalants are comprised of a variety of chemical agents such as nail polish remover, cleaning solvents, gasoline, and glue, all of which were developed for purposes other than producing mood altering effects (Doweiko, 1990).

Recently, however, the introduction of chemical substances solely for their subjective effects, and profit potential, has become more common. *Designer drugs* are chemical copies of controlled substances that are manufactured to replicate the effects of psychoactive drugs (*NIDA Capsules*, 1986).

The history of drug use in the United States is important, as earlier attempts to quell it provide an understanding of current policies and programs. During the late 1800s and early 1900s the use of alcohol, cocaine and opiates for medicinal purposes was relatively common. Not only did doctors prescribe these drugs, they also were frequently added to patent medicines. Thus, it is estimated that perhaps 300,000 people were addicted to opiates around the turn of the century. This figure is startling when compared with current estimates of 500,000 narcotic addicts in the United States. When these numbers of estimated addicts are compared to the total national population in 1900 and now, it is apparent that the problem of opiate addiction was at least as serious, if not more so, in the early years of the century (Courtwright, Joseph & Des Jarlais, 1989; DuPont, 1990).

While medically induced addiction was viewed with some degree of sympathy in the early years of this century, alcohol dependency was objectionable. Attitudes toward the use of drugs and alcohol gradually reversed as alcohol became socially acceptable while drug addiction was stigmatized because of its association with crime, prostitution, and lower socioeconomic groups. The perception of drug users as a feared or rejected segment of our society is a recurring theme (Courtwright et al., 1989; Owen, 1992). Between the 1920s and mid-1960s a series of laws and enforcement measures were instituted which attempted to eliminate the problems of substance abuse mostly by policing activities to reduce supplies and demands (Courtwright, et al, 1989). See Table 2-A for a summary of major legislation and court rulings on drug control. The prevailing sentiment appears to have been an increasingly punitive approach to dealing with both distributors and consumers of mood altering drugs, while alcohol moved from a position of disdain to one of social acceptance.

Beginning in the 1960s, the social, economic and political currents began to change, affecting drug use and how it was confronted in our society. Following the Great Depression and the Second World War, there was a period of unprecedented economic growth in this country. There was a population shift from city to suburban life for the middle class and more affluent. There also was an increase in consumer spending, and an attitude desiring instant and unbounded gratification prevailed (Gitlin, 1990).

Against this backdrop, a distinctive youth culture developed. Fueled by a tremendous explosion in the birth rate after World War II, the youth population in the 1960s and early 1970s grew rapidly. Distinctive

youth-oriented dress, music, dances, sexual mores, and slang became prominent and further separated youth from the older generations. There were also increasingly larger institutions for youth, including high schools, colleges and the armed services, which allowed this new youth culture the opportunity to grow. Youth had more money to spend than ever before. Among other things, the youth culture precipitated sexual promiscuity, political opposition, and drug use (Gitlin, 1990).

What was perceived as a double standard that permitted the use of alcohol and prescription drugs but prohibited use of illicit drugs began to be challenged by the younger generation. In some places the legal drinking age was lowered in the early 1970s. Youth were generally viewed as healthy young people who used drugs to relax and have fun in much the same way as their parents used alcohol. Thus, use of alcohol and illicit drugs increased dramatically in the early 1970s reflecting increased social tolerance (DuPont, 1990).

The primary purposes for which youth turned to drug and alcohol use included the following (Gitlin, 1990).

- **Recreational.** Drugs fulfilled a desire for sensory pleasure.
- **Transcendental.** Drugs provided an alternative to the commercialism, materialism, and rationalism of Western society.
- **Medicinal.** Drugs provided an escape from physical and psychological pain, particularly for young men involved in the Vietnam War.

The result was the emergence of a new pattern of drug use, which contrasted with the earlier association of drugs with crime, prostitution, and lower socioeconomic groups. Drug use became mostly recreational, and was practiced largely by white youth. Unlike earlier patterns, the drugs of choice were chiefly non-opiates (Courtwright, et al., 1989).

Those who could not control their drug use were considered sick, not criminal. Treatment programs began to proliferate (DuPont, 1990). The former quasi-penal approach, embodied in large institutions such as the U. S. Public Health Service's federal narcotics farms at Lexington, Kentucky and Fort Worth, Texas, was gradually replaced. Therapeutic communities and methadone maintenance began as alternative treatment approaches in the 1960s and grew in the 1970s (Doweiko, 1990). The self-help approach of Alcoholics Anonymous influenced the founding of Narcotics Anonymous in 1953. However, the *Basic Text* for the organization was only developed in the late 1970s and finally published in 1982, thus reflecting the attitudes of the 1970s (Gifford, 1989).

By the late 1970s and early 1980s the pendulum began to swing toward a more conservative response. Law enforcement tactics, particularly directed toward dealers, were reinstated. Legislation emphasized stiffer penalties while promoting drug education as a preventive measure (Courtwright, 1990).

Shifts in drug-use trends and responses generally reflect societal conditions from one era to another. These include values and prejudices, as well as economic conditions, population shifts, wars, epidemics, technological and medical advances, media coverage, and many other factors (Courtwright, 1990).

EXTENT OF DRUG USE AMONG ADOLESCENTS

There are two primary indicators of drug use among the U. S. population today: *The National Household Survey* and *The High School Senior Survey.* Both are funded by the National Institute on Drug

Table 2-A

Major Legislation and Court Rulings

1906 **Pure Food and Drug Act** - Required labeling of medicines and thus disclosure of substances they contained, such as cocaine or opiates.

1909 **International Opium Commission, Shanghai** - Resulted in a law forbidding the importation of opium for other than medicinal purposes.

1914 **Harrison Narcotic Act** - Required sellers and distributors of narcotics to register with the government and pay a small tax.

1919 **Supreme Court Decision** - Sustained the constitutionality of the Harrison Act and ruled that a physician might not write prescriptions for an addict.

1920 **Eighteenth Amendment to the Constitution** - Inaugurated a national prohibition on the manufacture and sale of alcohol.

1933 **Twenty-First Amendment to the Constitution** - Repealed the Eighteenth Amendment and ended Prohibition.

1937 **Marijuana Tax Act**

1951 **Boggs Act** -
1956 **Narcotic Control Act** - These two acts provided progressively stiffer mandatory sentences for possession and sale of drugs.

1962 **Supreme Court Ruling** - Condemned prison as a cruel and unusual punishment for addicts whose dependence was viewed as a disease.

1970 **Drug Abuse Prevention and Control Act** - Sought to reduce availability of drugs and set procedures for bringing substances under control.

1986 **Anti-Drug Abuse Act** - Provided resources for law enforcement measures to combat the illicit manufacture, distribution, and consumption of drugs. The Act substantially enhanced penalties for possession, involving juveniles in drug activity, and required life sentences for those convicted of conducting a continuing criminal enterprise. In addition, international narcotics control, interdiction, and demand reduction were addressed. Allows the treatment of controlled substance analogues that have no legitimate medical use to be treated as if it were a controlled substance in Schedule I.

1988 **Anti-Drug Abuse Act** - Created a Cabinet-level position to centralize and streamline Federal activities aimed at reducing drug supply and demand. Expanded Federal support for substance abuse education, treatment, rehabilitation, and enforcement activities. Enhanced penalties for offenses involving children.

(Courtwright, Joseph, & Des Jarlais, 1989; Doweiko, 1990; DuPont, R. L., 1990; *Drugs of Abuse*, 1988; *Drug Trafficking: A Report to the President of the United States*, 1989)

Abuse, and both measures have shown a decline in the general patterns of drug use among those surveyed.

The High School Senior Survey focuses exclusively on youth and is repeated every year. Trends in adolescent drug use noted since its inception in 1975 include the following (Johnston, O'Malley, & Bachman, 1991).

- Students reporting marijuana use during the past year and during the past 30 days on this survey peaked in 1978-79 at 60 percent. Rates of marijuana use began dropping in 1980 and have continued to fall to a rate of 40 percent. Reported rates of daily marijuana use have dropped from their highest point in 1978, when more than 10 percent reported this level of use, to a rate of 2.2 percent in 1990.

- The highest rate of cocaine use among seniors occurred in 1986 with 12.7 percent reporting use in the past 12 months; this decreased to 5.3 percent in 1990. Use of cocaine within the past month decreased from 6.2 percent in 1986 to 1.9 percent in 1990. Use of crack cocaine, though not specifically measured before 1986, has shown similar levels of decline in use from then until the present.

- Between 1982 and 1990 the use of amphetamines fell by more than half.

- The use of barbiturates declined from 10.7 percent use during the past year in 1975 to 3.4 percent in 1990.

- The reported use of heroin by youth dropped steadily from 1.0 percent having used within the past 12 months in 1975 to a level of 0.5 percent in 1980; it has remained about this rate since then.

- Use of hallucinogens within the past year was reported as 6 percent in 1990, about half of what it was in 1975.

- In 1979, 7 percent of seniors had used PCP during the past year; the rate in 1990 was 1.2 percent.

- LSD use declined from 1975 to 1985, but has increased slightly since 1985. The 1985 rate for use within the past year was 4.4 percent, and the 1990 rate was 5.4 percent.

- Alcohol continues to be the most frequently used substance by high school students. While there has been some decline since the late 1970s, rates of use remain high. In 1990, 57 percent reported using alcohol during the past month and 3.7 percent reported daily use.

- Youth reporting use of any illicit drug in 1990 constituted 33 percent of those surveyed. This represents a substantial decline from the highest rate of 54 percent in 1978-79.

Although these trends point to decreases in drug and alcohol use among today's adolescents, there is still a substantial amount of substance abuse, generating cause for concern. Nearly half (48%) of the seniors in 1990 reported use of an illicit drug at some time during their lives. Alcohol is the most frequently abused substance with 89.5 percent of the seniors reporting some use in the past. This is followed by cigarettes, used by 64.4 percent of the youth at some time. Marijuana is the most widely used of the illicit drugs. Forty-one percent of seniors reported some use of it in their lifetimes. In addition to these substances, the reported levels of use of major categories of illicit substances are shown in Table 2-B in descending order of lifetime prevalence (Johnston, O'Malley, & Bachman, 1991).

Table 2-B

Lifetime Prevalence of Drug Use

Inhalants	18.5%
Stimulants (other than cocaine or "crack")	17.5
Hallucinogens	9.7
Cocaine (not including "crack")	9.4
Opiates (other than heroin)	8.3
Sedatives	7.5
Tranquilizers	7.2
"Crack"	3.5
PCP	2.8
Heroin	1.3

The statistics generated by the *High School Survey* provide some reason for optimism that the epidemic of adolescent drug use is waning. However, for those concerned about youth in the juvenile justice system, there is reason for continuing concern. These surveys do not provide an accurate reflection of many of the youth served by the juvenile justice system, as they do not measure drug and alcohol use among those who are not attending school. Dropouts constitute an estimated 15 to 20 percent of youth the age of high school seniors, and these youth tend to be at high risk for substance use and delinquency (Schinke, Botvin, & Orlandi, 1991). Thus, it is necessary to examine additional statistics to find out the extent of drug use among juveniles.

The Drug Use Forecasting Study is an ongoing project to determine the extent of drug use among criminal offenders - both adults and juveniles. Male juvenile arrestees/detainees in eleven cities across the United States are asked to submit voluntarily to urinalysis and an interview; they are assured of anonymity of their responses. Table 2-C summarizes the data from the 1990 Annual Report (National Institute of Justice, 1991).

Unfortunately, comparable information is not available on female adolescents in these same cities. However, studies of adult female arrestees have shown a higher incidence of drug use, in some cases, than male arrestees. (See Chapter 4 for additional discussion of this issue.)

The data in Table 2-C indicate that the amount of drug involvement by youth in the juvenile justice system is substantial. An earlier report, Survey of Youth in Custody, 1987 (Beck, Kline, & Greenfeld, 1988), found similar results. Marijuana, cocaine and amphetamines were the drugs most commonly used by youth. More than 39 percent of youth under age 18 were under the influence of drugs at the time of their current offense, and more than 57 percent reported using a drug in the previous month. This study also found that the largest percentage of juveniles (33.5%) began using drugs between the ages of 12 and 13.

Another study that underscores the concern about drug-involved youth in the juvenile justice system was conducted in a juvenile detention center in Florida (Dembo, Williams, Wish, & Schmeidler, 1990). Both urinalysis and interviews were conducted with 399 male and female detainees who were assured of confidentiality of individual results. Forty-seven percent tested positive for drugs as follows:

Marijuana	37%
Cocaine	10%
Combination (2 or more drugs - included in above categories)	7%

This study concluded that juvenile offenders who use illicit drugs tend to have higher crime rates. The authors believe that reducing drug dependence must be a priority. Successful interventions must address emotional and behavioral problems and will require a broad range of treatment approaches, including social, educational and vocational skills training.

Table 2-C

Summary of Drug Use Forecasting Data

Juvenile arrestees/detainees testing positive for drugs at time of arrest		Range 10 - 31 %
Most prevalent drugs:		
Marijuana		8 sites
Cocaine		2 sites
Marijuana and Cocaine		1 site
Recent self-reported use of drugs/alcohol	Past 30 days*	Past 3 days*
Alcohol	6 % - 52 %	4 % - 32 %
Tobacco	8 % - 63 %	6 % - 57 %
Marijuana	6 % - 50 %	4 % - 27 %
Average age at initiation of use		Age**
Alcohol		13
Tobacco		13
Marijuana		13
Juvenile use of other drugs		Self-reported lifetime use
Cocaine		5 % - 28 %
Crack		2 % - 16 %
Heroin		0 % - 7 %
Inhalants		0 % - 25 %
LSD		0 % - 20 %

* The very low percentage reported for each of these categories was consistently reported in one site, Washington, DC. The authors of the report speculate that this finding is due to under-reporting by the juveniles interviewed.

** Ages are averaged for all sites and rounded up or down to the nearest whole number.

(National Institute of Justice, 1991)

Finally, a study that examined juvenile courts' handling of drug and alcohol cases showed an increase of nearly twelve percent in drug cases and eight percent in alcohol cases between 1985 and 1988. In addition, drug cases, during the latter part of this period, were more likely to be handled formally and to result in youth being placed in detention. This has resulted in larger caseloads and has placed a greater strain on juvenile court resources. This study also found an increasing disparity between white and nonwhite case rates. Drug cases involving white youth decreased 15 percent, but the rate for nonwhites increased 88 percent during the period of this research (Sickmund, 1991).

PATTERNS OF DRUG INVOLVEMENT

Some youth can limit their use of drugs and alcohol, but drug involvement for many is a progressive process. Youth are motivated to begin using drugs and alcohol for many reasons. However, adolescents do not anticipate progression of substance use to a problem stage when they initiate use. Typically, they consider themselves invulnerable to negative consequences and feel they can use drugs and alcohol without negative effects.

There are many models representing the stages of drug involvement. The following Tables aggregate the elements of several models into four basic stages of drug involvement providing a convenient and practical framework for conceptualizing the progression of drug use (Beschner, 1986; Jaynes & Rugg, 1988; Macdonald, 1989; Nowinski, 1990).

Juvenile justice professionals need to be aware of the indicators of drug use and progression from one stage to the next. Behavioral indicators may alert adults to the need to assess drug involvement with a particular youth.

RISK FACTORS AND CORRELATES FOR ADOLESCENT SUBSTANCE ABUSE AND DELINQUENCY

Youth who become involved in delinquent behaviors and the use of drugs and alcohol come from all social strata, both large and small communities, and healthy as well as dysfunctional families. They may be gifted or limited in intellectual abilities, have few or many talents, and vary markedly in personality. There is no easy predictor of delinquency or substance abuse.

Indeed, research indicates that a complex array of cognitive, psychological, attitudinal, social, personality, pharmacological, and developmental factors foster initiation of adolescent drug use (Schinke, Botvin & Orlandi, 1991). Some of the characteristics that are typical of adolescent development appear to increase the chances that some youth will at least begin the process of experimenting and taking risks with drugs, alcohol and illegal behaviors. As presented in Chapter 1, young people are establishing their identity and independence. As a part of this process, they need to explore different behaviors and values. Experimentation and opposition to adult norms and values, within limits, is typical adolescent behavior. For some youth, however, these behaviors plunge them into a world of activities that can become very dangerous. The pleasure, thrill, or excitement may be so stimulating that they continue to seek it. For some, the acts of rebellion against parents or society are particularly satisfying. Others acquiesce to peer influences from youth who offer friendship and acceptance to those who will engage in similar activities.

Young people often feel invincible and invulnerable. They have difficulty understanding that they are not exceptions to the rules of drug use and delinquency. There is a tendency for youth to believe

Table 2-D

STAGE 1

EXPERIMENTAL AND SOCIAL USE OF DRUGS AND ALCOHOL

Frequency of use:	Occasional; perhaps a few times monthly. Usually on weekends when at parties or with friends. May use when alone.
Sources of drugs/ alcohol:	Friends/peers primarily. May use parents' alcohol.
Reasons for use:	To satisfy curiosity; acquiescence to peer pressure; for social acceptance; to defy parental limits; to take a risk or seek a thrill; to appear grown up; to relieve boredom; for the pleasurable feelings produced; and to diminish inhibitions in social situations.
Effects:	At this stage youth will experience euphoria and return to a normal state after using. A small amount may cause intoxication. Feelings sought include: • fun, excitement; • thrill; • belonging; and • control.
Behavioral indicators:	Little noticeable change; some may lie about use or whereabouts; some may experience moderate hangovers; occasionally, adults may find evidence of use, such as a beer can or marijuana joint.

Table 2-E

STAGE 2

PURPOSEFUL MISUSE

Frequency of use:	Regular; may use several times per week. May begin using during the day.
Sources:	Friends; begins buying enough to be prepared.
Reasons for use:	To manipulate emotions; to experience the pleasure the substances produce; to cope with stress and uncomfortable feelings such as pain, guilt, anxiety and sadness; and to overcome feelings of inadequacy.
Effects:	Euphoria is the desired feeling, and youth will return to a normal state following use. Intoxication begins to occur regularly, however. Feelings sought include: • pleasure; • relief from negative feelings such as boredom, and anxiety; and • stress reduction. May begin to feel some guilt, fear and shame.
Behavioral indicators:	School performance may decline; school attendance problems may begin; mood swings; lying and conning; may have both straight and drug-using friends; decrease in extra-curricular activities; appearance (clothing, grooming) may change; conflict with parents and/or siblings may be exacerbated; and behavior may be more rebellious.

Table 2-F

STAGE 3

HABITUAL USE: DAILY PREOCCUPATION

Frequency of use:	Uses almost daily; may be using alone rather than with friends.
Sources:	May sell drugs to keep a supply for personal use. May begin stealing to have money to buy drugs/alcohol.
Reasons for use:	Youth who progress to this stage of drug/alcohol involvement experience depression or other uncomfortable feelings when not using. Substances are used to stay high or at least maintain normal feelings.
Effects:	Users experience euphoria, but after effects subside will experience pain, depression and general discomfort. May have suicidal ideations/attempts. Tries to control use, but is unsuccessful. Feels shame and guilt. More of a substance is needed to produce the same effect.
Behavioral indicators:	Poor school performance and attendance; change in friendships - no longer has straight friends; stealing; drug culture appearance e.g., clothing, hairstyles, jewelry; poor family relationships; lying and conning to cover use; all interest is focused on procuring and using drugs/alcohol; and changes in personality.

Table 2-G

STAGE 4

DEPENDENCY/ADDICTION

Frequency of use:	Daily use; continuous
Sources:	Will use any means necessary to obtain and secure needed drugs/alcohol. Will take serious risks; often engages in criminal behavior such as shoplifting and burglary.
Reasons for use:	Drugs/alcohol are needed to avoid pain and depression. Many wish to escape the realities of daily living. Use is out of control.
Effects:	The youth's normal state is pain or discomfort; drugs/alcohol help them feel normal; when the effects wear off, they again feel pain. They are unlikely to experience euphoria at this stage. May experience suicidal thoughts or attempts. Often feels guilt, shame and remorse. May experience blackouts. May experience changing emotions, such as depression, aggression, irritation and apathy.
Behavioral indicators:	Physical deterioration includes weight loss, health problems; appearance is poor; may experience memory loss, flashbacks, paranoia, volatile mood swings, and other mental problems; likely to drop out of school or be expelled; may run away from home; possible overdoses; and lack of concern about being caught - focused only on procuring and using drugs/alcohol.

that they can somehow engage in certain behaviors but escape their negative consequences. Because of their limited future time perspective they tend to see themselves as always being as they now are: young, strong, and in control. Many cannot believe the negative impact of drug and alcohol use will affect them, even if they are acquainted with others in such distress.

While there are no absolute methods to forecast drug and alcohol use, or involvement in delinquent behaviors, research has shown that certain factors correlate more strongly with these problems. A given youth may experience several of these problems and not become involved in delinquency or substance abuse. However, among youth with histories of drug and alcohol involvement and delinquent behavior, these factors are proportionately more prevalent. A combination of several of these factors is a stronger indicator of the possibility of such behavior (Hawkins, Lishner, Jenson, & Catalano, 1987).

Family Factors

- **Parent and sibling drug use and criminal behavior.** Children whose parents or siblings engage in crime are at increased risk of delinquency. Parental and sibling alcoholism and use of illicit drugs also increase the risk of alcoholism and drug abuse in offspring. Attitudes and early drinking behaviors appear to be shaped more by parents and relatives than by peers (Hawkins et al., 1987; Knott, 1986). A recent study of adult probationers found that 70 percent of respondents from chemically dependent homes scored positive on the addiction scale used in the research, while only 33 percent of those from non-chemically dependent homes did so. The adult probationers from chemically dependent homes also reported being arrested 26 percent more as juveniles than those from non-chemically dependent homes (McGaha, 1991).

- **Poor and inconsistent family practices.** Children from families with lax supervision, excessively severe, or inconsistent disciplinary practices, and low communication and involvement between parents and children are at high risk for later delinquency and drug use (Hawkins, et al., 1987). Lack of acceptance, closeness, warmth, and praise for good behavior also are family characteristics associated with adolescent substance abuse (Jaynes & Rugg, 1988).

- **Family conflict.** Children raised in families with high rates of conflict appear at risk for both delinquency and illicit drug use. It is the conflict, rather than the actual family structure (e.g., "broken home" or single parent family) that predicts delinquency and drug use (Hawkins et al., 1987).

- **Family social and economic deprivation.** Social isolation, poverty, poor living conditions, and low-status occupations are circumstances that appear to elevate the risk of delinquency and drug use (Hawkins et al., 1987).

School-Related Factors

- **School failure.** School failure is a predictor of delinquency and drug use. Low achievement, low vocabulary and poor verbal reasoning by late elementary school predict later delinquency. Truancy, placement in special classes, and early dropout from school are likely causal factors for drug abuse (Hawkins et al., 1987).

- **Low degree of commitment to education and attachment to school.** This factor is sometimes called school bonding. Delinquent youth tend not to have a commitment to educational pursuits, are less likely to participate in school activities, are unlikely to have an achievement orientation and

to express educational aspirations, and care less about teachers' opinions. Low commitment to school also is related to drug use. Drug users are more likely to be absent from school, to cut classes, and to perform poorly than nonusers. Dropouts tend to have patterns of greater drug use (Hawkins et al., 1987).

Behavioral and Attitudinal Factors

- **Early antisocial behavior.** Conduct problems in early elementary grades have been associated with continued delinquency and use of drugs in adolescence. Early delinquent behavior appears to predict early initiation of the use of illicit drugs; and early initiation of drug use increases the risk for regular use and the probability of involvement in crime (Hawkins et al., 1987).

- **Attitudes and beliefs.** Alienation from the dominant values of society, low religiosity, and rebelliousness are related to drug use and delinquent behavior. Adolescents who are problem drinkers tend to value independence and autonomy, be more tolerant of deviance, and place more importance on the positive than on the negative functions of drinking. They also tend to have lower expectations of achievement. Individuals with positive attitudes toward drug use are more likely to become substance users. Perceiving substance use as normal and widespread behavior is correlated with engaging in substance use. The initiation into use of any substance is preceded by values favorable to its use (Hawkins et al, 1987; Knott, 1986; Schinke, Botvin, & Orlandi, 1991).

Environmental Factors

- **Neighborhood attachment and community disorganization.** High population density, high neighborhood crime rates, and lack of informal social controls are predictors of increased delinquency. Disorganized communities have less ability to limit drug use among adolescents (Hawkins et al., 1987).

- **Peer factors.** Association with delinquent peers is one of the strongest correlatives of delinquency. Similarly, drug behavior and drug-related attitudes of peers are among the most potent predictors of drug involvement. Adolescents tend to increase use of drugs due to the influence of friends, and they also tend to choose friends who reinforce their own drug norms and behaviors (Hawkins et al., 1987). Adolescents who are problem drinkers usually do not feel their peer group and their parents are compatible; are more easily influenced by peers than by parents; and feel more pressure from peers for drinking and drug use (Knott, 1986).

- **Mobility.** Transitions (such as from elementary to middle school and from junior high to senior high school) and residential mobility are predictors of delinquency. Residential mobility also is associated with high rates of drug initiation and frequency of use (Hawkins, et al, 1987).

Constitutional and Personality Factors

- **Constitutional factors.** These factors are often present from birth or early childhood and are thought to have neurological or physiological origins. Attention and cognitive deficits, such as low verbal ability and poor language and problem-solving skills have been associated with delinquent behavior. There also is evidence of a constitutional predisposition toward alcoholism, suggesting that genetic factors may play a role in this area (Hawkins et al., 1987).

- **Personality factors.** Alienation, low motivation, sensation-seeking, willingness to take risks, and

need for stimulation are associated with drug and alcohol use. Some studies have found a relationship between sensation-seeking and delinquency; however, other research has not substantiated these findings (Hawkins et al., 1987). Other characteristics associated with substance use include low self-esteem and self-confidence, need for social approval, high anxiety, low assertiveness, rebelliousness, low personal control and low self-efficacy (Schinke, Botvin, & Orlandi, 1991).

Physical and Sexual Abuse

- This area of investigation is relatively recent. However, some studies have found a high correlation between physical and/or sexual abuse and drug use and/or other deviant behavior. It is postulated that child maltreatment leads adolescents to become disengaged from conventional norms and behaviors and to initiate patterns of deviant behaviors (Dembo et al., 1988). There also appears to be a high correlation between parental abuse of drugs and alcohol and abuse and neglect of their children. These emotional wounds, in turn, increase the likelihood that youth will use substances to compensate for unmet emotional needs (Nowinski, 1990).

A better understanding of the causes of juvenile delinquency and substance abuse will require continuing research. However, juvenile justice professionals can use the knowledge currently available to guide them in assessing youth at risk of delinquent behavior and substance abuse. There is also the possibility that they can contribute to future research efforts in this area by careful documentation of cases. Information that is recorded during intervention may be more accurate than reflections by workers or youth later.

THE CONSEQUENCES OF ADOLESCENT DRUG USE AND DELINQUENCY

The Association Between Delinquent Behavior and Drug Use

Approximately 11 percent of the youth in custody in 1989 were charged with alcohol or drug offenses, such as sale, possession, and manufacture of illegal substances. Forty-nine percent of these youth were held in 1989 for distribution of drugs. This represented a substantial increase from the number of youth held for such offenses in 1987 (Allen-Hagen, 1991).

Delinquent behaviors that are common to only 11 percent of the population of youth in custody may seem of less significance on the surface. However, this figure underestimates the effects of drug use in several ways. Many youth who use drugs and engage in delinquent behavior are not apprehended. Self-reports of adolescent delinquency and drug use are usually much higher than actual statistics. The statistics just cited include only youth in custody in the juvenile justice system; those on probation, diverted from the system, or otherwise not in custodial care are not included. It is increasingly recognized that adolescent substance abusers need treatment services, and many jurisdictions attempt to obtain such services instead of placing youth in correctional facilities. While these youth may have been arrested for a drug-related offense, they may be diverted for treatment services.

Data already discussed show that the rate of substance use among youth entering the juvenile justice system is much higher than the 11 percent who are charged with drug or alcohol offenses. In the 1987 report of youth in custody (Beck, Kline & Greenfeld, 1988), more than 39 percent of youth under 18 years of age reported they were under the influence of drugs at the time they committed the offense for which they were currently charged. In a Florida Detention center,

47 percent of youth tested positive for drugs (Dembo et al., 1988). The Drug Use Forecasting study found that between 10 and 31 percent of youth had positive urinalysis results at the time of arrest (National Institute of Justice, 1991). These statistics underscore the fact that many youth may be affected by drugs at the time they commit crimes. Delinquent behavior and drug use often coincide (Hawkins et al., 1987).

Questions have been raised about the precipitating factors of drug use and delinquency: Does drug use cause delinquent behavior or does delinquency result in increased drug use? While there are research findings that support either theory (drug use causes delinquency or delinquency causes drug use), the majority of evidence suggests that neither may be true, but both problems have common causal factors as discussed in the previous section of this chapter. Studies indicate that delinquent behavior often precedes drug use chronologically. It is common for delinquent behavior to peak between ages 15 and 17; concomitantly drug use increases through the teens and often peaks in the early twenties. Those who engage in and continue both behaviors comprise a small proportion of the juvenile and adult criminal justice system; however, they commit a disproportionately large number of crimes (Hawkins et al. 1987).

Drug use is associated with both income-generating crimes and violent crimes. As youth progress to more serious drug involvement, the source of their supply of drugs and alcohol changes. They gradually need more drugs to maintain their level of comfort, and they are less likely to receive them from friends and family members. Therefore, many resort to stealing, shoplifting, burglary, prostitution and other crimes that produce income with which to purchase drugs.

Other youth may commit crimes because of the effects of drugs. Some will experience impaired judgment and may attempt to drive automobiles while under the influence of drugs or alcohol. Other risky behaviors are also associated with drug use, including risky sexual activity. Various substances have different physiological effects (see Chapter 3). Some will result in youth becoming more disorderly or violent. Examples of drug categories that can result in disorderly, aggressive or violent behaviors include: CNS depressants; CNS stimulants; inhalants; hallucinogens; and PCP.

The Effects of Drug Use and Delinquency for Individual Youth

Substance abuse profoundly affects adolescent development. When youth become chemically dependent, the developmental process usually slows markedly and may stop completely for many. This includes development in all areas, including social, psychological, physical, and cognitive development. One study cited by Nowinski (1990) compared adults and adolescents in treatment for substance abuse. The research found that the adults began abusing substances at an average age of 15, while the average age at which the youth in the study started abusing substances was less than 12 years. There is a vast difference between the development of 11- and 12-year-olds and that of youth who are 15 or 16 years old. With early initiation in substance abuse, many youth never experience important developmental tasks. Professionals often find the development of these youth is much behind that which is expected of their chronological ages (Nowinski, 1990).

Social and Psychological Consequences

Habitual substance abuse interferes with the youth's capacity for making choices and decisions, an important part of adolescent development. Developing self-control is a major task, but substance abuse creates dependency and defeats attempts at control. Youth may loudly protest that they are choosing to use drugs; in reality, however, as involvement with drugs progresses,

they have less and less choice. Substance abuse also affects social interactions and results in alienation from the mainstream adolescent subculture for many youth. They are likely to be stigmatized by peers and become outsiders. Many do not confront some of the developmental tasks of most youth, such as dating and developing appropriate skills, as their lives are totally absorbed with drug use. As a result of substance abuse, some youth will experience psychological consequences including agitation, depression and paranoia (Nowinski, 1990).

Physical and Health Consequences

Physical effects of adolescent substance abuse include accidental injuries, physical illnesses and infections, possible overdoses, and even death. Suicides and homicides follow only injuries as the leading causes of death for adolescents. Many suicides and homicides, as well as accidental injuries are directly or indirectly related to drug involvement. For example, more than half of traffic fatalities for teenagers (ages 16-20) in 1990 involved alcohol (Did you know. . ., 1992).

As the pursuit of drugs becomes the focal point for youth, many experience malnutrition because of appetite changes or their inability to afford nourishing food because of the expense of their drug habit. Depending on the type of drug(s) being abused, youth may experience damage to various systems and organs of the body, including the cardiovascular, respiratory, and endocrine and reproductive systems and to the brain, liver, kidneys and other organs. Effects on the brain may include hallucinations, psychotic episodes, changes in sleep patterns, and changes in concentration abilities and short-term memory (Schonberg & Schnoll, 1986; Macdonald, 1989).

Drug use is a factor in AIDS and other sexually transmitted diseases. Youth may become infected with the Human Immunodeficiency Virus (the causative agent of AIDS) through sexual activity or blood contact with an infected person. Blood contact most often occurs through shared use of intravenous drug needles and paraphernalia. Small amounts of infected blood may remain on these instruments after they are used to administer drugs. If they are not thoroughly cleaned before being used again, the virus can be transmitted to uninfected individuals. An infected person also can infect another through the exchange of body fluids during sexual activity. Drug use increases the risk of this happening if inhibitions are lowered and judgments are clouded resulting in the failure of youth to abstain or use precautions they might otherwise have used.

Adolescent pregnancies also may result from unprotected sexual activity while youth are drug-involved. Youthfulness and poor health conditions are likely to result in complications for adolescent mothers during pregnancy and delivery. Exposure to alcohol and other drugs *in utero* also may result in spontaneous abortions, stillbirths, premature deliveries, congenital malformations, low birth weights, addiction withdrawal, and health and developmental problems for the infant. These children also often experience later behavioral, emotional and learning problems (*NIDA Notes*, 1990).

Cognitive and Academic Consequences

Arrested cognitive development means that many youth remain at the concrete level of cognitive operations. This not only affects academic abilities, but moral and social development as well. Youth may continue to make behavioral choices according to immediate consequences rather than ethical principles. Declining grades, increased absenteeism, and eventually dropping out of school are also consequences for many drug-involved youth (Nowinski, 1990).

Legal Consequences

Legal problems are a reality for drug-involved youth. As discussed earlier, they are subject to arrests for drug-related offenses, such as possession of drugs and driving while intoxicated. Illegal activity is also likely to include income-generating crimes, such as stealing, shoplifting, and breaking and entering. Disorderly conduct, aggressive behaviors and violence may be rooted in the effects of substance abuse and result in legal consequences for youth (Nowinski, 1990).

Environmental and Social Consequences of Drugs and Delinquency

Family

Adolescent substance abuse has a massive impact on families. Many youth who abuse drugs and alcohol are a part of families where one or more members have substance abuse problems. However, despite the history of other family members, the habitual use of drugs or alcohol by an adolescent often precipitates a crisis for the family. An addicted adolescent will become preoccupied with drug or alcohol use; similarly, his or her family is likely to become preoccupied with the adolescent and his or her behavior. When this occurs many other aspects of family life may be jeopardized, including the marriage relationship and other children in the family. The effects on the family are likely to include progressive preoccupation with the "problem youth," struggles for control, and personality and lifestyle changes. Family members may accommodate the drug-involved youth, and in the process, lose control of their own lives. Resentment, guilt, and blame are often experienced by family members. Siblings, as well as parents, are profoundly affected by an addicted adolescent family member (Nowinski, 1990).

Various roles may be taken by family members with a drug-involved youth. Different models use distinct terms for these. However, generally the roles include the following activities (Macdonald, 1989; Nowinski, 1990):

- enabling the youth by protecting him or her from negative consequences and placating others who may be affected;
- compensating for the drug-involved youth by being a model sibling; and
- distracting the family from the problems of the drug-involved youth by drawing attention to another problem.

If not already in disarray, adolescent substance abuse may eventually render the family dysfunctional. Treatment interventions are often necessary to restore parents and siblings to previous levels of functioning. For families with a history of multiple problems, interventions may need to focus on learning appropriate roles and resolving long-standing issues.

Peers

Just as peers are an influential factor in developing drug and alcohol problems in an adolescent, a drug-involved youth has a reciprocal influence on his or her peer group. Adolescents are more likely to seek and accept friendships with other youth who share their values and preferences for drug-related behaviors. They may introduce other youth, and even siblings, to drug-related activities, just as they were once initiated.

School and Community

Drug-involved adolescents are likely to become disengaged from school and community activities. They are unlikely to have time and talents available for making a positive contribution to their environment.

Simultaneously, they may contribute to problems in the school and community that are related to drug behaviors. Issues of community safety and protection are likely to be exacerbated by drug-involved youth who engage in delinquent behaviors to generate income or in disorderly, aggressive and violent behaviors caused by the drugs they have consumed.

Societal Costs of Substance Abuse and Illegal Activities

In addition to the distress of individual youth and their families, delinquent and drug-involved youth present societal concerns, as well. There are both economic costs and social problems that can be attributed to these juveniles.

Economic Costs

In examining the links between drugs and crime, Gropper (1985) lists several economic impacts of crime committed by persons using drugs. These include *non-drug crimes* such as burglary, robbery and theft from which victims suffer an economic loss. *Freeloading* includes the costs to relatives, friends, and the public to support drug-involved persons, including shelter, meals, cash loans, public transfer payments, and evasion of taxes. For most youth, basic support is expected from parents or public welfare. However, if they begin drug use and delinquent behavior at an early age, it may be expected that economic dependence will continue into adult years and their potential earnings and contribution to society will be minimized or lost. *Many youth who are habitual or addicted drug users become involved in drug distribution crimes.* Some youth are involved in drug distribution to receive cash, while others do so to secure an adequate supply of drugs for their own use. These crimes increase costs for law enforcement and place other youth at risk for involvement with drugs. In some cases, youth are injured or killed because of drug distribution crimes. Other economic costs include the expense of providing correctional facilities, courts, treatment, and other services to protect the public and rehabilitate offenders. (See Chapter 9 for additional information on cost issues.)

Social Costs

Among the intangible costs of drug use and delinquency are the suffering caused to victims of crimes and the families and loved ones of the juveniles involved. General fear of crime on the part of the public is also a social burden (Gropper, 1985).

Youth Gangs. Youth gangs that are involved in drug-related crimes appear to be spreading at an alarming rate. Gangs involve youth and young adults from a variety of cultural, ethnic, socioeconomic, and racial groups. It is estimated there are nearly 1,500 youth gangs nationwide, with more than 120,500 members. African American and Hispanic youth comprise about 87 percent of gang membership. The ages of gang members tend to range from about 13 to 24 years; nearly all gang members are male (Gurule, 1991; Spergel & Chance, 1991).

Youth become involved in gangs for a variety of reasons. For some, they fulfill socialization and survival needs for young people in low-income, socially isolated, and transitional areas. Family dysfunction, school problems, lack of employment opportunities and poverty also appear to be contributing causes for joining gangs. Racism, cultural traditions, opportunities for criminal activities and the lack of effective interventions also contribute to gang development (Spergel & Chance, 1991). Some youth turn to gang involvement to meet needs for acceptance, recognition, and belonging. it is not unusual for gangs to be considered "family," providing mutual care and support among members. Youth frequently become involved with gangs because of low self-esteem, a poor sense of identity, and to alleviate boredom (Harper, 1989).

Youth gangs are not a new phenomena; however, they appear to be becoming more violent than ever before. Drug trafficking and other illegal moneymaking activities have become an important focus for these groups of young people. The violence perpetrated has included drive-by shootings, turf battles, and killings of informers. Victims of this violence range from innocent bystanders to other gang members, and sometimes include professionals who are trying to intervene, such as police and teachers. There is speculation about links between youth gangs and organized crime, but further research is needed in this area. Comprehensive approaches that combine social intervention and law enforcement suppression strategies appear to be the most effective in gaining control of gang problems. In addition to intervention techniques, prevention strategies are needed to ameliorate community problems that foster gang development and target youth at risk of gang involvement at an early age (Gurule, 1991; Spergel & Chance, 1991).

Income-generating Crimes and Drug Trafficking. As young people progress to habitual use and addiction, they generally must seek alternative means for financing their drug purchases. For many this involves income-generating crimes, including drug trafficking. It is difficult to determine through official statistics the number of income-generating crimes (e.g., thefts, robberies, burglaries) directly related to drug use. However, as the information given earlier indicates, many youth who are arrested and detained for these crimes are found to have drugs in their systems when they undergo urinalysis. Thus, the likelihood that drug use is a motive for such crimes in many situations is strong.

The selling of drugs has become a big business. It operates on a supply and demand basis with entrepreneurs often making huge profits on drugs that are in greatest demand. Although youth may become involved in drug trafficking independently or cooperatively with a small group of peers, many are involved in working for other persons or organizations including adult employers. In some cases, their only reward is a steady supply of the drugs they need. However, in many instances, they are able to make a monetary profit, as well. There have been some examples of youth carrying large amounts of cash, wearing beepers to be able to serve their customers promptly, and purchasing extravagant items such as expensive cars and clothing. However, the majority of youth involved probably earn much less. Not all youth who participate in drug trafficking are heavy users of illicit substances. They may find that this illegal activity is the only (or most profitable) employment opportunity available to them. Many, on the other hand, will re-invest most of their profits to purchase their own supply of drugs. Fields (1986) found that successful young drug dealers possessed individual autonomy, commitment to the work ethic, and dealing techniques, including entrepreneurial knowledge and skills.

Prostitution. Prostitution is another type of deviant behavior in which drug-involved youth may participate. It is estimated that 125,000 to 200,000 male and female youth become involved in prostitution each year (Haffner, 1987). For some, this area of criminal activity is a way of procuring money and/or drugs. In some cases youth will consort with an adult (or another juvenile) in exchange for a supply of drugs. Often, however, their prostitution activities involve many "customers" who pay for their services. In turn, they can purchase the drugs they need. In addition to the hazards of drug use, juveniles who engage in prostitution face many dangers, including violence and the potential for contracting sexually transmitted diseases.

While these examples of the economic and social costs of drug use and delinquency are not exhaustive, they serve to illustrate the enormous impact of these activities on society. There appears to be a growing link between drug use and violent crime, both because

of the effects of certain drugs, and the associated gang-related and drug-trafficking activities. Younger age is a factor that has been associated with a greater tendency toward aggressiveness and violence. As McBride & Swartz (1990) state:

> . . .younger addicts, enculturated into a climate of greater overall violence and prone to opportunistically using multiple drugs. . .have shown less reluctance to turn to violent crime as a way of generating income, settling scores or demarcating territorial rights. Within this increasingly volatile and violent mix, the emergence of cocaine, and particularly crack and free base cocaine, along with the proliferation of a powerful arsenal of weaponry, seems to have wrought a quantum change in the degree and lethality of street violence.

CONCLUSION

This chapter has presented information about the history of adolescent substance abuse in the United States. The extent of drug use among adolescents has been described, and characteristics of progression through four stages of drug involvement were outlined. Risk factors for both drug use and delinquent behavior by adolescents were explored. Finally the association between and consequences of adolescent drug use and delinquency were addressed. This is not a comprehensive presentation of these areas. However, the information presented here serves as a stimulus to broaden views about these problems and encourage juvenile justice professionals to investigate these issues more fully in their particular jurisdictions.

Drug and delinquent behaviors present an immense challenge to the juvenile justice system. All aspects of the system have been challenged by these problems as you will read in more detail in Chapter 4.

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CHAPTER 3

PHYSIOLOGICAL EFFECTS OF DRUGS ON ADOLESCENTS

PHYSIOLOGICAL EFFECTS OF DRUGS ON ADOLESCENTS[1]

INTRODUCTION

Though further research is needed, modern science offers alarming discoveries about the physiological effects of drugs on human beings. However, use of some drugs, alcohol for instance, is accepted in today's society; therefore, denial of the adverse consequences associated with drugs is common. As discussed in Chapters 1 and 2, among certain youth cultures, the use of drugs is accepted, and possibly even encouraged. When drug use is reinforced by the powerful elements of societal acceptance and peer pressure, an extremely rigid wall of denial may form. In Chapter 2 the behavioral ramifications of adolescent drug use were discussed. There is also a need for basic, honest education about the physiological factors associated with drug use.

To date, most of the research on chemical dependency has been conducted on male adults, and has concentrated on alcoholism. Literature on drugs other than alcohol, and specifically, that which differentiates the effects of drugs on adolescents as opposed to adults, is more rare (Doweiko, 1990). Research is seriously needed in this area. The primary purpose of this chapter is twofold: one, to acquaint juvenile justice professionals with common physiological signs and symptoms of drug influence, intoxication, overdose, and withdrawal; and two, to relay what is known about the potential long-term effects of drug use on an adolescent's health and development.

After reading this chapter, participants will be able to:

- discuss two reasons an awareness of the physiological effects of drugs is useful to the juvenile justice professional;
- list at least four ways that adolescent drug-using patterns differ from those of adult patterns, and why adolescent chemical dependency is sometimes considered more complicated than adult chemical dependency;
- briefly describe how the effects of drugs are produced in the body;
- list the seven categories of drugs, and the usual route(s) of administration for each;
- list at least five observable effects of each category of drugs;
- describe the symptoms of overdose and withdrawal associated with each category of drugs; and
- explain at least two long-term health consequences associated with the use of each category of drugs.

OVERVIEW OF DRUG USE AMONG ADOLESCENTS

Some people may dismiss, or downplay adolescent drug use as "experimental," or primarily a problem of peer pressure that will go away with maturity. Data shows otherwise. While the use of drugs is always a health concern with potentially serious ramifications,

[1] Material for much of this chapter was drawn from the resources *Concepts of Chemical Dependency* (Doweiko, 1990), and *Drug Recognition Techniques Participant Manual* (APPA, 1988).

additional complications are encountered when juveniles use drugs.

This chapter will deal primarily with the physiological and health consequences associated with adolescent drug use, including the potential for death. In addition, it is important to be aware that the use of substances can *indirectly* lead to death. The leading causes of death for 15- to 24-year-olds are accidents, homicides, and suicides. All three are strongly correlated with drug use (Macdonald, 1984).

The Developing Adolescent

There is reason to believe that the impact of drugs on an adolescent's system may be more devastating than it is to an adult. This is supported by the fact that symptomology of drug use is often more pronounced in juveniles than in adults. The tolerance level for juveniles is lower, also. Tolerance occurs when an individual's body adapts to the effects of the drug, so that increasing quantities are needed to produce the desired effects (Doweiko, 1990). Therefore, adolescents might be expected to become addicted to a drug at a faster rate. Physiologically, young people are not fully developed. Some research indicates that the use of drugs by youth can actually slow down, or halt, the developmental process (American Probation and Parole Association, 1988).

Young people are immature psychologically as well. The concept of chemical dependency in the adolescent becomes more complicated when we realize that youth are also in a natural state of psychological dependency. Because of this, it may be said that youth are in need of "habilitation" instead of "rehabilitation." The adolescent has never fully developed the ego strength and coping mechanisms that provide a foundation for rehabilitation.

Patterns of Adolescent Drug Use

Research has shown that patterns of drug use tend to differ between adolescents and adults. In a study conducted with clients in treatment, Holland and Griffin (1984) compared the patterns of adolescent and adult drug use. Some of their findings are summarized below.

- The average age adolescents began using drugs was 11.8 years, while adults typically began their use at 15.1 years;
- Adults were more likely to have used alcohol before other drugs, while adolescents were just as likely to have used another drug before alcohol as they were to have used alcohol first;
- Adolescents seemed to have begun polydrug use more rapidly, and to have begun such use at an earlier age, than adults;
- The social, psychological, and behavioral factors affecting the adolescents in the sample were similar to those found in the adults, even though adults had been using drugs an average of twice as long; and
- In the areas of alcohol use, family, psychological functioning, and acting out behaviors, adolescents seemed to have more severe problems than adults.

There are physiological, as well as psychological ramifications to these findings. Further analysis of the Holland and Griffin data produces evidence of the very serious consequences associated with the early use of drugs. Their research suggests that the earlier an individual begins using drugs, and the longer the duration of use, the more likely s/he is to use drugs frequently and to use multiple substances. Younger

clients in the study were just as likely to experience psychosocial and/or medical problems associated with their drug use as were adults. Furthermore, problems were seen more frequently with earlier onset of use, and longer duration of use.

Robins and Przybeck (1985) report similar findings about the particular dangers of early drug use. Through a large-scale study conducted in three sites, they concluded that those who began using drugs before age 15 were at increased risk of developing a severe drug disorder. Robins & Przybeck also found a correlation between early onset of drug use, alcoholism and antisocial personality.

Researchers at the National Institute on Drug Abuse (NIDA) Addiction Research Center have studied the effects of drugs on the brain and found that certain drugs reduce activity in the cerebral cortex, the upper part of the brain which is responsible for complex thought processes (NIDA, 1990). This portion of the brain acts as a "judge," deciding which human urges will be expressed, and which will be controlled. This research, conducted by Dr. Edythe London, has concluded that morphine, cocaine, amphetamines, alcohol, and barbiturates reduce activity in the cerebral cortex, producing a disinhibiting effect on the user. This finding is especially critical when considering its impact on young people, who are just learning how to control their impulses and resist peer pressure. Youth often find themselves in situations where they feel pressured to engage in risky behavior. When using drugs, these individuals are less likely to control the urge to take the risk.

Apparently, there are unique considerations associated with adolescent drug use. Additional research is needed to further explore this area.

GENERAL PHYSIOLOGICAL EFFECTS OF DRUG USE

Drugs may enter the body through various routes (e.g., orally, intravenously, nasally). However, regardless of the means of administration chosen, the mind- and behavior-altering effects of drugs are not produced until they reach the brain.

Depending on the route of administration, drugs interact with certain tissues and organs of the body, and eventually are absorbed into the bloodstream (**absorption**). For example, when a drug is smoked or inhaled, such as marijuana, it is absorbed through the lung's membranes into the bloodstream. A drug that is swallowed, such as alcohol, is absorbed from the stomach or intestines into the bloodstream. Cocaine, when administered intranasally ("snorted"), is absorbed into the bloodstream through the mucous membranes of the nose. Drugs like heroin, that are taken intravenously, are injected directly into the bloodstream.

As drugs enter the body through absorption, they may undergo all of the following processes:

- biotransformation;
- blood circulation;
- storage in tissue reservoirs; and
- action in the brain.

(adapted from Gilman, et al., 1985)

These processes occur simultaneously, and the drug is in a dynamic state of interaction with the body until it is excreted. Here, for purposes of discussion, each of the processes will be discussed separately.

Biotransformation. The drug may be broken down, or metabolized in various tissues and organs of the body. Through this process, chemical reactions take place with other substances encountered in the

body, and the drugs are changed into new substances called **metabolites**. Sometimes it is a metabolite of the drug, and not the drug itself, which interacts with the brain. For example, heroin is transformed into morphine, and it is the morphine which produces its effect on the brain.

Blood Circulation. After absorption, the drug circulates throughout the body by way of the bloodstream. The drug may be in the form of metabolites, as discussed above. Biotransformation does not always occur, however. Portions of the drug may be distributed through the body *unchanged*. In either case, either the unchanged drug, or metabolites of the drug, are distributed throughout various organs and tissues via the bloodstream.

Storage in Tissue Reservoirs. Some chemicals, such as the synthetic drug phencyclidine (PCP), and tetrahydrocannabinol (THC), the active substance in marijuana, are distributed to fat cells, and may be stored there and released slowly over a long period of time. However, this does not occur with all drugs.

Action in the Brain. Eventually, the drugs, or metabolites, pass through the **blood-brain barrier** into the brain. The blood-brain barrier is a membrane which acts as a filter, prohibiting harmful substances from entering the brain. Drugs are capable of passing through the blood-brain barrier, some more quickly than others (APPA, 1988). Therefore, the onset of effects occurs much more rapidly with some drugs than others.

As stated previously, the intended (and sometimes unintended) effects of drugs are produced when they reach the brain. The brain controls all bodily functions because all information perceived by the body is ultimately transmitted to and interpreted by it. The information is carried to the brain through the release of "chemical messengers" called **neurotransmitters**. Neurotransmitters are released from a nerve ending to cross a small gap called the **synapse**. Once across the gap, they bind with receptors on another nerve or tissue. Most drugs produce their effects by interacting with the neurotransmitters and/or receptors in the brain. For instance, they may stimulate or inhibit the release of neurotransmitters; change the rate at which the action of the neurotransmitter is terminated; or mimic the action of the neurotransmitter at its receptor site. These alterations in neurotransmitter activity have profound effects on an individual's behavioral, emotional, and cognitive functioning (Bennett & Woolf, 1991). Different psychoactive drugs will alter the activity of certain neurotransmitters. Scientists have discovered that neurotransmitters acetylcholine, dopamine, norepinephrine, seratonin, and endorphins in the brain are affected by the use of psychoactive drugs. More information on this will be presented throughout the chapter.

Excretion is also part of the ongoing, dynamic process described above. Some of the drug may be changed into a form which can be passed out of the body, or the drug may be eliminated unchanged. Eventually, all drugs are filtered through the kidneys and passed from the body through urine. For this reason, urine testing is an extremely reliable means of detecting the presence of drugs in the body (Ryan, 1989). Further information on the physiology of drug use and urinalysis will be presented in Chapter 13, Chemical Testing.

General knowledge about the effects of drug use can help the juvenile justice professional identify individuals who may be drug-involved. Based on the symptoms demonstrated, personnel may decide who to further evaluate through assessment instruments, drug recognition techniques, and/or chemical testing. Recently arrested adolescents or probationers may show symptoms of intoxication. Juveniles in detention or residential facilities may exhibit signs of withdrawal from certain drugs. It is also wise for juvenile justice practitioners to be aware of signs of drug overdose and

withdrawal so that medical attention can be arranged when necessary. In this section, information on the physiological effects of seven categories of drugs will be presented: Central Nervous System Depressants (CNS Depressants); Cannabis; Central Nervous System Stimulants (CNS Stimulants); Hallucinogens; Narcotic Analgesics; Inhalants; and Phencyclidine (PCP).

For each category, the following will be discussed:

- common types of drugs represented;
- typical methods of administration of the drug, and the corresponding onset and duration of effects;
- physical signs of recent use;
- physical symptoms of drug overdose;
- physical symptoms of withdrawal; and
- long-term consequences of use.

It is interesting to note, when reading about signs and symptoms of drug use and drug withdrawal, that the effects experienced by withdrawal from a drug are usually the opposite of those effects experienced when using the drug.

CENTRAL NERVOUS SYSTEM (CNS) DEPRESSANTS

Effects of Current Use

CNS Depressants include alcohol, barbiturates (e.g., phenobarbital, pentobarbital, Seconal), and benzodiazepenes (e.g., Xanax, Valium, Librium). Alcohol is by far the most widely used of the CNS depressants. In fact, in regard to frequency of use, alcohol surpasses all types of drugs. Although the use of other CNS depressants is not as common, adolescents may find barbiturates or benzodiazepenes in a parent's purse or medicine cabinet; youth also may manage to get a prescription refilled for their own use.

All of the CNS depressants are taken orally and act upon the body in much the same way. They slow down the operations of the brain, relieving anxiety and producing feelings of relaxation and sometimes sedation. Because they depress areas of the brain that are normally inhibitory, they also have a disinhibiting effect. This means that, under the influence of CNS depressants, an individual might engage in behavior that s/he would normally control.

CNS depressants are often classified by the duration of their effects on the individual taking them. These include ultrashort-acting (effects last up to an hour), short-acting (up to three hours), intermediate-acting (three to six hours), and long-acting (longer than six hours). CNS depressants are usually ingested orally. The effects of barbiturates and alcohol are similar. Both drugs affect the entire central nervous system. The potency and amount of the drug ingested will determine the degree to which these effects are experienced. Benzodiazepenes, on the other hand, have a more limited effect. They do not produce depression of the entire central nervous system unless a very heavy dose is taken. The primary effect of benzodiazepenes is anxiety reduction; the drug does not usually produce sedation as alcohol and barbiturates will.

The CNS depressants have been shown to interfere with the sleep cycle, decreasing the amount of the user's **Rapid Eye Movement** (REM) sleep. The REM sleep phase is said to be essential for maintenance of an individual's normal emotional state. Thus, REM sleep deprivation may cause irritability, aggression, reduced attention span, hallucinations, and possibly psychotic episodes (Bennett & Wolf, 1991). When drug use is stopped, the individual may experience the **REM rebound effect** (Woods, et al., 1988), in which there

is an *increase* in the amount of REM sleep. With this rebound effect, dream time is increased, and vivid and frightening dreams are often experienced. When combinations of CNS depressants are taken together, **potentiation** occurs, meaning that one drug will exaggerate the effects of the other. Potentiation can be very dangerous, even fatal. For heavy users, withdrawal from CNS depressants can be a very serious condition, possibly leading to psychosis or death, and so requires medical supervision.

Alcohol

Because alcohol is so widely used by juveniles, greater detail about the physiological processes of this drug will be discussed. When alcohol is ingested, approximately 20% of the ethanol is immediately absorbed through the stomach lining, and the other 80% is absorbed into the body through the small intestine. When one drinks on an empty stomach, all of the alcohol ingested can pass into the bloodstream through the stomach lining in as little as one minute. Most of the alcohol is metabolized by the liver before it is excreted at a rate of about one 12-ounce can of beer or a mixed drink containing one ounce of alcohol per hour. Alcohol is classified as a CNS depressant because it can act as a sedative, a tranquilizer, or an anesthetic, depending on the dosage used. At low levels of use, a person would experience decreased alertness, feelings of euphoria, a loss of inhibitions, and impairment of judgment. As dosage increases, an individual might develop **ataxia**, which is characterized by slowed reaction times and an impaired ability to coordinate muscle activity. With extremely high levels of alcohol in the bloodstream, an individual would stagger, be stuporous, and probably not remember what happened after intoxication diminishes. When alcohol reaches the point where it acts as an anesthetic, the dosage is extremely dangerous; the individual may die without medical attention.

Because alcohol is a toxic chemical, it causes both the brain and the stomach to react, often resulting in a "hangover" the day after its consumption. The hangover may include headache, tremor, or nausea. For heavy users, alcohol detoxification can be extremely distressful to the body, and will require medical supervision. The user may experience **delirium tremens** during abstinence, a condition which is characterized by restlessness, insomnia, severe agitation, hallucinations, body tremors, and possible convulsions and delirium.

Long-Term Health Risks of Use

The long-term effects of alcohol and the other CNS depressants differ, and thus will be discussed separately.

Alcohol

The long-term use of alcohol can have devastating effects on the body. Many of these are life-threatening. Since alcohol is metabolized by the liver, damage to the liver is a common consequence. Cirrhosis of the liver is the most severe effect, causing damage to liver cells that is irreversible. The esophagus, stomach, and intestines also may be harmed through excessive use of alcohol. Pancreatitis is a disease that may develop within just a few years of heavy drinking, making young people susceptible to this condition. The illness can result in death, especially if alcohol use is continued.

Many of the serious health complications associated with alcohol use occur after chronic abuse over many years. Therefore, they are not of immediate concern for juveniles. However, the effects of alcohol poisoning can be devastating, even fatal, at any age. Young people are at greater risk of alcohol poisoning because they have a lower tolerance for the toxic effects of alcohol than adults. This is because alcohol is water soluble; after ingestion, it is distributed to the parts of

the body that contain water. Youth typically have less body water than adults to dissolve the alcohol that is absorbed into their body. Therefore, they are more likely to reach the high blood alcohol concentrations associated with alcohol poisoning than are adults (Gordis, 1989).

Alcohol can cause harm to the cardiovascular system. It is toxic to both skeletal and cardiac muscles. Increased risk of pneumonia and tuberculosis also are associated with alcohol use. Alcohol consumption has been correlated with the development of certain types of cancer (e.g., mouth, larynx, tongue, esophagus, and liver). Vitamin deficiencies are also common. Alcohol has virtually no nutritional quality, and the tendency for people to consume less food while drinking increases this effect. A poor resistance to infection is seen in heavy drinkers. Hormonal changes in both males and females also have been observed.

Withdrawal from all CNS depressants is similar, and may require medical attention if the individual has been consuming the drug, including alcohol, for at least three to five years. The symptoms of withdrawal, as discussed in the previous section, include seizures and delirium. During the stages of delirium, agitation and hyperthermia (increased body temperature) can cause exhaustion, cardiovascular collapse, and possibly death.

Other CNS Depressants

Some of the CNS depressants take a fairly long period of time to metabolize, meaning the body often does not function normally the next day or for up to several days after taking the drug. This effect is similar to the "hangover" often experienced with alcohol. With some drugs, judgment and coordination may continue to be impaired even though intoxication wears off.

When the use of CNS depressants increases, so does the level of danger they can cause. The respiratory system may slow down considerably; this and other complications can result in coma or death. Chronic use can lead to drug-induced psychosis.

Hostility and aggression also can be associated with the use of CNS depressants. Perhaps because of the drugs' disinhibiting effects, these emotions can cause the user to engage in violent behavior, directed toward both self and others.

CANNABIS

Effects of Current Use

The cannabis plant is the source for marijuana and hashish. Marijuana is also used in large quantities by adolescents. Although the drug contains about 400 different chemicals, the active ingredient is Delta-9 Tetrahydrocannabinol (THC). Various concentrations can be found in marijuana or hashish, depending on what part of the plant the drug is taken from and how it is grown. Marijuana is usually smoked, and sometimes taken orally (e.g., mixed in baked goods). A marijuana cigarette is inhaled very deeply and held in the lungs for several seconds. Thus, about half of the THC contained in the cigarette is absorbed through the lungs into the blood in a short period of time. The effects usually begin within a few seconds or minutes, peak by about 30 minutes, and decline after two to three hours. When taken orally (e.g., mixed in brownies or cookies), only a small percentage of the THC will be absorbed very slowly; the effects are not felt until about 30 to 60 minutes later, or perhaps not for a few hours. The effects can last for three to 12 hours.

The effects of marijuana usually occur in two phases. During the first phase, which begins shortly after the drug is absorbed, the individual experiences mild anxiety, followed by euphoria, relaxation, and friendliness. The user may seem to experience deep

Table 3-A

CENTRAL NERVOUS SYSTEM (CNS) DEPRESSANTS

Symptoms of CNS Depressant Use:

- drunken behavior (may be accompanied by odor of alcohol)
- slurred, thick speech
- disorientation
- poor coordination
- reduced social inhibitions
- slowed reflexes
- sluggishness, sleepiness
- impaired judgement and concentration
- wide variety of emotional effects, such as euphoria, depression, suicidal tendencies, laughing or crying for no apparent reason
- decreased heart rate and blood pressure
- shallow respiration

Symptoms of CNS Depressant Overdose:

- extreme drowsiness (may pass out)
- slowed heartbeat
- shallow respiration
- cold, clammy skin
- possible death from respiratory failure

Symptoms of CNS Depressant Withdrawal:

- restlessness
- muscle weakness
- dizziness
- nausea and vomiting
- confusion
- insomnia
- agitation
- unpleasant hallucinations
- tremors
- possible convulsions and delirium

Source: American Probation and Parole Association (1988). *Drug recognition techniques training program participant manual.*

insight during this first phase. The second phase begins when the individual becomes very drowsy and sedated.

Marijuana may cause impairment of the reflexes, a decrease in short-term memory, and an inability to concentrate or focus one's attention. Coordination and reaction time is often significantly decreased. Drivers under the influence of marijuana will often have trouble judging distances, speeds, and the length of time it takes to brake. Some research has shown that heavy marijuana use may cause a general decrease in one's motivational level. THC is a fat soluble drug, meaning that it is stored in the body's fat cells. Thus, THC may be slowly released to the blood for days, or weeks, after the drug has been used, causing symptoms of use even though the drug was not recently ingested.

Marijuana use causes changes in the brain that inhibit activity of the neurotransmitter acetylcholine. Acetylcholine is active in the brain's cerebral cortex which controls thought and higher mental functions. This may help to explain marijuana's effects on such thought processes as memory and concentration. (Edelson, 1987).

Tolerance to THC can develop rapidly, making it necessary for the user to increase the potency of the drug, inhale more deeply, or use greater quantities of the drug to achieve the initial effect. When heavy users discontinue marijuana use, withdrawal symptoms usually occur, including irritability, depression, loss of appetite, sweating, and nausea.

Long-Term Health Risks of Use

Smoking marijuana can cause severe damage to the lungs. In fact, marijuana is much more toxic to the lungs, and contains a greater amount of cancer-causing agents, than tobacco. The way marijuana is smoked increases its toxicity to the lungs. It is inhaled very deeply and held in the lungs for several seconds for an increased effect. Also, marijuana cigarettes contain no filters, and are smoked down to the very end. Bronchitis, and other upper respiratory infections, are common among marijuana smokers. A relationship between pain in the front of the chest and marijuana smoking has been observed among adolescents. Heart rate usually increases, and blood pressure decreases, when marijuana is smoked. Studies have also reported that marijuana may alter the effects of the immune system.

Chronic marijuana use also can affect the reproductive system and cause infertility. Lower testosterone levels are often seen with males who use marijuana. In addition, changes in sperm levels, activity, and shape have been noted. Some substances found in certain varieties of marijuana have had feminizing effects on males. In females, abnormal menstruation and a failure to ovulate have been reported.

While further research is needed, there is evidence that marijuana affects the brain in a number of ways. Physical changes in the brain which are similar to those seen in aging have been observed. An "amotivational" syndrome has been linked with marijuana, but research is conflicting on this issue. Those who support the theory of an "amotivational syndrome" say that marijuana users eventually lose their drive and ambition, become distracted easily, and tend to think in terms of the present day, rather than the future. A reduced ability and interest in learning also is observed. Some studies have shown that marijuana use can distort the way the brain handles sensory information, and interfere with memory function. Impairments in certain abilities -- to concentrate, pay attention, and remember things in the short-term -- have been seen. Reductions in reaction time and coordination also have been correlated with marijuana use, increasing the risk of marijuana-linked automobile accidents.

Table 3-B

CANNABIS

Symptoms of Cannabis Use:

- interference with person's ability or willingness to pay attention or divide attention properly
- drowsiness
- relaxed inhibitions
- impaired perception of time and distance
- disorientation
- body tremors
- bloodshot eyes
- odor of marijuana
- possibly slightly dilated pupils
- increased heart rate and blood pressure

Symptoms of Cannabis Overdose:

- paranoia and possible psychosis
- sharp personality changes, especially in adolescents
- lung damage
- chronic bronchitis
- acute anxiety attacks
- chronic reduction of attention span

Signs and Symptoms of Cannabis Withdrawal:

- irritability
- restlessness
- decreased appetite
- sleep disturbance
- general depression
- sweating
- tremors
- nausea and vomiting
- diarrhea

Source: American Probation and Parole Association (1988). *Drug recognition techniques training program participant manual.*

It is also important to consider that THC is a fat soluble drug, meaning that it stores itself in the body's fat cells. Thus, THC may be slowly released to the blood for days, or weeks, after the drug has been used. Moreover, in addition to the 400 compounds found in marijuana, the drug is often adulterated with other chemicals, which may remain in the body for weeks after use. When considering the potential adverse effects of marijuana on the body, one must take into account the additional chemicals that are introduced into the system along with marijuana. These also may do long-term damage to an adolescent's system.

CENTRAL NERVOUS SYSTEM (CNS) STIMULANTS

Effects of Current Use

This category includes cocaine and amphetamines, which have become drugs of choice among adolescents in many areas of the country. CNS stimulants speed up the operation of the brain and spinal cord. The "speeding up" results in a significant increase in heartbeat, respiration and blood pressure, all of which can lead to physical harm to the abuser. In addition to the desired effects of euphoria, increased energy, and confidence produced by the drug, the stimulant user may experience nervousness, irritability, and an inability to concentrate or think clearly. Dilated pupils is another observable sign of CNS stimulant use.

An overdose of CNS stimulants can cause panic, sudden aggression, and convulsions. Respiratory failure may occur. An increased heartbeat, and possibly arrhythmia (irregular heartbeat), can lead to cardiac arrest. Withdrawal from CNS stimulants are the direct opposite of the effects of the drug. Depression, apathy, exhaustion, and an increased appetite are some symptoms of withdrawal from cocaine and amphetamines.

Cocaine and amphetamines interfere with the natural activity of neurotransmitters dopamine and norepinephrine in the brain. Users feel more alert as norepinephrine cells in the cerebral cortex are stimulated. This also creates a perception of greater endurance and muscle strength. CNS stimulants' effect on dopamine receptors can bring on or worsen symptoms of schizophrenia in users, helping to explain why psychosis can occur with long-term use of these drugs (Edelson, 1987).

While all the CNS stimulants produce a similar experience, there are three major differences between the effects of amphetamines and the effects of cocaine: 1) the effects of the amphetamines can last many hours as opposed to the effects of cocaine, which generally last a few minutes to an hour at most, depending on the route of administration; 2) amphetamines may be used orally, while cocaine is usually consumed through other methods; and 3) amphetamines have only a small anesthetic effect (i.e., sedating, painkilling), compared to a much larger effect with cocaine. Because of these differences, certain characteristics of the two types of CNS stimulants will be discussed separately.

Cocaine

There are several routes of administration for cocaine consumption. Cocaine powder may be snorted and absorbed through the mucous membranes of the nose. In this case it will take approximately three to five minutes for the cocaine to enter the bloodstream, after which it quickly reaches the brain. Hydrochloride salt of cocaine may be used **sublingually**. In this method, the drug is placed under the tongue, where there are many blood vessels. The drug enters the bloodstream much like when the drug is taken intranasally. Cocaine hydrochloride powder may be mixed with water, then injected intravenously. This way the drug reaches the brain in approximately 15-20 seconds. Some inhale cocaine through burning and smoking cocaine hydrochloride. The practice of

smoking "freebase" cocaine has also become popular. The "freebase" process involves treating cocaine with various solutions, then filtering out the hydrochloride salt. This increases the concentration of the cocaine, but it does not burn off the impurities of the drug. When freebase cocaine is heated and inhaled, it enters the bloodstream very quickly through the lung tissue. This provides the most direct route to the brain (Kirsch, 1986). Effects begin in just a few seconds. For a similar effect, the drug can be bought in the form of "crack" or "rock" cocaine. When smoked, the effects of crack cocaine are felt within a matter of seconds as well. Cocaine has **anesthetic** properties, meaning it can act as a painkiller and a sedative. It also produces an intense euphoria that has been likened to a sexual orgasm.

The cocaine "high" usually does not last long. The drug begins to be metabolized in about 5 to 15 minutes. For this reason, the effects of the drug wear off rather rapidly. Generally, the longer the onset of the drug's effects, the longer the duration of those effects. Therefore, the effects of cocaine can last from 5 to 10 minutes when freebased or from 30 to 90 minutes when taken intranasally. The short-lived influence of the drug causes the user to crave the drug often. In addition, tolerance to cocaine may develop within hours or days (Schuckit, 1984). Given the rapid development of tolerance, the short-term duration of the drug's effects, and the depression that typically follows, individuals find that as their use of cocaine progresses, more and more quantities are needed more and more frequently. Research done on rats and monkeys has shown the powerful addictive qualities of cocaine. Rats have repeatedly chosen the stimulus for cocaine over food or sex. Monkeys given unlimited access to cocaine have self-administered the drug to the point of death by convulsion or infection.

Amphetamines

Amphetamines include such drugs as methamphetamine (called "ice" in smokeable form), ritalin and benzedrine. When amphetamines are taken orally, they are absorbed into the bloodstream from the gastrointestinal system. After administration, it usually takes about 30 minutes for the drug to take effect. Other methods of administration, and the corresponding onset and duration of the drug's effects, are similar to cocaine. Amphetamines also can be crushed into powder form, and snorted, like cocaine. When the powder or tablet is mixed with water, it can be taken intravenously. Methamphetamines are often injected, producing a euphoric "rush." As with cocaine, the initial "rush" is over in seconds. However, the effects of methamphetamines last much longer. The individual may feel "wired" for up to eight hours from one dose of the drug.

Long-Term Health Risks of Use

Cocaine

Of the CNS stimulants, the use of cocaine is especially dangerous. It has extreme addictive properties. Once drug use begins, cravings for cocaine become very powerful. In addition, tolerance develops rather rapidly, making increasing quantities of the drug necessary to produce the desired effects. Thus, use of the drug becomes more and more dangerous as it progresses.

For cocaine to be metabolized, the liver must produce a certain enzyme which breaks down the drug. For some individuals who do not produce this enzyme, absorption of cocaine may cause serious complications or be fatal. Even if an individual is able to metabolize cocaine, the liver can be severely damaged through continued use. Overdose of cocaine can result in death from uncontrolled seizures, strokes, paralysis of the breathing muscles, heart attacks, or heart failure.

Complications of the heart often are associated with cocaine use. It can affect the blood supply to the heart tissue, or cause the heart to beat abnormally fast, both of which can ultimately be fatal.

Intranasal use of cocaine can cause hoarseness, sore throats, inflamed sinuses, and damage to the cartilage and lining of the nose and sinuses. Freebasing cocaine can result in serious lung damage. Injection of cocaine in tablet form, intended for oral use, can cause extreme scarring; the tablets, which are crushed, mixed with water, and injected, can contain foreign substances that are not meant to enter the bloodstream. Also, when cocaine is injected intravenously, there is risk of infection from "dirty" needles. Hepatitis B, AIDS, and other blood-borne infections may result.

Cocaine use can lead to panic reactions, cocaine-induced psychosis, and depression so severe that it reaches suicidal proportions. Even individuals who have been using cocaine for a long time may eventually develop a hypersensitivity to the drug that would cause serious, possibly fatal, side effects from the same dosage previously tolerated.

Researchers are just beginning to discover the long-term effects of cocaine. A recent study (Cocaine and cerebral blood loss...,1990) conducted at Brigham and Women's Hospital in Boston has produced evidence that even occasional use of cocaine can cause significant blood flow abnormality in the brain, similar to that seen in stroke patients and people with Alzheimer's disease. Researchers speculate that the cerebral blood flow deficiency caused by cocaine may lead to impairments in thinking, learning, and decision making; chronic personality changes and chronic memory loss. Further research is needed to determine whether the blood loss or the drug's effects are permanent, even after abstinence. The ramifications of this study become even more profound when considering the potential impact on a young person, whose brain is not yet fully developed.

Amphetamines

Long-term amphetamine use, like cocaine, can lead to drug-induced psychosis. These drugs also are extremely addictive. In addition, many amphetamine users develop vitamin deficiencies, possibly because of inadequate dietary and sleeping habits that are common. Depression and exhaustion result after long-term use of amphetamines, and the depression can lead to suicide. There is evidence that brain cells become severely damaged from the use of amphetamines. Further research is needed to understand the long-term impact of amphetamine use on the brain's ability to function. Prolonged use of amphetamines can lead to a state of mind that can be potentially dangerous. The user may become assaultive, anxious, panicky, and experience delirium or paranoid hallucinations, all of which may result in dangerous, or even fatal, behaviors.

HALLUCINOGENS

Effects of Current Use

This category includes the natural hallucinogens, derived from the peyote cactus and psilocybin mushroom, as well as the synthetically produced LSD, MDMA, and other chemical substances. The use of hallucinogens has decreased since the 1960s, but it is still a fairly common drug of abuse. Although hallucinogens have different chemical structures, their effects are similar. These drugs cause the user to experience hallucinations; the user's perceptions of the surrounding world are altered as well.

LSD and other psychedelic drugs closely resemble the molecular structure of the neurotransmitter

Table 3-C

CENTRAL NERVOUS SYSTEM (CNS) STIMULANTS

Symptoms of CNS Stimulant Use:

- restlessness (can't stand or sit still)
- talkativeness
- bruxism (grinding teeth)
- excitation
- impaired ability to perceive time and distance
- euphoria
- confusion
- exaggerated reflexes
- possible body tremors or rigidity
- possible nasal irritation/scarring
- dry mouth
- dilated pupils
- elevated heart rate, blood pressure, and body temperature
- rapid breathing

Symptoms of CNS Stimulant Overdose:

- paranoia
- panic
- extreme confusion
- suddenly aggressiveness
- convulsions
- hallucinations
- faintness (may pass out into coma)
- dramatically increased heartbeat and possibly heart arrhythmia
- cardiac arrest
- possible death from sudden respiratory failure

Symptoms of CNS Stimulant Withdrawal

- weakness
- poor thinking ability
- exhaustion
- restless sleep
- depression
- various aches and pains
- possible increased appetite
- apathy
- decreased activity

Source: American Probation and Parole Association (1988). *Drug recognition techniques training program participant manual.*

Table 3-D

HALLUCINOGENS

Symptoms of Hallucinogen Use:

- hallucinations
- nausea
- body tremors
- disorientation
- paranoia
- difficulty in speech
- perspiring
- piloerection ("goose bumps") -- (LSD)
- decreased muscular coordination
- rapid mood change -- (mescaline)
- dilated pupils
- increased heart rate, blood pressure, and body temperature
- rapid breathing

Symptoms of Hallucinogen Overdose:

- extreme panic and agitation from "bad trip," possibly leading to suicide or accidental death
- severe and sometimes permanent psychosis from experiences of a "bad trip"
- Organic brain damage from prolonged use, possibly leading to impaired memory, reduced attention span, mental confusion, and impaired ability to deal with abstract concepts

Hallucinogen Withdrawal:

- Physical dependence has not been shown to develop.

Source: American Probation and Parole Association (1988). *Drug recognition techniques training program participant manual.*

seratonin. Seratonin is thought to be involved in the brain processes of sleep and sensory perception. Hallucinogens also stimulate the release of norepinephrine from neurons which could explain the heightened sense of self-awareness created by these drugs. (Edelson, 1987).

This discussion on hallucinogens will be limited to the drug LSD, because it is the most frequently used, and because all of the hallucinogens affect the user similarly.

Lysergic Acid Diethylamide-25 (LSD)

LSD is typically sold in the form of tablets, thin squares of gelatin ("window panes"), or paper that has been saturated with the drug ("blotter acid"). The drug is usually taken orally, sometimes intranasally, and very rarely injected intravenously (*Drugs of Abuse*, 1988). Only a small fraction of the ingested drug reaches the brain. The effects are experienced within about 20 minutes to an hour after the drug is taken and last for approximately 8 to 12 hours. The onset of the effects of LSD varies according to the amount of the drug ingested and the tolerance of the individual. Tolerance to LSD can develop within two to four days, and can dissipate within the same amount of time.

The actual effects of LSD depend on the individual's mental state at the time of use, and usually go through several phases. The first stage will last about one to two hours. At this point, the individual is relieved of inner tension; laughing and crying are characteristics typical of this stage. During the second stage, hallucinations begin, and the individual experiences distorted and illusionary images. A phenomenon known as synesthesia may occur, where sensory systems become confused (e.g., the user "smells" colors or "tastes" music). In the third phase, the user experiences the LSD "trip." Although this mind-altering experience is often pleasurable, it also can be extremely disturbing to the user. In the latter case, it is termed a "bad trip." Mood swings, anxiety, panic, or depression may develop. The loss of reality characterized by the hallucinogenic "trip" may be extremely powerful and cause the user to reach a psychotic state or behave in ways that are ultimately fatal. After the "trip," an individual will experience periods of normalcy before completely returning to a normal state of consciousness. While LSD itself is not known to be lethal, the effects of the drug can indirectly lead to death, as discussed in the explanation of a "bad trip." The tendency toward a "bad trip" is dependent upon three factors:

- the user's psychological state;
- his/her expectations of the drug; and
- the setting in which the drug was used.

An individual who is having a panic reaction to a hallucinogen usually may be calmed by a gentle, rational, reinforcing voice.

Physical dependence on hallucinogens has not been demonstrated, so withdrawal symptoms usually do not occur. However, psychological dependence tends to occur with recurrent use (Drugs of Abuse, 1988).

Long-Term Health Risks of Use

Consumption of this category of drugs usually does not lead to serious medical problems. It is the *indirect* effects of the hallucinogens that can be fatal. Panic reactions may result, which can cause the user to engage in unsafe or violent behavior. For instance, individuals under the influence of these drugs may jump from windows or cars to escape the horrors of their hallucinations. Though the panic reaction may eventually pass, temporary psychosis may set in for weeks or months, requiring psychiatric intervention. Some have concluded that the use of hallucinogens arouses a latent psychosis which, once surfaced,

requires psychiatric attention. Also, persons who have used hallucinogens may experience flashbacks of the drugs' psychedelic effects long after the drug has been eliminated from the body (*Drugs of Abuse,* 1988).

Studies of the hallucinogen MDMA have found that overdose of the drug can cause renal failure, increased heart rate, increased or decreased blood pressure, heart palpitations, and increased body temperature to dangerous levels. These studies have theorized that these conditions are caused by MDMA's effect on the brain. Other evidence has shown MDMA to cause damage to certain brain cells, and some have concluded that this damage is irreversible. Moreover, what will constitute an overdose is always unclear to the user; dosages of MDMA that were previously tolerated can eventually cause death.

In addition, one must consider the fact that hallucinogenic drugs may be combined with other substances; it is these substances that cause complications such as cardiorespiratory failure, which may result in coma or death.

NARCOTIC ANALGESICS

Effects of Current Use

Both **analgesics** and **anesthetics** are capable of relieving pain. These chemicals work in different ways, however. For example, an **anesthetic** (e.g., cocaine) blocks the actual transmission of nerve impulses from the origin of pain to the brain, so the pain message is never received by the brain. With an **analgesic**, the person's *perception* of pain is actually altered. There are two types of analgesic drugs, the narcotics and the nonnarcotics. The narcotics, such as heroin, morphine, Demerol, and Fentanyl, have a depressant effect on the central nervous system as well as pain-relieving qualities. The nonnarcotics, which include aspirin, acetaminophen, and other medications, have no significant effect on the central nervous system.

The narcotics are sometimes smoked or snorted, but are usually injected, either under the skin (i.e., "skin-popping"), or directly into a vein ("main-lining"). Narcotics are usually sold in tablet or powder form. The tablet is crushed, then the powder is mixed with water, heated, and injected.

When injected, the drug supplies a flood of pleasure-producing chemicals called **opiates**, to the brain, which mimic the actions of the body's natural **endorphins**. **Endorphins** are neurotransmitters naturally produced by the brain to moderate emotions, induce pleasure sensations, and control pain. Opiates use the same receptor sites in the brain that endorphins use. Therefore, when opiates are introduced to the brain, the natural endorphins are no longer needed. The body then produces fewer and fewer endorphins until, eventually, the natural endorphin system shuts down. At this point, the individual is addicted to narcotics, which have become a synthetic substitute for the natural endorphins which are no longer being produced.

When a narcotic is injected, a "rush" of intense pleasure and increased confidence will occur within seconds. This feeling will last up to about a minute, followed by several hours of euphoria and drowsiness. As tolerance to narcotics develops, the "rush" will become less and less intense. A feeling of anxiety will return much more quickly after use. More and more of the substance will be needed to produce the drug's original effects. Therefore, the narcotics have a significant potential for becoming addictive. A unique symptom of narcotic use that can be easily observed in the user is constriction of the pupils of the eyes to "pin-point" size.

Withdrawal from narcotics is extremely uncomfortable, and medical supervision is advised.

Table 3-E

NARCOTIC ANALGESICS

Symptoms of Narcotic Analgesic Use:

- cold skin
- droopy eyelids
- constipation
- low, raspy speech
- facial itching
- dry mouth
- poor motor coordination
- "on the nod" (eyelids droopy, head slumped forward, chin resting on chest)
- possible flaccid muscle tone
- constricted pupils, little or no pupil reaction to light
- injection sites
- decreased heart rate, blood pressure, and body temperature
- slowed reflexes and slow, shallow breathing

Symptoms of Narcotic Analgesic Overdose:

- slow and shallow breathing
- clammy skin
- possible convulsions
- possible coma
- possible death from severe respiratory depression

Symptoms of Narcotic Analgesic Withdrawal:

- Within approximately 4-6 hours after the last injection of heroin: chills, muscle and joint aches, nausea, insomnia
- After approximately 8-12 hours: dilated pupils, sweating, goose bumps, hyperactive reflexes, possible vomiting, yawning, runny nose, tearing eyes (may look like common cold or flu)
- After approximately 14-24 hours: intensified above symptoms plus gooseflesh, slight tremors, and loss of appetite
- After approximately 24-36 hours: insomnia, vomiting, diarrhea, weakness, depression, hot-cold flashes, elevated blood pressure
- Within about 2-3 days, withdrawal symptoms peak: muscular and abdominal cramping, elevated temperature and severe tremors, twitching (especially of the legs, referred to in expression "kicking the habit"), extreme nausea, possibly repeated gagging and vomiting

Source: American Probation and Parole Association (1988). *Drug recognition techniques training program participant manual.*

Symptoms of withdrawal depend on how long it takes for the drug to be metabolized by the body, but generally begin within 8 to 12 hours after the last dose is administered. During withdrawal the individual will experience agitation, restless sleep, repeated yawning, dilated pupils, loss of appetite, weakness, abdominal cramping, constipation, sweating, running nose, and tearing eyes. The symptoms will be similar to those of a cold or the flu.

Long-Term Health Risks of Use

The powerful addictive properties of the narcotic analgesics are the drug's greatest danger. The lifestyle needed to maintain the addiction, the possibility of overdose, and the severe symptoms of withdrawal from these drugs all carry with them severe consequences. Withdrawal from narcotics is highly uncomfortable for the user, making complete abstinence extremely difficult. Researchers say that withdrawal from narcotics, though very painful, is not life-threatening as it is with depressants. Opiate overdose, however, can result in death, usually from respiratory depression. Cardiac arrest also is seen with narcotic overdose. It is not certain whether the fatal effects of narcotics are due to the drug itself, or the chemicals that are often added to the drug before it is sold on the streets.

As with CNS stimulants, injection of narcotics can be extremely harmful. Injection has the propensity to bring about infections and other diseases associated with the sharing of "dirty" needles. In addition to AIDS, viral hepatitis, pneumonia, tetanus, lung abscesses, and endocarditis (infection of the heart valves) are some of the risks of needle sharing. The existence of "fillers" which are added to drugs intended to be taken orally presents an added danger. The "filler" substances are not meant to be injected into the veins, and extensive scarring can result from this process.

INHALANTS

Effects of Current Use

This category of drugs includes household substances and aerosols such as hair sprays, felt tip markers, deodorants, insecticides, frying pan lubricants, plastic cement, airplane glue, lighter fluid, fingernail polish remover, and gasoline. Anesthetic chemicals such as ether, nitrous oxide, and chloroform are also in this category.

Inhalants are considered a very dangerous "gateway" drug because they are more popular among young people than adults. This is mainly because they are inexpensive, and very easy to obtain. Most of these items are legal; many of them can be found in the child's home. A survey conducted by the Texas Commission on Alcohol and Drug Abuse showed that inhalant abuse was common in Texas, especially with younger students. Seventh graders were more likely to report experimentation with inhalants than with any of the illicit drugs (TCADA, 1991).

Volatile solvents such as gasoline are usually inhaled from a soaked cloth. Some substances (e.g., glue or plastic cement), may be squeezed into a paper or plastic bag. The substance is inhaled as the bag is held tightly over the user's nose. Some users hold the bag over the head while inhaling the substance. If one should pass out during this process, s/he may suffocate. The effects of inhalants are felt very rapidly, usually within a few seconds. After inhaling a chemical, the user experiences a floating sensation, combined with feelings of euphoria. Sometimes the "high" is similar to alcohol intoxication, with the user exhibiting slurred speech, distorted perceptions, and lack of coordination. Negative effects, such as lightheadedness, nausea, vomiting, delusions, or hallucinations may occur as well. Depending on the substance used, the effects may last from 5 minutes to several hours.

Table 3-F

INHALANTS

Symptoms of Inhalant Use:

Glue and similar volatile solvents:

- confusion, disorientation
- slurred speech
- inebriation similar to alcohol intoxication
- bizarre thoughts
- dizziness and numbness
- euphoria and grandiosity
- floating sensation
- distorted perceptions of time and distance
- possible hallucinations
- poor coordination
- increased heart rate and blood pressure

Gasoline and similar petroleum products:

- confusion, disorientation
- slurred speech
- nausea and excessive salivation
- drowsiness and weakness
- lightheadedness
- sensation of spinning, moving, floating
- distorted space perception
- visions of altered shapes and colors
- fear, guilt and loneliness
- increased heart rate and blood pressure

Symptoms of Inhalant Overdose:

- depression of central nervous system (may reach the point where respiration ceases)
- heart failure
- nausea and vomiting
- unconsciousness (unconscious user may drown in his own vomit)

Symptoms of Inhalant Withdrawal:

- Hallucinations
- Headaches
- Chills
- Stomach cramps

Source: American Probation and Parole Association (1988). *Drug recognition techniques training program participant manual.*

Psychological and physical dependence on inhalants has been observed, with withdrawal symptoms including hallucinations, headaches, stomach cramps, and chills.

Long-Term Health Risks of Use

The use of inhalants can cause death because of the method of administration (i.e., sniffing through an airtight bag placed over the head), which may lead to suffocation.

The substances themselves may cause severe physical harm or death as well. Use of inhalants can result in organic brain damage, a condition that can be very severe, and possibly permanent. The inhaled vapors can cause fatty brain tissue to literally melt (TCADA, 1991). Various substances can cause coma or convulsions. Other risks include respiratory depression, cardiac arrhythmia, and irreversible damage to the kidney, liver, and bone marrow. The sniffing of gasoline has caused lead poisoning, which can have lasting adverse effects on an individual's physical and emotional development.

PHENCYCLIDINE (PCP)

Phencyclidine (PCP) is often classified with the hallucinogens because it is a synthetic drug and may produce hallucinations. However, the drug has characteristics similar to so many other drug categories that it does not belong to any one category. Much of the time, PCP is consumed along with other drugs, such as marijuana, to increase their effects. Also, drug dealers and manufacturers of PCP often mix it with other street drugs.

PCP may be smoked, snorted, orally ingested, or injected. Depending on the amount taken, and the method of ingestion, the drug may have several different effects. It can produce anesthetic, stimulant, depressant, or hallucinogenic effects. The onset of effects also varies. When PCP is smoked, the drug may be absorbed into the bloodstream within just minutes, or an hour. Negative symptoms often are associated with PCP use, such as anxiety, agitation, irritability, depression, and disorientation. With small doses of PCP, effects similar to those produced by alcohol, such as slurred speech, staggering, and lack of coordination, are common. At higher dosages, users will begin to experience altered images of their bodies. Individuals may become assaultive, and develop unusual physical strength. At even higher dosages of the drug, a user may experience seizures, convulsions, coma, or a temporary or prolonged state of psychosis.

Like marijuana, PCP is fat soluble, meaning the chemical may be stored in fat tissue of the body for several days or even weeks. When the stored PCP is released to the bloodstream, an individual may again experience the effects of the drug. As with hallucinogens, tolerance to and physical dependence on PCP have not been substantiated. However, some withdrawal symptoms have been reported, including depression, tremors, and insomnia. PCP is especially dangerous because it is so unpredictable, producing effects of many different types of drugs.

Long-Term Health Risks of Use

As with hallucinogens, the devastating effects of PCP are most often experienced when an individual is under its influence. Extreme assaultiveness and strength are characteristics sometimes experienced by the user. In such a state, one is capable of causing considerable harm to oneself, and to others.

Psychotic reactions to the drug, including paranoia, suicidal tendencies, delusions of grandeur, and hallucinations have been reported. As with hallucinogens, flashbacks of PCP-induced episodes can occur long after the drug has been eliminated from the body. (*Drugs of Abuse*, 1988). High doses of PCP

Table 3-G

PHENCYCLIDINE (PCP)

Symptoms of PCP Use:
- slow, slurred speech
- disorientation
- loss of memory
- agitation, excitement
- blank stare
- passivity (but user may turn abruptly violent if confronted with a threatening situation)
- non-communicativeness
- muscle rigidity
- loss of a sense of personal identity
- sensory distortions
- auditory hallucinations
- feeling of extreme heat, profuse perspiring
- increased pain threshold
- repetitive speech
- cyclic behavior
- incomplete verbal responses
- poor coordination
- possible chemical odor
- increased heart rate, blood pressure, and body temperature

Symptoms of PCP Overdose:
- bizarre, violent, self-destructive behavior
- deep coma, lasting for up to 12 hours
- seizures and convulsions
- respiratory depression
- possible cardiac problems

Signs and Symptoms of PCP Withdrawal:
- depression
- insomnia
- muscle aches
- tremors
- nausea

Source: American Probation and Parole Association (1988). *Drug recognition techniques training program participant manual.*

can cause increased heart rate, convulsions, coma, and arrhythmias. Similar to the other drug categories, PCP can bring about drug-induced psychosis that lasts for weeks or months. Research has shown PCP to produce memory loss, and reduced abilities in judgment, perception, and concentration.

CONCLUSION

Though much still needs to be known about the physiological effects of drugs on an individual's, and particularly an adolescent's, health and well-being, enough research has been done to conclude that there are devastating risks associated with drug use. Besides being addictive, the adverse health consequences associated with the use of any drugs can be permanent, possibly fatal. Unfortunately, some people are often unaffected by the disclosure of such information. Adolescents especially tend to view themselves as immortal. Still, the information in this chapter is necessary for professionals who work with drug-involved youth. It can be useful for identification purposes, and serve as educational material for intervention planning as well. Perhaps some youth and their families will be responsive to the realities of drug abuse presented in this chapter.

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CHAPTER 4

THE JUVENILE JUSTICE SYSTEM

THE JUVENILE JUSTICE SYSTEM[1]

INTRODUCTION

Our nation's juvenile justice system has seen many changes throughout its history, and it continues to be affected by innovations and reform. The problem of substance abuse among today's youth has had a powerful impact on the system. This crisis is one of the major challenges facing juvenile justice professionals today. In this chapter, possible ways juvenile justice professionals might confront the problems presented by drug-involved youth and some of the other issues challenging today's system will be discussed. These recommendations are grounded in Maloney, Romig, and Armstrong's *Balanced Approach*, a theoretical concept based on valued principles of the juvenile justice system. The *Balanced Approach*, which has become a significant guide for goal setting and decision making among juvenile justice professionals, will be discussed in this chapter. The chapter will begin with an overview of the development of juvenile institutions, the juvenile court and probation systems, and the status of today's juvenile justice system. A discussion of the impact of substance abuse and other system challenges, along with possible solutions, will conclude the chapter.

After reading this chapter, participants will be able to:

- discuss how changing ideologies have influenced the development of the juvenile justice system;
- compare the principle of *parens patriae* as it was originally meant, with how this principle is perceived in the juvenile justice system today;
- list three possible reasons for the correlation between drug use and delinquency;
- distinguish between delinquents, status offenders, and persons in need of supervision;
- list the seven constitutional rights that were granted juveniles through the Gault, Kent, and Winship decisions;
- list the three additional rights of all youth, according to Charles Springer's interpretation of "what is fair and due";
- describe the four components of the *Balanced Approach* to juvenile justice and discuss ways the problems of substance abuse can be addressed through each principle;
- explain the role of public awareness and education in meeting the system's goals of reducing drug use among juveniles;
- list at least six ways that juvenile justice professionals can respond to the problem of substance abuse within the system;
- discuss the fragmentation of the juvenile justice system (why it exists, how it handicaps the system);
- explain why intersystem and interagency collaboration is preferable to fragmentation of the system and discuss four ways collaboration can be achieved; and

[1] Contributions for this chapter were made by Judge Roy B. Willett, Chief Judge of the Twenty-third Circuit Court, Roanoke, VA.

- discuss the difficult working conditions faced by juvenile justice practitioners today, and possible ways to improve these conditions.

DEVELOPMENT OF THE JUVENILE JUSTICE SYSTEM

The principle that has become the foundation for the United States juvenile justice system originated with a 1772 English court case. This principle, *parens patriae*, authorized the British court to intervene on behalf of children whose parents were found to be unwilling or unable to give appropriate guidance. Thus, the court assumed responsibility for cases involving dependent and neglected children. The perception of *parens patriae* broadened in the American system. It came to be perceived as the court's duty and responsibility to protect and serve all children found to be out of their parents' control, including those who are abused, neglected, incompetent, or delinquent.

Over the past two centuries, the juvenile justice system has undergone considerable modification. Society's perceptions of juvenile delinquency have changed as well. During the 1700s, the public began ascribing the term "juvenile delinquency" to the acts and conditions of poor children whose families appeared unable to adequately care for them. Thus, in the early 1800s, children of low socioeconomic class in general were labeled juvenile delinquents. Many of those who were brought before the court were institutionalized with adult criminals in unsanitary prisons that afforded little opportunity for recreation, education, or rehabilitation (Roberts, 1989).

History of Juvenile Institutionalization

In 1819, the Society for the Prevention of Pauperism in New York City initiated a movement toward reform through a report on the unsanitary, unsafe conditions at Bellevue Prison. Organized efforts to establish separate correctional institutions for juveniles and adults began. By 1825, the House of Refuge, the first facility built solely for juveniles, opened in New York. Over the next 25 years, several other large cities, beginning with Boston and Philadelphia, followed suit with similar institutions. The function of these first houses of refuge was to save children from environments that fostered delinquency. Thus, the facilities were to be based on a family model, and focus on reform, education, and discipline.

The daily routine of these institutions was similar. Silence and strict adherence to order was expected of youth at all times; those who violated rules or caused trouble were punished. Examples of mild forms of punishment were meal deprivation or bread and water rations. More severe penalties included solitary confinement, corporal punishment, and placing youth in manacles (Rothman, 1971). Sentences were usually indeterminate, giving superintendents of the institutions control over how long youth were held. The average length of stay was usually under two years. After confinement, those youth who adhered to the rules of the refuge usually were given apprenticeships or placed in farmers' homes. Those considered unreformed and untrustworthy "were exiled out of the country on extended whaling voyages." (Roberts, 1989)

Problems with the house-of-refuge system soon became evident. The depression of 1857 led to overcrowding of facilities and lack of employment for discharged youths. At the same time, another movement for reform was underway. This movement was led by those who did not believe the excessively punitive and militaristic environment of houses of refuge to be conducive to rehabilitation of youth. Some leaders of the reform movement subscribed to the theory that youth should be placed in rural, rather than urban areas of the country: a "wholesome," rather than "corruptible" environment.

This philosophy triggered the reformatory movement in the late 1800s. Goals of reformatories espoused conservative values such as ambition, prudence, and frugality. In addition, the environment was to stress love and guidance, as well as firmness. Youth were to receive industrial and agricultural training; more academic forms of education were de-emphasized. As with houses of refuge, sentences were determined by the superintendents so that each youth could stay until sufficient progress was made. Also, youth were to become actively involved in their own rehabilitation. In theory, the reformatory system seemed to be based on sound principles. In practice, however, these goals often were not realized. As with earlier institutions, serious crowding was a major factor often leading to less than adequate conditions in reformatories. Some criticized the rural reformatory system for its impracticality in placing youth in more "ideal" surroundings when they would probably be returning to their original environments. After placing youth in more sheltered, rural settings, critics contended, the system failed to prepare them for the transition back to the city (Roberts, 1989).

Treatment of youth in facilities was a popular subject for studies and literature of the 1930s and 1940s. In 1946, Sherwood Norman reported the results of the National Probation Association's study of the nation's best detention facilities. The study, undertaken to develop principles and standards for detention, examined 68 facilities in 22 states. Norman described the conditions in most of these facilities as substandard. The following are some of the deficiencies identified in the report:

- scarcity of warm, concerned relationships between youth and adult staff;
- inadequate recreation program;
- mixing of serious offenders with those who had not committed "crimes," such as truant or indigent youth;
- inadequate educational programs; and
- lack of professional social work services.

(Roberts, 1989)

Norman further pointed out that the above conditions were similar to those that contributed to delinquency in the community. While in general the study's findings were grim, effective practices and programs were identified as well, indicating that some progress was being made.

In the 1960s, the National Council on Crime and Delinquency (NCCD) developed guidelines for the design of detention centers, and upgraded detention homes were built accordingly. Despite improvements in the system, however, less than adequate conditions still exist in some juvenile institutions. The debate as to whether detention is beneficial or detrimental to youth continues (Roberts, 1989).

The Roots of Probation

At about the same time rural reformatories came into existence, another important aspect of the juvenile justice system originated. In 1847, John Augustus, a Boston shoemaker, bailed 18 boys out of jail and, with the judge's permission, took them into his home to reform them. Augustus was successful, and this service laid the groundwork for the juvenile probation system (National Center for Juvenile Justice, 1991). Probation became a formal part of the juvenile justice system in 1869, when the Massachusetts legislature passed a law requiring a state agent to be present at any trial that might result in a child's being placed in a reformatory. The agent was to seek alternative placements for the youth, investigate the child's case, and supervise the court's plan for the child after disposition. In 1878, probation became mandatory in

Massachusetts, with a law that provided for the hiring of salaried probation officers in each court jurisdiction in the state. By 1900, similar laws regarding probation were established in Vermont, Rhode Island, New Jersey, New York, Minnesota, and Illinois. Juvenile probation was authorized by the legislatures of every state except Wyoming by 1930 (National Center for Juvenile Justice, 1991).

Beginnings of the Juvenile Court

The first juvenile court in the United States was established by Illinois state law in 1899. It was the law's intention that rehabilitation, rather than punishment, would be the court's focus. Furthermore, while the juvenile court was given authority to send juveniles to institutions, community-based treatment was preferred. Therefore, when the juvenile court system first developed, the emphasis was on community-based treatment of juvenile offenders.

However, as in other areas, the goals of the system did not necessarily coincide with reality. The juvenile court did not have access to the resources to carry out its well-intended objectives. Also, there were many problems inherent in the juvenile court system that worked to a youth's disadvantage. Juveniles were not given rights to due process of the law because the court was supposed to "protect" the youth through comprehensive treatment services. Still, many youth continued to be sent to ill-equipped institutions where living conditions were not conducive to rehabilitation (Roberts, 1989). Furthermore, the term "delinquency" applied to all youth who came before the court: those who committed acts that would be considered crimes in the adult court, as well as those who did not, such as runaways and truants. All cases were processed by the juvenile court, and all youth were sent to the same institutions.

The Emergence of Today's Juvenile Justice System

As a result of the Kent (1966), Gault (1967), and Winship (1970) Supreme Court decisions, juveniles were formally given constitutional rights, though these were limited. Youthful offenders were granted the following rights of due process:

- to be notified of the charges against them;
- to be provided counsel;
- to access records;
- to cross-examine witnesses;
- to be protected against self-incrimination;
- to have guilt determined beyond a reasonable doubt; and
- to be provided a hearing before being transferred to and tried in the adult courts.

(Schwartz, 1989; National Center for Juvenile Justice, 1991)

The federal government began to respond to other inadequacies of the juvenile justice system in 1968 with the passage of the Juvenile Delinquency Prevention and Control Act. The Act provided financial assistance to the juvenile court and correctional facility systems. It also recommended that status offenders, who had not actually committed criminal offenses, be separated from the court system; however, this was not accomplished through the 1968 Act. The Juvenile Justice and Delinquency Prevention Act of 1974 was more effective in promoting change within the juvenile justice system. To provide for administration of the Act, it established the Office of Juvenile Justice and Delinquency Prevention. In addition, it called for the deinstitutionalization of juveniles who had not

committed "criminal" offenses (or "status offenders," to be defined later in this section), although this has not been fully achieved. It also called for the separation of juveniles from adult facilities. In order to receive funding from the federal government, states would have to comply with these requirements. Additional goals of the Act were for the juvenile justice system to focus on delinquency prevention and develop community-based alternatives to incarceration.

The Act stressed a preference toward "diversion" of youth who could be reformed through means less restrictive than probation supervision or incarceration. Though diversion had not previously been recognized formally, nor endorsed as a preferred strategy for dealing with youthful offenders, the concept was not new to the juvenile justice system. The practice of diverting juveniles originated with the first juvenile court in 1899. The court system was based on levels, which posed many opportunities for juveniles to be diverted into programs in lieu of remaining in the system. Thus, from the beginning, diversion was a routine and necessary part of juvenile case processing. In the 1970s, however, through federal attention, thousands of formal diversion programs were developed (Roberts, 1989).

The federal government's push toward community rehabilitation and away from institutionalization caused public concern that the system was becoming too lenient with juvenile offenders. State and local politicians, judges, and prosecutors were pressured to take a firmer stance on juvenile delinquency. Some state officials responded by adopting harsh policies and passing legislation that stressed accountability of youth. For example, some states adopted statutes that made it easier to transfer a juvenile to the adult court. Stricter systems of imposing penalties were put into practice, such as a minimum term of incarceration for certain offenses. The system had changed considerably from its prior determination that juveniles should never be treated or punished as adults or criminals.

The Juvenile Justice and Delinquency Prevention Act is periodically subject to Congressional review. During Senate hearings conducted on the 1974 Act that is scheduled to expire September 30, 1992, witnesses have commented on the shift of the juvenile court's emphasis from a rehabilitative toward a more punitive approach. This emphasis makes the juvenile court similar to the adult court; yet in many cases, youth do not receive due process of the law, especially their right to counsel. Other problems with the system under the 1974 Act mentioned during the proceedings have been:

- the need for prompt decision-making in juvenile courts;
- the poor quality of working conditions in the juvenile court system;
- crowding in detention facilities; and
- the need for additional resources outside the legal system (e.g., social services, schools) for responding to troubled youth.

("Senate panel considers," 1992)

SUBSTANCE ABUSE AND TODAY'S JUVENILE JUSTICE SYSTEM

Impact of Substance Abuse

The correlation between substance abuse and delinquency has been well documented. Chapter 2 expands upon this topic, but some discussion is appropriate here. According to the latest census of juveniles in institutions, *Children in Custody 1989* (Allen-Hagen, 1991), sponsored by the Office of Juvenile Justice and Delinquency Prevention, about 11 percent of the youth in public facilities were held for drug-related offenses, with 49 percent of these cases

involving the distribution of drugs. This figure represents only those who were charged with drug offenses. Many youth who are drug-involved enter the juvenile justice system because of other crimes. It is also important to note that the number of juveniles held in public institutions for alcohol or drug offenses increased by 58 percent since the previous census in 1987, and by almost 150 percent since the 1985 census.

Beck, Kline, and Greenfield (1987) studied illegal drug use by youth in long-term, state-operated institutions. They discovered that 80 percent of the juveniles had used drugs; 59.7 percent had used them regularly; and 39.1 percent had been using drugs at the time of the offense (American Probation and Parole Association [APPA], 1988; Beck, et al., 1987).

The 1990 Drug Use Forecasting (DUF) Program Annual Report reveals that between 10 percent (Kansas City) and 31 percent (Los Angeles) of male juvenile arrestees, at various cities in the United States, tested positive for at least one drug. Figures are not available for female juveniles since so few were tested through the DUF Program (Drug Use Forecasting, 1991). The omission of females may have had an impact on the DUF juvenile statistics, since data in the same report indicates that a greater percentage of female adult arrestees tested positive for drugs than did males in 13 of 21 cities. It is also important to note that the DUF figures indicate only youth who have *recently* used drugs, were arrested, *and* were brought in for booking. It does not take into account youth who are involved with drugs, yet did not test positive at the time of arrest; nor does it include those youth who were apprehended, but not brought in for booking. Significantly, a 1986 survey of members conducted by the National Council of Juvenile and Family Court Judges (1988) revealed that substance abuse was a primary factor in 60 to 90 percent of the cases referred to courts.

There are a number of reasons youth who enter the juvenile justice system are often involved with drugs. First, drugs cause individuals to engage in risky, destructive, and even violent behavior. In some cases, youth are so dependent on the drug that they will do anything to obtain it. They therefore commit income-generating crimes such as theft, drug trafficking or prostitution. Moreover, these youth often come into contact with other juveniles or adults who are involved in drug use and/or crime. Such influential individuals in their lives may help steer them toward delinquent behavior. While drug use may contribute to a juvenile's tendency toward delinquency, it is also true that many juveniles are involved in delinquency before they begin using drugs. A direct cause-effect relationship between drugs and delinquency has not been substantiated.

The problem of adolescent substance abuse affects all systems dedicated to serving youth, as well as every community in the nation. Many look to the juvenile justice system for answers. Some believe there should be tougher penalties for drug and alcohol offenses. Some advocate diversion of youth to drug education and treatment programs -- a more rehabilitative approach. A balance is probably more reasonable than the adoption of either extreme. But a balance is not easy to achieve. The next section, "The Balanced Approach to Juvenile Justice," provides further information on this topic.

Handling of Substance Abuse Cases by Juvenile Courts

Trends: 1985-1988

The National Center for Juvenile Justice (NCJJ), at the request of OJJDP, conducted a National Juvenile Court Data Archive study to review how drug and alcohol cases were processed from 1985 through 1988 (OJJDP, 1991). NCJJ reviewed 300,000 records from 841 courts in 17 states, and selected for analysis those

cases where an alcohol and drug offense was the most serious charge.

According to statistics derived from the study, the number of drug cases in juvenile court increased by 12 percent, and alcohol cases increased by 8 percent from 1985 to 1988. It should be noted that cases where youth were involved with drugs or alcohol, but not charged with a drug-related offense, were not included in the statistics for this study.

The NCJJ study showed that cases involving drugs other than alcohol were handled more severely in 1988 than in 1985. They were more likely to be handled formally, and a higher percentage of youth were placed in a residential facility following a drug-related charge. Cases of possession and trafficking were handled similarly in 1985. However, in 1988, youth charged with drug trafficking received more severe penalties than youth charged with drug possession. The drug trafficking cases were more likely to be petitioned, and the youth were more likely to be placed in residential facilities.

While cases involving drugs other than alcohol were handled more severely by the courts in 1988 than 1985, data indicate that the handling of alcohol cases saw little change. The majority of alcohol cases, 72 out of 100, were handled informally throughout this period. Of the informally handled cases, 32 were dismissed. However, driving-under-the-influence (DUI) cases were much more likely to be handled formally than other alcohol-related offenses. For example, in 1988, 75 out of 100 DUI cases were petitioned, compared with 23 of 100 drinking cases. Of the 75 DUI cases, 50 resulted in probation orders, compared to only 9 of the 23 petitioned drinking cases. The processing of DUI and other alcohol cases remained much the same from 1985 to 1988.

Inconsistencies Across Jurisdictions

Generally, court systems apply both rehabilitative and punitive philosophies when dealing with juvenile drug and alcohol cases, but there is no consistency between states or jurisdictions. The substance abuse problem itself varies from one locality to another. Drug offenses are more likely to occur in larger counties, while alcohol offenses tend to occur more often in smaller counties (OJJDP, July/August 1989).

The National Center for Juvenile Justice (NCJJ) (OJJDP, January 1989) compared the way states handled drug and alcohol cases and discovered that there was wide disparity among them. For example, they found that one state petitioned about 12 percent of its drug cases, while another state petitioned more than 80 percent. The proportion of alcohol referrals handled formally by the juvenile court ranged from 3 to nearly 90 percent. Similar disparity was found in cases of drug possession, drug trafficking, and driving under the influence of drugs or alcohol. NCJJ also found differences, though less dramatic, when examining the ways states responded to drug-involved youth. State responses ranged from placing 2 percent of drug-involved juveniles in residential facilities to placing 33 percent. When offenses involved alcohol only, the proportion ranged from 2 percent to 25 percent.

A comparative analysis of two major counties in Georgia -- DeKalb and Fulton -- strongly suggests that this wide variation occurs *within* states as well. For instance, in DeKalb County, a juvenile's case was often held open for a few months and then dismissed if there were no further arrests. In Fulton County, a similar case was closed with an informal adjustment. Also, after a third arrest in DeKalb County, one in three juveniles were committed to the state, whereas in Fulton County, one in eight juveniles would be committed under the same circumstances (Marill, 1990).

Exacerbating the problems presented by drug-involved adolescents are the drug distributors. Very often, these youth are *not* also drug users. They are extremely savvy and streetwise; they view themselves as "employed" in a very profitable business. These youth may have a problem with drugs, but their addiction is different from an addiction to using drugs or alcohol. Interventions that apply to youth who are using drugs are not appropriate for those involved in the economics of drug use. Adults who recruit youth to sell drugs tell them that they needn't worry about being arrested: because they are juveniles, the police will release them (Marill, 1990). In any given area of our nation, this statement may or may not be true.

While the extent and nature of substance abuse problems differ from one area to another, such wide disparity in the handling of cases is not reasonable. Further, it confuses the messages of the system. The need for collective action and more uniform policy making is evident. This may be accomplished through increased intersystem and interagency collaboration. This strategy will be discussed later in the chapter.

Traditionally, the responsibility for handling drug-related problems among juveniles have fallen outside the juvenile justice system. However, today, the problems of substance abuse are found in schools, families, and the juvenile justice system as well. Social services agencies usually do not have the resources to handle the volume of cases that come through their doors. Thus, the prevalence of drug use within the juvenile justice system itself has made it imperative that juvenile justice professionals learn how to identify youth with a substance abuse problem, and make plans for intervention. In some communities, in fact, limited outside resources have made it necessary for juvenile justice agencies to develop some follow-through strategies, using direct interventions in the areas of probation, detention, and aftercare.

PROFILE OF TODAY'S JUVENILE JUSTICE SYSTEM

Delinquent Youth, Status Offenders, and Persons in Need of Supervision

In the past, there was little discernment between youth who came into the system who had committed delinquent acts, and those who had not committed delinquent acts. Today, states often separate these youth into two major categories: **delinquents** and **status offenders.** In about half the states, status offenders are viewed as being "in need of supervision" and often are referred to as CHINS, CINS, MINS, PINS, or JINS. The first word of the acronym stands for either children, minors, persons, or juveniles. The states have different specific definitions for these terms, but generally, they can be defined as follows:

> **Delinquents** - juveniles who commit illegal acts that are considered crimes whether committed by an adult or a juvenile (e.g., drug-related offenses, theft, aggravated assault, rape).
>
> **Status offenders** - youth who have committed deviant acts or misbehaviors that, if committed by an adult, would not be considered crimes (e.g., truancy, incorrigibility, running away from home, minor in possession of alcohol, drinking alcoholic beverages).

Juvenile Justice Case Processing

Figure 4-A depicts a typical manner in which juvenile court cases are processed. It should be noted that the example is meant to be a general representation only; actual practices among states and jurisdictions will vary. A description of this process, excerpted

from the OJJDP Juvenile Justice Bulletin (1989), follows.

A typical case processing plan moves through levels, or steps. Upon arrest for a delinquent offense (a violation that would be considered criminal in an adult court), a preliminary screening is performed. A decision is made as to whether the case should proceed to juvenile court. The youth may be released to his/her parents or guardian, or held in a detention facility. If the case proceeds to juvenile court, youth are then referred to the intake section of the court for a full review of the case and the youth's background. Based on the evidence presented, the intake officer must make a determination as to how to handle the case. In the most general terms, the case may be handled formally or informally, or the charges may be dropped. If the case is dropped or handled informally, the matter will not go before a judge. Instead, the youth may be diverted from the system through voluntary restitution or informal probation. If a decision is made at intake to handle the case formally, a petition must be filed with the court requesting an adjudication hearing. During adjudication, the judge formally determines whether or not a juvenile is guilty, or if s/he should come under the civil jurisdiction of the court. At the hearing, the judge reviews the case and decides on a formal disposition. At this stage, the judge may select from a number of options, including:

- dismissing the case or filing an acquittal;
- placing the youth out of home in a residential facility, foster home, or institution;
- placing the youth on probation surveillance;
- ordering the youth to pay restitution or a fine; and/or
- diverting the youth to an outside agency.

If appropriate, the youth may undergo certification as an adult, and the case may be transferred or waived to criminal court.

The Rights of Youth

As discussed in the previous section, juveniles were given certain rights of due process through the Gault, Kent, and Winship Supreme Court decisions. In addition, a juvenile's privacy rights are protected through federal laws on confidentiality. For the most part, however, it has been the inherent duty of the juvenile court to ensure the protection of all youth who come under its jurisdiction and responsibility. Therefore, few rights have been legally and formally granted youth who enter the juvenile justice system.

Charles Springer, in *Justice for Juveniles* (1988), describes justice as "what is fair and due." By this, he refers to a broader concept of justice than that prescribed by the law. He states that this type of justice "commands that all citizens act for the good of others and treat each other fairly." Springer applies this concept to the rights of children, contending that they have an inalienable right to life, and that the right to life includes, at minimum:

- the right to nurture;
- the right to an environment which offers a reasonable expectation of normal growth and human fulfillment; and
- the right to moral training that enables them to function as integral members of society, and offers the capacity for moral and spiritual growth.

Many of the drug-involved youth who become part of the juvenile justice system have been deprived of these rights. It becomes the ethical duty of the system, then, to see that juveniles are given their due through adequate rehabilitation programs.

Youth in Public Facilities

According to the latest census of juveniles in institutions, *Children in Custody 1989* (1991), sponsored by the Office of Juvenile Justice and Delinquency Prevention, the average daily population of juveniles confined in detention, correctional, and shelter facilities in 1989 reached the highest level ever. That year, 56,123 juveniles were institutionalized in a public facility, an increase of 5 percent over the 1987 count. Interestingly, during that same year, the total juvenile population in the country had declined; this means that a significantly greater proportion of juveniles were being institutionalized than in previous years. The vast majority of committed youth were male (88%), and between the ages of 14 and 17 (80%).

Most Common Delinquent Offenses

The OJJDP report, *Children in Custody 1989* (1990) stated that, of the total youth held in custody in 1989, 95 percent were held for delinquent offenses. The remainder of the population included four percent who were committed for status offenses. One percent were abused, neglected, or dependent; held for reasons not involving juvenile offenses; or admitted on a voluntary basis.

Property offenses were the most common of all delinquent offenses, at 41 percent. As mentioned in the previous section, about 11 percent of the youth were held for drug-related offenses, with 49 percent of these cases involving the distribution of drugs.

Minority Youth

According to the 1989 United States Census, of youth ages 10 to 19, 80 percent were white, 16 percent were black, and other ethnic groups comprised the remaining four percent (Bureau of the Census, 1991). These figures look far different when counting youth confined in juvenile institutions. In 1989, minority youth constituted 60 percent of the population of juveniles in custody (Allen-Hagen, 1991). Of this group, 42 percent were black, 15 percent were Hispanic, and two percent were Native American, Alaskan native, Asian, or from the Pacific Islands. Compared to 1987 statistics, the total black youth in custody increased by 14 percent; the Hispanic population increased by 10 percent; while the number of white youth decreased five percent.

Ira Schwartz, in *(In)Justice for Juveniles* (1989), points out that white youth make up 65 percent of the population in private institutions. This suggests a racially segregated system where minority youth are dominant in public facilities, and primarily white youth are found in private facilities.

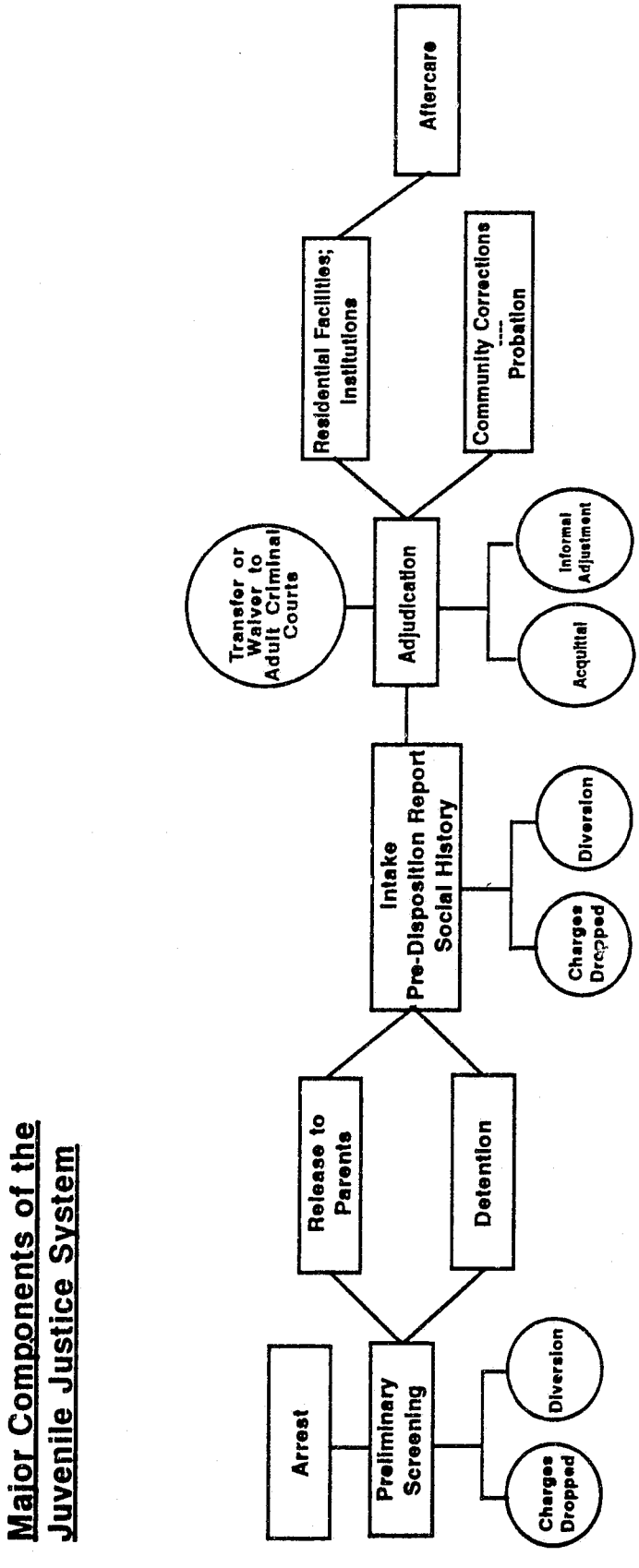
Schwartz further states that while minority youth do account for a substantially higher number of arrests for serious juvenile crime, these statistics do not necessarily indicate the number of youth who are committing such crimes. Schwartz contends that a better representation might be obtained from the National Youth Survey, a study that attempts to examine the number and nature of delinquent offenses that may not result in an arrest. Data from this study indicate that minority youth who commit delinquent acts are much more likely to be arrested and charged than white youth who commit similar acts (Huizinga and Elliott, 1987). This could be a reason for the overrepresentation of minority youth in public facilities.

THE BALANCED APPROACH TO JUVENILE JUSTICE

As demonstrated in this chapter, the focus of the juvenile justice system has swayed from one direction to another throughout its history in response to new schools of thought and economic realities. In today's system, there is no one clear mission guiding

Table 4-A

JUVENILE JUSTICE CASE PROCESSING



juvenile justice professionals. Prevailing philosophies lie somewhere in the middle, between a "protect the community" and a "rehabilitate the offender" focus. In many areas, crowding and the expense of institutionalization have necessitated the trend toward community-based corrections. Changing ideologies toward a treatment focus also may be a contributing factor in some cases, although there are jurisdictions that opt first for the public safety and accountability measures of detention and institutionalization.

The differences do not lie only in the treatment vs. punitive approach, however. Other ideologies present entire spectrums of thought, and agencies find themselves somewhere along each of these: proactive vs. reactive; individualized vs. collective; holistic vs. fragmented approaches.

Agency goals have taken various directions as well. In recent years, the *Balanced Approach* to juvenile justice, developed by Maloney, Romig, and Armstrong (1988), has been given considerable attention. This theory places equal emphasis on four primary principles: **community protection, accountability, competency development,** and **individualized assessment.** The authors urge agencies working with delinquent youth to adopt balanced mission statements and program practices that address all four values. A discussion of each follows.

Community Protection

While not always the primary goal of an agency, community protection is probably always an important goal. The term "community" can take on many meanings; it can refer to a state, a city, or an institution. Law enforcement officials might cite public safety as the first and foremost goal of their jobs. Educators must be concerned about safety in the schools. Social welfare workers are concerned about the protection of children in their homes. State officials, when adopting policies for intervening with juvenile delinquents, must consider the impact of their decisions on the safety of the state's citizens. Identifying drug-involved youth through the means described in this manual (i.e., assessment instruments, drug recognition techniques, and chemical testing) is a prime example of community protection in action. Other methods of community protection include, but are not limited to house arrest, electronic monitoring, detention, institutionalization, and intensive probation supervision.

Accountability

Accountability refers to measures taken to ensure that youth are held responsible for the damages, injury, or loss incurred because of their actions. It is argued that the practice of holding youth accountable is too infrequently applied in our juvenile justice system today (Kramer, 1988). In the past, punishment has been *applied inappropriately*, as in cases of mistreating institutionalized juveniles. An accountability measure, or correction, is most effective if it communicates a clear message that certain consequences logically follow harmful actions. It is preferable, then, that the penalty delivered be somewhat related to the offense. For example, restitution paid to the owner of a vandalized car teaches youth that one must pay for damages rendered against another. If that juvenile is found to be using drugs, the added component of direct confrontation with positive drug screen results is an important accountability measure. Compulsory drug treatment along with probation demonstrates to the juvenile that one must work intensively and show proof of reform before again being trusted with freedom to live without supervision from the system.

Competency Development

Historically, the juvenile justice system has been concerned with the rehabilitation of delinquent youth, though this emphasis has wavered at times. The early court and other components of the system

philosophized that they were to nurture and protect the child who was regarded as delinquent. Often, delinquency referred to a neglected or deprived child. More recently, ideologies have stressed that these youth have specific deficiencies which must be addressed. Rather than a decision of *whether* to treat youth, the question is more often *how* to treat them. When drug-involved youth are brought before the court system, juvenile justice professionals have an ethical responsibility to determine the most appropriate treatment needs for each particular individual, and to seek the best possible methods of meeting those needs.

Individualized Assessment and Treatment

The principle of individualized assessment comes from the precept that each youth is unique. Juveniles come from differing social environments, face different obstacles, possess unique personalities and talents, and learn to cope in varying ways. So many factors distinguish juveniles and their circumstances from one another that each youth must be assessed, and then treated, individually.

To increase efficiency in case processing, agencies may formalize the assessment process through the use of classification systems. The *Balanced Approach* describes three classification systems, each responding to a different objective. These objectives include:

- classification by legal category to establish jurisdictional status (delinquent, status offender, abused or neglected);
- classification by diagnostic assessment to determine an appropriate treatment response, including identification of a substance abuse problem; and
- classification by risk for caseload assignment (low, medium, or high level of risk of dangerousness to self and/or the community).

(Maloney, Romig, & Armstrong, 1988)

In addition to classifying youth into categories as described above, some agencies further assess the youth through examining patterns of offense behavior. They then analyze to this pattern of delinquency (e.g., drug involvement, peers, family, personal attitudes, school).

In addition to these four principles, an additional focus must become **public awareness and education.** Juvenile justice agencies have access to information about the patterns of delinquent activities in communities. They are also in a position to evaluate programs aimed at rehabilitating youth and holding them accountable. This information should be organized and analyzed for use in the agency and throughout the juvenile justice system. It also should be reported to the community. For example, when the system is made aware of the extent of the drug problem among youth in the community, the public should be made aware of it. The system should also share information about the risk factors leading to adolescent drug use, as well as signs and symptoms of drug involvement. Such information might prepare citizens and professionals in the community for working toward solutions to the problems associated with adolescent substance use within their homes and within the community. Used effectively, public awareness can be a preventive measure, as well as a source of support for juvenile justice programs.

CURRENT CHALLENGES FACING JUVENILE JUSTICE PROFESSIONALS

The *Balanced Approach* illustrates the varying demands and goals juvenile justice professionals must

face. Added to this complexity are additional problematic factors presented by today's society.

This section will address the following challenges facing juvenile justice professionals today:

- the problems presented by adolescent substance abuse;
- fragmentation of the juvenile justice system; and
- inadequate working conditions for juvenile justice practitioners.

Facing the Substance Abuse Challenge Within the System

Juvenile justice professionals can no longer view the problems of substance abuse within the system as beyond their realm of duty. Adequate resources are not available within the social services segments of states and communities to respond to the needs of all youth who are found to be drug-involved. The system the youth comes into contact with usually bears the responsibility of identifying those who are in need of rehabilitation. In some cases, this may be the school. Often, it will be the juvenile justice system. Identification of these youth is the first important step. The next crucial step is intervention. To the extent that it is possible and deemed appropriate, juvenile justice practitioners must be equipped to intervene with drug-involved youth. However, there should be a balance between providing treatment in justice settings and community-based settings. While the system should be aware of and make full use of treatment resources in the community, juvenile justice practitioners should be capable of dealing with drug-involved offenders within the system as well.

In response to the substance abuse crisis facing our nation, the National Council of Juvenile and Family Court Judges' (NCJFCJ) Metropolitan Court Judges Committee (1988) prepared the document, *Drugs - The American Family in Crisis: A Judicial Response*. This manuscript includes 39 recommendations that families, communities and the juvenile court system should adopt to confront the nation's drug problem.

Some ways that the judicial system can intervene include:

- Consistently hold youth and families that are found to be drug-involved accountable for their drug use and behavior, while understanding that addiction is a disease;
- Consistently mandate sanctions that require drug-involved youth and/or family members (when drug use places youth in the family in danger) to be identified, assessed, and placed in effective treatment programs;
- Consistently require that juveniles and adults abide by the law as it relates to substance abuse, including the sale, purchase, possession, and consumption of controlled or illicit substances;
- Provide leadership in making the public aware of the dangers of substance abuse, especially for children and families, and of prevention and intervention programs that may provide solutions to the problem;
- Ensure that a full range of substance abuse assessment and treatment programs are funded and made available to the courts;
- Develop a process for identifying, assessing, and monitoring a child or family member's problem with drugs;

- Require that treatment plans include the submission of progress reports to the court for monitoring and enforcement;

- Provide substance abuse treatment and rehabilitation in all youth correctional facilities, training schools, and community-based alternative programs; and

- Require that all judges and intake, probation, and casework staff have substance abuse training.

(NCJFCJ, 1988)

While this is only a partial list of the Council's recommendations, it demonstrates that there are a number of ways the juvenile court system can respond to the challenges presented by substance abuse.

From a treatment perspective, additional recommendations were made by Linda Lewis, Director of Public Policy, National Association of State Alcohol and Drug Abuse Directors (formerly Assistant Deputy for Treatment and Rehabilitation of the Office of National Drug Control Policy, Executive Office of the President). At a conference on drug and alcohol treatment in juvenile justice settings in December of 1990 in Seattle, Lewis urged professionals within the system to take the following steps toward confronting the challenges presented by drug-involved youth:

- Establish programs which provide early identification, intervention, and referral to reatment;

- Increase alternative day treatment programs which combine individualized education with intensive substance abuse counseling for child and family;

- Provide intervention programs targeted at youth who are just beginning to display behavioral/academic problems which can be signs of a current or potential drug problem;

- Provide ongoing training in youth development, family systems, and substance abuse for juvenile court judges and other juvenile justice practitioners;

- Provide ongoing training for judges and juvenile justice practitioners to learn about addiction and treatment so they may better support treatment programs and not sabotage treatment efforts;

- Increase stability in rotation of judges into juvenile court;

- Expand Treatment Alternatives to Street Crime, which provides assessment of drug-involved youth and places them in appropriate treatment settings; and

- Expand and improve treatment for youth to specifically address the population of juvenile delinquents.

Need for Intersystem and Interagency Collaboration

A way to alleviate some of the problems posed by resource limitations within the system, and work toward a *Balanced Approach* might be through **intersystem and interagency collaboration.** This is especially true in today's system, which tends to be fragmented internally as well as externally, and locally as well as nationally. As has been demonstrated, court systems differ in the way they handle youth charged with drug offenses. Communication is often insufficient within the components of the system -- law enforcement, detention, probation, the offices of the court, treatment, residential care, and aftercare. Furthermore, there is little formal connection between external systems that share common goals, such as mental health, education, social welfare, and nonprofit

community organizations that serve youth and the family.

Reasons for System Fragmentation

Fragmentation of the juvenile justice system is not necessarily intentional. The structure of the system, the perceptions of professionals within the system, and the current demands of the profession contribute to the tendency toward fragmentation.

Internally, the juvenile court system consists of various levels (e.g., arrest, intake, detention, adjudication). Depending on the jurisdiction and the case, different avenues of intervention may be taken with delinquent youth, such as probation surveillance, diversion to community programs, or institutionalization. Figure 4-A depicted the typical flow of juvenile case processing. This is a general, and simplified version of the system. Not all jurisdictions follow the same pattern; even similar cases are not handled in the same manner.

States have organized their systems differently. For instance, in some states, detention, probation, institutions, and aftercare all fall under the domain of the state. In others, probation and detention may be run by the county, yet aftercare and institutions are run by the state. This difference in structures makes resource sharing and collaboration difficult beyond the state level.

Furthermore, each state decides its own policies and legislation regarding juveniles. For example, individual states have decided on the upper age at which cases can be handled by the juvenile court. Likewise, the states have decided on differing ages for extending that age of juvenile jurisdiction, with some states providing no opportunity for extension. Many states have established a youngest age at which a juvenile may be transferred to criminal court by judicial waiver, and in some states judicial waiver does not apply. Tables depicting these differences among the states can be found in Appendix A.

Fragmentation probably also exists, at least partly, because professionals from juvenile justice and other related systems perceive their goals as separate and distinct. Treatment practitioners are eager to explore the basis for delinquent behavior. They focus their energies primarily on individualized assessment and competency development of youth. Law enforcement officials view themselves as protectors of the community. Citizens regard the very presence of police in a neighborhood as a safety precaution. To a police officer, this image is instrumental to the goal of his/her job.

Accountability is a primary objective for youth care workers, detention personnel, and probation officers. As supervisors of juvenile offenders, it is their duty to see that the youth takes responsibility for his/her actions. Within the juvenile justice system, then, the primary duties of different positions may lead to an emphasis on different goals. The professionals outside the system see the goals of their positions as distinct as well.

Finally, the professionals within and outside the system working with troubled and delinquent youth are absorbed by the demands of their own jobs. All are struggling to meet with limited resources the challenges presented by their own overloaded systems. What they may find, however, is that working together may be a resource-saving approach to meeting all of these challenges.

In reality, it is probable that basic goals of each system are much the same, as are the obstacles these systems are confronting. All are concerned with improving conditions in the community and guiding youth toward promising futures. The goals and demands of *each* system may be better and more efficiently served through collective efforts.

Interagency and intersystem collaboration also may prove advantageous to the individuals served by the juvenile justice system. It can provide a strong support structure for youth, victims, and their families. It can facilitate, and possibly expedite follow-through as cases move through the various steps of the system.

Means of Achieving Intersystem and Interagency Collaboration

Effective collaboration and cooperation can be accomplished through a variety of means. Some ideas include:

- adopting a systemwide mission;
- developing a common knowledge/values base;
- organizing systemwide and intersystem efforts;
- constructing interagency partnerships; and
- creating ongoing opportunities for sharing information, expertise, and resources.

Adopting a system-wide mission: Common goals can unite the juvenile justice system itself, and provide a link with other related systems as well. The *Balanced Approach* to juvenile justice, discussed in the previous section, provides a foundation for the formulation of broad, basic goals, applicable to all agencies within the juvenile justice system.

Organizing efforts: Activities may be accomplished more efficiently and effectively through the creation of system-wide and intersystem task forces, groups, or organizations dedicated to a common purpose. These can be temporary structures, directed toward a short-term purpose, or they can be more formal, permanent organizations. For example, some probation departments and schools have integrated efforts to work with students who are on probation, and to promote the safety of the school environment.

Developing a shared knowledge/values base: While ideologies may differ, the basic goals of juvenile justice agencies are much the same. Disagreement is usually on how goals should be achieved. It is not necessary that all involved in similar efforts agree. It *is* necessary that knowledge and resources be shared. When reviewing the ideas and approaches of other agencies and systems, juvenile justice professionals should keep in mind the system-wide mission of juvenile justice. The distinctive goals of agencies within the system should all relate to the broader systemwide mission. Through this holistic approach, individuals may be more open to innovative ideas, and willing to share experiences with others in the field.

Constructing interagency partnerships: This idea is central to the *Coordinated Interagency Drug Training Project*, a training program developed by the American Probation and Parole Association (APPA) and the National Association of State Alcohol and Drug Abuse Directors (NASADAD) (1991). It involves the negotiation of formal agreements between agencies who share common goals in providing service to clients. Interagency partnerships may be devised after careful, joint planning which includes conducting a needs assessment and holding formal interagency meetings. Agencies must decide together the process and steps to be undertaken to achieve their purpose, and consider potential outcomes and problems. After the planning stage, formal contracts may be developed between the agencies involved. A number of elements must be agreed upon and written into the contract. Principle areas to include are compensation, affirmative action, confidentiality, cancellation/modification, and others. More information about interagency partnerships may be obtained through the American Probation and Parole Association.

Creating opportunities for sharing information, expertise and resources: Resources may be shared informally or formally. Informal communication may occur in the lunch room, in a telephone conversation, or through an article sent through the mail to a colleague. It is helpful to devise formal methods of collaboration as well. These may include regular meetings of representatives from juvenile justice and other systems. Systems may rotate responsibility for putting together and disseminating a monthly newsletter consisting of articles written by professionals in the various areas. It may be possible to share training opportunities. For instance, one agency may present a seminar in a particular area of expertise to personnel in another system in return for the same service.

Agencies are encouraged to explore other ideas that might work in their own states and communities.

Need for Improved Working Conditions for Practitioners

Those who work directly with delinquent youth today face a difficult situation. The system is overloaded; resources are scarce, and getting scarcer. The job itself is sometimes dangerous, sometimes tedious, and often intellectually and emotionally demanding. Furthermore, because of the disparity in philosophies governing the system, roles played by line personnel may differ from one area or one supervisor to another. This is frustrating to the worker and, possibly even more significantly, clouds the message the system sends to juveniles.

David Roush, in *Corrections Today* (December, 1990), contends that juvenile justice line personnel are not offered what is necessary to be satisfied, or effective, in their positions. Dissatisfied line personnel can create serious problems for the juvenile justice profession. According to Roush, specific problems that need to be addressed include: salary inequities, recruitment, liability, and training.

Workers in juvenile corrections often receive lower wages than those in adult corrections, which results in high turnover in agencies serving juvenile offenders. Low salaries pose a problem in *recruiting* as well as *keeping* qualified personnel. Finally, there are potential legal liabilities involved when working with youth. Therefore, the staff entrusted with case management and supervision responsibilities of these children must be exemplary.

A way of addressing the problems presented by staff turnover and the decreasing availability of qualified applicants is through training programs. Practitioners need skills in working with the different types of offenders challenging today's system. Juvenile justice workers must be aware of many issues and conditions that may affect drug-involved youth, such as family dysfunction, emotional deprivation, poverty, homelessness, school failure, AIDS, and teenage pregnancy. In addition, they need to learn strategies for coping with the frustrations inherent in their positions.

CONCLUSION

Juvenile justice professionals working in today's system are forced to face certain realities. Substance abuse is so linked with delinquency that the system must devise methods for helping these youth. Attempts should be made to identify these youth as early as possible. Then, appropriate treatment must be made available as well. In today's system, youth are being institutionalized at higher rates than ever before, with minority youth significantly overrepresented in this figure. Resources are inadequate to meet the needs of today's delinquent population both within institutions and in community corrections. In addition, practitioners in the system are often overburdened and underpaid. This creates a situation where recruitment of qualified personnel is difficult, and risk of liabilities are a serious concern. Line staff in the juvenile justice

system are in serious need of professional development and greater rewards for their work. To make matters even more difficult, the focus of today's juvenile justice system is blurred. Different philosophies govern the practices of different areas. Personnel are guided by varying schools of thought.

In order to be effective in responding to these challenges, efforts directed toward meeting the needs of both youth and the community must be collaborative. Intersystem and interagency collaboration can be instrumental in resolving some of the resource and fragmentation problems faced by juvenile justice agencies. The *Balanced Approach* to juvenile justice can help unify and clarify goals within the system. In response to the system's need for a more unified approach to decision making, Maloney, Romig and Armstrong (1988) have developed the *Balanced Approach* to juvenile justice. The principles behind the *Balanced Approach* -- **community protection, accountability, competency development,** and **individualized assessment** -- are applicable to juvenile justice agencies system-wide. **Public awareness and education** must be a priority for these agencies as well.

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MODULE II

ESTABLISHING DRUG-USE IDENTIFICATION PROGRAMS IN THE JUVENILE JUSTICE SYSTEM

ESTABLISHING DRUG-USE IDENTIFICATION PROGRAMS IN THE JUVENILE JUSTICE SYSTEM

Overview

This module guides the development of a drug-use identification program to address the needs of drug-involved juveniles who were discussed in Module I. The type of program to be developed is not prescribed. Rather, the necessary information and skills are presented so agency personnel may develop a program that meets the needs of their clients and communities.

Three possible types of screening methods will be presented in Modules II and III:

- Assessments;
- Drug Recognition Techniques; and
- Chemical Testing.

These are commonly used approaches in the juvenile justice system and appear to be the most reliable and cost effective. Each method poses advantages and disadvantages which will be discussed in Module III.

Drug-use identification programs are initiated for a variety of reasons. Some are instituted to apprehend drug-involved youth, thus attempting to interrupt patterns of criminal behavior and protect the community. Other programs are founded to identify juveniles involved with use or abuse of substances, and to provide the rehabilitative services the juveniles need to become productive adult citizens. Still others are conducted to hold youth accountable for illegal drug use and penalize them for this behavior. Often, a combination of these purposes is indicated. As each agency works to develop a drug-use identification program, it must be sure that the purpose of such a program correlates with the agency's mission.

Module II will examine the process of establishing a drug-use identification and intervention program.

- **Chapter 5, Program Purpose**, emphasizes the importance of correlating the program purpose with the agency's mission and the intervention responses applied when youth are drug-involved. Four main types of program purposes are described.
- **Chapter 6, Program and Policy Development,** discusses the need for written policies, essential components of a policy document, and strategies for policy development.
- **Chapter 7, Assessment of Needs and Resources,** will guide readers through the necessary process of collecting, compiling, analyzing and synthesizing information related to the agency and the community for the purpose of effective decision making.
- **Chapter 8, Legal Issues,** discusses important legal considerations, including those of constitutional issues, informed consent, confidentiality, and many other topics.
- **Chapter 9, Economic and Human Resource Issues,** delineates some important considerations related to the benefits and expenses of a drug-use identification program. Possible ways of procuring funding resources also are discussed. Finally, ideas are suggested to help managers and practitioners work together to develop effective programs.

- **Chapter 10, Program Evaluation and Dissemination of Results,** describes the importance of evaluating a drug-use identification program and provides suggestions for developing an evaluation component.

In Module III, specific information about the three types of drug-use identification procedures will be presented along with other factors for program implementation. It is very important that the elements in the policy development process be given careful consideration before proceeding to the implementation of a program. As the *Drug Testing Guidelines and Practices for Juvenile Probation and Parole Agencies* (American Probation and Parole Association, 1990) state: An agency,

> **"should implement . . . programs only after establishing relevant policies and procedures."**

CHAPTER 5

PROGRAM PURPOSE

PROGRAM PURPOSE

INTRODUCTION

Delineating a clear statement of the purpose for drug-use identification is a vital part of establishing the program. Determining the program purpose is similar to plotting a trip on a map; it helps you decide where you are going and how you will get there. Without a clear statement of purpose there is a greater risk of getting diverted in the process of implementing a program. A clear statement of purpose also helps in the development of effective evaluation of the program. It prescribes exactly what should be evaluated.

In this module, principles for program development, the importance of assessing needs and resources, potential legal concerns, and staff and cost issues will be discussed. These are all vital considerations in determining the purpose of a program for drug-use identification.

After reading this chapter participants will be able to:

- list the elements of a good purpose statement;
- define parameters to be considered in developing a statement of purpose;
- describe four categories of purposes for which a program may be developed;
- discuss the importance of understanding how the purpose relates to the agency mission and the way in which results of drug-use identification will be used; and
- review the limits of a drug-use identification program.

COMPONENTS OF A PURPOSE STATEMENT

A purpose statement needs to detail:

- what should be accomplished through the implementation of a program to screen juveniles for drug use;
- a brief summary of the methods for accomplishing the purpose;
- the party or parties responsible for various elements of the program (such as agency staff, administrators, judges, and other agencies) and how they will interact to achieve the ultimate agency mission through the goals of this program;
- the general time frame within which certain tasks or events are to occur; and
- any objectives or activities that are not to be pursued through this program.

Various formats are appropriate for preparing such a statement. It may be a simple narrative of a few sentences; it may consist of several paragraphs that include more detailed information; or it may be written in the form of goals and objectives for the program. Goals are broad, general statements of the purpose to be accomplished. Objectives specify how the goal will be achieved, and should include a method for evaluating results. A goals and objectives format is recommended because it is also very useful in developing an evaluation plan for the program. The following is an example of one possible goal statement and two objectives that could accompany it.

> **Goal: The drug-use identification program will assess the drug involvement of individual youth to assist in planning**

for their treatment and hold them accountable for their behavior.

Objective 1: Using drug recognition techniques and urinalysis, implemented when indicated by line officers, youth in need of drug-related treatment will be identified, and designated case management procedures will be followed to ensure timely referral and follow-up of treatment.

Objective 2: Random urinalyses will be conducted monthly by probation officers on youth with a documented history of drug use to determine their current drug using behavior. Designated case management responses will be implemented for both positive and negative test results.

In addition to carefully detailing the intended function of a program to screen youth for drug use, the purpose statement also should include any objectives or activities for which the program is ***not*** to be used. For example, some programs may be designed only to identify those youth needing treatment, with appropriate interventions specified. In this case, it would be important to specify that positive results could not be used for legal purposes or punitive sanctions. In the next section, several parameters for drug-use identification programs will be discussed. These should be considered carefully when planning a drug-use identification and intervention program.

CONSIDERATIONS FOR DEVELOPING A STATEMENT OF PROGRAM PURPOSE

There are several areas to evaluate when developing a purpose statement for a drug-use identification program. It is important to address each element fully and directly. It will be necessary to include appropriate staff in this process, as well as other persons having an interest in the program, to ensure that the program purpose is comprehensive. The purpose also must be in accordance with all other aspects of the agency's mission and programs, and acceptable to all involved. This process may involve judges, agency board members, other community agencies, citizens' groups, attorneys, and others specific to a particular agency or community. In determining with whom to confer about the program's purpose, it is critical to consider those who are supportive of the program, as well as those who might have reason to resist it.

Agency Mission

At the outset, the agency mission is a key element to consider in developing the purpose statement for the program. Possible agency missions were discussed in Chapter 4. *The Balanced Approach* to juvenile justice (Maloney, Romig & Armstrong, 1988) includes a combination of:

- community protection;
- accountability of youth; and
- competency development of youth.

These are to be balanced with the assessed individualized needs of each youth. In addition, many agencies include an element of public awareness and education as a component of their general mission.

If an agency's mission does not include all of these elements and considerations, or if the mission strongly emphasizes one component over another, the purpose of a drug-use identification program should reflect these tendencies. Likewise, if the agency mission includes and places equal emphasis on all components (i.e., the *Balanced Approach*), it would be appropriate for the purpose statement to be balanced in the same manner. These possible purposes will be

discussed in more detail in the next section of this chapter.

Legal Restrictions

It is recommended that a person with legal training and experience be involved in the planning process. Careful research should be done to determine any legislative, case law, court or agency policy restrictions on conducting assessments, drug recognition techniques, and/or chemical testing in a given jurisdiction. The use of results from these screening methods may be limited by legal conditions or agency policies. For example:

- Many agency policies mandate conditions for the supervision of juveniles, specifying both the number of staff to be present and that staff must be of the same gender as youth when performing certain activities. This could have important ramifications for the collection of urine specimens for chemical testing.

- Some jurisdictions dictate that if results of chemical testing are to be used as evidence in court proceedings, there must be a confirmation test.

- Sometimes the use of results are limited to case management interventions and cannot be used in legal proceedings.

Failure to carefully research this area may result in the implementation of a program that will be subject to legal challenges in the future. It is much better to spend time and resources in advance to avoid such a test.

Stipulations Imposed by Funding Sources

If a program will be funded fully or partially by external sources, agencies should examine any restrictions that may apply to the implementation of the program. A variety of conditions could apply, such as limitations on expenditures for equipment, funding for staff training, the fundamental purpose for the program, and the use of results. Some sources might be willing to fund programs to identify youth needing treatment services, but would be unwilling to support programs that result in punitive sanctions for drug-involved youth. Funding agencies also might require disclosure of information about the program as a condition of receipt of money; whether or not such disclosure is consistent with the agency mission and program purpose should be determined.

Limitations of Community and Agency Resources

It is easy to design an ideal program that cannot be realized because of limited resources. This can result in frustration and disappointment on the part of staff and the community. Consideration should be given to the realities which exist within both the agency and the community. A thorough and accurate knowledge of community and agency resources is necessary. If the purpose for a program is to obtain treatment for drug-involved youth, but treatment resources are not available on a timely basis, the purpose cannot be realized and the program may fail.

Refer to the information gathered in the needs assessment process (see Chapter 7) when considering the purpose of the program. Agency funds and staff, as well as available community services, will affect the parameters of a drug-use identification program.

POSSIBLE PROGRAM PURPOSES

There are essentially four possible purposes for developing a program to screen drug-involved youth. Most agencies find a combination of the following suitable.

- Community protection;
- Case management to hold youth accountable for their behaviors and to help rehabilitate them;
- Case management to achieve competency development and provide treatment for youth; and
- Community and professional awareness.

Community Protection

The term *community* denotes a geographic area such as a town or city. However, community also may be defined as a limited living environment, such as an institution. A drug-use identification program may emphasize detecting and controlling the presence of illicit drugs in a community.

A program for *community protection* of a geographic area would stress the reduction of delinquent behavior by youth who are drug-involved. This might include the determination of the level and type of drug use among adolescents, and possibly the source of the drug supply, to plan for appropriate community intervention strategies. For example, a drug education program and suitable law enforcement procedures might be developed. Drug-use identification for community protection also could emphasize public health. These issues might include the inhibition of the spread of AIDS and other infectious diseases associated with intravenous drug use or risky sexual behavior in which youth engage while using drugs or as a means of obtaining drugs. Results of drug-use identification might be used to target youth in need of educational interventions about such health risks.

Programs to screen for drug use among adolescents in an institutional *community* would be similar to those in the larger community, focusing on detecting and controlling the presence of illicit drugs. Discovering that youth are drug-involved could result in consideration of possible program changes and increased security. For example, if youth who leave the institution on weekend furloughs are using drugs and presenting behavior problems upon their return, the furlough program and/or behavior management aspects of the program may need to be examined. If it can be determined that visitors are supplying illegal substances to the youth, security should be increased.

The staff and directors of an agency may need to consider their own protection in this respect. A youth could use drugs within an institutional facility and suffer health consequences or leave the agency to continue committing crimes. If the agency cannot document that every possible effort was made to identify and treat that youth's substance abuse problem, the staff and directors might face legal liability for the youth's health and/or behavior.

Case Management for Accountability of Youth

Case management interventions designed to habilitate and rehabilitate individual youth are commonly included in agency missions. Drug-use identification programs can provide valuable information to personnel responsible for case management. Detection of drug use in individual youth must be accompanied by thorough case assessment and planning before the most appropriate interventions can be determined.

Accountability in juvenile justice is the practice of holding youth answerable for their behaviors and helping them develop a sense of social awareness and responsibility. Accountability related to drug-involvement might emphasize monitoring a youth's compliance with institutional rules, treatment plans, or conditions of probation. Results of chemical testing

might be used to recommend appropriate interventions to the court and/or take legal actions for law violations.

When youth accountability is a purpose of the program, the usual consequence of drug use will be a sanction. It is also important, however, that youth who demonstrate responsible behavior by avoiding drug use receive reinforcement in the form of positive responses, such as rewards and praise to encourage them to remain drug free. Possible interventions to foster accountability will be discussed in Chapter 14.

Case Management for Competency Development

The aim of *competency development* stems from the position that youth are not fully developed and need guidance and nurturance. Juveniles need *habilitation* because of deficits in their maturation and development. Various kinds of skill development (e.g., social, vocational, and life skills) and therapeutic interventions are often included in the case management plan for youth when the agency mission includes competency development.

Drug screening of individual youth for competency development stresses identifying youth who are abusing chemicals; confronting their drug use and possible underlying factors; and developing appropriate interventions. Additionally, deterring substance use, preventing progression to increased involvement with drugs, advocating abstinence, and promoting health are possible program purposes that correspond with this agency mission.

Resources for substance abuse treatment, drug education, relapse prevention, family and individual therapy, social and life skills development, and other approaches that help youth confront and overcome drug dependency must be available to achieve this goal successfully. If they are not, innovative case management approaches, along with the development of needed resources, will be necessary.

Community and Professional Awareness

While seldom the sole objective, obtaining and providing information about drug use among adolescents in the juvenile justice system is another possible program purpose. Generally, results are aggregated and used for decision making at agency and community-wide levels. Examples of information that can be acquired include profiles of drug-using youth, drugs of choice, and the extent and distribution of the problem. This data may indicate that other services and additional information are needed, such as drug prevention programs and increased treatment options.

Both long- and short-term modifications in program policies and procedures may be indicated as a result of this process. A short-term response might be increased security, while a long-term response could entail the development of treatment programs. Making such information available to professional educators, medical practitioners, mental health and social welfare workers, and juvenile justice specialists may positively influence their interventions with adolescents; this information can make them more aware of the issues surrounding substance abuse.

THE NECESSARY CORRELATION BETWEEN AGENCY MISSION, PROGRAM PURPOSE AND USE OF RESULTS

The statement of purpose for a drug-use identification program is like a link in a chain. It connects the overall agency mission to the methods of program implementation; it should ensure that these elements are compatible. This is particularly important when considering the responses that will be made when youth are found to be drug-involved (see Chapter 14).

Failure to correlate all three elements - agency mission, program purpose and use of results - will likely lead to unsuccessful outcomes with individual

youth, program failures and staff frustration. For example, an agency's mission and program purpose might strongly emphasize community protection and accountability of youth; however, if the only response to drug-involved youth is referral to treatment programs, both the agency and the community are apt to be dissatisfied with the outcome. This is especially likely if there are long waiting lists for treatment services, as youth may continue drug involvement and delinquent behavior while they await admission to these programs. On the other hand, if a major program purpose is to promote and maintain abstinence from drug use, but youth are held accountable only for positive screens, with no recognition of those who are drug free, case outcomes may not be very favorable.

To be effective, the purpose of a drug-use identification program must be in concert with the agency mission, and implementation methods must be constructed to help accomplish this purpose. Procedural documents must include guidance for intervening with drug-involved juveniles. In addition to sanctioning youth for using drugs, abstinence should be rewarded; this can be combined with teaching youth skills for recognizing and dealing with relapse, as well as building pro-social life and vocational skills.

PROGRAM LIMITATIONS

Programs to identify youth who are using drugs have been heralded as a panacea for the problems of delinquency and substance abuse. However, this ascribes too much credit to such a program; it is only one of many tools in the spectrum of the juvenile justice system. It is affected by the working relationships that are established with the courts, other juvenile justice agencies and other systems influencing youth and their environments. A drug-use identification program must be accompanied by sound administrative practices, competent and adequate staffing, appropriate funding levels, an array of intervention options, and many other factors in order to accomplish its purpose effectively.

Drug-use identification programs are one important component of an effective juvenile justice system. Without them it is unlikely that an agency can meet its goals of protecting the community and rehabilitating youth. To fail to identify youth who are drug-involved is tantamount to treating the symptoms of an illness without identifying its cause.

CONCLUSION

This chapter has addressed five areas related to considering the purpose for a drug- use identification program in the juvenile justice system:

- the composition of a good purpose statement;
- parameters to consider in developing a statement of purpose;
- four categories of purposes for which a program may be developed;
- the importance of thinking about how the purpose relates to an agency's mission and the way in which results of drug screening will be used; and
- the limits of a drug-use identification program.

The effort spent in carefully considering these issues during the process of establishing a program is likely to be rewarded with successful program implementation in the future.

The next chapter will discuss policy development in the establishment of a drug-use identification program. Clearly stated program purposes will be extremely important in deciding upon policies that will govern the program.

REFERENCES

Maloney, D., Romig, D., & Armstrong, T. (1988). Juvenile probation: The balanced approach. *Juvenile & Family Court Journal, 39*(3).

CHAPTER 6

PROGRAM AND POLICY DEVELOPMENT

PROGRAM AND POLICY DEVELOPMENT[1]

INTRODUCTION

Program and policy development occurs at several levels, including

- state;
- jurisdictional; and
- agency

It is recommended that policies for drug-use identification programs be state-wide with legislative authority. If this is not possible, having a policy at the jurisdictional level with judicial authority is also satisfactory. Finally, an agency-based policy with administrative support is acceptable. Agencies should work to establish appropriate policies at the highest level possible.

The policy development process in establishing a drug screening program is essential. *It can be tempting to try out a new program to get it started, or to see what works and what does not work. . .and then write the policies for it.* However, this can lead to many problems and the possible failure of the program. It is advisable to undertake a policy development process that helps evaluate possible options and then select those that are best suited for a particular agency. It is also important to develop policies that allow enough flexibility for future changes that may be needed.

Program development is a decision-making process carried out by individuals or groups involved in selecting a plan of action after considering information and options gathered from a variety of sources. This chapter presents some of the crucial steps in this decision-making process.

After reading this chapter participants will be able to:

- describe the importance of having written policies for a drug-use identification program;
- specify the essential elements in a program development process;
- list the important areas to include in a policy document; and
- design a strategy for developing a program and policies for identifying drug-involved youth.

THE PURPOSE OF WRITTEN POLICIES

In reality, policies may actually be written or unwritten. A *policy* is a general course of action that determines the way specific decisions are made. In some agencies, policies have evolved informally, and it is tacitly understood that everyone knows what to do and how to do it. However, when thinking about developing a drug screening program, it is advisable to have written policies for several reasons.

The Protection of the Agency, Client and Staff

Written policies can be implemented more easily and consistently than unwritten policies. Written policies are the result of conscious decision-making, unlike unwritten policies which are often the outcome of a trial-and-error process. The lack of appropriate policies may result in uncertainty on the part of staff,

[1] Contributions to this chapter were made by John A. Cocoros, Teresa V. Ramirez, Phyllis M. Kisor, and Larry M. Landmesser of the Harris County Juvenile Probation Department, Houston, Texas.

causing them either to take no action when action is needed or to make inappropriate decisions.

Sound policies help protect the agency and staff from possible legal liability resulting from improper actions on the part of staff. To protect clients, staff, and the agency from legal culpability, the parameters for decision-making must be deliberated carefully and presented to staff in a clear format.

The program and policy-development process must examine legal issues concerning the agency, staff responsibilities, and client rights to ensure that all of these interests are legally protected. In so doing, the policy document will reflect federal, state and local legal parameters within which the program will function. It will consider the legal rights of the youth involved and establish procedures to protect those rights through such provisions as informed consent, chain of custody, and confidentiality procedures. The policy document also will detail the rights, responsibilities and decision-making latitude of staff to avoid errors in judgment that could result in legal problems and program failures.

Clarification of Staff and Program Expectations

Effective written policies will clearly state the purpose and expectations of the program and how to achieve them. It is important that everyone involved with the program understands its purpose and can refer to it as needed. Implementation of the program will be more consistent if there is unity of purpose and if procedural guidelines are defined clearly.

Within these policies and procedures staff roles must be defined and responsibilities must be specific so they can be carried out consistently. Continuity from one staff member to another in the implementation of the program can be achieved only through clearly written policies and procedures. These should be placed in the agency's policies and procedures manual and distributed to all staff. The effectiveness of the policies and procedures can be enhanced by providing adequate staff training which will be discussed in detail in Chapter 15.

Program Credibility, Replication and Support

For a program to be regarded highly by others it needs to have written policies and procedures resulting from a careful and responsible decision-making process. If the program is called into question, written policies will indicate that a careful decision-making process was undertaken before it was implemented.

In juvenile justice, cooperation and resource sharing are important. When one agency develops a successful program, it can easily be shared with other agencies if written policies, procedures, and evaluation information are available.

Effective policies and procedures are also important for generating funding support for a program. A funding source that can view the purpose and operational guidelines of a program in written form is more likely to want to invest in the program.

THE PROGRAM DEVELOPMENT PROCESS

There are many important considerations in developing an effective program for drug-use identification. It is likely to be a time-consuming process. However, it should be worth the initial investment of time if the program functions well, achieves its purpose and avoids time-consuming and expensive problems later.

The program development process is decision making. To make effective decisions, several key elements are crucial. The following questions must be answered throughout the program development process.

Who Should Be Involved In The Process?

There are several principal actors to be included in the program development process. First, it is vital that agency administrative personnel take part in the decision-making process. They are able to obtain necessary information to make choices about the allocation of resources. However, it would not be advantageous for administrators to develop the entire program without consulting other key players.

Management and line staff also must be represented in the decision-making process. Developing a new program represents change within the organization and affects their jobs. Staff members who are involved or represented in the decision-making process are more likely to embrace a program when it is initiated. They will have very important insights into the operation of the program, other staff and juveniles' reactions to it, and possible problems to be avoided. (See Chapter 9.)

Including others from outside the organization in the decision-making process may be necessary, also. For example, it would be counterproductive for a probation department to institute a drug-use identification program without consulting the judge who will be asked to include participation in the program as a requirement in a juvenile's conditions of probation. Similarly, if an administrator of an agency answers to a board of directors, it is imperative that they be informed and have an opportunity to provide feedback about program development.

It may even be necessary to involve people from outside the organization who do not currently have any formal relationship with the agency. For example, consider involving:

- parents' or citizens' groups;
- other juvenile justice system agencies or professionals;
- educational, legal, social welfare and medical professionals;
- academicians;
- technical experts;
- delegates from possible funding sources; and
- other representatives concerned for the same group of youth.

There are several approaches to determining who should be included in the process and developing an effective mechanism for their involvement. Three questions to consider are:

1. Whom will this program affect most?
2. Who is most likely to oppose the implementation of this program?
3. Who is most likely to support this program?

The answers to these questions may include some of the same individuals and groups in more than one category; there also will be unique persons in each of the lists. However, if a list is compiled in response to each question and some persons from each list are involved, it is likely a good group to help with the decision-making process will be assembled.

The most manageable size group for decision making is usually about five to seven members. However, if a core group this size needs additional expertise, other knowledgeable persons could be invited to join the group as needed. Subcommittees also could be established to deal with specific areas.

If possible, it is advantageous to designate a program coordinator as early in the decision-making process as possible. This person can provide assistance to the planning process and learn what is expected of the program from the decision-making group.

What Roles Are Necessary for Good Decision-Making?

In addition to the representation of various interests, it is also important to be sure that key roles are performed by those involved in the decision-making process. Participants will need to provide one or more of the following:

- *Information* - This may include information about the juveniles, the agency, and the drug-involvement of youth. It also includes knowledge about drug assessment, recognition and testing techniques.

- *Leadership*, decision making, and other skills - It is helpful to have at least a core group of persons who have had experience in similar program development activities. In addition, research skills and many other competencies will expedite the process.

- *Gatekeeping functions* - Some people are especially adept at communicating with others, resolving differences, and making others feel that they are important in a group process. Whether or not these persons contribute significantly to the substance of the decision-making process, their skills are vital in accomplishing the tasks required.

In addition to the decision-making responsibilities these individuals may fulfill, there will be a need for ongoing program roles and duties, including: administering the program, monitoring its progress, developing training for staff, and public relations activities. The commitment of participants to continue as the program develops should be assessed.

If possible, a system of checks and balances is useful. This may involve an overall policy-making group that will establish the program direction and a coordinating committee that will develop implementation procedures.

How Can the Appropriate Persons Best Be Involved in the Process?

There are several options to consider for involving the appropriate persons in the decision-making process. Some of these include:

1. Developing a task force or committee of agency staff to work out the details of the program. These particulars may be shared with others who do not serve on this body but have a legitimate interest in the outcome. Adjustments can be made based on their feedback.

2. Composing a task force or committee of both agency staff and representatives from other agencies and interest groups. They can jointly undertake the decision-making process.

3. Handling decision making on an informal basis, with one or a few individuals taking responsibility for certain tasks while asking for input from others, as needed.

Selecting an approach to the decision-making process will depend on management style and other factors. For example, if administrative leadership is typically democratic, group involvement is likely to be most successful. On the other hand, if it is autocratic or *laissez-faire*, decision-making is likely to be less formal and more individualized. Other factors that will determine the approach taken include the availability of individuals, the amount of time they can devote to the

process, and the resources at the disposal of the agencies and the individuals involved. No particular approach is inherently right or more effective. However, the selection should be conscious, and based on an assessment of the advantages and disadvantages of each.

How Long Does the Decision-Making Process Take?

With concerted effort, the decision-making process can occur in a relatively short period. On the other hand, since many of the individuals involved have multiple other responsibilities, it may be more realistic to extend the process so that it does not demand large segments of time at once. There is likely to be an optimal period - not too short and not too long. If it is too short, there may not be enough ideas and information generated to make the best choices. If the process takes too long, those involved may become discouraged, lose interest, or have difficulty maintaining their commitment.

If a working group for planning and policy development is selected, a useful approach will be to have the group discuss a time frame for achieving its major goals as well as the incremental steps of the process. If group members have committed themselves to particular deadlines they are more likely to adhere to them.

A FRAMEWORK FOR DECISION MAKING

Developing a program, and the policies and procedures to implement it, is essentially a problem-solving or decision-making task. There are six steps in this process (Heirs, 1986; Reitz, 1987; Wheeler, & Janis, 1980).

1. **Specify the problem to be addressed.** As you will read in Chapter 7, undertaking a needs assessment can be a vital step in gathering information about the extent of the drug problem in a community and agency. The *problem* may present itself as both a threat and an opportunity (Wheeler & Janis, 1980). For example, it may be seen as a *threat* that juvenile correctional facilities will become overcrowded because of the number of repeat offenders who are drug-involved. Therefore, a program must be developed to interrupt the cycle of drug use to protect the community from crime and conserve scarce resources. At the same time, intervening with drug-involved youth may be seen as an *opportunity* to help youth, through effective treatment programs, and to change their lives positively for the future.

   Stating the *problem* as clearly as possible is the first step in the decision-making process. Without a clear definition of the problem, the remainder of the process will not be effective. The outcome of specifying the problem may be a series of problem statements, with one or more being broad and general such as a goal or mission statement, while others are specific, and similar to objectives.

2. **Develop alternative strategies.** This step is often referred to as *brainstorming*. It is important that participants in the process feel free to be as creative as possible. This also may involve looking at other, similar agencies and learning what they are doing to address comparable problems. Initially, no suggestions should be considered *good* or *bad*; none should be accepted or rejected immediately.

3. **Evaluate the alternatives.** Each of the alternatives suggested in step two must be assessed for its possible consequences. Advantages, disadvantages, potential risks, and other factors must be estimated. In some cases,

more information will be required to evaluate an alternative adequately.

4. **Make a decision.** The most advantageous alternative may or may not be readily visible. Ultimately, however, a choice will need to be made, representing a commitment to a particular course of action. There are several ways such a decision may be achieved. If the majority of those involved agree on the same choice, the decision may be made by *consensus*. However, if there is disagreement about the best approach, other methods may be needed. One is to conduct a *vote* among those involved in the decision-making process. Another is to *provide an administrator, judge or other person in authority with the information and recommendations necessary for making a final decision.*

   It is advisable to have an understanding of how final decisions will be made from the beginning of the process. It can be discouraging and counterproductive for a group to work toward making a decision by consensus and then learn that someone with higher authority in the agency has implemented a different decision. Responsibility for making the final decisions should be understood from the outset.

5. **Take action.** Once the decision has been made, the program must be implemented. Part of the decision-making process should include the development of plans for carrying out major decisions. If sound decision-making and policy development have occurred, the implementation should be relatively smooth.

6. **Monitor the results.** Program evaluation will be discussed in Chapter 10. It is vital that the implementation of policies and procedures be measured to determine if they are having an impact on the original problem as identified. If not, the process may have to be undertaken again, and perhaps several times, to generate new approaches.

This decision-making process is a fairly simple one to read about, but it is much more complex to undertake. One important caveat is that each of the six steps are equally important and each should be given equal attention. It is tempting to spend very little time thinking about how the problem is defined or stated and actually begin working at the second step - thinking about alternatives. Sometimes, decision-makers stop thinking about alternatives as soon as they hear one that sounds workable. Evaluating the alternatives too quickly can stifle creativity. Another pitfall that may occur is failure to monitor results adequately. Programs sometimes continue to function ineffectively for years because of a lack of constructive evaluation.

Multiple decisions that must be made in concert with each other add to the complexity of the decision-making process. As one decision is made it affects those made previously and those which will be made subsequently. Thus, it is sometimes necessary to go back and re-think previous decisions as new situations present themselves.

For example, one of the first decisions to be made in developing a drug-use identification program is to determine the purpose for the program. Will the primary purpose be to protect the community from crime by reducing the number of drug-involved youth? Will it be to identify those youth who are in need of treatment for substance abuse in order to promote their ability to develop more positively? Or, will the purpose for the program encompass more than one area, such as holding youth accountable for their illegal behaviors and protecting the community, while providing them with help to overcome their addiction? Making such a decision may depend on information gathered during the needs assessment process about the

extent of the drug problem, community attitudes, types of drugs being used, and many other elements.

Once a decision about the purpose for the drug-use identification program has been made, there are many other decisions to consider. For example, which method(s) will be used to determine whether or not youth are drug-involved? Will it be assessments, drug recognition techniques, chemical testing, or some combination of these? Will all youth be subject to the selected approach, or just those with drug-related charges or obvious symptoms of substance abuse? What responses will be made when it is determined that a youth is drug-involved? These are just a few of the many decisions that need to be addressed. For each, the decision-making process should be followed. Further information to guide this process is presented in later chapters.

THE ESSENTIAL ELEMENTS OF A POLICY DOCUMENT

By the end of the program-development process an agency must have a document that will guide the implementation of its program to screen youth who are drug-involved. This will be available to all staff who work with the program in any way. It should ensure that, within reasonable boundaries, all staff conduct the program consistently. It also should ensure that if one pivotal staff member should leave the agency or be promoted to another position, others can continue the program with a minimal amount of disruption.

Written policies and procedures may need to adhere to agency requirements for such documents, following a prescribed format. However, other agencies may not have such established methods in which policies and procedures are to be written. Narratives, outlines, or goals and objectives are common ways in which policies and procedures are presented. Organizing the policies and procedures in a goals and objectives arrangement is recommended and is especially useful for later evaluation. This format allows for both brevity and clarity. Narrative sections may be added as needed for explanation of certain points.

The content of a policies and procedures document will vary according to the needs of individual agencies and the design of the program. However, every document needs to include the following basics:

1. **The purpose of the program.** The agency's mission statement guides the development of the program's purpose. The purpose should be stated clearly and must correlate with the agency's mission. Chapter 5 presented a complete discussion of determining the purpose for your program. It also may be helpful to explain how and why the program was developed and the issues around which it is focused.

2. **The legal authority and limitations of your program.** The legal basis, principal agencies responsible, and their legal authority to conduct such a program should be stated. Any legal conditions that regulate or restrict a program must be outlined explicitly in the policies and procedures document. See Chapter 8 for a discussion of the legal issues to be considered. These may apply to various aspects of the program, including areas such as the collection of urine specimens, chain-of-custody procedures, and use of results. Policies also should delineate how youth will be notified that they are subject to chemical testing or other methods of drug-use identification. Penalties that may be imposed for drug use and consequences for refusing to cooperate should be articulated (Crane, nd). Informed consent by juveniles and confidentiality of results also must be addressed. Any purposes for which the program cannot be used legally should be stated as well.

3. **The methodology to be used.** Whether the program will use assessment methods, drug recognition techniques, or chemical testing, the policies and procedures document needs to explain why the method was selected and what it can and cannot accomplish. The protocol for conducting the screening procedure(s) must be outlined in detail. It may be useful to analyze the tasks involved by watching someone perform each step. Writing down all procedural steps in the order in which they should be performed can mean the difference between a program that produces credible results and the consequence of costly mistakes made by inexperienced personnel. Check lists may be useful in helping staff follow procedures from beginning to end.

   If there are parts of the procedures that call for judgments to be made by the staff involved, these should be articulated. Any restrictions of their discretion in these instances should be included also. For example, upon determining that a youth has used drugs while on probation, will filing for a revocation hearing require a supervisor's approval?

4. **Which juveniles will be included in the program.** If the agency has sufficient resources, all youth might be included in the screening process. However, as discussed in Chapter 9, drug-use identification programs can be costly. Therefore, it may be important for the program to focus on only those youth presenting the greatest risk of drug involvement. Decisions may be based on the type of offenses committed by the juvenile, risk factors determined through intake screenings and drug recognition procedures, or other considerations. Criteria for the decision, and those responsible for determining who to test, should be outlined. The latitude to be given individual staff members in this area must be clarified. The important point is that these decisions be made and the information detailed in the policies and procedures document.

5. **Staff duties and responsibilities.** A program coordinator should be identified to carry out the program according to the established policies and procedures. The authority, responsibilities, and accountability of staff for administration of the program, day-to-day implementation, evaluation, and other required tasks must be defined clearly. Each staff person involved must know exactly what is expected of him or her.

   If procedures employed will affect the work of other staff who are not involved directly in implementing the program, these should be detailed, as well. For example, a staff member might have no involvement in the screening process, but might be responsible for intervention responses if results are positive. Any training required in order for staff to learn procedures and maintain their competency level also should be included. Adjustments in other responsibilities of staff members created by the implementation of a drug-use identification program must be addressed; new job descriptions may need to be written.

6. **Cost of operations and materials.** Various costs should be identified, and procedures for handling these must be specified. For example, how to order and charge supplies, pay laboratory fees, and deal with other costs of this type should be stipulated. The expense of confirmation testing, if required, must be calculated. Staff training and staff salaries are other costs that must be addressed. Possible consultation and travel costs are also factors to be considered. The source(s) of funding for the program needs to be identified, and possible requirements due to outside financial

support should be indicated. See Chapter 9 for further discussion of cost and staff issues.

7. **When and where the program will be implemented.** The initial time frame for the program should be delineated. If the program is to be implemented in stages, rather than all at once, a time line or chronological list of implementation phases is needed.

In some cases, policies and procedures documents will apply to an entire system of juvenile justice agencies, such as a state's juvenile corrections program. In other instances, a single facility or program will be developing the policies and procedures. The question of ***when*** to implement the program may relate to the youth's progression through the system. Will assessment, drug recognition techniques, or chemical testing be performed at intake in the detention center, post adjudication, throughout probation, while in a treatment program, or during aftercare? There are many possibilities and combinations to consider. Legal concerns, cost factors, and treatment issues will affect the final decision, and these must be recorded in the policies and procedures document.

The term ***when*** also may refer to decisions about whether or not screening activities, especially urinalysis, should be conducted on a routine or random basis. The advantages and disadvantages of each should be considered in the decision-making process and included in the final document.

Where a youth is screened may refer to the part of the system involved, such as detention, or correctional facilities. However, it also may refer to the actual physical place within a facility that the screening occurs. This is particularly significant when thinking about drug recognition techniques and chemical testing. Drug recognition techniques require a space that can be totally darkened to examine the reaction of the eyes to light. Urinalysis necessitates a collection site for urine specimens with a toilet and running water, refrigerated storage, and other space requirements. The security of such areas, particularly specimen storage areas, is also an issue.

8. **Use of results.** The policies and procedures document needs to guide the use of the information obtained from the screening procedures. Some agencies have a prescribed set of consequences for youth who are abusing substances. Others leave the response options to the discretion of the personnel involved. Agencies should consider providing a suggested array of graduated sanctions and rewards so officers have suggestions for potential responses, but can individualize them based on the youth involved.

If a drug screen reveals that a youth has not used drugs, a positive response should be provided. **It is important to note that a reward or positive feedback for a "clean screen" may be more effective than sanctions for drug use in helping youth maintain sobriety.**

Some agencies wish to limit responses for drug involvement to rehabilitative interventions. Thus, test results are not used for legal purposes. If this is the case, such a decision needs to be made and procedures must be developed to guide personnel in implementing appropriate responses.

9. **Roles of other agencies and professionals.** If other professionals (e.g., medical, legal) or agencies will be involved directly or indirectly with a drug-use identification program, their roles need to be included in the policies and procedures

document. For example, if youth will be referred to a treatment program when identified as drug-involved, the proper procedure for making a referral needs to be included. In addition, information that needs to be furnished to other agencies or professionals, along with confidentiality and release of information requirements, should be described.

It is important to define clearly the specific roles of government and community-based organizations that are involved in drug-use identification programs. This will ensure that all involved agree on the principles of the program and the duties of each party. When two or more agencies are actually collaborating on the development and implementation of a drug-use identification program, it is essential that common missions and mutual objectives be produced. Further, program responsibilities of each, and clear communications among all involved, need to be delineated (American Probation and Parole Association & National Association of Probation Executives [APPA & NAPE], 1988). Formal working agreements with others may be helpful in establishing good working relationships. These agreements might be appended to the policies and procedures document.

If part or all of the program is to be contracted to another organization, the policies and procedures document needs to stipulate the responsibilities of all involved (APPA & NAPE, 1988).

10. **Documentation and Evaluation.** A policies and procedures document should explain what information is to be recorded. If forms are needed, these should be appended to the policies and procedures. Documentation may include case records, chain-of-custody forms, consent forms, court reports, and the like. Evaluation procedures should be detailed, including types of reports to be generated and other anticipated outcomes from the process.

11. **Dissemination of information and public relations.** Agencies sometimes specify who may release information and what may be shared. Legal limitations on the dissemination of information must be clearly addressed. This should include clients' rights to confidentiality and necessary procedures for release of information. These should be reflected in the policy document, and mechanisms for keeping the Public Information Officer informed about the program should be delineated. Other materials that may be useful include an abstract of the program for distribution to the media and news releases as new information develops. It also is important to consider sharing information and resources with other juvenile justice agencies; the extent of information that may be furnished to others should be included in the policy document. This may entail such items as an executive summary containing a program description, progress and results, and thorough program reports. These program reports also may be disseminated to the board of directors, funding agencies, and other interested agencies and professionals.

POLICY APPROVAL, DISSEMINATION, AND REVIEW

Producing the policies and procedures document is not the final step in the process. Policies should be reviewed by one or more legal authorities or a knowledgeable attorney prior to program implementation. This will ensure that they comply with applicable local, state, and federal statutes and case law.

The policy document may need to be approved by a judicial or governing body as well. This should be completed before the program begins operation to avoid legal liabilities. However, sometimes obtaining this consent can be quite time-consuming. To facilitate the process, make sure that those in a position to approve the policy are informed about the process as it progresses. Provide them with pertinent and timely information so they will have less to consider when the policy is finally developed. Communication about the decision-making process, and the reasons for selecting certain options, will expedite the approval process.

Once approval is granted, the policies and procedures should be issued to all who need to be aware of them. Many agencies have a regular process for distributing new policies and procedures. They must be provided in written form for all who will be affected by the program. However, it is also important to provide an opportunity to discuss them with staff in supervisory or staff meetings. Even the most comprehensive and clearly written policies will not guarantee proper program implementation. Staff training must accompany all written procedures to ensure that personnel understand expectations. See Chapter 15 for a discussion of staff training.

Make certain the date of approval and implementation of the policies is placed on the document. Also provide for a periodic review of the policies (at least annually) to determine if any changes are needed. Staff involved in conducting the program should be a part of this review process. An evaluation process, discussed in Chapter 10, will be important in providing necessary feedback to the decision-making group about possible changes that may be needed.

CONCLUSION

The policy development process is not an easy one, but it is essential and may make the difference between a successful program and one that fails. Even more important, it may prevent the program from encountering legal challenges and liabilities for the agency. The most significant reason for undertaking a thorough policy development process is to make the program as effective as possible for helping the youth served by the agency.

In the remainder of this Module information will be presented which will be essential in the policy development process. Specifically, the following will be addressed:

- Assessment of needs and resources;
- Legal issues;
- Cost and staff issues; and
- Evaluation.

Module III will detail information needed in making decisions about the implementation of specific drug-use identification methodologies.

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CHAPTER 7

ASSESSMENT OF NEEDS AND RESOURCES

ASSESSMENT OF NEEDS AND RESOURCES[1]

INTRODUCTION

The preceding chapter, Program and Policy Development, introduced many decisions that must be made when establishing a drug-use identification program. An agency should not initiate such an undertaking without first assessing: 1) its need for the program; and 2) whether or not it has access to the resources to implement it. A process for formulating answers to these questions is presented in this chapter.

Some agencies will require a needs and resources assessment to confront obstacles or resistance to the new program. If the data gathered provides evidence to substantiate the need for a drug-use identification program, an agency will be in a better position to recommend it. If the necessary resources to achieve program objectives are not sufficient, the agency can demonstrate proof of this when requesting support (e.g., funding, further training, additional treatment referral options).

This assessment is critical and requires the acquisition of a wealth of information from a variety of sources. It does not necessarily require technical research applications. Simple mathematical calculations such as ranges and percentages are sufficient. This enterprise can be undertaken internally, by the agency alone. However, linkages with other professionals and members of the community will enhance the process significantly. The size of the agency may have a bearing upon the complexity of an assessment and the agency's resources for conducting it. Regardless of limitations, a basic assessment is feasible and should be undertaken. Sufficient staff resources must be allocated to conduct the assessment. Likewise, if a decision is made to establish the program as a result of the assessment, administrators must be willing to commit adequate resources to implement it. This chapter will guide agencies in the possible directions they may take to compile and examine the necessary information to conduct a sufficient needs and resources assessment.

At the end of this chapter, participants will be able to:

- discuss why conducting a needs and resources assessment is essential before implementing a drug-use identification program;
- list the basic steps of the needs and resources assessment process;
- explain why uniformity and consistency are essential to the data collecting, recording, and analyzing steps of the process;
- list four methods for gathering essential information to conduct the assessment;
- devise an appropriate, unbiased question for a survey that measures attitudes or opinions;
- discuss two different decisions agencies might make after substantiating the need for a drug- use identification program in their community when resources are deficient;
- review four processes agencies can adopt to network with other sources in carrying out the needs and resources assessment within the community; and

[1] Contributions for this chapter were made by John A. Cocoros, Teresa V. Ramirez, Phyllis M. Kisor, and Larry M. Landmesser of the Harris County Juvenile Probation Department, Houston, Texas.

- devise a list of appropriate needs and resources statistics to collect from the community, and from the agency.

NEEDS AND RESOURCES ASSESSMENT PROCESS

The objective of the needs and resources assessment process is to gain a clear sense of supply and demand within the agency and community: Is there a demonstrated and perceived need for a drug-use identification program? If so, what obstacles and opportunities might the program encounter if introduced? Simply stated, is the idea of developing a drug-use identification program a worthwhile and realistic one?

To determine the *need* for a drug-use identification program, an analysis must be conducted of the community and of the agency itself. This entails estimating the magnitude of the drug and delinquency problem and its impact on the community and the agency. Likewise, the agency must collect information regarding *resources* available to implement any or all of the three components of the drug-use identification program: assessment, drug recognition, and chemical testing. This will include a review of services and resources in both the agency and the community.

Two types of information surrounding the issues of substance use and delinquency will be useful: 1) factual data derived from agency and community records; and 2) opinions and viewpoints. Agencies should gather information from records, attempt to verify their accuracy, and explore the perceptions of citizens and professionals in various ways to compile balanced, conclusive evidence.

Generally, information will be obtained through four means:

- assembling pre-existing data;
- reviewing records;
- administering surveys and questionnaires; and
- engaging in interviews and informal communication.

Regardless of which of these are used, the agency will have to plan and undergo a process for collecting, organizing and analyzing the data. The following four steps must be followed:

- determine types and sources of information;
- design the data collection process;
- determine procedures for collecting and recording data; and
- analyze results.

When this process is completed, results must be reported and, finally, a decision made as to whether or not to establish a drug-use identification program in the agency.

Determining Types and Sources of Information

Some, or even all, of the necessary data may be available to the agency. However, it is more likely that additional information will need to be obtained. In this case, the agency will have to plan and undergo a process for collecting data within the agency and from outside sources.

The specific types of objective (factual) and subjective (viewpoint) information gathered will vary depending on whether the assessment is conducted in the agency or in the community. Lists of suggestions for both types of information are provided in this

chapter under the headings, *Needs and Resources in the Community* and *Needs and Resources in the Agency.*

In Chapter 2, the connection between drugs and delinquency was discussed. In order to examine fully the demand for a drug-use identification program, an assessment of both delinquency and drug use will be necessary. Statistics regarding adult substance abuse and criminal activity also will be essential as such problems in adolescents often parallel those of adult family members (Kumpfer, 1990). See Chapter 2 for further discussion of this issue.

To save time and money, agencies are encouraged to begin by seeking *existing* statistical information. For knowledge on agency needs and resources, most data will be generated within the agency itself. To assess needs and resources in the community, agencies may consult schools, social welfare organizations, hospitals, businesses, the media, and citizens within the community. Research regarding needs and resources usually will be conducted simultaneously, as the same sources are likely to provide both types of information.

Designing the Process

Before any data is collected, a system should be devised and someone appointed to oversee its implementation. An unbiased process is crucial to the integrity of the outcome. Some suggestions for avoiding skewed results include the following:

- Respondents from varied backgrounds and those with differing points of view should be selected.
- Impartial sources of information should be consulted.
- Sufficient questions should be asked to collect a broad range of information.
- Response options should be varied enough to elicit an array of viewpoints.
- Anticipated outcomes should be acknowledged, while other possibilities are also actively pursued.

Measuring opinions or viewpoints is often more difficult than compiling factual data. To simplify processing, agencies should ask closed rather than open-ended questions in interviews or surveys. Enough options must be offered, however, to address an array of responses.

Questions may be structured in various ways. The following are commonly used approaches:

- degree or frequency;
- intensity; and
- ranking.

(Converse & Presser, 1986)

True/false or agree/disagree questionnaire items are not recommended because they force a respondent to select an opinion on one side of an issue or another. Often, people's views on certain topics are ambiguous. Thus, there should be a "don't know" or "no opinion" option for those who do not have a clear viewpoint on a topic. Questions that require people to figure something complex, such as percentages or changes in patterns of behavior or thinking, should be avoided (Converse & Presser, 1986). The questionnaire should be simple to answer; it should not involve analysis or computations. Accurate answers are essential; these will come from clear, direct questions.

The following are examples of unbiased questions using the three approaches listed:

Degree or Frequency

Given your agency's current drug use identification resources and practices, to what degree do you feel capable of identifying drug-involved youth on your caseload (very capable = 5; incapable = 1)?

___5 ___4 ___3 ___2 1___

How often do you encounter youth in your classroom (or emergency room, or caseload) whose behavior you believe is affected by drug use?

____ daily
____ three times weekly
____ once a week
____ once every two to three weeks
____ once a month or less
____ never

Intensity

I feel that there is a serious problem of substance abuse among juveniles in this community.

Strongly Agree__ Agree__ Don't Know__ Disagree__ Strongly Disagree__

I believe that many juveniles who are using drugs are not being identified by the juvenile justice system.

Strongly Agree__ Agree__ Don't Know__ Disagree__ Strongly Disagree__

I believe that many youth who use drugs also commit crimes.

Strongly Agree__ Agree__ Don't Know__ Disagree__ Strongly Disagree__

I believe that it is okay for young people to use alcohol as long as they do not drive while under its influence.

Strongly Agree__ Agree__ Don't Know__ Disagree__ Strongly Disagree__

Ranking

Rank the following crimes from most threatening to least threatening to the safety of people in your community (1 = most threatening; 8 = least threatening).

___ Rape
___ Assaul t
___ Selling alcohol to minors
___ Theft or robbery
___ Driving under the influence of intoxicants
___ Murder
___ Drug trafficking
___ Domestic abuse/neglect

Rank the following crimes from most prevalent to least prevalent in your community (1 = most prevalent; 8 = least prevalent).

___ Rape
___ Assault
___ Selling alcohol to minors
___ Theft or robbery
___ Driving under the influence of intoxicants
___ Murder
___ Drug trafficking
___ Domestic abuse/neglect

Questionnaires can be devised to measure the perceptions of different groups within the community, such as health care professionals, law enforcement officials, and educators. An agency can use the information derived from surveys to determine the expected level of support for drug-use identification programs from each of these populations.

Opinions and viewpoints may be obtained through interviews or informal communication as well. If a structured interview is conducted, data may be formally collected and recorded following the steps outlined previously. Qualitative data collected through various other means (e.g., memos, conversations, meetings) is also valuable and may be used in decision-making. For example, an administrator may request information from staff about their perceptions of the clients they serve. Do they suspect that many of the clients on their caseloads are drug users? Do they feel that a drug-use identification program would enhance their ability to help clients by detecting juveniles who are in need of drug education or treatment? Likewise, opinions of key professionals in the community could be sought during discussions at civic meetings. Do they believe that adolescent drug use is a serious issue in the community? While this information would neither be quantified nor included in a statistical survey, it may be used to supplement other findings in the final report.

Collecting and Recording Data

Agencies must decide upon uniform data collection and recording methods. People from several positions and organizations may be gathering information. All personnel responsible for implementing the procedures should use methods that ensure consistent, organized, accurate data is accumulated.

The assessment may be conducted by various people within the community or by the agency alone. Once the information is collected via records reviews, surveys, interviews, or other methods, it will have to be processed. To maintain consistency in recording information, forms should be created. Also,

information gathered through surveys or interviews must be in codable, not narrative form. In other words, questionnaires should be used or developed that allow the respondent limited choices (as demonstrated in the preceding examples). Responses then can be recorded statistically on the data collection form.

Analyzing Results

The project will involve a meticulous compilation of substantial amounts of data from a number of sources. Simple calculations, such as averages, ranges, and percentages will be sufficient for analyzing the information collected. Uncomplicated techniques are particularly desirable when a number of individuals will be conducting the analysis. As this is often the case, agencies should develop uniform, comprehensible procedures so that results are reliable and clear. Agencies that wish to conduct more sophisticated analyses, which may be time consuming and costly, should consult a research specialist.

Reporting Results

The needs and resources assessment process will yield information helpful in implementing the drug-use identification program and targeting other areas that need improvement within the agency. It also can provide useful information for other community organizations: law enforcement agencies, schools, youth advocacy groups, health care centers, substance abuse treatment centers, and social services organizations. Therefore, reports generated from the analysis should be disseminated to these various groups. In order to promote public awareness, this information may also be shared with the public via the media.

Making a Decision

A variety of sources may be consulted while obtaining the necessary information for a needs and resources assessment, but the final decisions regarding the drug-use identification program rest with the agency. The level of need for the program should be balanced against the level of resources available to implement it. A strong need for the program may be demonstrated, but certain resources may be scarce. In this case, agencies must determine the feasibility of accessing or developing the necessary resources. For example, funding may be adequate, but drug education and treatment options may be lacking. It would be impractical to implement a drug-use identification program without sufficient means to respond to drug-involved offenders once they are identified. Therefore, developing or enhancing programs within the community to rehabilitate and educate drug-involved youth may become an agency's priority. Similarly, if the need for a drug-use identification program is established, and funding resources are limited, agencies must seek ways to finance the program. Chapter 9, Economic and Human Resource Issues, presents possible funding sources for agencies to consider.

Agencies that substantiate a need for drug screening may decide to implement a program, but reduce it to fit within their means. They may use assessment and drug recognition techniques to identify drug-involved youth but may not implement a urinalysis program. Another possible approach when resources are scarce is to implement a program in phases, using existing resources and developing the program as resources expand. Reducing or gradually introducing a program are viable solutions, but agencies should use caution. They must not limit programs to a level where they cannot effectively accomplish their objectives. If they decide to implement a program in phases, they must be certain that the resources will expand to sufficiently meet the needs of the program. Also, care must be taken to ensure that program policies and procedures fall within the legal parameters of the particular jurisdiction (Consult Chapter 8, Legal Issues).

NEEDS AND RESOURCES IN THE COMMUNITY

Information should be gathered from various sources in the community to assess its need for a drug-use identification program as well as any resources it can offer the agency in implementing it. Common issues of concern surrounding substance abuse and delinquency should dictate the type of information gathered. Some issues include:

- magnitude of drug and delinquency problems within the community;
- social and financial costs of substance abuse and delinquency to the community, including violence, suicides, school drop-out rates, neighborhood safety and appearance, family dysfunction, and loss of labor pool;
- community and professional attitudes toward drugs, delinquency, and drug screening;
- existence of sources of support, such as youth advocacy groups within the community;
- treatment services and other options for responding to the problem; and
- analysis of current drug-use identification programs within the community.

Specific data that may be gathered to address the above issues are listed in a later section of this chapter, *Information From the Community.*

Organizing the Process

A thorough assessment of needs and resources within the community requires collaboration and communication with various sources. This process can be organized in several ways. A juvenile justice agency may decide to collect the data by designing and executing its own system. In this case, if little pre-existing information is available, the extent of data collected will be substantially limited; one agency alone cannot invest the time required to aggregate all the necessary information. A better strategy might be for the agency to work with other agencies and organizations within the community.

The following are formal and informal strategies for structuring the needs and resources assessment process:

- Agency staff members collect the information themselves through public records research, telephone calls and correspondence with other professionals. The agency then proceeds with data compilation and analysis on its own.
- The agency initiates one-on-one meetings with people from various organizations within the community (e.g., law enforcement, court system, health professions, social welfare, education, business, and community members). The purpose of the meetings is to establish contact and obtain information first-hand. Information about needs and resources is gathered through each meeting, verified if necessary, then compiled and analyzed by the agency.
- A short-term assessment group is assembled. The group is comprised of people from various groups in the community who possess information vital to the program. Their purpose is to conduct a needs and resources assessment of the community. Information is shared through a fixed number of meetings to be conducted during a short span of time. Those outside the agency may be expected to do a small amount of follow-up research or reporting. Most information is gathered, compiled, and analyzed by the agency itself.

- A long-term task force, composed of people with a mutual interest in the drug-use identification program, is created. To keep the group as small as possible, it is probably best to limit the members of the task force to one representative per area outside the juvenile justice system (e.g., health care, social welfare, education, business, and citizenry). It is advisable to have approximately four juvenile justice professionals on this task force, such as: one law enforcement official, one line worker, one administrator, and one judge. These people would be expected to generate current information from their respective areas regarding needs and resources for a drug-use identification program in the community. They may be asked to distribute questionnaires, review records within their own profession, accumulate data, and write reports.

Agencies may use one of the above or generate their own systems to undertake this process. The structure chosen will depend upon the needs and preferences of the agency and the amount of participation that can be expected from the community. This decision will have to be made initially because it will establish a framework for beginning the assessment process.

Advantages to Intersystem Collaboration

Although the final decision rests with the agency, there are advantages to intersystem collaboration as follows:

- **It produces highly reliable and credible information:** Each group is in a better position to assess its own particular needs and resources accurately. Representatives from all areas bring expertise, and a fresh, diverse perspective to the program. In addition, a substantially greater amount of information can be collected through several sources, lending increased reliability to the effort.

- **It is cost-efficient:** Time is spent much more productively when the workload is distributed. Instead of one agency attempting to undertake the entire project, more reliable information can be gathered in less time when responsibilities are shared.

- **It facilitates the acquisition of resources:** With the assistance of various sectors of the community, contacts are made. Many resources can be uncovered that a single agency would have difficulty finding or acquiring on its own.

- **It helps to garner support:** An opportunity to promote the drug- use identification program is realized through collaborative efforts within the community. Further attention will be secured if media representatives are included in the task force. Public and community support may mean financial sustenance as well. A well-known, reputable program, with continued respect and financial backing, will be in a stronger position to accomplish its goals.

- **It mobilizes energies toward a common cause:** Various forces joining efforts in a common cause wield greater influence. As long as efforts are organized and focused, diversity will enhance the enterprise and increase program credibility.

Information From the Community

Pertinent data for agencies to consider regarding needs and resources that may be gathered from each professional area and the public are provided in Table 7-A.

Table 7-A

STATISTICAL INFORMATION FROM WITHIN THE COMMUNITY

Agencies must determine which elements are considered *Needs* and which are considered *Resources* in their particular jurisdiction. For example, "law enforcement personnel's skills in recognizing and dealing with drug-involved offenders" may be a *Need* if staff require additional training in this area. However, if a community's law enforcement officials have received adequate training in this subject area, their acquired skills would be considered a *Resource* rather than a *Need.*

Juvenile Justice Agencies	**Needs**	**Resources**
• crime rates by type of offense, both juvenile and adult (number of drug charges, violent offenses, profit-oriented crimes, vandalism, etc.)		
• number of known and suspected drug-involved offenders, both juvenile and adult		
• categories of drugs of choice in the community		
• law enforcement and juvenile justice practitioners' skills in recognizing and dealing with drug-involved offenders		
• drug education programs available for juvenile offenders		
• training available for acquiring drug-use identification skills (assessment, recognition, chemical testing)		
• treatment options for referral of drug-involved youth		
• practitioners' views on their own competency in handling drug-involved youth		
• juvenile justice personnel's levels of tolerance toward drugs and drug-involved offenders and their perceived roles in intervening with drug-involved youth		

Schools	**Needs**	**Resources**
• extent of drug use • truancy • drop-out rates • concerns of school officials about how substance abuse is affecting the academic environment and the school's ability to manage the problem • drug education opportunities within the school setting • staff with skills to identify and counsel drug-involved students • access to community resources for referral of drug-involved students. • concerns of students' parents regarding the impact of substance abuse on their children's academic performance, safety, and social, mental, and physical development.		
Social Welfare Organizations	**Needs**	**Resources**
• juvenile suicide rates • cases of children living in poverty, domestic violence, child abuse and neglect, and extent of adult substance abuse problems within the community (since these conditions are often associated with juvenile drug use and delinquency, as discussed in Chapter 2) • number on waiting lists for drug treatment programs • number of adolescents and adults receiving substance abuse treatment • possible options for referral when number of individuals needing treatment exceeds spaces available		

Social Welfare Organizations (cont'd)	**Needs**	**Resources**
• viewpoints of social service professionals regarding the extent of the drug problem and their ability to handle case volume levels		
Health Care and Drug Treatment Centers	**Needs**	**Resources**
• drug-related accident victims admitted to hospital emergency rooms • drug-related health disorders • mental health expenditures within the community for adult and juvenile substance abuse treatment • number of people in substance abuse treatment • number of people on waiting lists for treatment • average number of new substance abuse cases and ability to treat them • existing options for referral when number of individuals needing treatment exceeds available spaces • general feelings of health practitioners regarding the extent of the drug problem in the community and their perceived ability to handle current volume of cases		
Businesses	**Needs**	**Resources**
• extent of drug problems in the workplace • business professionals' concerns about the future of the labor force because of drug issues • steps taken to identify and deal with drug-involved workers • access to community resources when referral is necessary		

Media	**Needs**	**Resources**
• current trends in drug use and delinquency as revealed through newspaper clippings, headlines, and top news stories • community attitudes toward, and level of interest in, the subjects of substance abuse and delinquency as suggested by letters and editorials • Level of commitment to disseminate appropriate and accurate information		

Citizens Groups	**Needs**	**Resources**
• prevailing attitude of adolescents and adults toward drug use and delinquency • extent to which people feel safe in their neighborhoods and in the general community • existence of citizens' advocacy groups to respond to drug use and delinquency • mechanisms outside the juvenile justice system that enforce standards to control drug use • existence of support groups for individuals who are at risk for drug use, are drug users, or are involved with drug users		

NEEDS AND RESOURCES IN THE AGENCY

Independent of other professions, the agency will have to conduct an assessment of its own needs and resources. Some information will be accessible through agency records. Information gathered to assess needs and resources in the community may be appropriate for this analysis as well. Additional research may have to be conducted through opinion surveys and communication with agency staff and clients.

Some broad issues surrounding an agency's need for a drug-use identification program and its ability to acquire the resources to implement it include:

- magnitude of the drug problem among agency clientele;
- social and financial costs of drugs and delinquency to the agency (e.g., client and staff safety, physical and mental health complications, job satisfaction and stress factors);
- juvenile justice professionals' attitudes toward drugs and delinquency;
- agency resources and accessibility to responses for handling problems of substance abuse;
- cost, space, and equipment required to implement the program;
- potential external funding sources; and
- analysis of current screening practices.

Information from the Agency

Specific data that may be obtained to address the above issues are listed in Table 7-B.

CONCLUSION

The needs and resources assessment seeks to determine whether the decision to implement a program is worthwhile and practical, and to provide evidence to support the conclusion reached. There are various ways of conducting this analysis, both within the agency and the community. Each agency must determine the method best suited to its particular situation.

Agencies must realize that if the assessment reveals a need for the program, and resources are deficient, the idea of drug screening should not be abandoned. A comprehensive program may be implemented in phases, or a limited program may prove to be effective. Agencies should also search for ways to expand resources within the agency and the community so that the needed program might become feasible.

The information gathered from the needs and resources analysis may be useful for other purposes as well. It may provide significant data for the evaluation process, discussed in detail in Chapter 10. The needs and resources assessment also may expose information that can be used to generate public awareness and support for the agency in other attempts to accomplish its mission. Thus, agencies are encouraged to be thorough in their efforts to compile accurate, reliable information.

If an agency decides to establish a drug-use identification program based upon the needs and resources assessment, there are additional essential matters that also must be considered. These topics -- Legal Issues, Economic and Human Resource Issues, and Evaluation -- are discussed in the following chapters of this module.

Table 7-B

STATISTICAL INFORMATION FROM WITHIN THE AGENCY

Information from within the Agency	Needs	Resources
• number of drug-involved clients		
• range of ages and typical age of youth using drugs		
• drugs of choice in the community		
• number of drug traffickers		
• general opinion of clients and staff regarding safety within the agency		
• staff attrition and absenteeism rates (indicators of job satisfaction and stress level)		
• staff physical and mental health status		
• general feeling among staff regarding extent of juvenile drug problem		
• general feeling among staff regarding their competence in identifying drug-involved adolescents		
• staff level of expertise in establishing and implementing the program		
• general feeling among staff regarding their ability to handle case volume levels		
• existence of drug programs for clients within agency (drug education, counseling, or referral)		
• opportunities for staff training in drug-related education		
• number of agencies providing assessment and treatment services to delinquents through the agency		

Information from within the Agency (cont'd)	**Needs**	**Resources**
• number of referrals of drug-involved youth to assessment or treatment		
• number of juveniles awaiting treatment, and steps taken to provide help in the interim		
• number of qualified staff to carry out screening procedures		
• services available in the community for conducting screening procedures		
• a number of individuals within the juvenile justice system with expertise in drug screening procedures		
• existence of drug-use identification activities currently in operation in agency (assessments, recognition techniques, chemical testing)		
• cost, space and equipment needed to carry out drug-use identification and follow-up procedures		
• money available in current budget for program		
• existing external funding sources		
• other potential funding sources		

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CHAPTER 8

LEGAL ISSUES

LEGAL ISSUES[1]

INTRODUCTION

In developing a drug-use identification program, particularly one which uses urinalysis as the method of identifying drug use, potential legal issues must be identified and considered. The program should be planned so the rights of juveniles, staff, the agency, and the public are protected. Avoiding the risk of legal liability is a priority. It is imprudent to wait until a legal challenge arises before researching the legal status and issues that may affect the program.

A drug-use identification program in the juvenile justice system may have a legislative or judicial mandate as its basis. If such authorization does not exist, programs may be developed from community and professional concern. However, the policies for the latter types of programs may be different from those for programs which are legislated or legally ordered.

Legislation and judicial case law vary greatly from state to state. This manual will not explore all such differences in detail. Rather, the information presented here and in the *Drug Testing Guidelines and Practices for Juvenile Probation and Parole Agencies* (American Probation and Parole Association, 1992) describes generally accepted practices for drug screening based on statutes and case law. However, state legislation and court decisions, if contrary to these, will prevail in a particular locality.

The legal issues surrounding a drug-use identification program are complex. The assistance of legal counsel is necessary for developing and reviewing program policies and procedures. It is optimal to have an attorney participate in the entire planning process, if possible.

There are several methods of screening youth for the use of illicit drugs. In this curriculum three techniques are presented: assessments, drug recognition techniques, and chemical tests. These are progressively more invasive, and therefore, the legal considerations surrounding each are different. The legal issues presented in this chapter primarily apply to urinalysis. However, concerns such as confidentiality pertain to all methods.

After reading this chapter, participants will be able to:

- identify the four criteria for the legal validity of drug testing;
- discuss five constitutional rights that are not jeopardized by drug testing;
- understand the importance of knowing and applying state statutes and standards related to drug screening and interventions with drug-involved youth;
- determine areas to investigate for discovering the requirements related to drug screening and interventions in a judicial district;
- distinguish between mandatory and voluntary drug screening;
- develop appropriate procedures for obtaining consent for screening procedures;

[1] Contributions to this chapter were made by John A. Cocoros, Teresa V. Ramirez, Phyllis M. Kisor, and Larry M. Landmesser of the Harris County Juvenile Probation Department, Houston, Texas.

- formulate policies about confidentiality;
- create chain-of-custody procedures that will maintain the validity of a drug screening program; and
- determine the requirements for screening methodologies and confirmation of results to meet standards of reliability.

AUTHORITY AND RESPONSIBILITY TO TEST AND TREAT

When considering the development of a drug-use identification program, an agency must examine laws or regulations that mandate such programs. Permissive legislation, regulations or case law which allow for drug screening, but do not require it, also must be investigated. Similarly, legal liability that might result from failing to detect and treat illicit drug use should be considered. For example, would staff and the agency be exposed to claims of negligence if a youth with a drug problem was not identified and subsequently injured himself or others? Does greater legal liability result from failure to act or from suits challenging the infringement of offenders' rights? (American Probation and Parole Association & National Association of Probation Executives, 1988)

It is also important that medical conditions which present some of the same symptoms as drug use be detected and differentiated from substance abuse. Agencies need to make provisions for a medical screening to rule out the possibility of medical conditions or prescribed medications causing the symptoms observed. Medical illnesses that are neglected because their symptoms appear to indicate substance abuse instead, can result in legal liabilities.

Possible legal ramifications of a new program have to be deliberated carefully. There are several areas to explore regarding legal issues for a drug-use identification program. Again, it is important that legal counsel be sought for advice that is locally specific and current.

Constitutional Issues

Youth within the juvenile justice system have fewer rights because of both their age and their legal status. Fundamental constitutional entitlements, such as the right to vote, are curtailed by age. Similarly, privileges that are legally controlled, such as driving vehicles and purchasing alcohol and tobacco, are restricted for youth. In addition, persons who have been found guilty of committing certain offenses may lose their freedom or have conditions placed on it. Therefore, the rights of youth within the juvenile justice system are diminished (Del Carmen & Sorensen, 1988).

When considering a drug-use identification program, particularly urinalysis, choices must be made with the protection of both the youth and the agency in mind. Del Carmen and Sorensen (1988) list four requirements for the validity of probation and parole conditions. These also may be applied to youth who are incarcerated or detained. Conditions must be:

- constitutional;
- clear;
- reasonable; and
- reasonably related to the protection of society and/or the rehabilitation of the individual.

Although the youth may have diminished constitutional rights because of age or legal status, their remaining rights must not be violated by a drug-use identification program. Conditions that are unclear or which the youth does not understand can lead to

infringement of a youth's right to due process. Reasonableness requires that conditions be fair and achievable. Finally, the broad requirement that a condition be reasonably related to the protection of society and/or the rehabilitation of the individual allows for a wide range of interventions that can be related to the youth's drug behavior (Del Carmen & Sorensen, 1988).

Challenges to drug testing have focused on five constitutional rights (Del Carmen & Sorensen, 1988).

1. **The right against unreasonable search and seizure.** Urinalysis is equivalent to a search for illicit drugs and involves procedures that invade privacy to collect body fluids for analysis. To be constitutional, such a search must be reasonable and based on a rational belief that it is necessary

2. **The right to due process.** Certain procedures must be followed before persons can be deprived of their freedom. Challenges to urinalysis on the grounds of violation of due process have usually been unsuccessful. Certain standards should be met, however. The tests used must be accurate and meet scientific standards acceptable to courts. Where a legal procedure, such as revocation of probation, is based solely on the evidence of urinalysis, the methodology used must have a high degree of accuracy. Often, courts require a second, confirmatory test before finding there is sufficient evidence to prove drug use and limit the offender's liberty.

   Chain of custody is another important factor in due process. If procedures allow for the possibility of tampering with the specimen or test results, they may be invalid for legal use. Therefore, specimens must be properly sealed, labeled and stored; documentation of all who handle specimens and reports of results should be maintained. Additionally, specimens from positive tests should be retained in case of possible legal challenges. (For a sample chain-of-custody form see Attachment 7, Appendix B.)

3. **The right to confrontation and cross-examination.** When used for legal proceedings, results of urinalysis can be challenged on the basis of hearsay evidence. This occurs if the laboratory personnel who actually conducted the test are not present to provide testimony; therefore, the accused person cannot confront and cross-examine the witness who is testifying against him or her. However, these challenges generally have not been sufficient to deter the use of urinalysis. Courts have concluded that the rights of offenders were not violated because there are exceptions to the hearsay rule. Business records, reliability, and trustworthiness of a laboratory are factors considered in excluding a requirement for direct cross-examination.

4. **The right to equal protection.** This clause ensures that individuals cannot be treated differently unless legal justification exists. With drug use, differential treatment is based on an illegal activity, not racial, gender, or socioeconomic differences. As drug screening is reasonably related to the detection, treatment, and/or prevention of drug use, it is a justifiable condition.

5. **The right against self-incrimination.** The constitutional protection against self-incrimination applies to testimony given in court rather than physical evidence. As urinalysis is a form of physical self-incrimination (similar to submitting to fingerprinting or appearing in a line-up) it falls outside the domain of constitutional protection. The use of urinalysis does not require that the person *confess* to drug use, an action which would constitute self-

incrimination. The type of legal proceeding in question largely determines whether or not a constitutional claim is upheld. In criminal trials it is more often upheld, because guilt must be proved beyond any reasonable doubt. In revocation hearings it more often fails, because the question of guilt relies upon the preponderance of evidence.

It can be concluded from these points that youth may be required to submit to urinalysis without violating their diminished constitutional rights. These rights must be balanced against the protection of society and the rehabilitation of the youth.

If possible, it is advisable that the drug screening requirement be imposed by legislation or court order. However, as long as it is reasonably related to the protection of society and rehabilitation of the offender, it is likely to withstand legal challenges.

Del Carmen and Sorensen (1988) recommend the following practices in implementing a drug screening program.

1. Impose drug screening only when it is reasonably related to the rehabilitation of the individual and in such cases where the person's delinquent behavior could be attributed to drug use.

2. Determine whether or not a confirmatory test is required.

3. Ensure that those administering drug tests are trained and properly qualified, whether they are agency staff or employees of a laboratory.

4. Follow strict chain-of-custody procedures. These include sealing, labeling, and storing the specimens and documenting their transfer.

5. Save samples with positive results until the time for all possible legal challenges has elapsed.

6. Have clearly written policies and procedures for drug screening and for the responses to positive findings.

State and Local Issues

Review state and local statutes for the presence of any legislation that specifically enables or prohibits the use of drug screening. Cite the legal mandates for conducting drug screening in the documentation of policies and procedures for the program. If no laws exist, agencies should encourage the enactment of legislation authorizing drug screening within the juvenile justice system. This will provide greater protection for the agency and its employees, should a legal challenge arise. If no state or local statutes authorize drug screening, agencies should seek court orders or authorization for the program by the agency's governing body. These measures protect the agency and staff from possible civil liabilities. Previous court challenges have upheld the validity of drug screening even without legislation or court orders, but statutory authority for the program is preferable. If this is not available, a court directive is better than implied authority.

In the implementation of the program, however, sufficient flexibility should be retained by the agency to implement the program in ways that meet the needs of the youth. For example, legislation or a court order that rigidly sets the frequency of urinalysis may be counterproductive. If the agency or individual officers have the latitude to tailor responses and strategies according to a given situation, it may be more beneficial. A youth might be encouraged to abstain from drug use if the program allowed for decreased testing frequency in response to negative test results.

Policies and procedures for a drug-use identification program should agree with other agency policies. For example, if the agency requires that youth be under the supervision of staff who are the same gender as the youth, then drug screening procedures also should involve same-gender staff. If specimen collection is to be directly observed, it is strongly recommended that same-gender staff be responsible for this task with juveniles.

Mandatory vs. Voluntary Drug Screening

Some agencies and localities will have clear legal authority for drug screening activities, while others will find such authority vague or lacking. If drug screening is legislated or court ordered, a juvenile who fails to comply will be subject to sanctions. It can be specified that failure to submit to testing is a violation of the law or court order. The court or legislative body enacting the legal requirement should determine the penalties for non-compliance. Notification and an administrative hearing before imposing sanctions for non-compliance may need to be included in the procedural requirements.

Without a clear statutory mandate or court order for screening, some agencies may prefer to conduct drug-use identification procedures voluntarily. This may be especially appropriate at the pre-adjudication phase of progression through the juvenile justice system when youth have been charged with a crime but not convicted. This includes arrest, detention, pre-trial release, diversion, and informal adjustments. Prior to formal adjudication of guilt it is inadvisable to impose requirements or punishments.

To avoid potential legal challenges, drug screening should include notification and *informed consent*. Juveniles should receive advance notice that they are subject to drug screening procedures, and they have a right to be fully informed about the process of and purpose for screening (Crane, nd). If screening is voluntary, they must give their consent. With urinalysis, this includes information about the specimen collection process and the way in which the actual test is conducted. For all methods of drug screening, the possible ways in which the results will be used should be explained. If there are legal consequences for positive results and/or if results will be used for diagnostic and treatment purposes, this should be stated before the youth gives consent. Youth also should be advised of consequences that may be imposed if they refuse to be tested (Crane, nd). Affirmations of confidentiality should be included also. Further, youth may have the right to legal counsel in some jurisdictions; they should be informed of this before they consent to any procedures. When providing voluntary screening with informed consent, a youth should not be penalized for refusing to be screened.

To protect staff and the agency from legal challenges related to informed consent, information about the screening procedures should be given to the juvenile both in writing and verbally. Youth should be asked to sign a statement confirming that they understand the information that has been provided and give their consent to participation in the screening. This might be included with or appended to the Rules of Probation (or other such documents) which youth must sign. In some states parental consent also will be required. (See Attachments 1 and 2, Appendix B.)

OTHER LEGAL ISSUES AND CONCERNS

There are several legal issues and concerns that should be researched carefully during the policy development process. Legal challenges still may occur. However, if these issues have been reviewed and decisions have been based upon the best legal advice available, the agency and staff can proceed with greater confidence.

Confidentiality

All citizens, including those with diminished rights due to age or legal status, have the right to some degree of privacy. There are two federal laws and several federal regulations that affirm the confidentiality rights of persons receiving alcohol and drug services: 42 U.S.C., § 290 dd-3 and ee-3 and 42 CFR Part 2.

> "The Federal confidentiality laws and regulations protect any information about a youth if the youth has applied for or received any alcohol or other drug-related services - including diagnosis, treatment, or referral for treatment - from a covered program. The restrictions on disclosure apply to any information, whether or not recorded, that would identify the youth as an alcohol or other drug user, either directly or by implication" (Brooks, 1990).

All agencies that receive any federal funding must adhere to these confidentiality requirements.

The purpose of such strict measures is to promote the participation of youth in programs that diagnose, treat, and/or refer youth for substance abuse problems. Therefore, federal confidentiality laws and regulations forbid disclosure of information that would identify a youth as a substance abuser and inhibit his or her participation in such programs. There are a few circumstances in which exceptions to confidentiality occur. The most notable is when youth sign a consent form to release information. This allows the disclosure of specific information that is necessary to accomplish a designated purpose (Brooks, 1990). Policies and procedures for a drug- use identification program should include release forms and explain the steps necessary to execute them. (A sample Release of Information form can be found in Attachment 10, Appendix B .)

Sharing information without the consent of a youth can be done in medical emergencies and child abuse reports. Also, it is not necessary to have the youth's consent to communicate among staff who need the information within a program. The key issue to be considered in developing policies concerning disclosure of information is the legitimate interest the person has in needing the information. In some states, parental consent is required, in addition to the youth's consent, for the release of information. In certain cases, if a youth and/or his parents refuse to give consent, but disclosure of information is considered necessary, a court order may be requested (Brooks, 1990).

In addition to federal laws and regulations, there are likely to be state laws and agency policies concerning confidentiality. It is imperative that state privacy acts, state juvenile acts and agency regulations be scrutinized for restrictions on disclosure of information. These should be reviewed and incorporated in the program's policies and procedures. The following areas related to confidentiality should be addressed specifically:

- the right to privacy;
- to whom, and under what circumstances information may be released;
- what information can and cannot be shared;
- the process and forms for obtaining permission to release information;
- the consequences for unauthorized disclosure of information; and
- precautions to be taken in collecting and aggregating data to ensure the confidentiality of individual youth.

Requests for information from outside sources should be made in writing. Actions taken to respond to such requests should be documented in case files.

Reliability of Screening Methodologies

Accuracy of screening methods must be researched in the program development process. A combination of drug-use identification methods is likely to increase reliability. Offender confirmation (admission) provides verification of results. The three methods of screening that are presented in this manual are:

- Assessments (Chapter 11);
- Drug recognition techniques (Chapter 12); and
- Chemical testing (Chapter 13).

For each of these methods there may be variations in the degree of reliability of results depending upon the specific procedures used, the training and skill of the person administering the procedure, and the accuracy of instruments used. With each screening method, and particularly with urinalysis, it is imperative that all manufacturer's directions be followed exactly and that equipment be maintained as required (Carver, 1986).

Reliability can vary according to the screening method used. Assessments are sometimes considered less reliable because they depend upon offenders' admissions and the evaluator's interpretation of findings. Drug recognition techniques can be very reliable in determining recent drug use; however, they are less likely to withstand challenges in court as they depend upon the observations of a trained evaluator. Urinalysis is considered the most reliable screening method that is commonly used for legal proceedings. Selection of the method may depend on how the results will be used. Assessments and drug recognition techniques, performed by well-trained staff, may be sufficient if the purpose is to detect drug-involved youth and refer them for treatment. However, if court actions will be based upon the results of screening, then urinalysis is preferable.

Confirmations

The use of confirmation procedures increases the reliability of each method. Confirmations may be accomplished by using a different procedure to confirm the results of the first. For example, an agency might employ an initial assessment instrument and drug recognition techniques on all youth to detect probable substance use. Based on the results of these interventions, urinalysis might be used to scientifically confirm the presence of illicit drugs.

As stated earlier, urinalysis is considered the most reliable screening method, and reliability is critical if results are to be used for legal proceedings. It is important to determine the requirements of the court for admission of results. Most courts will require the more scientific results of urinalysis for legal action. Some courts will order that the results of urinalysis be confirmed by another test with equal or greater accuracy. Gas Chromatography/Mass Spectrometry, or GC/MS, is sometimes required for confirmation because it is the most reliable technology currently available. However, because of its cost, it usually is used only when needed for legal confirmation. In some jurisdictions an offender's admission of drug use will be accepted as confirmation, thus avoiding the expense of additional tests. (A sample form for offender confirmations is Attachment 9, Appendix B.)

Chain of Custody

For the protection of the youth and the agency, when urinalysis is used, the whereabouts and handling of the specimen and results must be documented. This begins with the collection of the urine sample and includes the sealing, storage, transportation, testing and

return of the results. There should be a written record of each person who handles the specimen or the results and where these are at all times. Chain-of-custody procedures verify that the results of urinalysis correspond to the specimen tested and the person from whom it was collected. Careful documentation will avoid legal challenges to a particular test or the program in general. (See sample form, Attachment 7, Appendix B.)

Many agencies require that a staff member observe the collection of the specimen as a part of chain-of-custody procedures. However, sometimes there are other procedures used to detect the possibility of tampering with the specimen. These may include checking the temperature of the sample after collection or using colored water in the collection area toilet.

The final step in chain-of-custody procedures is documentation of results. The report should include the client's name and/or identifying number, test date and time, drugs tested for, testing method, and results. The person conducting the test should sign the report form (National Association of State Alcohol and Drug Abuse Directors [NASADAD], 1988).

Giving Testimony in Court

Staff may, at times, be required to testify in court concerning the results of drug screening for a particular client or the screening methods used in the agency. Training for staff should incorporate the information and skills required to testify successfully. This should include:

- chain-of-custody procedures;
- screening methodology used;
- confirmation practices;
- quality control measures and proficiency standards;
- reporting procedures;
- confidentiality safeguards; and
- staff knowledge of and agency's compliance with state standards and legislative mandates.

(NASADAD, 1988)

CONCLUSION

This chapter has provided a brief summary of some legal issues that are related to the development of a drug-use identification program. Many concerns and questions were addressed, but definitive answers were not given in all cases, nor are all legal issues explained here. It is imperative that agencies research these areas carefully for laws and regulations that are specific to each state and local jurisdiction.

The importance of obtaining legal counsel during the planning process cannot be stressed too strongly. It is much more cost effective and much less time consuming to avoid a legal challenge than to respond to a law suit that arises because the legal aspects of the policies and procedures were not researched adequately.

When the legal issues have been resolved to the satisfaction of the planning group and those providing legal advice, the agency's board, administrator and staff will feel more confident and comfortable in implementing the program. Thus, a successful venture will be much more likely.

Chapter 9 will explore staff and cost issues, some of which depend upon determinations concerning legal questions. Module III will provide information

required to determine specific policies about methodology for each of the screening methods.

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CHAPTER 9

ECONOMIC AND HUMAN RESOURCE ISSUES

ECONOMIC AND HUMAN RESOURCE ISSUES

INTRODUCTION

A number of policy decisions must be made in planning a drug-use identification program. Many decisions will depend on the agency's need for the program and the extent of resources at their disposal, both internally and within the community (Chapter 7). Some policy will be contingent on the legal parameters surrounding drug testing in a particular jurisdiction (Chapter 8). Agencies also must make some concrete decisions as to whether or not drug screening is a viable option: First, can they afford it? Second, how will they gain the necessary staff cooperation to implement it?

Cost-Benefit Issues

Though juvenile justice professionals are interested in the idea of a drug-use identification program, budget constraints cause many to look upon the idea as financially impractical. In this chapter, a framework will be presented for a cost-benefit analysis from which decision makers can explore the pragmatic possibility of implementing a drug-use identification program in their agencies. Even those agencies that feel certain they cannot afford to implement such a program must examine *all* the potential costs and benefits associated with it before a final determination is made. In some cases, it may actually be considerably more costly *not* to have one. In every case, it is possible to reduce the financial burden of a drug-use identification program to its most cost-effective level.

Cost-benefit issues addressed in this chapter include:

- intangible costs, such as costs of substance abuse to society;
- tangible and intangible cost factors associated with drug-use identification programs;
- possible funding sources for agencies having budgetary limitations that seem to outweigh the advantages of a drug-use identification program;
- the potential long-term savings that may be realized through comprehensive drug screening programs; and
- suggestions for maximizing the benefits and minimizing the costs of drug-use identification programs.

Staff Issues

New programs affect the staff of an agency in many ways. Some employees may be required to take on new roles; job descriptions may be altered; additional staff may be hired. Attitudes may be affected as well. New programs may be met with enthusiasm or resistance depending on many factors, such as administrative styles and the distinct personalities of the individuals involved. ***Without the involvement and cooperation of staff, programs will not realize their full potential. In fact, they may fail.*** Therefore, the use of effective management skills is vital when introducing new programs to an agency. Some potential obstacles to achieving staff cooperation and ways to offset or minimize them will be identified. These will be addressed through a discussion of the use of communication, rewards, incentives, and other strategies that contribute to staff unity and cooperation in the execution of new ideas and innovative programs.

After reading this chapter participants will be able to:

- calculate the tangible costs of implementing a drug-use identification program in an agency

(either instrument-based or non-instrument-based on-site testing, or laboratory-contracted services);

- discuss two long-term tangible benefits and two long-term tangible benefits of these programs;
- list six possible funding sources to help finance new programs or improve existing programs;
- identify ten ways an agency can maximize benefits and minimize costs of a drug-use identification, screening, and testing program;
- discuss four methods administrators may use to empower staff to bring about change in an agency.
- list four obstacles to organizational change and explain how to minimize them; and
- identify the five steps of the change-making process and discuss one key activity suggested in each step.

COST-BENEFIT ISSUES

Tangible Cost Factors

To calculate the approximate total cost of a drug-use identification program, an agency must first devise a list of tangible cost factors. **Tangible cost factors** are those based on information that can feasibly be gathered and represented in dollar amounts. Some information will be readily available; other data may have to be collected. Some of this information will have been gained through an agency's assessment of needs and resources (Chapter 7).

Necessary information includes:

- average number of drug-involved youth in the juvenile justice system;
- number and type of drugs of choice;
- current techniques for detecting drug involvement among youth; and
- current practices for responding when youth are found to be using drugs.

Some information will depend on agency policy decisions:

- whether to use assessment instruments, drug recognition techniques, chemical testing, or a combination of all three;
- whether drug identification processes will take place on-site or off-site;
- frequency of assessments and type of instrument used;
- frequency of drug recognition techniques;
- frequency of chemical testing and type of technology used;
- juvenile justice personnel classifications and salary ranges;
- staff training needed;
- approximate length of time for monitoring and supervising each case;
- size of population to be tested;
- number of drugs for which to test;
- method and frequency of confirmation needed;
- services needed for youth who are drug-involved; and

- any rewards and sanctions for compliance or noncompliance that might result in expenses for the agency.

In considering the tangible costs of a drug-use identification program, it is helpful to itemize the expenses associated with each of the three methods of evaluating drug involvement as well as methods of intervention.

1) **Assessments** - This process generally consists of a series of information collecting activities (record reviews, pencil-and-paper tests, supplemental interviews), and will necessitate some or all of the following tangible cost factors if conducted on-site:

- purchase of a formalized assessment instrument, or staff time and resources to design one;
- staff time to conduct assessments; and
- training sessions and materials.

If, on the other hand, an agency decides to contract with an outside resource for assessments, the following will need to be calculated into the cost-benefit analysis:

- number of youth to be evaluated; and
- cost per evaluation.

More information about assessment instruments and techniques is provided in Chapter 11.

2) **Drug Recognition Techniques** - Tangible cost factors for conducting drug recognition techniques include:

- training of staff who will conduct the process;
- staff time to conduct the drug recognition process; and
- supplies (e.g., pupilometer, penlight, narc light/ski light, breath analyzer)

Training in drug recognition techniques can require substantial initial expenditures. However, it will prove to be extremely cost effective in the long run as staff become adept in identifying drug-involved youth and the type of drug used without the added expense of chemical testing.

Additional information about drug recognition techniques may be found in Chapter 12.

3) **Chemical Testing** - This is the most intrusive and expensive of the three methods; it is also the most reliable technique now commonly available to agencies for identifying drug use. Calculating the tangible costs of chemical testing is a complex procedure. Expenditures will vary depending on whether testing is conducted on-site or contracted with an off-site laboratory. On-site refers to programs in which the screening process takes place within the physical parameters of the agency, or in the field. In this case, agency staff, instrumentation and supplies are used. Off-site refers to programs where screening and testing services are provided via contracts with outside organizations and/or laboratories.

Costs associated with on-site instrument-based or non-instrument-based testing include:

- training and time of existing or new staff to collect specimens, analyze drug or alcohol tests; and respond to test results;
- cost per test;
- training sessions and materials;

- collection area with toilet and sink with running water;
- secured room for storing testing equipment and analyzing specimens that includes a sink for running water to dispose of negative specimens;
- secured refrigerator and freezer space for toring specimens;
- testing equipment (cost dependent upon vendor and type selected); and
- supplies (such as chain-of- custody forms, labels, reagents, pipettes, collection cups, cotton swabs, cleaning supplies, bags for disposal).

Costs associated with off-site laboratory testing include:

- number of existing or new staff who will be trained to collect and transport specimens, and respond to test results;
- private collection area with toilet and sink with running water;
- secured refrigerator and freezer space for storing specimens;
- transportation of specimens to and from the laboratory; and
- collection supplies (such as chain-of-custody forms, labels, collection cups, cotton swabs).

Obviously, estimating the total tangible cost of implementing drug-use identification programs is a complex process requiring extensive decision making and careful comparison of various methods, procedures, and practices. Some agencies may find it reasonable and more manageable to establish and implement these processes one phase at a time, perhaps beginning with assessment and progressing gradually toward more sophisticated drug identification methods.

Chapter 13 contains further information on chemical testing. Specific information on urinalysis also may be found in *Drug Testing Guidelines and Practices for Juvenile Probation and Parole Agencies.*

Intangible Cost Factors

Intangible cost factors are expenses incurred in the event of some predictable, yet immeasurable occurrence. Currently, the most significant cost factor anticipated is a possible lawsuit against an agency's drug identification program, policies, or practices. *There are legal risks associated with chemical testing programs that are not presented by assessment or drug recognition techniques.* This is because chemical testing is the only procedure of the three that provides ***actual evidence*** of drug use that can be used in court proceedings. As discussed in Chapter 8, drug testing has been upheld by the courts in the majority of contested cases. However, failure to employ practices within the legal parameters mandated by a jurisdiction can be quite costly. Fortunately, this risk is avoidable when appropriate information is gathered and legal restrictions are followed (See Chapter 8). Implementation of thoroughly researched, comprehensive, and clearly written policies and procedures governing programs minimizes the risk of intangible costs to an agency.

Funding Sources

The many tangible costs of implementing a drug-use identification program have been identified. Agencies that do not have adequate money in their budgets may have to look at alternative funding mechanisms. The following are some ideas for obtaining the financial resources necessary to start new programs or improve those in existence.

Grants and Funding Programs: State, federal, private, or local resources are available to fund or defray the costs of implementing innovative programs designed to help drug-involved youth. The Drug and Alcohol Agency in each state can provide information on statewide funding sources. The Office of Juvenile Justice and Delinquency Prevention appropriates monies to each state through the State Formula Grants Program. States then disburse the funds to agencies according to a standard formula based on compliance with statutory mandates. *State Drug Resources: A National Directory*, is a comprehensive list of state funding sources and is available free of charge through the Drugs and Crime Data Center and Clearinghouse, United States Department of Justice. Private foundations and corporations sometimes offer financial support for programs that address public concerns. Administrators might consult with community resource providers to identify any funding options at the local level.

Agency Collaboration: This is a method of creative financing that could help to defray the expense of a drug-use identification program. Through a joint agreement, agencies sometimes can share space and supplies, and engage in interagency training and staffing to implement the program.

Resource Sharing: It may be possible to contract with laboratories or agencies that will donate testing or assessment services in exchange for resources and/or public recognition provided by the agency.

Fundraising: Businesses, organizations, churches, and the community could be targeted to contribute or participate in fundraising events or campaigns with the goal of fighting crime and protecting the community.

User fees: Some agencies have youth pay for drug tests that yield positive results. However, most youth have no income and thus are not in a position to satisfy this requirement. It may be more reasonable (and cost effective) to devise a work program where individuals pay for positive tests through labor in the community or within the agency.

Agencies are encouraged to be creative in searching for other financing strategies to help pay for drug-use identification programs.

Tangible Benefits

Tangible benefits are actual dollars that an agency can save by establishing a drug-use identification program. An approximate, not actual, figure can be calculated using recent information from agency budgets, budgets of other agencies, and case management records. These estimates cannot be accurately computed *before* the program is in place; they may be part of the evaluation process. Still, though actual dollar amounts are unknown prior to implementing a program, there is evidence that drug-use identification will facilitate more efficient spending for an agency.

A comprehensive drug-use identification and testing program may avert conditions that have the capacity to result in wasteful expenditures. For example, it provides helpful information in deciding the most appropriate placement for a youthful offender. When one is unaware of factors contributing to a youth's criminal behavior, one of which might be drug use, that youth may be placed in treatment that is not the most appropriate for his/her particular problem. For instance, a person charged with a drug trafficking offense may not be heavily involved in drug use. Still, s/he may be placed in a drug treatment program that focuses on addiction, rather than the economic, subcultural, and moral issues associated with drug distribution. While something may be gained from such a program, it is much more cost-efficient to place a youth in a program specifically related to his/her individual needs. Similarly, a juvenile who is charged

with property theft and is subsequently placed in a restitution program may benefit from the program to a limited degree. But if that youth stole to support a drug habit, s/he probably will steal again if not treated for the drug problem. This mischanneling of funds very possibly can be avoided by distinguishing the users from the nonusers through assessment, drug recognition and/or chemical testing.

While it is impossible to accurately measure potential monetary benefits of a drug-use identification program, potential savings can be reasonably calculated using current figures. Over recent years, the justice system has been trying to save money by diverting juveniles from institutions. According to federal statistics, it costs states between $17,600 (South Dakota) and $78,800 (Rhode Island) per year to incarcerate one delinquent youth (Allen-Hagen, 1991). Many factors may account for the cost differences between states, including: economic conditions, number of youth served, extent of services offered, use of advanced technologies, and efficiency of spending.

The demonstrated relationship between drug use and delinquent behavior suggests that keeping juveniles from using drugs might keep them from committing crimes. Systematic drug screening and continued monitoring, along with other interventions, can act as a deterrent to dissuade youth from using drugs. This, in turn, decreases the likelihood of delinquent activity, and diminishes their chances of being incarcerated. Monitoring a youth with drug tests once a week for a year at $1 to $5 per test (Wish, Toborg, Bellassai, 1988) costs a maximum of $260. Coupled with treatment at an average expense of about $10,000 per year for residential care and $2,500 for out-patient care (McAuliffe, 1990), the cost totals between $2,760 and $10,260. Compare this with the average cost of incarcerating a youth at $29,600 (Allen-Hagen, 1991).

Agencies that have implemented drug testing programs testify that drug testing acts as a deterrent (Carver, 1986); forces youth and their parents to confront issues of drug dependency (Signorino, 1988); and breaks through denial, making the individual, as well as the family, more responsive to treatment (Thomas, 1988). A drug identification, screening, and testing program that achieves these goals, even if it keeps only a small percentage of youth out of institutions, will result in significant savings for juvenile justice agencies.

Intangible Benefits

Intangible benefits are predictable, yet immeasurable savings that may occur as a result of a new program. It is not possible to scientifically predict the potential savings an agency can offer the criminal justice system and society through an effective drug-use identification program. Still, if realizable, such savings are significant enough to warrant not only recognition, but consideration in the final cost-benefit analysis.

The financial gain of rehabilitating youth through continued monitoring and treatment is substantial when one considers the impact this may have on the adult criminal justice system in the future. Many unrehabilitated youth will become tomorrow's adult offenders. They will continue to commit crimes, demand more years of case processing in criminal courts, and may spend years in prisons at a cost of thousands of dollars each year. The potential financial repercussions of failing to rehabilitate youth are staggering.

The societal costs of juvenile substance abuse also are difficult to calculate. Nevertheless, adolescents who use drugs are more likely to engage in risk-taking, health-threatening behavior than other youth. Such behavior includes sexual activity, driving while intoxicated, truancy, theft, vandalism, minor assaults, and other public disorder offenses (Chaiken and Johnson, 1988). These activities are costly to society

and the juvenile justice system. Increased delinquency creates more expenses as additional staff, additional case processing, and additional means to protect the community and rehabilitate youth are required.

The evidence suggests drug-use identification programs can be effective in deterring juvenile drug use; if so, this invaluable benefit to society, the juvenile justice system, and the adult criminal justice system must be considered in the final cost-benefit analysis.

It is not difficult to convince people of the benefits to be gained through drug identification, screening, and testing programs. Still, there are costs involved. In fact, no matter how valuable drug screening appears to be, expense is sometimes the only deterrent voiced by agency administrators. However, urinalysis, usually the most expensive of the techniques, provides the reliability factor essential for a solid and complete drug-use identification program. With careful planning, drug screening may prove less expensive than presumed; certain practices can minimize the costs and maximize the benefits of a program. The next section presents some methods that can be used to reduce the costs of chemical testing.

Cost-Minimizing Measures

Decide who to test: It is usually impractical to conduct chemical testing on every youth who comes into contact with the juvenile justice system. A carefully constructed screening process can help reduce the number of people tested. The components of the screening might include one or more of the following:

- observation and interview - use of assessment instruments and drug recognition techniques;
- nature of offense - income-generating or violent offenses are often associated with drug use;
- drug history - record of the offender's prior involvement with drugs; or
- peer group and family - the offender's relationship with others who are known or suspected to use drugs.

Reasons for testing youth within an institution include, but are not limited to, one or more of the following conditions:

- when a youth exhibits behavioral changes;
- when a youth returns from a runaway or furlough;
- when there is suspicion based on assessments or drug recognition techniques; or
- suspicion based on changes in the institutional environment.

An agency's management information system may be used to compile and analyze data about youthful offenders and drug use. This information can be used to develop profiles of youth at risk of substance abuse.

The institution or agency may decide that results obtained through assessment and drug recognition techniques provide adequate reason to confront the youth. Unless documented evidence is required (such as for court proceedings), agencies may decide to respond to suspected drug use on the basis of these less expensive processes.

Chapter 11, Assessment Instruments and Techniques, and Chapter 12, Drug Recognition Techniques, provide further information on these topics.

Use of admissions: It may be adequate to accept an admission of drug use from the juvenile in lieu of a chemical test. If positive results are to be used in legal

proceedings, use of admissions may not be acceptable. As a case management tool, an admission may be all that is necessary. However, one must be aware that a youth may admit to using alcohol or marijuana to mask use of other drugs which might elicit a more severe response.

Refusal to test: In many cases it is agency policy to solicit compliance from a youth for a number of hours before designating a **refusal to test**; a staff person might be detained for a burdensome amount of time waiting for a specimen unless an alternative strategy is in place. An approach that may prove feasible and cost-efficient is to have staff rotate responsibility for monitoring the youth while waiting for the specimen or official **refusal**. If an agency does not consider monitoring necessary, or if personnel is not available, another alternative is to direct the youth to return to the testing location at a designated time to provide a specimen. The person collecting the specimen would then be free to attend to other duties and also to make arrangements for any assistance that might be necessary when the youth returns.

Know the limits of technology: Two types of measures are available within testing technologies: quantitative, which indicates the *amount* of drugs in one's system, and qualitative, which indicates the *presence* of drugs in one's system. Currently, there is only one test that measures quantitatively: Gas Chromatography/Mass Spectrometry (GC/MS). In an informal telephone survey of 18 agencies, the American Probation and Parole Association (1991) found that GC/MS costs an average of $30 per test. Agencies may not be able to afford this expense regularly; it is usually practical only for court-required confirmation testing.

Since it is neither feasible nor necessary for an agency to measure the level of drugs in a youth's system, it is more cost effective and reliable to limit testing to qualitative measures.

Limit testing to drugs of choice: Once a juvenile's drug(s) of choice has been determined there is usually no need to regularly test for any other drugs, although this should be done *randomly*. Similarly, if amphetamines, PCP, and heroin are never detected in a particular jurisdiction, there is no need to test on a regular basis for these drugs unless there is reason to believe that drug using habits have changed and these drugs have become available.

Know how often to test: Drug recognition techniques can be used to detect recent use of drugs (up to 72 hours) even after their obvious influence has subsided. The steps of the process that identify impairment (coordination, balance) are only useful for several hours; however, examinations involving the eyes and vital signs remain reliable for two to three days.

Chemical testing is the most dependable method of detecting the presence or absence of drugs in a system. With chemical testing, the decision of how often to test will depend on the youth's drug of choice and how long it remains in the system. For instance, THC, the main ingredient in marijuana, is fat soluble and may stay in the system for several weeks. Though the youth may not use drugs during that period, tests may continue to indicate positive results. The level of marijuana in one's system may appear to rise or fall due to the fluctuating amounts of THC released as a result of exercise, weight gain or loss, diet, stress, and other metabolic functions. Yet, the varying test results reveal little or nothing about the youth's drug using habits. Therefore, it is inefficient to test someone for marijuana more than once per week; it may even be efficient to test less frequently depending on the extent of the individual's involvement with drugs. Also, one must keep in mind that a second positive does not necessarily indicate current use. Practitioners should be aware that an abstaining chronic marijuana user may test positive for THC for weeks after an initial screen, while a light user will probably test positive for only

a few days. This information is useful as a guide in making judgments about the extent of a youth's involvement with drugs, but again, it does not provide conclusive evidence. A Duration of Detectability Schedule for determining how often to test for each particular drug is provided in Chapter 13.

As participation in the program continues, juveniles who comply with the agency goal of remaining drug-free should be rewarded by a reduction or termination of testing. This measure provides incentive to the juvenile and is cost-effective for the agency as well. Policy makers or case managers should determine the number of negative screens that will result in a decrease in frequency and ultimately a cessation of testing.

Determine when and how to confirm suspicion of drug use: Generally, only two conditions necessitate conducting a confirmation test on a positive result:

1) when the youth denies use; and/or

2) when the specimen will be used in court proceedings where a confirmation test is required.

Agencies that use assessments and drug recognition techniques to detect drug involvement may conduct a chemical test to confirm suspected use. If the youth tests positive, s/he or the parents may be required to pay for the drug test, but the practicality of that option is debatable. Confirmation by chemical testing is sometimes required only if documented evidence is needed for court purposes.

When a youth tests positive through chemical testing, and still denies use, an agency may decide to do a retest. Again, juvenile offenders or parents are sometimes required to pay for the confirmation test if the results are positive.

When test results will be used in legal proceedings, an admission statement signed by the youth (also known as an **offender confirmation**) is acceptable in some courts and may serve as evidence in lieu of a confirmation test.

If an agency using chemical tests decides to confirm positive results, a method of confirmation must then be determined. The least expensive method is the **offender confirmation**. A more expensive method is a retest using the same methodology as the initial test; however, this is not a preferred practice. The most reliable and most expensive test is GC/MS. It is recommended that an agency confer with the court system in its jurisdiction to determine confirmation requirements.

Benefit-Maximizing Measures

Employ procedures that maintain credibility of program: A drug-use identification program is only as effective as it is credible. Adequate training is required to develop the skills necessary to properly perform drug recognition techniques and assessments. When conducting chemical tests, strict collection, chain of custody, and reporting procedures are necessary to ensure accurate, reliable results on all specimens. False positives and false negatives can be detrimental to the juvenile, to the agency, and to society. Chapter 8, Legal Issues, presents ways to protect your agency from credibility problems resulting from legal liabilities.

Compile an array of optional responses: Whether or not findings indicate a youth has used drugs, a response must follow. Agencies should prepare a variety of response options so case plans may be individualized to suit each juvenile's situation and needs. Consult Chapter 14, Interventions, for detailed information on proactive strategies.

Conduct ongoing evaluations of program: To maintain funding, to monitor the effectiveness of a drug-use identification program, to obtain internal and external support for a program, and to educate staff and the public, agencies should set up a system for evaluating the program's effectiveness in meeting stated goals. Examples of data to be measured are:

- recidivism rates;
- number of youth who deny use and then test positive;
- number of youth screened who test positive;
- number of positive results that are confirmed by admission;
- number of positive results confirmed by second tests; and
- number of false positives and false negatives.

Other data that may be collected for informational purposes to enhance both public and agency awareness are:

- percentage of youth arrested who are involved with drugs;
- relationship between drug use and reason for arrest;
- isolation of drug use by geographic location;
- risk factors associated with drug use; and
- percentage of drug traffickers who are also users.

Chapter 10 offers suggestions for evaluating drug screening programs.

Keep agency mission in mind at all times: When policies and procedures are developed, both program purpose and agency mission should be given careful consideration and reflected in the plan of response that must follow every screen. Chapter 4 introduced three possible agency mission components suggested in Maloney, Romig and Armstrong's (1988) Balanced Approach. Therefore, as **protection of the community** is an overriding agency objective, one must remember when conducting a screen that the youth with an unidentified drug problem will return to the community with the same drug problem that contributed to the original crime. With **accountability of youth** as a primary concern, agencies must take steps to ensure that follow-through (i.e., confrontation and a response) accompanies every drug screen, whether positive or negative. **Competency development of youth** is also a vital goal; rehabilitation should be the focus of the program, and must override any motives or messages that the reason for screening and testing is to simply "catch" youth using drugs. Finally, **public awareness and support** are viable components of an agency's mission; thus, a plan for program evaluation and information dissemination should be incorporated into the policies and procedures of the program.

Select staff roles with longevity in mind: Administrators should use discretion when choosing staff to fill certain roles. Acquiring skills in drug assessment, recognition, and testing will require training. Some positions will require more extensive training than others. For example, drug recognition skills will probably require the largest investment in staff time and training expense. Therefore, commitment to the organization and employment tenure are some of the factors to be considered in offering this training to staff. Similar criteria should be used when considering who might analyze chemical tests when choosing an on-site testing program. It is recommended that agencies appoint a coordinator for the drug screening program. This person, again, should be considered with program longevity in mind.

In order to prevent potential staff resistance at the outset, administrators should offer (and not require) this training of selected employees, if possible. More information on staff responsibilities and training is presented in Chapter 15.

Involve staff in decision-making process: Staff cooperation, investment, and motivation are necessary to ensure success in any new endeavor. Administrators should include staff in the decision-making process to ensure their maximum participation in implementing the program. The staff members who implement a program contribute substantial knowledge and practical experience to the development of policies and procedures; they also become more "invested" and therefore work more diligently to achieve its success.

The next section of this chapter provides further information on management strategies for engendering staff involvement and participation.

STAFF ISSUES

New programs bring change to an organization, and change is disruptive. Enthusiasm and willingness to participate may not immediately greet the idea of any new program. Staff may be reluctant to adopt changes proposed by administrators. Conversely, administrators may be resistant to changes recommended by staff. Professional unions might object to changes in staff job descriptions that may be necessary for the new program. The adoption of a drug-use identification program necessitates many new job responsibilities. Some of these might include:

- extra paperwork to comply with rigorous chain-of-custody procedures as well as for evaluative purposes;
- collection of urine specimens;
- confrontation of drug-involved youth; and
- implementation of responses to suspected or confirmed drug use.

Staff may not understand the value of drug identification and testing; instead, they may look at the changes brought about by the new program as a hassle, and a possible threat to job satisfaction and job security. This may negatively impact staff morale and work performance even before any changes take place.

Empowering Staff

James Belasco, in *Teaching the Elephant to Dance* (1990), theorizes that the key to creating effective change is empowerment. To earn support and mobilize energies toward a new program, agency administrators must empower their staff. Four overriding themes help accomplish this task:

Vision - Vision is often presented to staff in the form of an agency mission and program purpose. A clearly stated mission and purpose can help focus and motivate staff toward the achievement of a common goal.

Participation - Involvement of large numbers of individuals in drafting the vision, and the program strategy to accomplish it, will unify and energize staff. Enthusiasm and interest will be aroused for a program which one has helped to create.

Organizational systems - Employees must be empowered with the means to accomplish the agency's goals. Training, communication, and reward systems give employees the tools to achieve the vision, or mission. These systems tell the employees what is expected of them; they provide opportunities to measure and report progress; they open channels for feedback; they motivate, and then reinforce efforts.

Exemplary leaders - Visionary action must begin with those who introduce the program to their staff. Administrators of the program must exhibit the same dedication and commitment to the new program expected of all employees, in practice as well as in theory.

Encountering and Overcoming Obstacles

No matter how carefully administrators introduce a program to staff, and no matter how meticulously they plan, the change process will encounter obstacles. According to Belasco (1990), obstacles to organizational change come from four basic sources:

- slowness of the change process;
- exaggerated expectations;
- skepticism; and
- procrastination.

Belasco offers suggestions to prevent the above obstacles from becoming debilitating factors in the change process.

Slowness of the change process - Change always takes longer than expected. People want to see results immediately. Administrators can help quell dissatisfaction and maintain enthusiasm by reporting short-term progress to staff at regular intervals as the program is developed. However, one must be careful to clarify that such immediate feedback does not indicate long-term results derived from evaluation.

Exaggerated expectations - An overinflated vision will lead to frustration and disappointment among agency staff. While it is commendable to establish high goals, administrators must be aware of the limitations of resources at the agency's disposal. Throughout the process, mistakes should be acknowledged, not hidden. Some agencies may be able to make great strides through organization-wide problem-sharing. It is not necessary to create heroes. People will feel most comfortable with honesty and humanness.

Skepticism - Critics of the vision and plan can throw the entire agency off course. However, negative comments should be neither squelched, nor ignored. Some may represent valid criticisms. Negative comments should be confronted directly. Sometimes, through approaching skeptics personally, an effective leader can transform them into avid supporters. Administrators may also allay the negativity in critics by placing them in key roles to help facilitate the new program. Administrators must keep optimism alive by accentuating the positive, while acknowledging imperfections. In the face of well-publicized short-term progress, pessimism will have a much harder time surviving.

Procrastination - New programs supported by intangible and often lofty-sounding visions, or missions, are difficult to pursue. A new program should be fragmented into several workable pieces. Each step should be clearly outlined for those expected to implement it. Success is the cure for procrastination. Through the agency's communication system -- newsletters, meetings, media, bulletin board postings -- the message of success should constantly be reported, as it is achieved by individual employees and by the program. Employees should be given opportunities to share their accomplishments and experiences with others in the agency. Everyone in the organization should be aware of the success and share in the progress of the new program every step of the way.

Organizing Change

Scott and Jaffe (1989) suggest that administrators make the transition smoother for employees and the

entire agency by following five steps. These steps are not necessarily progressive, and can be expected to overlap at various stages throughout the program establishment and implementation process.

1) **Preparation** - anticipating key elements, such as staff resistance;

2) **Planning** - involving others in policy making and procedure setting;

3) **Transition Structures** - establishing ways of working together;

4) **Implementation** - activating a flexible approach; and

5) **Rewards** - acknowledging people for making the program work.

During the **preparation** stage, administrators should inform employees of the decision to implement a drug-use identification program. They should describe accurately and thoroughly how this might affect both individual employees and the work group as a whole. It would be wise not to implement other changes within the organization at this stage, unless absolutely necessary.

During the **planning** stage, employee input should be encouraged. Administrators will need to identify the skills and knowledge required of staff to effectively implement the new program, and discuss any training needs. Attempts should be made to anticipate potential problems, and develop contingency plans to deal with occurrences that might cause setbacks. It would be helpful for administrators to prepare goals and objectives and a timeline for achieving them.

Transition structures are methods designed to make the establishment and implementation of a new program manageable and comfortable for all involved. Some methods may be temporary and phased out sometime after the program has been implemented. One idea might be to create a transition management group among employees to oversee the change, consisting of both practitioners and policymakers. Another is to create new communication channels for sharing ideas, offering suggestions and providing feedback to both proposed and implemented procedures. Examples of this include newsletters, general meetings, training sessions, posters, staff support groups, and electronic mailboxes; such methods are much more productive and cost-effective than gossip. Providing opportunities for clear and accurate feedback should be a daily event during this period. Finally, administrators should be flexible and open to suggestions during the initial stages of the new program.

During the **implementation** phase of the program, feedback will continue to be vital to the organization. Administrators should allow for resistance, possibly even temporary setbacks in productivity. They should provide information and appropriate training in development of new skills and values to ensure successful program implementation. Steps, such as those mentioned in transition structures, should be taken to promote continuing communication and collaboration. It may be beneficial to conduct surveys to find out how employees are responding to the changes represented by the new program.

As progress is made, administrators should **reward** those involved in the program. Rewards can be personal and private (i.e., a verbal or written acknowledgement or a salary increase). They can also be public, such as an award or mention in a newsletter. Rewards can be intrinsic as well: they can offer a feeling of satisfaction for an accomplishment, or pride in a well-implemented program. To generate and maintain employee enthusiasm for the program, it is advisable to keep employees apprised of all ongoing

accomplishments and developments, as well as any credit or support the agency receives as a result of the program.

CONCLUSION

To accomplish agency missions at the most cost-efficient level, policymakers must employ proactive rather than reactive approaches to problem-solving. Two such approaches were discussed in this chapter.

First, agency administrators must consider both tangible and intangible costs and savings when deciding whether to establish drug-use identification programs. Most tangible factors are agency-specific, and can be calculated. Some predictions about the potential for long-term economic gains also can be made. It is difficult to compute the long-term cost of substance abuse to society and weigh it against the conceivable benefits of a drug screening program, yet some determination about this issue must be made in the final analysis. Whatever the budgetary status of an agency, learning ways to cut costs is a proactive matter that no one can afford to ignore. Practical methods and philosophies that maximize benefits and minimize costs of a drug screening program were presented in this chapter.

Second, effective leaders and enthusiastic personnel working together will set a positive tone for a successful screening program. The frame of reference from which administrators see things may be entirely different from that of practitioners in the field of juvenile justice. People with similar positions will also see things in separate, distinct ways. These gaps can be narrowed considerably through an agency mission; this creates a common purpose that unites all individuals in the agency. Still, people will vary in their view of *how* that mission should be achieved. Acknowledging and addressing these differences, rather than trying to eliminate them, is crucial for generating successful programs. Through a unified approach to planning that stresses teamwork, involvement, and communication, an agency can bring together an effective program in which all staff believe.

To fully prepare for the implementation of an effective program, agencies must develop program evaluation strategies. These are discussed in Chapter 10. Module III will provide specific information on the three approaches to a comprehensive drug- use identification program which were described in this chapter: assessment, drug recognition techniques, and chemical testing.

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CHAPTER 10

PROGRAM EVALUATION AND DISSEMINATION OF RESULTS

PROGRAM EVALUATION AND DISSEMINATION OF RESULTS[1]

INTRODUCTION

As emphasized in Chapter 5, an agency must have in place a set purpose for its drug-use identification program before implementing it. All staff must be aware of and collectively focused on this purpose. Likewise, in the process of evaluating the program, agency mission and program purpose must be central.

Evaluation does not have to be a complicated or unpleasant task. A well-structured data collection and evaluation instrument can accomplish the job very efficiently and painlessly; it can provide the basic information an agency needs to oversee the program and ensure that it is achieving its intended purpose. It can be an effective tool in budget negotiations. A program that is proven effective through evaluation is more likely to be funded or re-funded. Evaluation can also provide data for reporting significant findings to interested parties, both within and outside the agency.

Evaluation is ongoing, encompassing various steps of the drug screening process. Collecting and analyzing data, and reporting results should become part of the program's standard operations. Evaluation is an integral part of the overall program; therefore, it is necessary for all parties involved to realize the importance of evaluation and contribute to this process.

At the conclusion of this chapter, participants will be able to:

- define the two primary types of evaluations;
- list at least four ways that evaluations can be beneficial to an agency;
- devise a realistic program objective for a formative evaluation and one for a summative evaluation;
- list three considerations in developing a Management Information System (MIS) and explain why these are important;
- describe two evaluation methods and list one advantage and one disadvantage of each;
- define control group, experimental group, independent variable, and dependent variable;
- list six tasks regarding the evaluation process hat must be incorporated into standard policies and procedures;
- discuss three strategies for implementing the results of evaluations; and
- specify the components of a consent form.

PRIMARY PURPOSES OF EVALUATION

A distinction between summative and formative evaluations will help explain the two primary reasons for the evaluation process. A **formative** evaluation oversees the drug-use identification process and provides information that is used to improve program practices. It also documents that procedures were implemented as planned (e.g., drug recognition techniques were performed on all juvenile offenders at intake). A **summative** evaluation of a program measures and substantiates a program's effectiveness,

[1] Contributions for this chapter were made by Harry Boone of the American Probation and Parole Association, Lexington, Kentucky, and Jan Rivers of South Carolina Probation, Parole, and Pardon Services, Columbia, South Carolina.

or ineffectiveness, in reaching its intended goals (e.g., six months after initiation of the drug-use identification program, there was a decrease in positive urinalysis results among probationers). Usually, a complete evaluation program consists of both formative and summative strategies.

WHY EVALUATION IS CRUCIAL

Programs may eventually fail if not regularly monitored and upgraded; but evaluation is necessary for other reasons as well. For example, a summative evaluation, which shows evidence of the effectiveness of drug screening, can validate the program to external sources and to staff within the agency. Staff members may become more committed to a program that evaluation data indicates is successful. External agencies may be more inclined to support or fund programs that can be shown to contribute to the safety of the community or help youthful offenders obtain rehabilitative services for drug problems. Especially when resources are scarce, summative evaluation methods can provide the added impetus to encourage funding awards. Additional funding is often necessary for an agency to maintain or improve its level of services. Evaluation also can facilitate the enhancement of resources offered within the community.

Formative evaluations are valuable as well. As the project progresses, knowledge gained from the formative evaluation will assist agency personnel in making appropriate decisions; this can contribute to overall increased efficiency in the policy-making and implementation process. Administrators may use formative evaluation as a tool to monitor the program and provide feedback to involved staff. For example, they may positively reinforce personnel for following established procedures and point out specific contributions staff are making to the program by adhering to policies. They also can keep track of unwanted effects and inform staff of actual problems that have resulted from a lack of compliance with policies and procedures. Finally, to be progressive, programs must undergo formative evaluations regularly to keep pace with social, legal, medical, and technological advances in a dynamic society.

DEVELOPING A PLAN FOR EVALUATING THE PROGRAM

Five steps, adapted from the American Probation and Parole Association's Training Manual, *Applying Drug Testing in Probation and Parole Supervision Strategies* (1991), will guide an agency in establishing a plan for evaluating a drug-use identification program:

- determine program objectives (what the agency wants to measure);
- select an evaluation method;
- develop a Management Information System (MIS);
- establish standard procedures and incorporate them into program policies; and
- implement evaluation results.

Determine Program Objectives

An agency's objectives for its drug-use identification program shall guide the evaluation effort. These must correlate with the purpose of the program and mission of the agency. Program objectives for evaluative purposes must be:

- clear;
- specific;
- measurable;

- practical; and
- specific to a time frame.

(American Probation and Parole Association [APPA], 1991)

Agencies will devise two types of objectives. One type will be suitable for formative evaluations, which serve as accountability measures of the drug-use identification process (i.e., to what extent the agency is adhering to operational policies and procedures). The other will be suitable for summative evaluations to measure program outcomes (i.e., to what extent the program is achieving the results it is expected to achieve).

Consider whether the following examples of **formative** objectives meet the criteria listed above:

Objective #1 - All youth on probation or aftercare status will be held accountable for positive results of drug tests.

The phrase, *held accountable* is not clear, not specific, and not measurable. As time is not measured, it is not specific to a time frame. It may be a practical program goal for case management, and may provide useful information that coincides with the purpose of the drug-use identification program. But as it is not clear, specific, nor measurable, it is not practical for evaluative purposes.

Objective #2 - Drug recognition techniques will be conducted with all youthful offenders within 12 hours of intake.

This objective is probably measurable, and does refer to a specific time frame, but it is not practical unless it is achievable. For some agencies, when there is a trained staff member on duty at all times, this may be a reasonable goal. However, in many jurisdictions, there are only one or two staff persons trained in drug recognition techniques. It would be impossible, in this case, for every youth brought in at all hours during the day and night to be seen by a drug recognition specialist within 12 hours. Most often, informed decisions will have to be made regarding which youth most need this type of examination.

Objective #3 - All youth on probation or aftercare status will receive at least one sanction, or at least one reward, for positive and negative urinalysis results, respectively, within three days of the test results.

Will receive some sanction or reward is clear, specific, and measurable. *Within three days* makes it specific to a time frame. This objective is practical for evaluative purposes because it is a realistic goal, and because the information provides evidence to measure the effectiveness of the program process.

Consider the following examples of **summative** objectives:

Objective #1 - The drug-use identification program will result in a reduction of drug use among juveniles in the community.

Reduction of drug use and *among juveniles in the community* are ambiguous phrases and therefore cannot be measured. There is also no mention of a time frame.

Objective #2 - All probationers who test positive on an initial screen will be referred to a treatment program within three months.

This objective is measurable and specific to a time frame, but is it practical? Agencies first must find out if community resources can accommodate this objective. Even if accommodation is possible, data obtained from this objective cannot measure the

effectiveness of a drug-use identification program. More pertinent considerations might be whether youth referred to treatment programs are actually placed in a timely manner, and whether treatment matches are appropriate.

> **Objective #3** - After six months of implementation of the screening program, there will be at least a 15% decrease in drug-related offenses among juveniles in the agency's jurisdiction.

This objective is measurable, clear, specific, and refers to a time frame. It is also practical, as it gives information that can substantiate whether or not drug screening leads to deterrence, which is a measurement of the effectiveness of the program.

When establishing objectives for summative and formative evaluations, agencies must remember that:

1) Clear, specific measurements must be derived through collecting, reporting, and analyzing data; *and*

2) Some decision about the efficacy of the process or the value of the program must be reached through these measurements.

Information gathered from evaluations also may serve the purpose of generating information of interest to the agency and to the public (e.g., the extent to which youth in the community are using drugs, the community's drugs of choice). In this case, the agency might obtain facts to report to the community or other professionals to obtain program support. For instance, knowing how many youth use drugs may provoke law enforcement officials to be more alert to suspicions of drug involvement in their daily work. Data gathered through evaluation also may provide information enabling juvenile justice agencies to more efficiently solve the problems associated with drug-involved youth (e.g., learning about drugs of choice in a community may reduce the necessity to test for all categories of drugs or documentation of the extent of the drug problem may substantiate the need for treatment resources).

Select an Evaluation Method

Various research methods can be used to accomplish the established objectives. The method chosen must fit within the limits of an agency's resources. In many cases, a complex method will not be required. Information regarding **descriptive research, before/after studies, experimental** and **quasi-experimental research**, will be presented in this chapter. Most agencies have the means to design and implement these fairly straightforward strategies.

Descriptive Research

Descriptive research seeks to evaluate a program by examining indicators of program accomplishments and problems. It does not provide explanations of results, explore causal factors, or make predictions. Data for descriptive research can be compiled within the agency's MIS. The data can be quantitative (e.g., number of youth who undergo urinalysis based on recognition techniques) or qualitative (e.g., number of probation officers who feel competent in identifying drug users). Quantitative data is objective, while qualitative data is more subjective. Still, arbitrary information derived from written reports, staff comments, and other environmental cues can help evaluate the program. Such sources of information are often very valuable in assessing a program's effectiveness in certain areas, such as staff attitudes. However, agency administrators who see the subjectivity of qualitative data as a problem can collect and measure viewpoints using a questionnaire or survey format. Examples of meaningful information related to

a drug-use identification program that can be presented in a descriptive format include:

- juveniles arrested on drug charges;
- juveniles assessed for drug involvement;
- number of youth suspected of drug use (based on assessment) who tested positive;
- total positive and total negative urinalyses results;
- youth placed in treatment as a result of the drug-use identification program;
- probation officers who report increased confidence in confronting and managing drug-involved youth;
- number of drug-related offenses committed by juveniles;
- number of drug-related emergencies involving juveniles at local hospitals; and
- people in the community who support the drug-use identification program.

Descriptive research studies are relatively easy to implement. If a more complex description is desired, such as an examination of relationships or causal factors, a system can be developed that expands upon key components and explores how they are related to one another. This is more challenging and may require some expertise in design; however, it can produce information helpful in identifying elements that are instrumental in achieving optimal results. The information also can serve as a guide when studying alternative program strategies.

Before/After Studies

Before/after studies (also called pretest-posttest) are used to evaluate the effectiveness of a program within an agency by assessing its probable impact on various factors. This approach involves compiling data that measures conditions existing before the project is implemented, compiling further data as the project progresses, and comparing results. To ensure the most accurate results, agencies must collect substantial information before the intervention is provided to obtain the most precise baseline measurement; they also must collect additional information at regular intervals for several months after its implementation. Progress can be monitored, but actual comparisons cannot be made until the program has been in place for several months. Examples of data that may be collected both before and after a program is implemented to substantiate the program's effectiveness are:

- number of juveniles who obtain treatment for drug involvement within three months of arrest;
- number of juveniles placed on specialized caseloads requiring regular chemical testing;
- number of juveniles released from probation who are not rearrested within the following year;
- number of juveniles placed in residential care who have no further contact with the juvenile justice system one year after release to the community;
- comparison of number of juveniles who admit to drug use to number of juveniles who deny drug use and then test positive;
- number of juveniles arrested for drug-related offenses;
- the public's perception of a drug problem in the community as determined through surveys; and

- number of drug-related emergencies at local hospitals.

The primary pitfall of before/after studies is the propensity to draw cause-effect conclusions too hastily. The basic method itself does not take into account other influences, including trends, that may have brought about the calculated changes. Agencies desiring to reliably attribute causal relationships to programs will have to isolate and test other possible correlative patterns. This will involve compiling additional data on potential variables independent of the program. For example, when attempting to associate a decrease in the number of drug-related offenses with the agency's new drug-use identification program, evaluators will have to consider other factors: Have there been changes in law enforcement policies or practices regarding drug-related crimes that would affect the number of juveniles apprehended or arrested? Does the time of year traditionally affect rates of drug possession and drug trafficking (i.e., does the number of arrests increase in the summer, when juveniles spend more time on the streets, and unsupervised)? Has a community-wide drug awareness/ education program been initiated?

Experimental and Quasi-Experimental Research

Another way to examine cause-effect relationships reliably is to use an experimental or quasi-experimental approach. These methods are designed to evaluate programs by comparing effects that occur both with and without the program. Conclusions are reached based on methods that seek to determine whether one variable (the independent or *causal* variable) led to another variable (the dependent or *effect* variable). If this association is substantiated, it signifies to researchers that the designated factor was responsible for producing the desired outcome. In experimental and quasi-experimental research, comparisons are made between experimental groups and control groups. A group of youth would be identified to participate in the study. Each of the youth would be randomly assigned to an experimental or control group. The **experimental** group would participate in the program that is being evaluated (i.e., drug screening). The **control** group would not participate in the program that is being evaluated. They may be receiving no screening, or some other form of screening. To the extent possible, all factors must remain the same with youth in both groups with the exception of screening activities. Thus, significant differences in outcomes found between the two groups could be correlated reliably with the independent, or causal variable.

In **experimental research**, the experimental and control groups are selected randomly. Drug screening activities also are assigned randomly to each group. Because of the random assignment, it can be assumed that the experimental and control groups are similar. This method, which sometimes entails randomly offering different services to different groups in a single setting, is not always practical or appropriate for agencies.

Quasi-experimental research is sometimes more feasible than experimental research. This approach also involves an experimental and control group, but selection is not random. In this case, the control group and the experimental group are selectively assigned. Researchers must "match" the two groups as closely as possible, especially in areas that can affect the outcome of the program (e.g., sex, age, prior delinquency record, type of current offense, and extent of substance abuse problem). An alternative method of matching is to measure the two groups and use statistical procedures to equalize them. Either method of matching can be difficult, which is the major drawback of quasi-experimental research. Any influential factors other than the drug-use identification program will have to be recognized and controlled to the greatest extent possible in order to substantiate the credibility of conclusions reached through this approach.

Experimental and quasi-experimental research designs can uncover valuable information about the impact of a program on an agency. Some consider it unethical to offer certain services to one group of individuals, and not another, for the sake of experimentation. However, resistance to experimental research in corrections is lessening. Case law has upheld the legality of random assignment (Winick, 1981); but more importantly, the field is becoming more aware of the benefits of experimental research (American Probation and Parole Association & National Association of Probation Executives, 1988).

Resources available to the agency, objectives to be met, and the level of sophistication needed will dictate the selection of the evaluation method. Resources listed at the end of this chapter may aid administrators in making the appropriate choice.

Develop a Management Information System (MIS)

An agency's Management Information System (MIS) provides a means of collecting information that can be aggregated and retrieved at regular intervals for reporting purposes. Broadly, the system should be capable of producing information relating to program effectiveness as well as generating any data considered significant to the needs of the agency or community. While a computerized system is recommended for its ease, speed, organizational efficiency, and convenience, other options can be effective. A computerized system also reduces the need for filing space and excessive paperwork. Some agencies may find it more cost-effective and reasonable to use a manual system.

Some factors to consider when developing the MIS are:

- ease of use;
- ease of retrieval; and
- speed in compiling information.

(APPA, 1991)

Ease of use - The MIS should be as uncomplicated as possible to ensure uniformity of implementation and accuracy of results. More than one staff person should be trained in operating the MIS and staff should be constantly updated on new procedures. This can avoid delays in processing and retrieving data, as well as the necessity for "crash course" instruction when reassignment of tasks occurs.

Ease of retrieval - When developing the MIS, retrieval of information is a vital consideration. Information sharing is primary to the process of evaluation. All staff in the agency who are involved in the drug-use identification process should be informed regularly of program findings through staff meetings, correspondence, newsletters, or other means. Information of importance to the community should be shared with the public via informational sources such as the media, agency annual reports, and community group meetings. Easy retrieval of data will be a foremost factor in achieving these responsibilities.

Speed of compiling information - A system that is able to compile information quickly for reporting purposes can generate more timely information upon demand. Agencies can make this process more efficient by avoiding duplication and streamlining data onto a minimal number of forms. Those with well-organized management information systems will be able to update their evaluation data more often. They also will have the capacity to compile information at a moment's notice if necessary for press releases, to fulfill requests for information and other unanticipated requests.

Establish Standard Procedures

The evaluation process will have to be incorporated into policies and procedures as standard

operations of the drug-use identification program. Procedures for the following steps in handling information should be established to achieve uniformity and validity:

- addressing issues of confidentiality;
- collecting data;
- recording data;
- organizing data;
- processing data; and
- reporting and disseminating findings.

(adapted from APPA, 1991)

The tasks above can be distributed according to designated and clearly defined staff roles. The issue of confidentiality is not a task in itself, but an overriding consideration that will affect each step of the evaluation process.

Confidentiality

All of the procedures incorporated into agency policies must take into consideration the protection of the youth's privacy. As data is entered into the MIS, identity should be preserved to assist in case management practices. However, when compiling statistics and analyzing results, names and other identifying characteristics must be omitted. When conducting surveys, respondents should be informed that all data will remain confidential. In addition to maintaining the privacy rights of individuals, this results in a higher, more reliable response rate for the study.

If the study poses any risk to the subjects, the agency will have to obtain written consent from youth, and possibly their parents, to participate. The consent form should include the following:

- a description of the study;
- possible risks to the subject;
- right of the subject to withdraw from the study at any time;
- right of the subject and parents to ask questions of the evaluator(s) regarding the study at any time;
- confidentiality procedures used; and
- signature line for youth and parents.

(Hawkins & Nederhood, 1987)

Collecting Data

This requires a systematic method of gathering the facts and figures necessary to address the established objectives. Decisions to be made can be categorized into four basic areas: **sources, sample, schedule, and staff.**

Sources: Information can be derived from a variety of sources, such as interviews, surveys, self-reports, observations, and official records. Agencies will have to decide which source(s) can provide the needed information most accurately and reliably, given accessible resources. It may be possible to use existing data, if it is pertinent and sufficiently reliable. The agency's assessment of needs and resources (discussed in detail in Chapter 7) also may produce information functional to the evaluation. Those contracting for drug-use identification services with outside agencies or laboratories may have to rely on these organizations for some data collection and record keeping. Communication and collaboration with these outside

resources will be crucial to the efficiency and accuracy of the evaluation process.

Sample: The collection sample must be defined. Will it be the entire population or will a representative sample be chosen? If representative, will it be random or will pre-established criteria dictate selection? The size of the sample must be determined as well.

Schedule: A schedule for data collection must be planned. When using before/after studies, data collection must begin some time before implementation of the intervention and continue regularly as the project progresses. Agencies must remember that to account for fluctuating patterns, many measurements will need to be taken systematically for an extended period of time before actual meaning can be derived from statistical findings.

Staff: Those staff who are designated to collect the data must be trained uniformly and thoroughly to avoid inconsistencies in collection methods and inaccuracies in data. Recording procedures will be an essential part of this training.

Recording Data

It is advisable to record data on paper and enter it in the MIS as well. Agencies often have personnel collect the prescribed information on forms and transfer it to a computerized database. The person who collects the data may or may not be the person who transfers it, especially if outside agencies are involved. Agencies should devise a system that allows for communication between those collecting and those recording the data. To avoid misinterpretations, entering the data in the MIS should be the responsibility of staff who are trained and meet standards of consistency.

Organizing Data

A filing system should be kept to organize paperwork for easy reference and retrieval if needed. Computerized systems should likewise be organized for easy retrieval of information and for efficiency in calculating results. The appropriate staff (those responsible for filing, retrieval, and calculation) should be involved in the organization of data and consulted when modifications take place.

Processing Data

This involves compiling, examining, and interpreting the data to provide information, to monitor program progress, and to calculate the extent to which program objectives are or are not being met. Evaluators should be objective and explore various ways of interpreting data and drawing conclusions. Methods of analysis may range from the fairly uncomplicated (frequencies, ranges, percentages, means) to the complicated (regression, multiple analysis of covariance, discriminant analysis). The former procedures can usually be conducted without the assistance of an evaluation specialist. The latter methods will require some expertise in statistical analysis. Available resources, predetermined program objectives, and type of data collected will dictate an agency's selection of processing method. Some training will be required of staff who are responsible for data analysis. Outside assistance may be required depending on the skill level of agency staff and the complexity of the method chosen.

Reporting and Disseminating Data

Sharing program information is a vital contribution to the field of juvenile justice. The method of reporting data and what will be reported will depend on the audience targeted. Internal reports might be in the form of newsletters, charts and graphs, and reports at meetings. These would focus on program

progress to generate and maintain enthusiasm within the agency, and to encourage further ideas for program enhancement. Reports for juvenile justice professionals might be in the form of journal articles and presentation handouts, emphasizing the program's effectiveness within the agency and community. These materials also would discuss the significance of the program within the broader context of the juvenile justice profession. Reports for the community would be disseminated through the media in the form of television or radio news broadcasts or newspaper articles. Reporting to the public may also be accomplished through public speaking engagements; presentation materials and handouts could be generated for this purpose. Public information might describe the impact of the program on substance abuse and crime and its implications for juvenile rehabilitation and public safety. Reports generated for researchers would emphasize research techniques (i.e., method, design, collection and recording procedures, and data analysis) to assist others in replication of the evaluation methods.

Implement Results

Just as program personnel must respond to evidence of drug use with interventions, administrators and practitioners must use evaluation results. This step is crucial to the evaluation process. Management decisions will have to be made as research findings are generated. Administrators and practitioners should collaborate in discussing new implementation strategies to counter unwanted outcomes. All staff should be notified formally of any changes in the program, as well as the reasons for the changes. These modifications should be incorporated immediately into policies and procedures.

New questions will emerge as research develops, suggesting possible ways of improving program practices. These should be considered, and the costs and benefits of attempting them discussed. Agencies are cautioned to implement change gradually, paying close attention to priorities. It may not be worthwhile to disrupt a successful program over a fairly inconsequential modification. On the other hand, if substantial modifications are necessary, program administrators will have to assess staff readiness for change and take steps to make the change as manageable and comfortable as possible. As discussed in Chapter 9, organizational change is unsettling and can affect attitudes and productivity of personnel. This applies to modifications to programs as well as new programs.

Results of evaluations also should be used to generate positive energy for the program. Agencies may post goal charts and devise ways to celebrate as a team when these goals are reached. Accomplishments of the program should be shared within the agency and the community. They can be used to instill unity and pride within the organization. Evidence of success also can foster credibility for the agency, and help to obtain support from the community.

CONCLUSION

The best form of feedback for an agency is an effective evaluation process. It can be extremely rewarding to see proof that a program is accomplishing what it was intended to do. It presents an excellent opportunity to share this sense of success with the entire staff.

Extra paperwork and tedious tasks associated with evaluation are often thought of as "a necessary evil." This is a common problem with evaluations, leading to poor planning and hasty, lax performance. Do not let apathy permeate the evaluation process. If a leader takes a genuine interest in the study and provides feedback as it proceeds, staff members will be more likely to become enthusiastic as well.

A great deal of investment goes into the evaluation process from design to data collection to analyzing and reporting results. *Capitalize on results.* Create as many opportunities as possible to use the results of evaluations to enhance the screening program. For instance, administrators might initiate numerous occasions to share findings with staff, other professionals, and the community.

Module III will discuss details in executing the program by introducing three processes involved in drug screening: assessments, drug recognition techniques, and chemical testing. Whether an agency decides to use one of these elements, or a combination of two or three, it will be necessary to consider how the program will be evaluated well before the implementation process begins.

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MODULE III

IMPLEMENTING DRUG-USE IDENTIFICATION PROGRAMS IN THE JUVENILE JUSTICE SYSTEM

IMPLEMENTING DRUG-USE IDENTIFICATION PROGRAMS IN THE JUVENILE JUSTICE SYSTEM

Overview

The content of this module focuses on specific information needed to implement a drug-use identification program. It develops from and expands upon the material presented in Module 2.

The first three chapters provide specific information about each of three methods of identifying drug-involved youth:

- *Assessment Instruments and Techniques* (Chapter 11);
- *Drug Recognition Techniques* (Chapter 12); and
- *Chemical Testing* (Chapter 13).

These chapters provide detailed information needed to determine: (1) whether or not an agency should develop a program using each method; and (2) procedural requirements for successful implementation of each method.

Chapter 14, *Interventions*, provides a framework and information for using the results of drug-use identification techniques. It offers an array of effective case management and treatment strategies. While the individual youth is the focus of intervention strategies, environmental and societal interventions also are recommended. In addition, the needs of special groups of drug-involved youth are addressed.

The final chapter in this curriculum, *Staff Responsibilities and Training*, details the functions staff need to perform in implementing drug-use identification programs. Some basic qualifications often required of personnel involved in drug screening activities are discussed. This chapter also provides a five-step process for developing appropriate staff training programs.

CHAPTER 11

ASSESSMENT INSTRUMENTS AND TECHNIQUES

ASSESSMENT INSTRUMENTS AND TECHNIQUES[1]

INTRODUCTION

Of the drug-use identification procedures to be described in this module (assessment, drug recognition techniques, and chemical testing), assessment is usually considered the least intrusive; it requires little, if any, physical scrutiny. An in-depth assessment, however, requires extensive probing into a youth's life. Some individuals may find this more intrusive than a thorough physical examination. Although in practice the term "assessment" may include drug recognition techniques and chemical testing, in this manual each shall be regarded as separate components of the drug-use identification program.

A common practice when evaluating adolescents to determine drug involvement has been to focus almost entirely on the issue of drug use. Recently, juvenile justice professionals have become aware that when youth are heavily involved with drugs, there are usually multiple problems associated with the drug use (Rahdert, 1991). Therefore, when substance abuse is suspected, it may be related to many other problems in the child's life. Family dysfunction, physical and sexual abuse, school failure, peer pressure, learning disabilities, and deficient social development are examples of factors that can contribute to, cause, or exacerbate an adolescent's drug involvement. If drug use is addressed, but ancillary issues are ignored, it is likely that the drug problem will recur. Consequently, an instrument designed to identify a range of potential adolescent problems is recommended to make a complete assessment and provide an appropriate response. Attempting to intervene without a comprehensive assessment can lead to frustration for youth and staff and wasted treatment resources.

This chapter will not provide the reader with an actual assessment instrument, nor will assessment tools that have already been developed in the field be recommended. Instead, this information is intended to provide readers with the means to evaluate and select or devise assessment instruments that will be successful in identifying and responding to the needs of drug-involved juvenile offenders.

After reading this chapter, participants will be able to:

- name the three basic assessment methods and give an example of information that can be derived from each;
- list the three main objectives an assessment can accomplish;
- describe **continuum of services** and explain how this system can enhance the assessment process;
- list four types of information that can be derived from existing records, possible sources for that information, and formulate one question for each type;
- list the five stages of the client interview and the main focus of each stage;
- identify eight areas interviewers should explore with the juvenile during the interview and formulate one question for each area;
- distinguish between **descriptive information** and **judgments** and formulate questions that lead to each type of answer;

[1] Contributions to this chapter were made by John Signorino, Intake Officer for Juvenile Court, Erie County Juvenile Probation Department, Erie, Pennsylvania.

- explain why information obtained from self-reports, client interviews, and collateral interviews should always be substantiated through other assessment procedures;
- identify one advantage and one disadvantage of the standardized interview, the structured interview, and the self-administered test;
- define reliability and validity as the terms relate to assessments; and
- list six factors agencies should consider when selecting an assessment instrument.

BASIC ASSESSMENT METHODS

The National Task Force on Correctional Substance Abuse Strategies (1991) recommends that agencies "identify, develop, and implement a standardized, comprehensive method for assessing alcohol and substance abuse appropriate to the specific offender population." A variety of techniques can be used to conduct assessments with youth. Within a drug-use identification program, an assessment is defined as the practice of identifying drug-involved youth through three general means:

- investigation of existing information (e.g., review of medical, school, delinquency, and treatment records);
- self-reports and interviews; and
- testing instruments (e.g., a self-administered test).

The key is to gather as much information about the youth as possible. As discussed in the *Balanced Approach* to juvenile justice (Maloney, Romig, & Armstrong, 1988), every case and every youth is unique; for each, different methods will be successful in uncovering essential pieces of information.

The most complete and reliable assessment will include all three of the above approaches. Many agencies, however, do not have the resources to employ them all. Administrators must carefully consider resources when deciding upon suitable assessment strategies. For instance, some methods require a monetary investment; they also require staff time for training and to conduct the assessments. Chapters 9 and 15 provide further information on cost and staff issues. Jurisdictional legal mandates or restrictions also must be considered when deciding which assessment methods to use. Finally, administrators must determine the objectives of the assessment. These objectives must correlate with the agency's mission and program purpose. Objectives will be a major factor in deciding which basic assessment methods an agency will use to evaluate youthful offenders.

OBJECTIVES OF ASSESSMENT

Each agency must determine its assessment objective and choose the methods that will accomplish it. An assessment can be helpful in achieving the following goals (American Probation and Parole Association [APPA] and National Association of Probation Executives [NAPE], 1988):

- distinguishing drug users from nonusers;
- making initial treatment recommendations;
- making case management decisions; and
- providing information for a continuum of services.

If an agency determines that assessment is necessary in achieving its overall mission, it must

determine how extensive the evaluation must be. In the first case, the agency's assessment process may be rather rudimentary. To make initial treatment recommendations, a more in-depth analysis is needed. The most comprehensive instrument is required when the third objective is to be achieved.

The assessment process can occur during many stages of the juvenile justice system (e.g., intake, probation, diversion, treatment, aftercare). At each of these points, objectives of assessment must be determined; these objectives must always comply with the agency's overall mission. These varying objectives will dictate decisions regarding assessment procedures and instruments to be used by particular agencies.

There are points in the juvenile justice system where a formal assessment is not practical to the goals of the agency. For example, at arrest, protection of the community is critical, but rehabilitation of the youth is not a feasible goal. When a juvenile is brought into custody, however, assessment becomes significant. Assessment procedures are critical to case management and planning treatment interventions. Assessment procedures should *not* be used, however, as a basis for taking punitive or legal action, although they may be used to support decisions regarding such actions.

In essence, an agency must consider its role in the juvenile justice system when determining the most appropriate assessment procedures: Is the agency responsible for detecting whether or not a youth is involved with drugs? Is it responsible for evaluating the severity of a drug problem and making initial treatment recommendations? Or, is it responsible for treatment planning and monitoring of individual cases?

The most efficient assessment system will provide information for a **continuum of services**, where agencies share information and a more thorough, comprehensive assessment is conducted as the youth continues through various stages of the juvenile justice process. This type of coordinated venture reduces the tendency to duplicate efforts, and builds a unified support system for the youth.

On the following pages are examples of applying the concept of a continuum of services:

INFORMATION GATHERING

As mentioned previously, information about a youth can be obtained through three general methods:

- investigation of existing information;
- self-reports and interviews; and
- testing instruments.

These three general sources of information will be discussed in detail in this section.

Investigation of Existing Information

When reviewing records, assessors must look beyond what seems immediately obvious and generate questions for further analysis. They also must be cautioned not to draw conclusions or make generalizations based only on information found in records. For example, it should not be assumed that youth apprehended or arrested on drug charges represent the majority of those in the juvenile justice system with substance abuse problems. In a study conducted at a Juvenile Detention Center in Tampa, Florida, Dembo and associates (Dembo, 1990) found that only 7% of youth entered the Center on felony or misdemeanor drug charges, yet 41% of the general juvenile detainee population were found by urinalysis to be positive for one or more drugs. Review of records should provoke questions that may be suitable for further investigation (e.g., through juvenile and collateral interviews).

Example 1:

A 16-year-old male is charged with breaking into a public high school and put on probation. The Intake Officer at the Probation Department learns from the arresting officer that the boy has had several prior charges of possession of marijuana. The Intake Officer reviews the youth's prior delinquency records and interviews him. The following day, a medical examination is conducted and a urine sample collected. The youth's parents also are interviewed, and a standardized psychometric test that includes substance abuse indicators is administered. Based on the results of this investigation, the Intake Officer identifies whether the youth has a substance abuse problem. If drug involvement is suspected, the individual will be referred to a Substance Abuse Specialist for further assessment. The information collected by the Police Department and Probation Intake Officer is shared with the Substance Abuse Specialist, who conducts further assessment into other areas that may be contributing to a substance abuse problem. A series of psychometric tests and an interview, all of which include indicators of other stress factors in the child's life (e.g., family dysfunction, learning disabilities, social skills deficiency) are used to assess the severity of the child's drug problem and any contributing factors. The Substance Abuse Specialist will then refer the child to the appropriate treatment program, sharing all of the information that has been accumulated so far, and taking part in the initial treatment planning process. The treatment facility will conduct assessments as needed to monitor the youth's progress and adapt a range of services to address any other needs that may be identified.

Example 2

A 17-year-old female is admitted to a treatment facility after being charged with drug trafficking in cocaine, and prostitution. Records regarding the client's delinquency history, medical history, and school history are sent to the Admissions Office of the facility and the documents are placed in a new file. When the youth is transferred to the facility, an Admissions staffperson sets her up with a self-administered substance abuse assessment instrument. When the test is completed, the Admissions staffperson scores it immediately, places one copy in the client's file, and places the file in the Admissions Counselor's box. The Admissions Counselor reviews the results of the diagnostic test, and prepares for an interview with the juvenile. After the Admissions Counselor completes the interview, a report is written and added to the other information in the juvenile's file. Next, a meeting is arranged for the multidisciplinary treatment planning team (consisting of the Admissions Counselor, Residential Program Director, Education Coordinator, Nurse, and Special Programs Director). The team is responsible for placing new clients in educational and special programs offered by the treatment facility and/or within the community. A treatment plan is developed, and placed in the juvenile's file. As new information is collected throughout the client's stay with the facility (e.g., academic reports, further assessments, health data, special program reports), they will be shared with the treatment planning team, and kept in the client's central file in the Admissions Office.

The following list contains categories of information, their sources, and data the assessor might look for while reviewing records. These lists are not all-inclusive. They represent areas that may be explored. Other areas (e.g., family history, educational background, and leisure activities) are more appropriately investigated during the interview process or through the use of assessment instruments.

Drug History (**Sources**: juvenile justice and treatment agency records)

- Was the youth or were any family members ever charged with a drug offense?

  If yes:

  - What was the charge?

  - What action, if any, was taken?

- Has the youth or have any family members been in substance abuse treatment?

  If yes:

  - Was it court-ordered or voluntary?

  - What was the level of commitment to treatment (as indicated by attendance, willingness to participate)?

  - Was the program completed?

Delinquency History (**Sources**: juvenile justice records)

- Have there been prior arrests?

  If yes:

  - For what offenses?

  - Was the youth intoxicated at the time of the offense?

  - Are offenses associated with effects of certain drugs on adolescents? For example, some drugs (e.g., alcohol, phencyclidine, amphetamines) are associated with **expressive** behaviors, such as violent offenses and disorderly conduct. Other drugs (e.g., cocaine, heroin) tend to be associated with **instrumental** or income-generating behaviors, such as burglary and prostitution. (*APPA and NAPE*, 1988).

Educational History and Current Status (**Sources**: school records)

- What is the youth's attendance record? Have there been excessive absences?

- What is the youth's grade level compared to age?

- Has the youth dropped out of school? If yes, at what age?

- What is the chance of the youth graduating from high school or receiving a G.E.D.?

- Is there a record of behavior problems in school?

- What are the results of any diagnostic testing (e.g., IQ, interest or personality inventories?)

- Have any learning disabilities been identified?

- Has the youth been referred to any student assistance programs?

- Has the youth ever been caught in possession of drugs or suspected of using drugs at school?

  If yes:

- What were the circumstances? What action, if any, was taken?

Medical History and Current Status (Sources: health care providers; juvenile justice and school records)

- Does the youth have a medical record of substance abuse?
- Is there a record of a substance abuse problem within the family?
- Does the youth have a medical condition? Could the problem be related to substance abuse (e.g., high blood pressure or liver damage, damage to tissue of nose)?
- Has there been a medical emergency that could have been caused by substance abuse (e.g., an alcohol-related auto accident)?
- Is s/he taking any medications? If so, what kind?
- Does the youth have any medical problems that could cause the same effects as drug or alcohol use?
- Has the youth had a recent illness or injury (such as a high fever or head injury) which could cause symptoms similar to drug or alcohol use?
- Are there any observable signs of a medical problem?

Self-Reports, Client and Collateral Interviews

A **self-report** might be a solitary statement from the youth, such as whether or not s/he has ever used drugs, or information derived from an informal conversation between a juvenile justice professional and the youth. A **client interview** is usually a formalized, planned conversation between the assessor and the juvenile, wherein the assessor asks predetermined questions and solicits responses. The client interview, because it necessitates some self-disclosure, also can be considered a form of self-report. However, for clarification, a distinction will be made between the self-report (informal self-disclosure by the client) and the interview (formal process through which the assessor solicits information and the client provides information). The **collateral interview** is a formal process conducted by the assessor with people who are closely associated with the youth, such as parents or other relatives, a physician, teacher, or treatment practitioner. Collateral interviews also may be conducted with others who possess information pertinent to circumstances surrounding the offense.

Self-Reports

Some research has found offender self-reports of drug use to be reliable; still other studies have determined self-reports to be unreliable (Wish, 1986; Mieczkowski, 1990). Reports from individuals in treatment appear to be much more credible. While an offender's statement should not be *relied* upon as an indicator of drug involvement, there are therapeutic benefits to confronting the juvenile with questions about his/her drug involvement. Speaking directly with the adolescent is a step toward creating a positive relationship with him/her. Direct confrontation also holds the youth accountable for his/her own behavior. Denial of drug use may indicate that the youth is in a psychological state of denial; this information is critical for treatment practitioners. Finally, for case management purposes, it is useful to know whether or not a juvenile has the tendency to lie about, or deny, his/her drug use. The assessment process may be a step toward working through a youth's denial. Drug recognition techniques and chemical testing, covered in chapters 12 and 13, also may be instrumental in confronting denial.

Client Interviews

An interview with the juvenile is much more in-depth than a self-report. In a national survey, juvenile probation professionals revealed that they regard interviewing skills as the most important skill for juvenile probation officers to possess upon hiring or to acquire early in their careers (Peters, 1988). The ability to obtain valuable information from a juvenile through an interview is useful in all agencies dealing with youth. ***Still, like the self-report, the interview must be used with other information gathering tools and not as a sole source.*** Properly conducted, the interview can reveal valuable information about the youth that cannot be determined through other means. It also may set the foundation for a positive relationship with the juvenile.

Collateral Interviews

This involves gathering information from individuals who are or have been closely associated with the youth. Again, reliability is a concern with collateral interviews, and no information gained should be accepted as irrefutable "truth." When conducting collateral interviews, it is important to phrase questions so that individuals give **descriptive information**, rather than make **judgments** (APPA and NAPE, 1988). For example, a parent might be asked: "Has Andrea been going out with a different group of friends lately than she did in the past? Is she dressing differently; or, has she become unusually quiet or secretive?" This is preferable to asking a parent to make a judgment such as: "Do you have reason to suspect that Andrea is using drugs?"

Organizing the Interview

For assessment purposes, an interview should follow a systematic process with the interviewer in control. Questions should be generated prior to the interview addressing the content areas identified in Table 11-A.

A systematic process will facilitate gaining the most information in the shortest amount of time. Basic steps to the interview process have been formulated by both the American Probation and Parole Association (1988) and the National Center for Juvenile Justice (1991). The following five-step plan is an adaptation and integration of both approaches.

1. **Preparation**

   - Gather all relevant existing information prior to the interview.
   - Generate questions from existing information.
   - Determine the most comfortable and least intimidating environment possible for the interview.
   - Be aware of and remain focused on the goal of the interview (consider the different goals of client, victim and collateral interviews at intake as compared with interviews conducted as part of case management or crisis intervention).

2. **Introduction**

   - Be aware of the impact the juvenile justice milieu may have on the interviewee.
   - Attempt to make the youth feel as comfortable as possible (e.g., establish eye contact, use a friendly tone of voice, use language the youth will understand).

- Explain the purpose of the interview, role of the interviewer, and expectations of the interviewee.
- Discuss confidentiality issues.
- Try to involve the interviewee in achieving the goal of the interview, making the youth feel helpful.

3. **Development**

- Begin with basic, unobtrusive questions such as full name, address, and school status. Then gradually introduce more personal questions as rapport develops.
- Ask predetermined questions in the areas identified in Table 11-A, and avoid being sidetracked.
- Consider the educational level and cultural background of the interviewee and adjust your vocabulary and speech to facilitate mutual understanding.
- Probe beneath superficial answers, being cautious not to probe to the point where the flow of communication is stopped or rapport damaged.
- Be perceptive of and inquire into gaps or inconsistencies in answers.
- Observe and make note of the client's nonverbal cues, interpersonal skills, verbal skills, and communication style.
- Do not ask leading questions. Never try to get certain answers out of the interviewee.
- Employ effective listening skills. Make sure interviewee does most of the talking. Interviewer conversation should be limited to asking questions and making empathic responses.
- Ask open-ended questions that allow the interviewee to narrate from his/her own point of view.
- Never interrupt, cut off answers, or finish sentences for the interviewee. Allow temporary silences.
- Try to remain concerned, but neutral.
- Accept interviewee's attitudes and feelings without being or appearing judgmental.

4. **Termination**

- Reinforce rapport with the interviewee.
- Summarize findings briefly or have the interviewee make the summation. If the information received involves facts gained from a witness, it may be better for the interviewer to do the summary to clarify that the witness was properly understood. If the interview was called to work out an issue, it is better to have the interviewee make the summation, to ensure that the goals of the interview were accomplished.
- Confirm any details regarding follow-up, such as another meeting, or fulfilling a request for physical evidence to be furnished by the interviewee.
- Invite and answer appropriate questions.

- Explain to the interviewee what s/he might expect next.

5. **Post-interview**

- Attempt to verify the information gained in the interview.
- Conduct further investigations, if necessary, to clear up discrepancies.
- Keep readable, organized notes in the client's case file.

Testing Instruments

Testing instruments can include **standardized interviews, structured interviews, or self-administered tests.** These techniques have been developed to assess individuals in multiple areas (e.g., personality, aggressive tendencies, social skills, stress factors, risk for substance abuse, intellectual capacity). Most of the instruments have been formulated and standardized through a systematic research and validation process.

An advantage to using standardized instruments is that information regarding their reliability and validity may be available. If an instrument has high **validity**, it will accurately measure what it intends to measure. An instrument that has high **reliability** will produce stable results; the test's outcome will not be significantly influenced by fluctuating or extraneous factors (such as a client's mood or the time of day). It is important that the instrument intended to assess youth in the juvenile justice system be **normed**, or validated, with the juvenile offender population. However, even when the credibility of these tests has been proved, test outcomes may be affected by other factors, including:

- attempts by youth to "slant" the outcome by deliberately answering questions incorrectly;
- ability of youth to read and understand the test items;
- motivation of youth to take the test seriously; and
- cultural sensitivity of the test.

It has been stressed previously that the assessment process works best when a variety of techniques is used. Testing instruments are a ***tool*** to guide decision-making efforts. As with all other techniques, the limitations of these tests must be realized. It is essential that staff members who are given the responsibility to administer and interpret them be fully trained.

Standardized and Structured Interviews

The **standardized interview** differs from the **structured interview** in that it limits the interviewer to a prescribed style and list of questions. Using the standardized interview, the interviewer is restricted from freely probing beyond conflicting or superficial answers, sometimes considered a disadvantage of this technique. An advantage is that this interview may be more credible than the structured interview, a vital consideration when results are used to support a decision (e.g., in court proceedings or treatment referrals).

Minimal training is usually required to administer standardized interviews. To administer structured interviews, interviewers must have knowledge and experience in working with youth as well as expertise in interviewing. The goal of this interview is to obtain as much information as possible about the youth. Therefore, the interviewer is *expected* to probe beyond superficial or conflicting answers. Structured interviews usually take more time to administer and interpret than standardized interviews.

Table 11-A

COMPONENTS OF AN ASSESSMENT INTERVIEW[2]

1. Drug History
   - frequency, intensity, duration of drug use
   - primary drug(s) of abuse

2. Delinquency History
   - number and nature of prior arrests
   - institutionalization history
   - history of failure to appear, violation of probation, runaways or escapes

3. Mental Status Exam
   - orientation to person, place, time
   - ability to concentrate on interview process
   - appropriateness of response

4. Treatment History
   - number and type of prior treatment experiences
   - treatment outcome including length of abstinence, relapse, etc.
   - nature of referral to treatment - voluntary, civil commitment, court-ordered
   - any suicide attempts, number, circumstances

5. Family History
   - history of neglect, abuse
   - history of criminality, substance abuse, or psychiatric disorders (particularly depression or suicide) by parents or siblings

6. Personal History
   - youth's assessment of critical life events
   - youth's assessment of family dynamics, peer group

7. Educational History
   - highest grade completed or if drop-out, reason for leaving school
   - adjustment problems, learning disabilities

8. Medical History
   - health disorders, including AIDS risk assessment
   - any medications (taken previously or currently)

9. Positive Support Systems
   - hobbies, interests and talents
   - opportunities in the community
   - positive peers or family members

[2] Adapted from *National Narcotics Intervention Training Program.* (1988, unpublished). American Probation and Parole Association and the National Association of Probation Executives.

Self-Administered Tests

Usually, less staff skill is required with **self-administered tests** than structured or standardized interviews. On the other hand, these tests require some motivation and reading ability on the part of the juvenile who is being assessed. Many instruments are written at the fourth or fifth grade reading level. Moreover, self-administered tests are only credible if the juvenile is willing to answer the questions honestly. However, written tests can be helpful for those who have difficulty speaking directly about themselves. These instruments provide an indirect and, for some, less threatening method of self-disclosing information. They also eliminate the possibility of interviewer bias and, like other standardized instruments, can be scored and quantified. Reliability and validity measures usually are available as well.

There are numerous standardized testing instruments available to assess youth in a variety of areas. When selecting these instruments, agencies should first decide what areas they must assess and limit their choices to instruments that are designed to address those areas. They then should consider the following factors in reviewing the various instruments:

- ease of use;
- expertise and time required of staff to administer and score test;
- training required to administer and score instrument, and training available;
- possibility of bias (cultural or in administration of the test);
- validity (Have studies proved that it accurately measures what it was intended to measure?);
- reliability (Have studies proven that if the test were repeated with the same person, the results would be the same?);
- credibility of test among members of the judiciary and treatment professionals;
- adaptation of test to MIS input and retrieval;
- whether the test has been normed with a population of juvenile offenders;
- availability of test in languages other than English;
- motivation level, verbal and readings skills required of youth to be assessed;
- propensity for test to be manipulated; and
- average cost per test.

INTEGRATION OF ASSESSMENT INFORMATION

The assessment process is usually conducted in pieces. Records are reviewed, interviews conducted, and standardized tests administered. Often each of these tasks is performed by a different person. Still, these pieces eventually must be integrated so the juvenile may be regarded and treated as a whole person. Therefore, the assessment process often will require a team approach. As mentioned previously, the use of drugs often is implicated as the primary cause of a youth's problems and treatment plans are developed accordingly. Drugs become the focus, and sometimes the sole issue, in treatment. Yet drug involvement is often an indicator of many *other* problems in a juvenile's life. In fact, drug use is more often found to be a consequence of these other problems than an antecedent to them (Kandel, 1981). Thus, drug use must not be looked upon as the sole focus in any

treatment plan. In Chapter 1, risk factors that tend to lead to substance abuse and delinquency were identified and discussed. Assessments can be helpful in uncovering these debilitating areas in a child's life. These areas must then be confronted in the development of treatment goals and plans.

While it is considered ideal to assess and treat each child individually, such a goal is only realistic to a certain degree. It is usually necessary to formulate some means of classifying youth to guide the decision-making process for each case. A client management classification system is often used for this purpose in the juvenile justice system.

Client Management Classification System

After all relevant, available information about a juvenile has been gathered, a decision must be made. In some cases that decision may involve two alternatives only (e.g., to detain or not to detain, to refer or not to refer to court). In other agencies, a variety of options must be reviewed and a case plan developed (e.g., What is the most appropriate method of intervention? What special programs offered by the institution might be beneficial?). When the decision to be made is complex and time consuming, it may be helpful to systematize and simplify this process. For this purpose, many agencies develop client management classification systems to categorize youth into different areas (e.g., those requiring minimal, medium, or intensive supervision; those who do or do not present a threat to the safety of others in the institution; those who are high, medium, or low risk for substance abuse). Depending upon the agency's objectives for the assessment, a classification system may or may not be necessary. Classification systems vary in complexity; the one devised should correspond with the complexity of the decision to be made. In some cases, youth may be classified into two categories only, users and nonusers, simply to determine the need for further evaluation of drug involvement (e.g., whether or not to order urinalysis or place youth in a drug education program). On the other hand, when making case plans involving treatment and supervision decisions, an intricate, detailed classification system will be appropriate.

Assessment Management Files

To assist in integrating information for case management purposes, and to facilitate interagency cooperation in providing a continuum of services for the juvenile, it is recommended that all assessment data be entered into a database. If this is not possible, the information should be kept in a cumulative client file. The National Task Force on Correctional Substance Abuse Strategies recommends that the following information be kept in the assessment management file and/or database:

- client demographics;
- juvenile delinquency history (e.g., arrests, dispositions, status offenses, delinquent offenses, institutionalization history);
- assessment results in each area evaluated;
- recommended interventions;
- interventions used;
- progress data;
- termination data; and
- reassessment data.

All recorded information must be kept confidential according to applicable federal, state, or administrative regulations.

CONCLUSION

While use of all means to gather pertinent information regarding a youth's drug involvement will result in the most comprehensive and accurate assessments of youth, it is not always practical or appropriate for an agency to assess all areas thoroughly. The objective for the evaluation will dictate how extensive the assessment process must be. If the objective is to screen drug-using youth from the nonusers, a simplified approach is probably adequate. This might consist of an administrative review of the juvenile's prior offenses and institutionalization history, a brief interview with the juvenile and his/her parents, and a reliable but easily administered standardized testing instrument. For purposes of recommending treatment, a more complex assessment is necessary to assess the severity of the drug problem and possible contributing factors in the juvenile's life. Substance abuse issues should never be the sole focus of a youthful offender's treatment plan. Those involved in the rehabilitation and supervision of juveniles will want to use the assessment process to gather as much information as possible about the individual, within limits of available resources, agency policy and the law.

Staff who are involved in this process must be thoroughly trained in assessment procedures if program effectiveness and credibility are to be achieved. Dembo (1990) contends that youthful offenders often perceive the juvenile justice system as an adversarial environment; such an atmosphere is not conducive to helping youth. Delinquents "who believe in the integrity of the screening/triage unit, and in the calibre [*sic*] and sincerity of its staff, are more likely to share information about painful and sensitive topics and experiences which will permit staff to better identify their needs -- and to link troubled youths with relevant helping services." (Dembo, 1990).

Finally, interacting with other agencies and systems to establish a continuum of services for youth can greatly enhance the assessment process. Through cooperation and the exchange of information, a support network for the youth is formed which may be better equipped to respond to the needs of the youth than a single agency. More appropriate decisions can be made in a more timely manner through a continuum of services; it is recommended that systems work together to adopt this approach.

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CHAPTER 12

DRUG RECOGNITION TECHNIQUES

DRUG RECOGNITION TECHNIQUES[1]

INTRODUCTION

In chapter 11, assessment skills and instruments were presented as a method of recognizing youth with substance abuse problems. Another method of identifying drug-involved youth is drug recognition techniques. This evaluation method was developed originally by the Los Angeles Police Department as a result of frequent encounters with impaired drivers. These motorists clearly were not functioning well, but they did not have a blood alcohol level that was high enough to result in the manifestations of impairment the officers were seeing. Law enforcement officers assumed these motor vehicle operators were under the influence of other drugs. However, substantiating that fact was difficult in a traffic arrest situation. In response to this problem, drug recognition techniques were developed to help officers identify drug-impaired motorists. Since then, the techniques have been applied in many other settings, especially community corrections.

Drug recognition techniques also have been adapted for use in the juvenile justice system. Personnel at the Orange County Probation Department in California have applied drug recognition techniques to their clients for over 15 years and used their findings to greatly expand the period for detecting drug use. These findings have been used by Orange County Supervising Probation Officers Joan Merritt and Bob Swearingen to develop a protocol and training program that broadened and refined the application of drug recognition techniques for community corrections. This was adapted by the American Probation and Parole Association (1988) for a curriculum on Drug Recognition Techniques for juvenile justice practitioners. The drug recognition process can be very useful in identifying youth who are under the influence of illegal substances or who have used drugs recently. In some instances, these techniques may be used as the only means of drug detection. In other situations, they may accompany assessments as an initial method of screening, followed by urinalysis to confirm drug use.

After reading this chapter participants will be able to:

- assess the value and practicality of implementing a drug recognition techniques program in an agency;
- delineate the reasons for using drug recognition techniques;
- list the twelve steps of the drug recognition process;
- discuss the appropriate uses of results from drug recognition techniques;
- enumerate the equipment and supplies necessary to implement a drug recognition techniques program;
- identify staff needed and training required for this program; and
- analyze the costs and benefits of implementing the program.

[1] The information in this chapter is condensed from a training manual, *Drug Recognition Techniques Training Program*, prepared by the American Probation and Parole Association in Cooperation with the National Highway Traffic Safety Administration. The development of this manual was sponsored by the Office of Juvenile Justice and Delinquency Prevention.

It should be noted that participants will not acquire the expertise needed to *perform* drug recognition techniques by reading this chapter. Formal training is required in order to use these techniques in the field.

A DESCRIPTION OF DRUG RECOGNITION TECHNIQUES

Drug recognition techniques are a systematic and standardized evaluation process to detect observable signs and symptoms of drug use. These include, among others, indicators such as dilated or constricted pupils, abnormal eye movements, elevated or lowered vital signs, and muscle rigidity. All the areas evaluated are observable physical reactions to specific types of drugs. The three key elements in the drug recognition process are:

- verifying that the person's physical responses deviate from normal;
- ruling out a non-drug related cause of the deviation; and
- using diagnostic procedures to determine the category or combination of drugs which are likely to cause the impairment.

By applying drug recognition techniques, a skilled staff member can determine, with a high degree of accuracy, whether a youth has, or has not, used drugs. It is also possible to assess the category of drugs that has been ingested. *It is not possible to identify specific drugs within a given classification.* For example, cocaine and amphetamines are both central nervous system (CNS) stimulants and produce the same observable symptoms, including dilated pupils, agitation, and elevated blood pressure, temperature, respiration and pulse. These manifestations, among others, provide the data needed by a trained staff member to determine if the youth has used a CNS stimulant; but it is not possible to distinguish whether the substance used was cocaine or amphetamines. That determination would require an admission by the youth or urinalysis, if necessary.

Drug recognition techniques can determine if a youth is currently under the influence of substances or has used a particular drug or combination of drugs for up to 72 hours. However, it is not possible to determine the amount of the drug that was consumed; nor is this usually possible through chemical testing.

WHEN TO USE DRUG RECOGNITION TECHNIQUES

Drug recognition techniques are a tool for early identification of drug use among criminal justice offenders, including juveniles. They are appropriate as a screening process to determine which youth should or should not be tested with urinalysis. In some situations, drug recognition procedures may be the only screening method used. They can be a valuable device within the entire spectrum of the juvenile justice system. Their use is recommended in the following parts of the juvenile justice system (Office of Juvenile Justice and Delinquency Prevention, 1990):

- **Juvenile intake.** Drug recognition techniques are used to assess symptoms associated with drug influence, overdose, and withdrawal. This information is used to determine possible risks youth may pose to themselves or others and the need for referral for medical treatment or other services. The evaluation also may help to determine whether a youth should be released or detained. Intake is an important time for using drug recognition techniques, whether it occurs in a juvenile detention program, a community corrections setting, or an institution.

- **Investigation.** Drug recognition techniques are useful in detecting current or recent use of drugs by a youth. This information is essential in the total process of identifying drug-involved youth, evaluating their needs, and recommending appropriate intervention strategies.

- **Field supervision.** Recognition techniques can enhance case management by allowing officers to assess a youth's drug involvement during any contact with that youth. As a result of a drug evaluation, the officer may determine appropriate action, such as confirmation through urinalysis, treatment referrals, or violation proceedings.

- **Institutional supervision.** Evaluation for drug use is appropriate when youth return from furloughs or when behavior changes indicate the possibility of drug involvement. These techniques can provide information to staff on current or recent drug use among juveniles.

VALIDITY OF DRUG RECOGNITION TECHNIQUES

Based on evaluations conducted in several settings, trained personnel are capable of accurately detecting drug use with drug recognition techniques. In one experimental study, subjects volunteered to consume a variety of drugs. These included different amounts of marijuana, central nervous system depressants, or central nervous system stimulants. Some participants were given pills or cigarettes containing no drugs. The police evaluators in this study correctly identified persons who had taken no drugs 95 percent of the time. Among subjects who received the drugs, the evaluators were able to detect the presence of a drug 98.7 percent of the time. They also accurately identified the category of drugs taken by 91.7 percent of these subjects.

Another evaluation involved using the recognition techniques on people who were arrested for driving under the influence or for drug use. In some cases they had used only drugs, and in other instances they had consumed a combination of drugs and alcohol. In these subjects, the officers correctly identified at least one of the drug categories used by the subjects 87 percent of the time, as confirmed by laboratory testing of blood samples.

Drug evaluations to detect drug influence or recent use have been validated on juvenile and adult probationers by Orange County deputy probation officers for over 15 years. Results have been repeatedly confirmed by urinalysis and client admission. The validity of the evaluation has been supported by client admission even in cases where subsequent urinalysis results were reported as *negative* because the amount of drug remaining in the system was not detectable by testing.

Thus, when conducted by trained and qualified personnel, drug recognition techniques are a valid tool for identifying drug use. Furthermore, they can determine, with a high degree of accuracy, the category of drugs used.

ADVANTAGES OF DRUG RECOGNITION TECHNIQUES

Given the reliability of this process, there are several important reasons for considering the use of drug recognition techniques in a juvenile justice agency.

- **Cost-benefit.** It is a highly dependable method of assessing whether or not a youth has used drugs. It does require initial training of staff, which can be costly. However, it requires only a few pieces of inexpensive equipment, and most offices can be modified easily to provide the space needed for

the procedures. If there is no indication of current or recent drug use, there is little need for further screening using the more costly technique, urinalysis. It is also possible, through drug recognition techniques, to identify the category, or combination of categories, of drugs consumed. Therefore, if confirmation through urinalysis is necessary, the testing can be limited to only those drugs that are known to cause the observable effects.

- **Immediacy.** If a youth is using drugs, it is imperative that appropriate interventions be undertaken as soon as possible. It can take from a few minutes to several weeks to receive the results of urinalysis, depending on the type of instrumentation used and arrangement for processing tests. Therefore, there may be a long period during which no steps can be taken to deal with the problem. With drug recognition techniques, a trained officer can determine at once, with a high degree of accuracy, whether or not a youth has used drugs. If so, appropriate treatment interventions and/or sanctions can be implemented immediately.

- **Minimally intrusive.** Drug recognition techniques rely on observations of body parts and functions (such as the eyes and certain behaviors), that are visible to anyone at any time. They do not require the collection of body fluids or the observation of bodily functions that are considered private.

- **Systematic and standardized.** The process includes the evaluation of several observable signs and symptoms that are reliable indicators of drug use. It does not depend on a single indicator, nor does it rely on manifestations that have not been verified to correlate with drug use. While determination of drug-involvement relies on observations of a trained evaluator, these techniques are performed in the same way for every juvenile. Thus, the possibility of bias or error by the examiner is diminished as staff become experienced at drug recognition techniques.

DISADVANTAGES OF DRUG RECOGNITION TECHNIQUES

Despite the advantages of drug recognition techniques, there are some drawbacks as well. When deciding whether or not to implement this procedure in an agency, decision-makers should be aware of these factors.

- **It requires rigorous and somewhat expensive initial training.** Thus, some agencies will find that there is a substantial financial outlay in starting a drug recognition program if the training is provided solely by the agency. If training is offered on a regional basis, agencies with limited budgets may be able to send only a few staff members.

- **The specific drugs ingested cannot be determined.** Drug recognition techniques allow a trained evaluator to determine the category or combination of drugs that have been ingested. Within that category, the particular type of drug cannot be determined. In some cases there are both legal and illicit drugs within the same classification.

- **Not all drugs are equally detectable.** The techniques used alone may not be conclusive in determining alcohol and use of some other drugs that have little effect on the physical responses measured by drug recognition techniques. Alcohol use does not significantly alter pupil response, but it may be suspected by the presence of a characteristic smell, behaviors and

nystagmus. A breathalyzer can be useful to confirm use and determine blood alcohol levels. However, drinking and drug use are not mutually exclusive, and a positive alcohol test does not rule out recent drug use.

- **Chemical testing also may be needed.** For certain purposes, detecting the presence of drugs through drug recognition techniques is sufficient. For example, an officer might confront the youth about drug-related behavior in a counseling session. However, if the youth were to deny drug use, it might be necessary to have toxicological evidence to apply sanctions, such as therapeutic interventions, or pursue any legal alternatives. Courts are more likely to accept the scientific validation of urinalysis than drug recognition techniques, especially if the results will be used to restrict a youth's freedom.

EQUIPMENT, SUPPLIES AND SPACE REQUIREMENTS

A few pieces of equipment are necessary to conduct the drug recognition techniques properly. The list on the following page details necessary types of equipment, their purpose, and approximate costs. These costs may vary regionally and over time. In some cases, as new devices become available (for example, new methods for determining blood alcohol levels), they should be considered based on their cost, accuracy and convenience.

A room that can be totally darkened is needed for conducting the darkroom examination of the eyes, nose, and mouth. Sufficient space also may be needed for the walk and turn test, in which the juvenile must walk ten steps on a line to check for impaired motor activity.

STAFF REQUIREMENTS

It is preferable that all personnel working directly with youth in an agency be able to conduct drug recognition techniques. If so, the procedures can be implemented immediately when drug use is suspected or during regular case management interventions. However, if it is not possible for all personnel to be trained, having a smaller, core group of staff who can use the techniques is acceptable. It would be least advisable to have only one or two staff members trained, especially in a large agency. This would place an undue amount of responsibility on too few staff, possibly resulting in a burden, which would ultimately affect the success of the program. It also would result in program interruptions if the few trained staff members are not available when drug recognition techniques are needed.

Training by a Certified Drug Recognition Expert is needed to qualify staff to implement drug recognition techniques. This consists of a minimum of 40 hours of training, including classroom instruction and field experience.

The field experience consists of practice in conducting each of the twelve steps of the process with feedback and validation by the instructor. To confirm results, urinalysis can be used to verify trainees' skill levels.

THE DRUG RECOGNITION PROCESS

The drug recognition process can be broken down into twelve components. These comprise the systematic process through which identification of the drug categories are made possible. The components must be rigorously adhered to and practiced in order to preserve the credibility and integrity of the process. The components are:

Table 12-A

EQUIPMENT AND SUPPLIES

Equipment	Purpose	Approximate Cost
Pupilometer	Measures pupil size	$ .50 - $10.00
Penlight	Illuminates pupils and nasal and oral cavities	$1.75
Narc light or Ski light	Magnifies possible illegal injection sites	$14.95
Sphygmomanometer and Stethoscope	Measures blood pressure	$23.95
Thermometer	Determines body temperature	$18.25 (digital)
Breath analyzer	Determines blood alcohol content	
-Hand-held units		$300 - $800
-Individual chemical tests		$1.45 each

(The breath analyzer equipment is optional. Alcohol consumption can be detected by these methods for only a few hours. Use of alcohol detection procedures may depend on the settings and situations in which drug recognition techniques will be used.)

Source: American Probation and Parole Association (1988). *Drug recognition techniques training program participant manual.*

These costs may vary over time and by geographic areas.

1. Drug History

This is a structured series of questions concerning prior drug involvement.

The drug history may provide information about the youth's past drug use, the level of use, drugs of choice, and preferred methods of ingestion. This can help reveal information about drug use patterns that may be useful in the evaluation process. Appropriate intervention responses will be based, in part, on what is learned about the youth's drug history.

Some agencies include questions about drug history on the intake forms. In other cases, they are a part of a total assessment. It is important to take a drug history on every youth for whom drug recognition procedures are to be used; the information should be obtained or verified by the person conducting drug recognition techniques. See Chapter 11 for more information on assessments.

2. Breath Alcohol Test

This is used to determine the youth's blood alcohol level and to rule out alcohol as the only cause of the youth's impairment. If the concentration of alcohol in the youth's system is not sufficient to explain the level of impairment observed, the presence of other drugs should be suspected, and the evaluation procedures should be continued.

Alcohol is eliminated from the body in a short time. The maximum duration of detectability is usually twelve hours or less. The breath alcohol test can be helpful during intake procedures in detention and community corrections, field supervision encounters, and in institutional placements, especially when youth return from furloughs. In situations where a youth has been under direct supervision for at least twelve hours, and has had no opportunity to consume alcohol, it is not necessary to use the breath alcohol test.

3. Divided Attention Psychophysical Tests

These tests provide additional information and documentation of impairment from drugs. Youth will only show signs of impairment on these tests while they are under the influence of a drug. This is very important in arrest situations where evidence of impairment is needed, such as Driving Under the Influence. In other circumstances, where any use of drugs is forbidden, it may be acceptable to omit this step. This might be the case with a youth on probation, whose orders clearly state that the use of illegal drugs is not allowed. Whether or not those drugs are causing impaired functioning at the time of the examination is not the central issue. Establishing that youth have consumed drugs, through evidence obtained at other points in the evaluation process, may be sufficient.

Four tests that show evidence of impaired function are used if this step is needed.

- Rhomberg Balance is a test in which the youth is asked to tilt the head back with his or her eyes closed, and stay in that position for thirty seconds. Evidence of impairment includes unsteadiness, tremors, swaying, and muscle tension, among others.

- Walk and Turn is administered by asking the youth to walk on a straight line, using heel-to-toe steps. When reaching the end of the line, the youth must turn while keeping one foot on the line. Impaired persons are likely to lose their balance, step off the line, raise their arms for balance, make the turn improperly, and make other errors.

- The One Leg Stand is administered by telling the youth to stand straight and hold one foot off the ground for thirty seconds (in a stiff-legged manner). When under the influence, the youth is

likely to sway, hop, put the foot down, raise the arms for balance, show body tremors, and exhibit other signs of impairment.

- The Finger to Nose Test instructs the youth to bring the tip of the index finger to the tip of the nose while the eyes are closed. Evidence of impairment includes body tremors, swaying of the body, inability to touch the tip of the nose, or using the wrong finger.

4. Medical Questions and Initial Observations

This is a structured set of questions, specific observations, and simple tests used to examine the youth closely and directly.

A set of questions should be asked to determine if there are any medical conditions or treatments that may be causing impaired functioning. It is very important to be sure that any symptoms noted are not a result of illness, injury, or prescribed medications.

One major purpose of the preliminary examination is to begin systematically assessing the youth's appearance, behavior and speech for signs of possible drug influence or recent use. For example, is the youth very active or lethargic? Are there any problems with speech, such as slurring or being too talkative? Is there a detectable odor of alcohol, marijuana, or other substances? Does the youth appear unkempt and thin? Are there body tremors, signs of disorientation, heavy perspiration, or facial itching? These, and many other indicators of drug use, are observable in an interview with a youth. A systematic review of all possible symptoms should be done. If observed, these should be noted.

5. Examination for Muscle Rigidity

Part of the observation process should include watching the movements of the youth. Some categories of drugs cause hypertension of the muscles, and they will become very rigid. This can be noticed in the way the youth walks, and in general movements. Muscle rigidity may be present with the use of CNS stimulants, hallucinogens, and PCP.

6. Examination for Injection Sites

As a part of the initial observations, evidence of the use of hypodermic needles for injection of some drugs may be found by examining for scars on veins, usually along the arms, legs, and neck.

If an injectable drug is suspected and injection sites are not easily visible, a ski light (or narc light) can be used to magnify and illuminate sections of skin. Narcotic analgesics are most likely to be injected. However, it is possible to inject some forms of all other drug categories, except inhalants and cannabis.

7. Vital Signs Examinations

Blood pressure, temperature, respiration, and especially pulse rate should be checked systematically.

Certain categories of drugs will cause the vital signs to be elevated or to be lower than usual. Some or all of the vital signs are likely to be increased with the use of CNS stimulants, hallucinogens, PCP, inhalants, and cannabis. With CNS depressants and narcotic analgesics, they are more likely to be lowered. It is important to be aware that other conditions, besides drug use, can cause changes in vital signs. Therefore, it is never acceptable to rely on this indicator without substantiating it with evidence from the other steps in this process.

A second pulse should be taken after step 9 (Examination of the Eyes). Undergoing a screening for drug use can generate anxiety and cause the pulse to be elevated. Thus, a second pulse is taken later in the

process, when the youth may be more relaxed, to be sure a normal reading is obtained.

8. Darkroom Examinations

In a darkened room, a systematic check is completed of the size of the pupils, the reaction of the pupils to light, and evidence of ingestion of drugs by nose or mouth.

Certain categories of drugs affect the eyes in predictable ways. After the eyes have adjusted to the darkened room, a penlight is used to observe their reaction to light. The pupil is likely to be dilated with the use of CNS stimulants and hallucinogens, and will sometimes be dilated with inhalants and cannabis. Pupils are likely to be constricted from the use of narcotic analgesics. The pupils will react to light more slowly than usual with the use of CNS depressants and CNS stimulants.

By illuminating the nose and mouth it is sometimes possible to detect the presence of debris from marijuana or damaged nasal tissues from the ingestion of cocaine.

9. Examination of the Eyes

This includes **horizontal gaze nystagmus, vertical nystagmus** and a check for **strabismus.** These tests are performed by simply asking the youth to follow an object, such as the end of a pencil, with his or her eyes without moving the head.

Certain categories of drugs induce **nystagmus,** an involuntary jerking that may occur as the eyes gaze to the side or as they are elevated. The presence of nystagmus, and the point at which it becomes observable, can indicate the possible presence of certain categories of drugs and the extent to which they may be affecting the youth. PCP, CNS depressants, CNS stimulants, and Inhalants are categories of drugs that may cause horizontal or vertical nystagmus.

When **strabismus** is present, indicated by the youth's inability to converge the eyes toward the bridge of the nose (cross eyes), the influence of certain categories of drugs can be suspected. CNS depressants, PCP, inhalants, and cannabis are likely to cause this problem.

Take the youth's pulse for the second time after examining the eyes.

10. Youth's Statements and Other Observations

Based upon the information gathered in the nine previous steps, the evaluator will have a preliminary opinion about whether or not the youth has used drugs and which category may have been used. If drug use is suspected, the youth should be interviewed about the drug or drugs involved. If the youth verbally admits the use of illegal drugs and confirms the type of drug(s) used, this may be sufficient in some situations to proceed with planning for interventions. However, if legal proceedings are involved, or if dictated by agency policy, it may be necessary to confirm the findings with urinalysis before responding to drug use.

11. Opinions of the Evaluator

The observations and evidence obtained during the preceding steps enable the evaluator to reach an informed conclusion concerning:

- whether or not the youth is under the influence of a drug or has used drugs recently; and if so,
- the category or combination of categories of drugs that is the probable cause of the youth's impairment.

The evaluator's opinion will summarize the results of the evaluation and provide corroborative information.

12. Toxicological Examination

If drug use is suspected, urinalysis may be performed to confirm the evaluator's opinion. This provides scientific, legally admissible evidence to substantiate the conclusions made by the evaluator. However, if the evaluator does not find evidence of drug involvement through these techniques, urinalysis can be omitted, with a concomitant savings of both time and money.

This overview has highlighted the twelve steps in the drug recognition process. *Agencies wanting to develop this strategy as part of a drug-use identification program must be sure that staff are trained by a certified drug recognition techniques expert. This cannot be accomplished by merely having staff read this chapter or other material about the procedures.* There needs to be a commitment that staff will develop a high degree of competency and follow the procedures carefully to maintain the integrity and validity of the program.

THE RESULTS OF DRUG RECOGNITION TECHNIQUES

The pharmacology of drugs was discussed in detail in Chapter 3. It is very important that those who use drug recognition techniques have a thorough understanding of that information. It is presented and reviewed in drug recognition techniques training programs.

The following chart summarizes the findings that are likely to occur for each category of drugs when drug recognition techniques are used. Training and experience in the use of these techniques will help evaluators become very familiar with these procedures.

CONCLUSION

This chapter has presented an overview of drug recognition techniques. As stated, this information is not sufficient to prepare participants to conduct drug recognition procedures. Rather, it provides the information necessary to determine whether or not these procedures will be included in an agency's drug-use identification program.

The following information, presented in this chapter, is important in considering the implementation of drug recognition techniques:

- the point at which the techniques may be used within the structure of the juvenile justice system;
- the validity of the procedures as demonstrated through evaluation studies;
- the advantages and disadvantages of these techniques;
- requirements for staff, equipment, supplies and space to implement the program;
- the steps in conducting drug recognition techniques; and
- the expected indicators for each category of drugs which can be detected through the use of drug recognition techniques.

The implementation of these procedures must be considered carefully and grounded in the agency's needs, resources, and established program purpose.

Table 12-B

DRUG RECOGNITION CHART

Factor	CNS Depressants	CNS Stimulants	Hallucinogens	Narcotic Analgesics	Cannabis	PCP	Inhalants
Pupil Size	Usually Normal	Generally Dilated	Generally Dilated	Severely Constricted	Normal or Perhaps Slightly Dilated	Generally Normal	Generally Normal
Horizontal Gaze Nystagmus	Generally Present	Possibly Present	Not Present	Not Present	Not Present	Present	Present
Vertical Nystagmus	Possibly Present	Not Present	Not Present	Not Present	Not Present	Present	Possibly Present
Lack of Convergence	Generally Present	Not Present	Not Present	Not Present	Present	Present	Present
Reaction to Light	Generally Slowed	Generally Slowed	Generally Normal	Very Little or No	Generally Normal	Generally Normal	Generally Normal
Pulse Rate	Generally Down	Generally Up	Generally Up	Generally Down	Generally Up	Generally Up	Generally Up
Blood Pressure	Generally Down	Generally Up	Generally Up	Generally Down	Generally Up	Generally Up	Generally Up
Temperature	Usually Normal	Generally Up	Generally Up	Generally Down	Generally Normal	Generally Up	Depends on Specific Inhalant
Respiration	Possibly Shallow	Possibly Rapid	Generally Rapid	Generally Slow and Shallow	Generally Normal	Generally Normal	Generally Normal
Muscle Rigidity	Not Present	Possibly Present	Possibly Present	Not Present	Not Present	Generally Present	Usually Not Present
Injection Sites	Not Usually (rarely) Present	Sometimes Present	Sometimes (Not Usually) Present	Often Present	Not Present	Sometimes Present (Not Usually)	Usually Not Found

The next chapter will discuss the use of urinalysis for detecting drug involvement among youth. It is a procedure which can be used alone or in tandem with assessments and drug recognition techniques.

REFERENCES

American Probation and Parole Association. (1988). *Drug recognition techniques training program participant manual.*

Office of Juvenile Justice and Delinquency Prevention. (1990). Drug recognition techniques: A training program for juvenile justice professionals. *Juvenile Justice Bulletin.* (Reprinted from *NIJ Reports*, No. 221.)

CHAPTER 13

CHEMICAL TESTING

CHEMICAL TESTING[1]

INTRODUCTION

While usually the most physically intrusive and most expensive of the three means of identifying drug use outlined in this manual, chemical testing is also the most accurate. Several scientific methods exist for detecting drug use in individuals (i.e., urinalysis, blood analysis, hair analysis, and saliva tests). Other techniques being developed, but not currently accepted by the scientific community, include voice recognition and perspiration testing. For detecting drugs other than alcohol, urinalysis is presently the most widely used method. Other means are less practical, mainly because of decreased reliability or greater cost. Urinalysis also may be used to detect alcohol consumption; however, the less invasive techniques of breath or saliva analysis are used much more frequently for this purpose. Because of their practical application to the juvenile justice system, chemical testing through saliva and breath analysis for alcohol, and urinalysis for drugs other than alcohol, will be the focus of this chapter.

Although chemical testing through saliva tests and urinalysis are extremely reliable for detecting drug use, its limitations must be recognized. These tests can reveal with accuracy that a youth has used drugs, but only within a certain time frame of ingestion. Alcohol is eliminated from the body within hours of ingestion (Milgram, 1990). Other drugs remain in the system longer, but detection can range from a few to about 30 days. Thus, chemical testing is dependable for identifying frequent users, but less frequent users of some drugs may be overlooked. Also, these techniques cannot determine *when* drugs were ingested or the level of intoxication, as in breath analysis for alcohol.

While considering the limitations of chemical testing, one must remember that all use of drugs, including alcohol, is illegal for juveniles. Furthermore, drug use is especially dangerous for young people, who are developing physically, socially, mentally, and emotionally. Drug use can impair, and even halt, the developmental process. It is also significant to note that most adults with substance abuse problems began using drugs when they were young (Wish, Toborg & Bellassai, 1988). Therefore, it is imperative that every effort be made to identify young drug users in the earliest stages of drug involvement.

In addition to identifying drug use, chemical testing can be a useful monitoring device and therapeutic agent in treatment. Again, however, practitioners must be aware of its limitations. While chemical testing is helpful to the rehabilitation process, effective treatment planning, case management, and proactive responses are necessary to make lasting gains with drug-involved youth. Chemical testing must be perceived as a ***tool*** in identifying and monitoring drug use. It should never be used alone, but in conjunction with other investigative techniques and rehabilitative strategies.

This chapter will provide information to assist participants in making informed decisions when establishing chemical testing programs. Critical

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[1] Contributions to this chapter were made by Lloyd Mixdorf, Juvenile Projects & Programs Director, American Correctional Association.

Much of this chapter has been excerpted from the American Probation and Parole Association's *Drug Testing Guidelines and Practices for Juvenile Probation and Parole Agencies* (1992). When reference is made to specific sections of the *Guidelines*, the corresponding guideline number is provided in parentheses.

considerations regarding the use of breath analysis, saliva tests, and urinalysis in the juvenile justice system will be outlined. Today, numerous methodologies are available for conducting chemical tests. Moreover, agencies may contract with commercial laboratories or establish on-site testing programs. No specific techniques will be recommended in this manual. Rather, objective, factual data will be offered. Agencies differ substantially in many ways, including size, philosophies, policies, clientele, and staff. As discussed in Chapter 7, needs and resources of both the agency and the community it represents must be considered in order to make sound decisions.

At the end of this chapter, participants will be able to:

- define the terms **quantitative** and **qualitative analysis, half-life, specificity, sensitivity, cutoff level, cross-reactivity**, and **chain of custody**;
- describe possible ways of adulterating or masking a urine specimen and identify methods agencies might use to lessen the risk of specimen adulteration;
- define passive inhalation and explain why it is difficult to test positive as a result of this means of ingesting marijuana;
- describe the basic principles underlying saliva tests, breath analysis, and ten methods of urinalysis;
- identify the most reliable and least reliable of the urinalysis methodologies as concluded through recent studies;
- identify six important considerations that should be included in a Request for Proposal;
- distinguish between onsite instrument testing, onsite non-instrument testing, and contracting for laboratory services;
- list six critical points for consideration when determining whether to use onsite or laboratory testing;
- discuss the importance of cutoff levels and steps agencies can take to be sure that its cutoff levels will be defensible in court;
- explain the importance of quality assurance and quality control (QA and QC) measures in both onsite and laboratory testing and give examples of QA and QC practices an agency should adopt;
- explain the purpose for and a process for undergoing proficiency testing for both onsite and laboratory testing;
- discuss the purpose for confirmation and discuss the three confirmation methods;
- list the seven essential steps in the chain of custody process and review at least two procedures recommended for each step;
- define **scheduled, random,** and **random scheduled chemical testing** and give an advantage and a disadvantage of each approach; and
- discuss the importance of responding to chemical test results.

CHEMICAL TESTING TERMINOLOGY

Before beginning a detailed discussion of chemical testing, certain terms associated with the field must be defined. These include **qualitative** and **quantitative analysis, half-life, specificity, sensitivity, cutoff**

level, cross-reactivity, adulteration or "masking", and passive inhalation.

A **qualitative chemical analysis** identifies whether or not a certain drug has been ingested, while a **quantitative analysis** determines the actual level of drugs in a system. Some technologies give qualitative results in the form of a number. These measurements may be misleading, however, as they tend to fluctuate depending upon many factors (e.g., metabolic rate, activity level, food consumption, variance in functions of testing equipment).

Half-life is the amount of time it takes for half the amount of drug present in the urine to be eliminated from the body. Many biological factors affect the duration of time a drug remains in one's system. A primary determinant is the water or fat solubility of different drugs. Drugs that are highly soluble in fat, such as marijuana and PCP, are stored in the body's fat and muscle tissue, and are slowly released to the blood. Thus, they have a long half-life. Certain biological activity may cause a sudden increase in the amount of stored drug to be released. This could explain why an individual who uses PCP may experience drug-related effects weeks or months after the drug is ingested (Coombs & West, 1991). Alcohol, on the other hand, which is very soluble in water, has an extremely short half-life. Most drugs of abuse are water soluble. Fat soluble drugs that have a long half-life (marijuana and PCP) may be easier to detect through urinalysis, but agencies should be aware that detection of such drugs does not necessarily indicate *recent* (within the last week) use. However, regular testing may reveal a drug-use pattern or the youth's drug of choice.

Specificity of a chemical test is a measure of its ability to differentiate between drugs that are detected. For example, a certain test can detect the presence of amphetamines/ methamphetamines in a urine specimen; a more *specific* test can determine which of these drugs is actually present.

Sensitivity refers to the lowest concentration of a drug that is detectable through a chemical test. Sensitivity is usually measured in nanograms per milliliter (ng/ml). A nanogram is one-billionth of a gram. The more *sensitive* a test, the greater its ability to locate the minimum amount of a drug in the specimen.

Cutoff level in a drug test is the amount of a drug or drug metabolite in a specimen that is required to achieve a positive result. When test results are positive, the amount of drug present is above the cutoff level; when negative, the amount of a drug or metabolite, if present, is below the cutoff level. The *cutoff level* is usually set above the test's sensitivity limit (Wish & Gropper, 1990). When a manufacturer sets a higher cutoff level, the possibility of the test producing a false positive (resulting in an erroneous conclusion that the specimen contains a drug) is reduced. However, higher cutoff levels also may result in the possibility of producing a false negative (resulting in an erroneous conclusion that the specimen does not contain a drug). To protect both clients and the agency, test manufacturers and laboratories are more likely to set a higher cutoff level, which may result in false negatives. Legally and ethically, this is a far less harmful practice than reporting false positives.

In addition to instrumentation error or excessively low or high cutoffs, other conditions that can produce a false positive result are **cross-reactivity, adulteration** or **"masking," and passive inhalation.**

Cross-reactivity refers to the ability of any substance other than the drug intended to produce a positive test result. For example, the consumption of poppy seeds may cause a positive result on an opiate test. However, this is unlikely due to the amount of

poppy seeds that must be ingested for a positive result to be produced. It is *possible*, but not likely, for over-the-counter medications to cross-react during chemical tests, producing a positive result. Therefore, personnel must ask clients whether they are taking any medications prior to analyzing tests. In addition, it is recommended that initial screens be confirmed (Wish & Gropper, 1990). Agencies also should ask the manufacturer to provide any information on cross-reactivity studies and results.

In attempts to "mask" the presence of a drug in their urine, offenders may ingest certain substances prior to giving a sample, or add substances to a sample. Reportedly, common substances offenders have used to attempt to mask their samples include (APPA, 1992):

- large quantities of water;
- acidic liquids (lime or lemon juice, vinegar);
- pectin;
- oriental tea;
- diuretics;
- coconut milk;
- bleach;
- bowl cleaner; and
- soap.

These practices may dilute the sample, but this will not affect the outcome of the drug test unless the specimen is near the test's cutoff level. Some of these methods can change the pH level of the specimen. To counter this, manufacturers have instituted a "buffer" stage in the testing instrument which brings the sample to the proper pH for effective analysis. Therefore, a change in the pH level ultimately will not affect the test results. "Masking" substances cannot dissolve a drug contained in a specimen. Therefore, after passing through the "buffer" stage, it is highly probable that drugs will be detectable regardless of the presence of an adulterant. Strict specimen collection procedures can eliminate most possibilities of adulteration. This is discussed under Chain of Custody (defined below) in the *Chemical Testing Protocols and Procedures* section of this chapter.

Attempts to "mask" a substance may cause a specimen to appear excessively cloudy, dark or clear in color, or of an irregular temperature. Temperature strips are sometimes used to record the temperature of a specimen. If personnel suspect that a specimen may be adulterated, a new specimen should be obtained from the youth. Again, adherence to strict collection and chain of custody procedures will lessen the chance of the offender adulterating a specimen. More detail on each of these topics will be presented later in this chapter.

Although it is rare, **passive inhalation** is another condition that can produce a false positive result; this has been reported to occur only in marijuana tests under extreme situations using reduced cutoff levels. Passive inhalation occurs when a marijuana cigarette is smoked and enters the system of a nonsmoking person through inhalation. For a drug test result to be positive because of passive inhalation, a large number of marijuana cigarettes must be smoked in the presence of the individual in a very small, nonventilated area. For example, nonsmoking individuals tested positive for marijuana after sitting in a small automobile for 30 minutes with two other individuals who smoked six marijuana cigarettes each. When a total of six cigarettes were smoked in the same automobile for 30 minutes, the passive smokers tested negative (Morland, et al., 1985). If agencies use cutoff levels approved by the National Institute on Drug Abuse, and endorsed by the American Probation and Parole Association, a positive result will not occur on a drug test because of passive inhalation. Recommended cutoff levels and other information related to this topic are discussed in detail later in this chapter.

Chain of custody involves policies and procedures that govern the testing of urine, saliva, or

breath in a manner that ensures that the sample and the results are correctly matched to the person intended and that the sample and results are not altered or tampered with from the point of collection through the reporting of results and disposal of specimens. While these procedures are much more complex when applied to the analysis of urine, they are applicable to saliva and breath tests as well. Chain of custody will be discussed in greater detail under the heading, *Chemical Testing Protocols and Procedures.*

CHOOSING A METHODOLOGY

Informed agency personnel must choose the methodology that best suits their needs, yet falls within the limits of agency resources. Also, the methodology selected must correspond with the drug-use identification program purpose. The selection process does not require a scientific background. To become adequately informed, agency personnel should consult several sources, including:

- professional organizations;
- established drug testing programs (e.g., TASC, hospitals, or other juvenile justice agencies);
- drug testing literature; and
- suppliers.

In addition to selecting the appropriate methodology, an agency also must decide whether they will conduct their testing onsite or contract with a laboratory for services. In this chapter, a discussion of onsite (at the agency or in the field) and contracted laboratory testing will follow the section on methodologies. In practice, however, this decision often will be made on the basis of an assessment of agency and community needs and resources (see Chapter 7) **before** a methodology is chosen.

Tests for Alcohol

Breath analysis and saliva tests are the most common techniques used to identify alcohol use. Alcohol can be detected through urinalysis, but this procedure is not as practical for three reasons: 1) obtaining a sample of urine is more intrusive than saliva or breath; 2) alcohol has the potential to evaporate from the urine, making it necessary to adopt very stringent methods for collection, storage, and other chain of custody procedures; and 3) urinalysis is generally more costly. If agencies find it cost-effective to test for alcohol along with other drugs using urinalysis, personnel should be aware of alcohol's evaporation tendencies and implement procedures accordingly. For instance, care should be taken to ensure collection cups are sealed tightly and immediately after the specimen is taken. Those analyzing the specimen also must take appropriate precautionary steps to avoid the possibility of evaporation. Further information on urinalysis can be found in the following subsection, *Urinalysis Methodologies.*

Breath Analysis

Breath analysis is based on the scientific principle that the quantity of alcohol in an individual's exhaled breath is directly related to the amount of alcohol in his/her blood (Milgram, 1990). By this principle, breath analysis actually determines the blood alcohol content (BAC) in one's system. BAC represents the most accurate measure of the level of alcohol in one's system; thus, it is a quantitative test. The breathalyzer procedure is very simple. The individual gives one full breath into a disposable mouthpiece; a numerical result is displayed within seconds. Breathalyzer equipment is rather expensive but there are few ongoing costs associated with it in terms of supplies and maintenance. Once purchased, many uses can be obtained from a single instrument; thus, the cost per test is substantially

lower than other methods when a large quantity of testing is done.

Saliva Tests

Saliva tests identify the presence of ethanol in one's system through a chemical reaction between saliva and certain reagents that produces a change in color (Milgram, 1990). Both quantitative and qualitative saliva tests for alcohol are available today. Quantitative tests usually cost more than qualitative tests. These differences are negligible, however. The more important factor is that while scientific evidence has proven that there is a correlation between blood and saliva alcohol levels in humans, normal physiological variability in these levels does exist. Therefore, when any action is to be taken based on the level of alcohol detected in an individual's saliva, confirmation through whole blood alcohol analysis may be necessary. Since any use of alcohol by juveniles is illegal, quantity of use may not be a primary issue.

Urinalysis Methodologies

After drugs are ingested, the body metabolizes them into compounds called **metabolites**. These metabolites of drugs and the actual drug can be eliminated from the body through the urine. Urinalysis is a technique for detecting these drug metabolites in one's urine. There are thousands of chemical substances in one's system. Therefore, in urinalysis, a drug of abuse must be separated from the thousands of other substances in the urine and then characterized in such a way that it can be identified with a sufficient degree of scientific accuracy. The two major procedures used to detect drugs in urine are immunoassays and chromatography. The most accurate, reliable result is achieved when these two procedures are used in combination: an immunoassay as an initial screen (first test) followed by analysis with a reliable chromatography technique (confirmation test).

Immunoassay techniques are presently the most widely used method of urinalysis because of their accuracy and reliability, cost-effectiveness, and adaptability to both onsite and laboratory testing. The six types of immunoassay technologies include: Radioimmunoassay (RIA), Latex Agglutination Immunoassay (LAIA), Enzyme Immunoassay (EIA), Fluorescence Polarization Immunoassay (FPIA), Kinetic Interaction of Micro Particles in Solution (KIMS), and Ascend Multi-Immunoassay (AMIA). These technologies may be performed by the agency, or through contract with an outside laboratory or agency. Chromatography techniques are used primarily in confirmation testing because they are more expensive than immunoassay procedures. Also, these techniques -- Thin Layer Chromatography (TLC), Gas Chromatography (GC), High Performance Liquid Chromatography (HPLC), and Gas Chromatography/Mass Spectrometry (GC/MS) -- must be performed by trained personnel in a certified laboratory. Therefore, agencies must contract for these services.

While a scientific background is not necessary, it is helpful to have a basic understanding of each methodology before selecting or using the instrumentation. The work of Wish & Gropper in *Drugs and Crime* (1990) provided much of the information for the following descriptions:

Immunoassays

The scientific principle underlying immunoassays depends on reactions which naturally occur between antibodies and antigens. An antibody is a protein that reacts only with a specific substance (an antigen). An antibody can be produced to react with a specific antigen, such as a drug. During the immunoassay procedure, a "tag" is chemically attached to a sample of the drug to be detected. The substance that contains the "tagged" drug is the antigen. Then the tagged drug (in the reagent), the untagged drug (in the urine

specimen), and the antibody are combined. The tagged drug and the untagged drug compete for binding sites with the antibody. If a high concentration of drug is present in the urine specimen, little of the tagged drug will be able to bind with the antibody. Depending on the technique, immunoassay tests measure the amount of tagged drug that was, or was not, successfully bound with the antibody. By comparing these results with measurements obtained from a sample containing a known amount of a drug, the presence or absence of drugs in the specimen is determined. As will be demonstrated in the following descriptions, immunoassay procedures developed by manufacturers vary primarily in the tag, or label, that is used to produce the reaction.

Radioimmunoassay (RIA) mixes a radioactively labeled drug with the antibody and the urine specimen. Both sets of drugs, those in the urine and those radioactively labeled, compete for binding sites on the antibody. After an incubation period, the presence or absence of drugs is revealed through the amount of radioactivity that remains after binding. Because radioactive materials are used and must be disposed of properly, this technique is less feasible for onsite testing than other immunoassay tests.

For the **Latex Agglutination Immunoassay** (LAIA) procedure, the drug in question is attached to latex particles. The latex particles are then combined with urine and antibodies. If drugs are present in the urine, they will compete with the latex-drug particles for binding sites with the antibodies and cause the latex to remain separate. In the absence of the drug, the latex particles are free to attach to each other and "agglutinate.".

In the **Enzyme Immunoassay** (EIA) technique, enzymes compete with the drugs in the urine for binding sites with the antibodies. The amount of enzyme activity after binding is measured to determine whether drugs are present in the specimen. If the drug is present, enzyme activity will produce a color change in the sample, which will be recorded by an instrument or through visual indicators.

Fluorescent Polarization Immunoassay (FPIA) employs a substance which glows (fluorescent tracers) attached to a sample drug as its antigen to compete with drugs in the urine to bond with antibodies. The presence of drugs is measured by the polarization (pattern) of light that occurs. When the drug is present, the tagged drug is not able to bind with the antibodies and remains free, resulting in lower levels of polarization.

Kinetic Interaction of Micro Particles in Solution (KIMS) attaches the drug being identified to micro particles. These particles then compete with drugs in the urine for binding sites with the antibodies. The micro particles will remain separated or will bind together, indicating the presence or absence of the drug found in the specimen. The instrument will measure the amount of light that is transmitted through the sample. A low level of light indicates the presence of drug in the sample (APPA, 1991).

The **Ascend Multimmunoassay** (AMIA) technology was developed recently. This method provides a technique with the ability to analyze multiple drugs simultaneously.

Chromatography Methods

Thin Layer Chromatography (TLC) was one of the first procedures used to screen for a broad spectrum of drugs. It is a labor intensive, yet inexpensive, procedure. The first step of the process is to extract, purify, and concentrate the drug to be detected. Then a certain amount of the concentrated specimen is placed on a TLC plate that has been coated with a fine, sandlike material (silica gel or alumina). Special solvents are used to separate the drugs on the plate. The solvent causes the drugs to disperse as they

separate. A series of color sprays is applied to determine the separated substances' locations on the plate. The position and color of the spots on the plate are compared to those of known drug standards on the plate. Particular drugs are present if both the location of the drug spot and the color match the standard.

Although TLC is inexpensive and capable of testing for many drugs simultaneously, there are significant disadvantages to this method. First, the accuracy of the technique depends largely on the ability of the technician. In addition, studies have found this process to be low in sensitivity, producing an unreasonably large number of false negative results (National Institute of Justice & Bureau of Justice Assistance, 1990). Therefore, agencies that contract for services are urged to ensure that laboratories use a technique other than TLC for both initial and confirmatory screening.

Like TLC, the **Gas Chromatography** (GC) process requires extracting the urine to produce a more concentrated specimen. A portion of the extract is injected into a special column on the chromatograph instrument. As the column is heated, drugs from the urine extract are swept along the column in gaseous form and "stick" to a liquid film on the walls of the column, causing them to separate and slow down. As the substances emerge from the end of the column, their retention time is measured by the instrumentation. Retention time is the time it takes for a drug to move through the chromatograph column. The presence of drugs is determined through the comparison of measured retention times of the sample to known standards. Gas chromatography can produce both qualitative and quantitative results.

High Performance Liquid Chromatography (HPLC) follows the same principles as GC, but uses liquids, rather than gases, in the column. Both qualitative and quantitative results may be obtained through this technique.

Gas Chromatography/Mass Spectrometry (GC/MS) is an advanced adaptation of GC. In this process, two procedures are used. The first is Gas Chromatography, which was discussed. During the Mass Spectrometry part of the procedure, an instrument called a mass spectrometer shatters the drug into pieces as it emerges from the GC column to form a fragmentation spectrum. During GC/MS, specific drugs are detected as the pattern of the fragmentation spectrum and the measured retention time are compared to known standards. The specificity of the fragmentation pattern can be compared to that of a fingerprint. Thus, this method is considered the "gold standard" in urinalysis. It is highly accurate, and is the only method of urinalysis that ***reliably*** produces ***quantitative*** results. Because GC/MS is an elaborate and time consuming procedure, it is much more expensive than other technologies; therefore, it is usually practical only when legally required for confirmation of positive results.

ONSITE TESTING AND CONTRACTING FOR SERVICES

Onsite testing can be accomplished through the use of self-automated equipment (instrument-based testing), designed to analyze single or multiple samples at a time, or field kits (non-instrument-based testing), which analyze one specimen at a time. Contracting for services entails making an agreement with and paying a laboratory or certified testing site for analyzing specimens.

The decision to adopt an onsite chemical testing program or contract for services depends on many factors, including:

- agency mission and program purpose;
- quantity of testing to be done;

- how test results will be used;
- agency resources available;
- community resources available;
- cost of onsite vs. laboratory testing (See Chapter 9, Economic and Human Resource Issues, for a detailed analysis of cost factors associated with each);
- immediacy of results required;
- control over testing protocol needed or desired; and
- program evaluation procedures used.

Agencies will have to thoroughly examine the costs, resources, and implications associated with each of the options to make the decision that best fits their needs and satisfies the purpose of the chemical testing program. Factors to consider regarding each option are discussed below. APPA's *Drug Testing Guidelines and Practices for Juvenile Probation and Parole Agencies* provides much more detail in policy and procedure recommendations for each approach.

Onsite Instrument-Based Testing (American Probation and Parole Association [APPA], 1992, Guidelines 17-1 to 17-82)

These tests use EIA, KIMS, and FPIA immunoassay procedures. All are legally defensible as initial tests in court. Usually HPLC, GC, or GC/MS will be used for confirmation testing. Further information on confirmation is provided in the next section of this chapter, *Chemical Testing Protocols and Procedures*. The instrument chosen should have the capability of testing at least five major categories of drugs, which may include cocaine, cannabinoids, amphetamines, methamphetamines, phencyclidine (PCP), opiates, benzodiazepenes, and barbiturates. Agencies must test for drugs that have been determined, through an assessment of the agency and the community, to be the current drugs of choice among youth. In addition to methods that run **single drug screens**, technologies are available that will test **panels** (an analysis of a number of specimens for a variety of drug categories at one time). Agencies must determine which method is more time-efficient and economical according to their particular needs.

Personnel must be trained to operate the instrument. Therefore, the supplier should have a training and certification program in place. The operator must follow the manufacturer's suggested procedures for operating equipment. Failure to do so results in reduced defensibility and credibility of the agency's chemical testing program. Some instrumentation allows the operator to set cut-off levels for analysis. In this case, agency policy should establish cutoff levels. These are not to be adjusted unless there is a formal change in agency policy. APPA endorses the cutoff levels recommended by the National Institute on Drug Abuse (NIDA). The current recommended cutoff levels are listed in Table 13-A.

If the agency wishes to use alternate levels, personnel must be prepared to defend their decision in case of a court challenge. Also, they must be assured that the manufacturer will support their practices in court as well.

Quality Assurance and Quality Control (APPA, 1992, Guidelines 17-25 to 17-33)

The use of any testing equipment necessitates quality assurance (QA) and quality control (QC) measures to ensure the most accurate and reliable reporting of results possible. Appropriate QA and QC measures include the following.

- With instrument-based technology, use manufacturer supplied calibrators and controls according to supplier's recommendations. Keep a QA and QC log of all results and the dates they were generated, including inaccurate results.

- Conduct a daily check of the equipment and order any necessary repairs. Record these in the QA/QC log.

- Test operators should participate in proficiency tests supplied by an accrediting organization (see **Proficiency Testing**, below). In addition, a supply of samples should be split and tested both within the agency and sent out for comparison testing by an outside laboratory. Blind testing (submitting urine specimens containing known drugs to determine accuracy) should be randomly conducted. Samples that have been previously tested and are kept in storage may be retested periodically as well.

- If a false positive or false negative is generated through the QA and QC program, steps should be taken immediately to isolate the problem and correct it. The agency should stop testing until the problem is corrected. The problem and its resolution should be recorded in the QA/QC log.

Proficiency testing (PT) provides the agency with an unbiased report on the accuracy and reliability of its testing program. It strengthens the agency's confidence in its program and enhances its credibility. Samples are sent to the agency by the PT organization, which then reviews the agency's results. Suppliers who provide PT specimens include the College of American Pathologists, the American Association of Clinical Pathologists, Surveys Plus (Toxicology Survey), and the American Association of Bioanalysts.

Ensuring the Safety of Onsite Testing (APPA, 1992, Guidelines 17-50 and 18-32)

The risk of acquiring a transmissible disease, including AIDS, is minimal at most for staff involved in the urinalysis program. There have been no reported transmissions of the HIV virus through laboratory contact with urine. Nevertheless, it is wise practice to ensure the safety and security of personnel who will be handling and testing specimens by including safety instructions in the procedural manual. Common safety practices for laboratories include the following.

- A secure area should be used for testing, storage, and recordkeeping;

- Rubber gloves and a lab coat should be worn when specimens are being handled;

- No smoking, eating, or drinking shall be allowed in the laboratory area at any time;

- No food should be refrigerated with specimens in the storage area;

- In case of fire or emergency, office safety procedures should be outlined and followed; and

- There should be access to goggles when hazardous materials are to be handled.

These guidelines apply to the use of both instrument-based and non-instrument-based techniques.

Onsite Non-Instrument-Based Testing (APPA, 1992, Guidelines 18-1 to 18-45)

These tests are portable, and may be used in the field as well as in the agency. They are capable of screening single or multiple drugs, but they are restricted to qualitative measures. These tests use EIA, LAIA, and AMIA immunoassay procedures. Only initial results are provided. Confirmation testing must be conducted with a different method. Confirmation is discussed in the next section of this chapter, *Chemical*

Table 13-A

RECOMMENDED INITIAL CUTOFF LEVELS

Cannabinoids*+	100 ng/ml
Cocaine*	300 ng/ml
Opiates*	300 ng/ml
Amphetamines/ Methamphetamines*	1000 ng/ml
PCP*	25 ng/ml
Benzodiazepenes**	300 ng/ml
Barbiturates**	300 ng/ml
Methadone**	300 ng/ml

ng (nanograms) = unit of measure in drugs of abuse testing equal to 1:1/billionth of a gram

*Recommended by National Institute on Drug Abuse (NIDA)

+NIDA is in the process of changing the cutoff level recommended for cannabinoids to 50 ng/ml.

**NIDA does not recommend cutoff levels for these drugs because they may be legally prescribed. The cutoff levels cited are those recommended by the scientific community.

Source: American Probation and Parole Association. *Drug testing guidelines and practices for juvenile probation and parole agencies.* (1992). Washington, D.C.: Office of Juvenile Justice and Delinquency Prevention.

Testing Protocols and Procedures. Cutoff levels of these tests are set by the manufacturer. The agency should know the cutoff level of the test, keeping in mind that the most legally defensible cut-off is that recommended by NIDA.

As with instrument-based testing, training and certification in test operation should be provided by the manufacturer of the product (APPA, 1992, Guidelines 18-11 to 18-12). Because these tests are designed for use in the field, it is not uncommon to have a large number of agency personnel trained in the use of non-instrument tests. Agencies must ensure that policies and procedures are clearly understood by all who will be analyzing the test results.

Quality Assurance and Quality Control

Quality assurance and quality control (APPA, 1992, Guidelines 18-23 to 18-25) measures must be taken with non-instrument testing as well as more sophisticated testing techniques. This entails strictly following manufacturer's instructions in operating tests. As with instrument-based programs, all aspects of the testing process should be documented. Any problems that occur with the tests should be recorded in the QA/QC log and testing should be discontinued until the problem is corrected. **Proficiency testing** should be performed at least quarterly as with onsite instrument testing to ensure that the program is achieving accurate results.

Safety Concerns

The use of non-instrument tests in the field offers immediacy of results. Tests can be performed in the presence of the offender, at the offender's home, or at the point of arrest. These practices pose some unique safety concerns for those conducting the test (APPA, 1992, Guidelines 18-29 to 18-30). Especially when testing juveniles with a violent history, personnel should employ appropriate safeguards in case of a volatile reaction. It may be advisable to confront potentially violent youth in a secure environment in the presence of other agency personnel. Testing in the offender's home should be considered carefully as well, especially when family or friends are present. If the youth is intoxicated or under the influence of drugs, s/he may react unpredictably. Those administering tests should be aware that, in any case, confronting a youth with results can lead to unexpected behavior. The agency should establish and train personnel in safety and crisis intervention procedures to prevent or handle these potentially dangerous situations.

Contracting for Laboratory Services (APPA, 1992, Guidelines 16-1 to 16-33)

When contracting for services, the agency must relinquish some of its control over the chemical testing program to a laboratory. Therefore, a good working relationship that includes ongoing communication with laboratory personnel is imperative. Especially in the areas of chain of custody, turnaround time, and program evaluation, certain procedures will require complete and dependable laboratory cooperation.

Developing the Working Relationship

Agencies that contract for services must develop and co-sign an agreement with the laboratory. The agreement provides assurance that the laboratory understands and will follow all the necessary protocols and procedures to achieve accurate and reliable results on all specimens in a timely manner for the agency. The agency should then communicate regularly with the laboratory and monitor its adherence to agreed-upon procedures throughout the working relationship. Laboratory director and technical staff should be properly qualified to manage the laboratory and operate drug testing equipment, according to guidelines recommended by APPA (APPA, 1992, Guidelines 16-1 to 16-5).

The laboratory must keep an updated procedural manual on the premises, readily available to all personnel involved in drug testing. This document should specify all activities of the drug testing from receipt of samples at the laboratory to final disposition. It also should explain in detail the drug testing equipment used by the laboratory and the scientific principles behind it. Agencies should inspect the manual before contracting with a laboratory and perform subsequent inspections periodically as the testing program progresses. APPA's *Drug Testing Guidelines* provides examples of elements that should be included in the laboratory procedural manual (APPA, 1992, Guideline 16-6).

Quality Assurance and Quality Control

The laboratory must develop and implement quality assurance and quality control procedures regularly (APPA, 1992, Guideline 16-7 to 16-13). The agency must be informed of these practices and inspect the laboratory for adherence periodically. This will instill and maintain the agency's confidence in the integrity of the test results received from the laboratory. Quality assurance and quality control procedures should include provisions for:

- chain of custody;
- specimen acquisition;
- initial and confirmatory testing;
- security and reporting of results; and
- validation of analytical procedures.

In addition, documentation of the accuracy, validity, precision, performance, and reliability of each test and test system used must be kept in a file and continually updated.

Request for Proposal (APPA, 1992, Guidelines 5-14 to 5-19)

After the agency determines its needs and resources and becomes familiar with the terminology and protocols associated with drug testing, it is in a position to define the parameters and needs of its own program. As these decisions are made, a **Request for Proposal** (RFP) should be developed to disseminate to drug testing suppliers and/or laboratories.

The RFP will outline elements the agency considers essential to its chemical testing program. Respondents will be invited to explain how their company or laboratory will meet these specified needs. Examples of areas the RFP might address include the following:

- testing equipment and supplies needed to run a testing system;
- categories of drugs to be tested;
- training to be provided by the supplier, both initial and follow-up;
- maintenance and replacement of equipment;
- details of purchasing or leasing agreements;
- computer support mechanisms for tracking results and evaluating the program;
- delivery and storage arrangements; and
- testimonies in the event of court challenges.

The proposal review group should consist of those administering the chemical testing program as well as those implementing it. In very small agencies, it may be necessary for only one person to review proposals and select a supplier or laboratory. In either case, a

list of essential needs and priorities should be prepared to assist decision makers in choosing the most favorable option available within the agency's resources.

It is best if the agency has made most of its policy decisions at the time the RFP is prepared (i.e., whether to contract for services or conduct testing onsite, how the program will be evaluated). Such pre-planning will make the process of choosing a supplier or laboratory more efficient and will facilitate a satisfactory selection.

CHEMICAL TESTING PROTOCOLS AND PROCEDURES

Confirmation (APPA, 1992, Guidelines 6-1 to 6-13)

Confirmation is performed on positive specimens when sanctions will be imposed upon the user, or when the results will be used in court. Some agencies may consider it unnecessary to confirm results (i.e., when testing is used solely for monitoring and rehabilitative purposes). Legal issues regarding confirmation are covered in Chapter 8. Cost issues are discussed in Chapter 9.

There are three types of confirmation:

1) **Admission statement** - Offender signs a statement confirming drug use.

2) **Second test/same methodology** - This method is not preferred, but is usually inexpensive and is acceptable in some courts. It especially is not recommended when sanctions for a positive result will be severe (e.g., incarceration, revocation).

3) **Second test/different methodology** - When this type of confirmation is used, the second methodology must have an accuracy rate that is at least as high as the initial screening instrument, and the cut-off level must be the same or lower (see Table 13-B).

Gas Chromatography/Mass Spectrometry (GC/MS) is always a legally acceptable method of confirmation. Because it is the most specific and most sensitive method of urinalysis available today, and also determines the level of drugs in one's system, it is considered the "gold standard" in urinalysis. While it is usually the most expensive alternative, sometimes it is the only confirmation method a court will accept.

High Performance Liquid Chromatography (HPLC) and **Gas Chromatography (GC)** are confirmation methods accepted in some jurisdictions. Agencies must confer with the court system in their area to determine what confirmation methods are legally acceptable.

Cutoff Levels for Confirmation

The National Institute on Drug Abuse (NIDA) recommends lower cutoff levels for confirmation testing than initial screening. Their recommendations are listed in Table 13-B.

Chain of Custody (APPA, 1992, Guidelines 12-1 to 12-35)

Chemical testing technologies are subject to inaccuracies. Human beings who conduct tests; collect, handle, and analyze specimens; and record results, may also err. Youthful offenders, who have much at stake and also have a constitutional right to due process, are entitled to assurance that all possible steps are taken by the agencies and laboratories involved to ensure the

integrity of the test results. While chain of custody is most complex with urinalysis, which requires collecting and storing specimens in addition to analyzing test results, it is applicable to all chemical testing. In urinalysis or saliva tests, chain of custody denotes procedures used to ensure that the urine or saliva collected is that of the person intended, that it has not been adulterated, and that documentation regarding it has been properly recorded. With breath analysis, chain of custody procedures must be followed to ensure that test results are read accurately, attributed to the person intended, and documented appropriately. Chain of custody procedures must be developed and incorporated in the policies governing the agency's chemical testing program. When testing on-site, the agency must establish and implement its own chain of custody procedures governing all steps of the testing process. When contracting for services, agencies must coordinate chain of custody protocol with the laboratory and be assured that laboratories adhere to these procedures.

APPA's *Drug Testing Guidelines* details procedures governing the seven essential steps in the urinalysis chain of custody process: **collection, handling, documentation, storage, transportation, testing,** and **dissemination of results.** These recommendations are designed for use with urinalysis programs and so are more complex than procedures required when administering and evaluating saliva and breath tests. For example, the collection of urine is an intrusive practice and lends itself to the tampering of specimens, unlike the simple collection of a saliva or breath sample. Also, issues of transportation and storage do not apply to saliva or breath analysis. Although APPA's recommendations regarding chain of custody were designed for use in urinalysis programs, some procedures, especially those regarding handling, documentation, testing, and dissemination of test results, are applicable to breath and saliva testing as well.

Collection

Personnel collecting specimens must be aware of ways an offender can adulterate a sample (e.g., substituting someone else's urine or another liquid such as colored water, ingesting certain substances prior to producing a specimen, contaminating the specimen with other chemical substances like detergent or salt). As mentioned previously, it is very difficult to add or ingest a sufficient amount of a substance to a specimen to actually affect the test's result. However, as it is possible for youth to adulterate or mask a urine specimen, precautions must be taken to lessen this risk. These may include:

- having a staff person observe the collection rather than allowing an offender to bring the specimen in to the office. This policy is strongly recommended as it greatly reduces the risk of tampering or adulteration. The observer should be of the same gender as the youth;
- placing a blueing agent in the toilet to avoid substitution of toilet water for the specimen;
- using a temperature strip and/or pH paper to record the temperature and pH level of the specimen;
- keeping soap and other chemicals outside the collection area;
- allowing only one observer and one juvenile to be in the collection area at one time; and
- not allowing youthful offenders to participate in the collection of another's sample nor to have access to testing equipment, supplies, storage facilities, or documentation.

Table 13-B

RECOMMENDED CUTOFF LEVELS FOR CONFIRMATION

Cannabinoids*	15 ng/ml
Cocaine*	150 ng/ml
Opiates*	300 ng/ml
Amphetamines*	500 ng/ml
PCP*	25 ng/ml
Benzodiazepenes**	250 ng/ml
Barbiturates**	250 ng/ml
Methadone**	250 ng/ml

ng (nanograms) = unit of measure in drugs of abuse testing equal to 1:1/billionth of a gram

*Recommended by National Institute on Drug Abuse (NIDA)

**NIDA does not recommend cutoff levels for these drugs because they may be legally prescribed. The cutoff levels cited are those recommended by the scientific community.

Source: American Probation and Parole Association. (1992). *Drug testing guidelines and practices for juvenile probation and parole agencies.* Washington, D.C.: Office of Juvenile Justice and Delinquency Prevention.

The following steps are recommended to guide agencies through efficient chain of custody procedures.

- Ensure the identity of the youth if unknown to the person observing the collection through a driver's license or other identifying document, a signature, or some system developed by the agency. Youth should initial or provide a signature next to his/her name on the identification sheet.

- Escort the youth to the secured collection area. A search of the juvenile may be conducted, if agency policy allows, and any outer clothing that impedes observation of the collection or assists the youth in adulterating the specimen should be removed.

- Instruct the youth to thoroughly wash and dry his/her hands prior to the collection.

- Observe the specimen collection.

- Instruct the youth to secure the cap tightly, wash and dry the container and hands, affix the prepared identification label to the container, and seal the top with evidence tape.

- Instruct youth to read and sign a statement certifying that the specimen collected is that of the youth.

Furthermore, when urine will be tested for alcohol, it is especially critical to seal the container tightly as soon as the sample is collected because alcohol has the tendency to evaporate.

Handling

Various forms must be completed to document the handling of the specimen from collection through use of results. These are necessary to ensure due process for the offender and proper chain of custody to protect the agency should a legal challenge arise. Examples of these forms are provided in Appendix B, Attachments 1-14. They include:

- *Instructions to Juvenile Offenders* (explaining the entire chemical testing process and its implications for the youth; this form must be read and signed by youth);

- *Drug Testing Agreement* (between the case supervisor and the offender);

- *Request for Drug Test* (including an admission statement and a refusal to test statement that may be signed by the offender; accompanies specimen to testing site where it is completed);

- *Substance/Medication Screen Record* (listing any other drugs the youthful offender may have ingested that might influence test results);

- *Specimen Collection Checklist* (denoting steps of the collection process and providing for initials as each is completed);

- *Seal* (to place over specimen container);

- *Chain of Custody Form* (documents collection and handling of sample from collection site to testing site; is attached to container and accompanies sample at all stages);

- *Urinalysis Report* (documents that youth has or has not adulterated or masked the specimen in any way; to be signed by the youth);

- *Positive Drug Test Statement* (documentation that the youth understands that the specimen tested positive and requests or does not request a confirmation test; to be signed by youth);

- *Authorization for Release of Drug Test and Result Information* (to be signed by juvenile, and possibly parents);
- *Urinalysis Test Record* (documents testing of all samples from an agency; is kept near testing personnel);
- *Probationer/Parolee Status Report* (documenting test results; to be presented to and signed by judge);
- *Drug Testing Summary Log* (gives a monthly report of all tests performed for the agency on separate categories of drugs); and
- *Drug Testing Control Log* (documents all drug testing conducted at agency from collection through responses to results; is placed in an accessible but secure area).

The number of people handling the specimen should be kept to a minimum in the event that a court challenge arises. The less people involved, the easier it is to prove the integrity of the sample.

Storage

Urine specimens should be refrigerated in the agency's storage area immediately after they are collected. If the sample is to be tested right away, it should be refrigerated immediately after it is tested. After testing, all negative specimens may be discarded; positive samples must be kept frozen until all relevant court proceedings have taken place.

Transportation

Packaging and transporting procedures should be outlined to safeguard against any tampering or misidentification of specimens during this stage. For example, boxes should be securely sealed and a specimen identification list should accompany each box.

Testing

Procedural guidelines vary depending on whether testing is conducted on-site or by an outside laboratory. In all cases, however, proper documentation as described above must be completed at the testing site (i.e., Request for Drug Test Form, Chain of Custody Form, Drug Test Record). Those analyzing the specimens must follow systematic procedures to ensure that results are accurately recorded.

Dissemination of Test Results

Agencies will need to develop policies governing the dissemination of test result information. They must determine who will receive test results and what method of dissemination should be employed. When tests are analyzed on-site, results are immediately accessible to the agency. When contracting with a laboratory, written results may be received via mail, computer or fax. Agency personnel should receive these results within 72 hours after the specimen reaches the laboratory. Some agencies expedite the turnaround time from laboratories by accepting verbal results over the telephone, followed by written confirmation.

It is imperative that those who analyze the tests record results on the Chain of Custody form as well as other appropriate forms and logs as outlined in agency policies and procedures.

Documentation of the following information must be kept:

- instrumentation used;
- drugs tested for;
- test results (positive or negative); and

- cut-off levels of each test.

This information must be filed in the laboratory as well as at the agency. Test results also must be kept in the juvenile's case file.

Scheduled and Random Chemical Testing (APPA, 1992, Guidelines 9-1 to 9-3)

Because alcohol is eliminated from the system and thus cannot be detected after several hours, an alcohol test is usually administered only if symptoms of intoxication are present. A youth may appear drowsy, stagger, have slurred speech, or smell of alcohol. Therefore, alcohol tests are not usually scheduled. They are administered upon suspicion of use.

Scheduled Testing

Other drugs can remain in the system for several days. Therefore, scheduled testing which occurs at regular intervals, is feasible. In some agencies, "testing days" may be designated. Youth and testing personnel know when urine specimens must be collected. This practice may help the agency to control costs, run smoothly, and ensure that designated youth are tested regularly. However, when juveniles know which days are testing days, they may learn how to schedule their drug use accordingly to avoid detection.

Random Testing

Random testing is unscheduled collection of urine and analysis of test results. Agency personnel may be given a certain amount of drug tests per month to be used on all youth under their supervision. Staff members determine which youth to test and how often to test them. Youth do not know when they might be tested, or if they will be tested at all. This process eliminates the possibility of youth attempting to "beat the system" through scheduling their drug use. However, it is a less controlled practice that may lead to problems such as inefficient use of drug tests or difficulty in keeping track of those who have and those who have not been tested.

Scheduled Random Testing

Scheduled random testing is an option that many agencies have adopted to manage the costs of drug testing while still maintaining a controlled, reliable system of testing youth. On a regular basis, youth are randomly selected to report to the testing site and provide a urine specimen for testing. A coding or computer system is used to keep track of who has and has not been tested, ensuring that all youth have submitted at least one specimen during a designated period of time. Agencies may assign different numbers or colors to youth and they must call in on a regular basis to see if their number or color is up for testing on a particular day. If so, they must report to the testing site and provide a specimen. The main problem with this system is that it is dependent upon youth complying with rules to make a call. If this system is used, calling in must become mandatory for the youth. Thus, when youth do not call in, or when they do not provide the specimen on days their number or color is designated, some sanction must follow. It is important that this sanction be selected carefully, because it must provide incentive for the youth to call even when s/he knows what the drug test may reveal. Some youth may choose the sanction for not calling over the sanction for using drugs.

When choosing a system for when to test youth, agencies must decide upon a system which meets their needs and, at the same time, provides the best means for identifying drug-involved youth in the community.

How Often to Test

An issue that accompanies *when to test* is *how often to test* youth. Cost is an obvious factor in making this decision. An agency cannot administer

drug tests more often than resources allow. The primary factor in making this decision, however, is the youth's drug of choice. Once a youth's drug of choice has been determined, regular testing may be limited to that particular drug. Because the youth's drug using habits may change, it is wise for agency personnel to be alert to any signs that may indicate that the youth is using a different drug, and also to test for other drugs occasionally. Still, the majority of testing may be restricted to the youth's drug of choice.

Knowing the youth's drug of choice also helps to determine how often to test him/her for drug use. The period of time drugs stay in one's system varies from several hours to several days, depending on the particular drug. Metabolic functions also play a role in the duration of time drugs stay in a person's system, but to a much lesser degree. Therefore, tests for a drug that is eliminated from the body within two to three days (e.g., cocaine) must be administered more frequently than one for a drug that may stay in the body for several days (e.g., marijuana). Table 13-C contains a Duration of Detectability Schedule that is useful in determining how often to test youth for drug use.

It is a waste of monetary and staff resources to conduct a drug test more often than necessary. This point is discussed in more detail in Chapter 9, Economic and Human Resource Issues. Also, when deciding how often to test, agencies must consider the fact that a response must always follow results, whether they are positive or negative. They must be realistic in their planning and take care not to administer drug testing more often than they are able to invoke a response.

Responding to Results (APPA, 1992, Guidelines 14-1 to 14-6)

As discussed in previous chapters, and expanded upon in Chapter 14, it is vital that proactive responses follow every chemical test, whether results are positive or negative. The youth must become aware of the importance of chemical testing. When staff do not acknowledge the results of chemical tests, a message is relayed to the youth that the drug test is simply procedural and does not hold much impact. Chemical testing is the most reliable means available for determining whether youth have used drugs or abstained from use. Because it provides an answer to that critical question, chemical testing must be taken very seriously by staff and all youthful offenders.

To assist staff in implementing this important step, an array of options for responding to both positive and negative results must be included in the agency's policies and procedures manual. As all youth are different, and thus require different response strategies, these options should serve as guidelines only, allowing enough flexibility for staff members to exercise discretion in dealing appropriately with individual cases. Chapter 14 provides numerous options agencies may find helpful in determining appropriate ways of intervening with individual youth.

LEGAL AUTHORITY

While chemical testing is a reliable means of detecting, and sometimes controlling, drug and alcohol use among youth, agencies must use caution when establishing policies and procedures. Every effort must be made to ensure that policies and procedures fall within legal parameters of the local court systems and the state. Some states or jurisdictions have set limits on drug testing; in other areas, drug testing may be mandated by the courts under certain circumstances. Agency personnel must become aware of regulations regarding confidentiality as well. These legal issues are extremely critical and outlined in detail in Chapter 8.

Table 13-C

APPROXIMATE DURATION OF DETECTABILITY OF SELECTED DRUGS IN URINE

Drug	Duration of Detectability* (in accordance with NIDA Guidelines)
Amphetamine	48 hours
Methamphetamine	48 hours
Barbiturates	
Short acting	24 hours
Intermediate acting	48 - 72 hours
Long acting	7 days or more
Benzodiazepines	3 days (therapeutic dose)
Cocaine metabolites	2 - 3 days
Methadone	3 days (approximate)
Codeine/Morphine	48 hours
Propoxyphene/Norpropoxyphene	6 - 48 hours
Cannabinoids (marijuana)	
Single use	3 days
Moderate use (4 times per week)	4 days
Heavy use (daily)	10 days
Chronic heavy use	21 - 27 days
Phencyclidine (PCP)	8 days (approximate)

*These are general guidelines only. Interpretation of the duration of detectability must take into account many variables, such as drug metabolism and half-life, subject's physical condition, fluid balance and state of hydration, route of administration, and frequency of ingestion.

Source: "Drug Testing Guidelines and Practices for Juvenile Probation and Parole Agencies." (APPA, 1990)

In jurisdictions where there are no local or state regulations regarding chemical testing, efforts can be made to enlist them. State legislation that permits chemical testing offers agencies the ultimate legal support for its chemical testing program. A judicial mandate is the next preferred option. Finally, in the absence of legislative or judicial support, agency administrative policy that authorizes chemical testing of youth should be established to offer a degree of security. On the other hand, if legislative, judicial, or administrative directives do exist but are excessively restrictive, attempts can be made to initiate new courses of action to make chemical testing a more viable tool for serving youth in the juvenile justice system.

CONCLUSION

Chemical testing programs are complex, requiring many regulations for implementing and maintaining a reputable program. They require a sizable investment in resources and commitment from staff. Even the most carefully established and efficiently run program will fail, however, if responses are not made to test results. Appropriate responses are crucial to an effective chemical testing program. Chapters 11, 12, and 13 described in detail three methods for identifying drug-involved youth. Chapter 14, Interventions, provides insight for practitioners seeking effective ways to confront and reduce juvenile substance use.

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CHAPTER 14

INTERVENTIONS

INTERVENTIONS

INTRODUCTION

Identifying drug-involved juveniles is only the first step in a successful program. After implementing one or more of the techniques for determining drug use by youth, it is imperative that appropriate interventions follow. Regardless of the results of drug identification strategies, a timely response should be initiated with every youth.

This chapter will detail some possible response options for interventions in juvenile justice settings. It also will explore some of the philosophical, legal, and practical considerations for developing and implementing interventions.

After reading this chapter, participants will be able to:

- describe three general target areas for interventions (i.e., individual, environment, and society;
- apply basic principles of implementing response options;
- outline six components of a case management model;
- discuss the importance of correlating interventions with the program purpose and agency mission;
- list appropriate supervision strategies for each type of agency mission/program purpose (i.e., community protection, youth accountability, and competency development);
- differentiate between crises and emergencies and give examples of appropriate interventions for each;
- review three important elements of treatment matching;
- describe six types of treatment programs and indicate their effectiveness with youth and/or how they may be adapted to serve adolescents;
- describe additional treatment modalities and innovative approaches and consider how these interventions might be used in their agency;
- list at least ten warning signs of relapse and identify approaches for intervening to prevent relapse;
- develop an intervention plan based on the needs and program purpose of a particular agency;
- describe the legal considerations that must be explored in determining appropriate interventions;
- describe the importance of including a monitoring and/or follow-up component for interventions; and
- describe the importance of developing interventions that address the problems of youth with special needs and circumstances.

Chapter 5 stressed the development of a program purpose that is correlated with the agency's mission. Responses to the results of drug screening measures must be linked to the program purpose and agency mission. This principle should be a prevailing consideration in developing intervention strategies.

LOCUS OF INTERVENTION

In the juvenile justice system, each youth generally is considered the target of intervention

efforts. This curriculum reinforces that concept by viewing the youth and his or her environmental context as the central focus. Much of this chapter will address specific intervention methods with individual youth. While this is appropriate, program administrators and personnel also are challenged to consider intervention strategies at the environmental and societal levels.

Figure 14-A depicts three points for juvenile interventions. The individual level consists of the young person who has engaged in illegal behavior and has been identified as a drug user. Intervention strategies are intended to correct specific behaviors or treat underlying needs and problems resulting in delinquency and drug involvement.

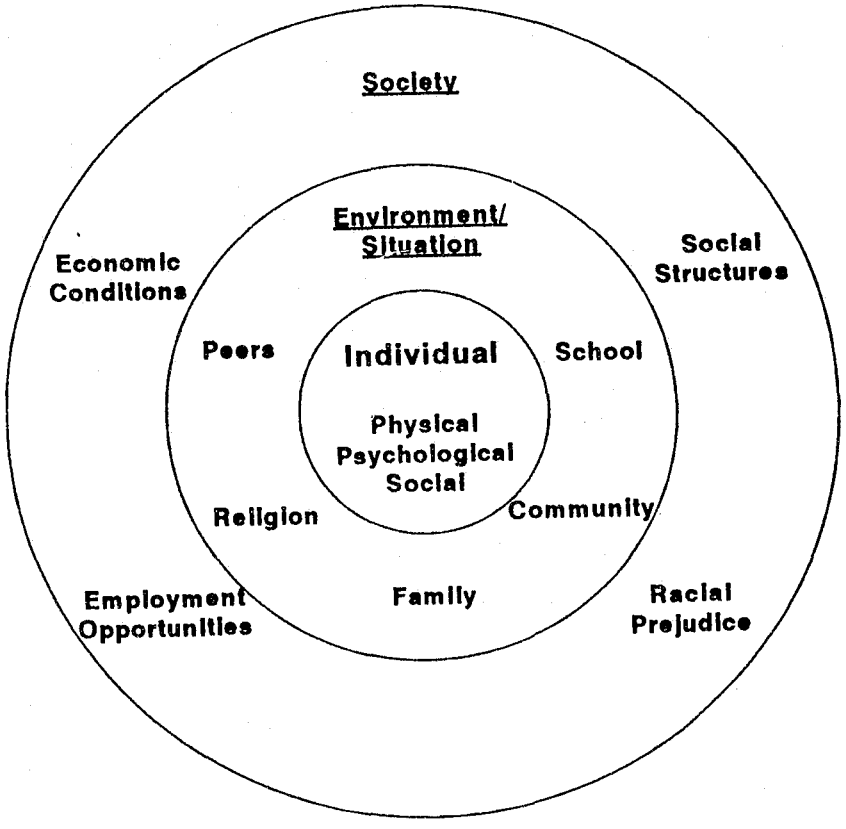
Surrounding the youth is the *environment or situation* which includes those factors that are intertwined with each youth's developmental process, including:

- family;
- peers;
- community;
- religious affiliation; and
- school experiences.

These influences often play a strong role in the formation of specific behaviors and problems for youth. For example, children whose parents are chemically dependent are at increased risk of substance abuse

Figure 14-A

LOCUS OF INTERVENTION



(Kumpfer, 1987). A significant and positive association has been found between reported physical and sexual abuse of youth and their use of illicit drugs (Dembo, et al, 1988). Youth who live in dysfunctional families or disorganized communities, experience school failure, associate with delinquent or drug-involved peers, or experience other risk factors, are more likely to be involved in both delinquency and drug and alcohol use (Hawkins, Lishner, Jenson, & Catalano, 1987). See Chapters 1 and 2 for a more detailed discussion of these factors.

Beyond the environmental level are *societal conditions* that determine, to a large extent, environmental circumstances and individual options. Substance abuse cuts across all socioeconomic, ethnic, and cultural boundaries. No youth is susceptible to or immune from chemical dependency merely because of membership in a particular racial group or economic class. However, as juvenile justice practitioners are aware, many factors (such as poverty, minority status, employment opportunities and access to health care) affect youth and the context within which they live. Social problems appear to contribute significantly to family and community distress, which in turn, have an impact on individual youth.

In 1989, minority youth comprised 60 percent of juveniles in custody. Compared with similar data from 1987, the percentage of white youth had declined 5 percent, while the number of black juveniles in custody increased 14 percent and the number of youth of Hispanic origin increased 10 percent (Allen-Hagen, 1991). The disparity of this representation of minority youth in the juvenile justice system is accentuated when compared to the distribution of minority youth in the general population. Of all youth ages 10 through 19 in 1989, 80 percent were white and 20 percent were minorities. The largest group of minority youth were black youth who constituted 16 percent of the adolescent population (Bureau of the Census, 1991). This data leads to the conclusion that minority youth are at much greater risk of encounters with the juvenile justice system than their white counterparts.

Family, social and economic deprivation are related to delinquent behavior and the use of illicit drugs (Hawkins, et al, 1987). Studies also have found that higher rates of drug use are observed among disadvantaged youth. Researchers have concluded that very low socioeconomic status may be a critical factor which is associated with drug involvement. Socioeconomic status is related to family strength and influences where families can live. Thus, youth from low socioeconomic families are likely to live in environments that encourage drug abuse (Oetting & Beauvais, 1987).

Juvenile justice professionals must be aware of factors that influence a youth's involvement in both delinquency and drug and alcohol use. Where possible, intervention efforts should target specific levels (i.e., individual, environmental, and societal). To concentrate on only one, to the exclusion of the others, will result in the loss of opportunities to affect the problems of delinquency and substance abuse.

SUPERVISION AND INTERVENTION STRATEGIES

The juvenile justice system incorporates agencies and programs which include:

- law enforcement;
- diversion programs (including residential and non-residential community-based programs);
- juvenile courts;
- detention;
- probation;
- institutions; and
- aftercare.

Supervision and intervention strategies vary markedly from one part of the system to another; however, the case management process is fundamentally the same at each point. Sometimes it is helpful to view the system as a continuum of services through which the youth moves to the point necessary for targeting and achieving individual goals or protecting society. Thus, it is obvious that not every intervention strategy is appropriate at every point in the system. However, it is possible to identify drug-involved youth as they encounter elements of the juvenile justice system and for each component of the system to respond appropriately to their substance abuse problems. See Figure 14-B for a graphic model of the youth's progression through the system and possible responses at each point.

As different services are provided throughout the juvenile justice system, there are also diverse professionals who fill many roles. Some are administrators, others provide case management services, and still others provide treatment. Many professionals fill more than one role. Therefore, it is not possible to suggest that all juvenile justice professionals should assume the same responsibilities for drug-involved youth. Rather, this chapter presents a case management model that incorporates essential procedures for intervening with individual youth who are drug-involved. These services are necessary for intervening with substance abusing youth; however, all of them usually are not provided by the same agency or professional. In some cases, such as detention, contact with a youth is very brief and only part of the case management process can be accomplished. For example, assessment information can be gathered, and brief interventions, such as drug education, can be provided. However, for intervention to be comprehensive, assessment information must follow the youth to other parts of the juvenile justice system and be used to develop and carry out a thorough case management plan.

The model consists of six inter-related components. These reflect a *Balanced Approach* to juvenile justice and are described in the *Desktop Guide to Good Juvenile Probation Practice* (National Center for Juvenile Justice [NCJJ], 1991). These are presented in Figure 14-C.

Principles for Implementing Interventions

There are many important concepts to keep in mind when developing a drug-use identification program and enacting intervention strategies. The following concepts are intended to guide decisions and should be useful in developing a quality program.

Take a proactive stance

Whenever possible, anticipate problems and plan a program and interventions in advance. Set goals and select program philosophy; then develop the procedures to accomplish your purpose. The alternative is a reactive response after problems are presented. This approach is usually less successful and frustrating.

Make the program fair

Juveniles are particularly sensitive to issues of fairness. Efforts should be made to make the program uniform and consistent. Youth should know in advance what to expect in response to their behaviors.

Individuality should be considered

Youth should be viewed as whole persons within their environmental contexts. While juvenile justice personnel are expected to exercise professionalism in maintaining the fairness of the program, they also must allow for individual problems, needs, and differences among youth. Individual case plans should be developed that address the needs of each young person.

Figure 14-B

THE JUVENILE JUSTICE SYSTEM: RESPONSES TO DRUG-INVOLVED YOUTH

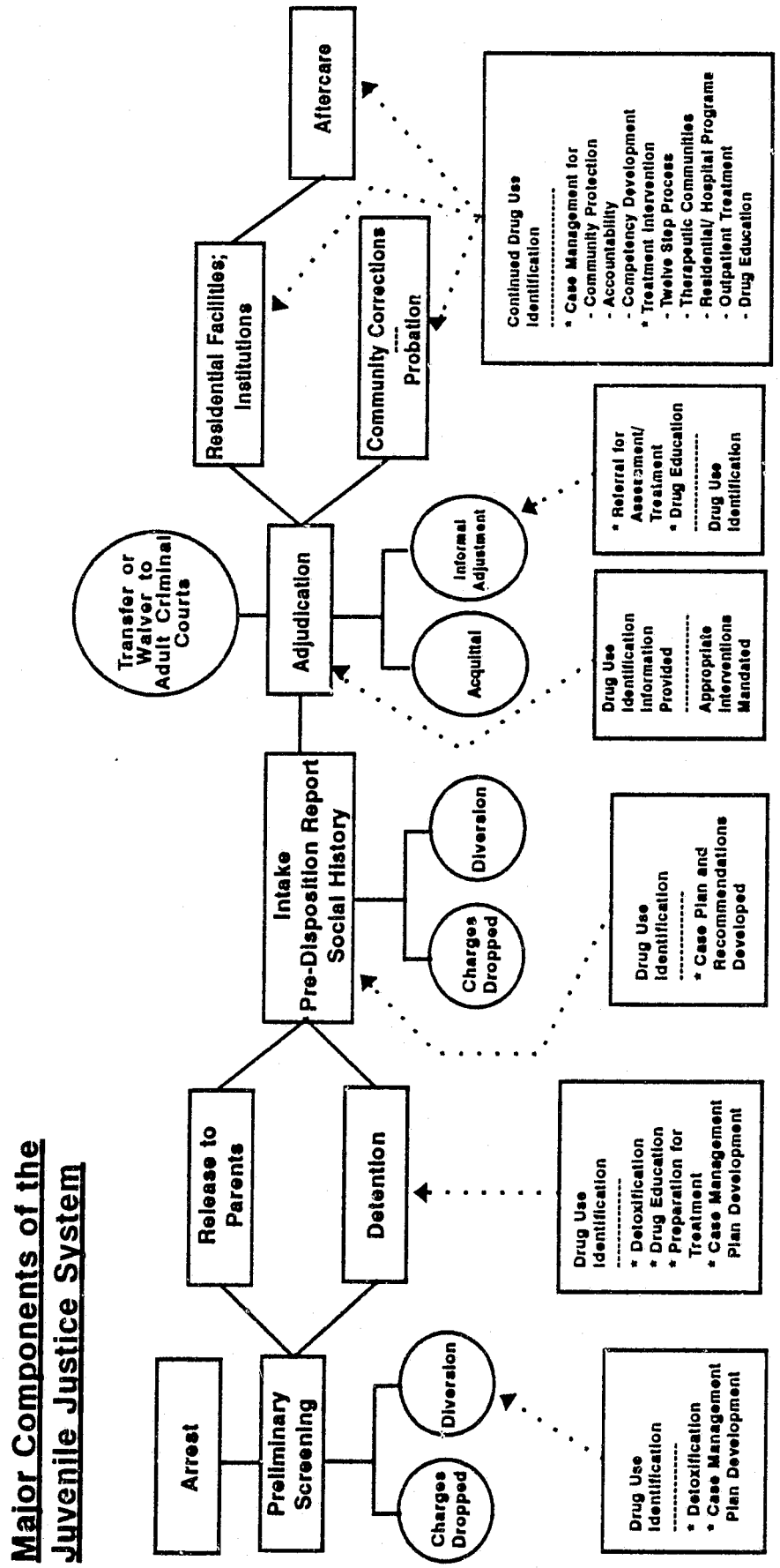
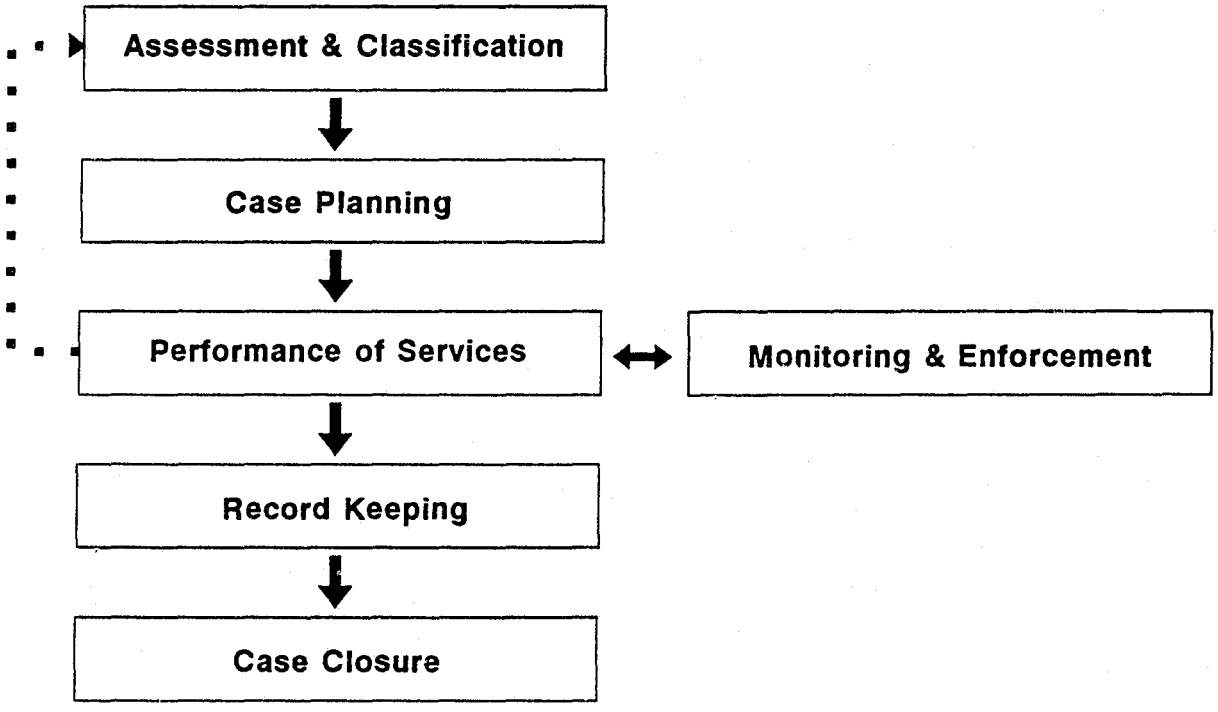


Figure 14-C

CASE MANAGEMENT MODEL



Consider cultural variables

Ethnicity, gender, and socioeconomic level are factors that contribute to cultural differences among youth. These issues must be considered in analyzing the origin of certain problems and in developing appropriate interventions. Programs that are not culturally sensitive will be less effective in achieving their goals and the agency's mission.

There should be immediacy in responding to youth

Time perspective is not fully developed in adolescents. As discussed in Chapter 1, they are more likely than adults to discount the importance of future consequences for their current behaviors. Adolescents also tend to feel invulnerable to significant repercussions that are too distant for them to imagine. (For example: "I can do drugs and not get hooked." "I can steal and not get caught." "I can have high risk sex and not get AIDS.") Therefore, whether drug screening measures indicate positive or negative results, a response should be made as quickly as possible to connect their actions with appropriate consequences that are not life threatening. For example, it is recommended that drug testing results be available to juvenile justice personnel within 72 hours of screening and that juveniles be confronted with these results within 72 hours after they are obtained. The period for responding to a youth after they have been screened should never exceed seven days (American Probation and Parole Association [APPA], 1992, Guidelines 13-2, 14-1, 14-4).

Agency personnel should have latitude in determining appropriate responses

It can be helpful to provide juvenile justice personnel with suggestions for an array of appropriate responses for both positive and negative results of drug identification techniques. However, flexibility in implementing responses is recommended. Case management plans must be individualized to best meet the needs of individual youth. It is also important to identify any responses that are not to be used. For example, some agencies use positive results for treatment responses but prohibit their use for further legal procedures, such as revocation of probation.

Sanctions should be graduated from least to most restrictive

In developing a case plan of responses for drug involvement, less controlling options should be attempted initially, and very restrictive alternatives should be saved until last. For example, community-based outpatient treatment might be used before residential treatment; loss of privileges and increased supervision can be implemented before revocation of probation. (See APPA, 1992, Guideline 14-1.)

Respond to each youth screened

As previously noted, youth need immediate responses to correct inappropriate behaviors or reinforce positive ones. To minimize manipulation, it is important to obtain results on all evaluation measures. Youth may be more likely to take a chance on occasional or regular drug use if they know urine specimens are randomly tested. It is just as important to respond to negative results (lack of use) as to positive findings of drug use. Responses that reward youth who are not using drugs, and provide incentive for continuing sobriety, ultimately may be more effective than sanctions for positive test results. (See APPA, 1992, Guideline 14-2.) It is also advisable to reward improvement as well as goal achievement. For some youth, increasing periods of temperance indicate hard work and a commitment to sobriety as important steps toward total abstinence. This behavior should be rewarded and used as an example of the youth's strengths when periods of relapse occur.

Use all resources available

It is easy to feel helpless in working with drug-involved youth if community resources are scarce. However, some community resources often are under-utilized. It is suggested that juvenile justice professionals develop and continually update community resource files. These should include health, educational, social welfare, religious, civic, and other options. Using community resources can become habitual, focusing narrowly on a few that are "tried and true." However, the most effective case management strives for the best match between the individual needs of youth and the services available. Thus, every case plan should be different. It also may be necessary to compensate for the lack of community resources. Juvenile justice programs need to become creative in developing services that do not currently exist, either within the community or the agency. Grants, foundations, and volunteer services are methods of augmenting limited agency resources.

Permanency planning for youth should be a consideration in case planning

Permanency planning includes efforts to rehabilitate and reunite families. This is particularly applicable in cases of abuse or neglect or other types of family dysfunction that result in children being removed from their homes. When family reintegration is not possible, case management should endeavor to terminate parental rights and identify permanent adoptive placements as soon as possible (National Council of Juvenile and Family Court Judges, 1989). Developing and applying responses to youth who are drug-involved should include this focus. In some cases, family members, as well as the identified youth, may need drug treatment. The goal of permanency planning must be carefully considered when placing youth in residential programs.

Working together is key

The juvenile justice system, as well as many other systems, including education, health care, and social welfare, claim mutual goals related to the best interests of youth. However, each approaches these goals from a different perspective and will have varied funding mechanisms and jurisdictions. Similarly, each system, or part of a system, has additional interests, goals, and values that may conflict with those of others. These potential disagreements may interfere with meeting the needs of youth unless agencies and systems work collaboratively.

Case Assessment and Classification

Individualized assessment is considered the foundation of good case management. Assessment includes an evaluation of each youth and his or her problems, as well as available resources for addressing those needs. Resources may be strengths of the youth and his or her family, as well as community services. Assessments should include, at minimum, information on the following areas for individual youth:

- delinquency history and behavior;
- substance abuse (history and degree of drug and alcohol use);
- family relationships;
- educational problems;
- health history and status;
- emotional and cognitive functioning;
- interpersonal relationships (especially with peers); and

- life skills (including vocational, social, communication and residential living skills)

(NCJJ, 1991).

Detailed information is provided in Chapter 11 on assessment instruments and techniques. To develop an effective case plan, juvenile justice professionals must go beyond merely determining that a youth uses drugs and alcohol; rather, all the areas listed above should be assessed.

Continuous assessment is recommended at each encounter with the juvenile justice system. The extensiveness of the assessment may vary according to the purpose and resources of the agency. For example, a detention center may have fewer resources for assessing youth than a probation agency. Nonetheless, the observations and other information that can be gathered at a detention facility can be invaluable in later intervention efforts. If information is shared between agencies and among professionals with a legitimate interest in the case (i.e., a continuum of services is achieved), time and resources can be saved, and a better outcome can be achieved.

Some agencies have adopted classification systems for case management. These tools assist personnel in evaluating needs, making decisions and determining appropriate resources. Classification systems also can be used to help determine needed services. For example, youth on probation may be placed in general caseloads, while others receive intensive supervision (NCJJ, 1991). In residential settings, youth may be grouped according to factors such as maturity, personality type, emotional or intellectual functioning, educational status or other categories.

The assessment stage is vital in effective case planning. It can be tempting to use superficial assessment information and proceed to case planning. However, planning cannot be comprehensive if an assessment is not thorough. Therefore, it is important for case managers to be skilled in assessment and to spend adequate time determining problems, needs, and resources for each youth.

Case Planning

The next step in the intervention process is case planning. This step is necessary whether a youth is involved with an agency briefly, such as a detention center, or is committed for a longer time, such as placement in an institution or on probation.

The process of developing a good case plan includes the following steps (NCJJ, 1991).

- **Analyzing the data** is the process of reviewing the assessment information, and identifying the problems and resources available to address them. A list or statement of problems should be developed. For a drug-involved youth, these would include drug and delinquent behaviors such as stealing, possession, or trafficking. Assessment should also address contributing problems such as dysfunctional family, academic failure, and associations with negative peers.

- **Setting priorities** involves selecting those problems that are most likely to be responsive to intervention and most critical in accomplishing the agency's mission (protection of society, accountability of youth, and/or competency development). Consideration should be given to the problem's importance, how likely it is to be modified, how quickly a problem can be solved, and how probable it is that resolution will help the youth's total situation.

- **Treatment matching** is an important concept in treatment planning. There are multiple factors to be considered in selecting the most appropriate intervention strategies. The agency's mission and

balanced approach of the juvenile justice system (Maloney, Romig, & Armstrong, 1988) must guide intervention decisions. Factors that determine specific interventions include (See Figure 14-D):

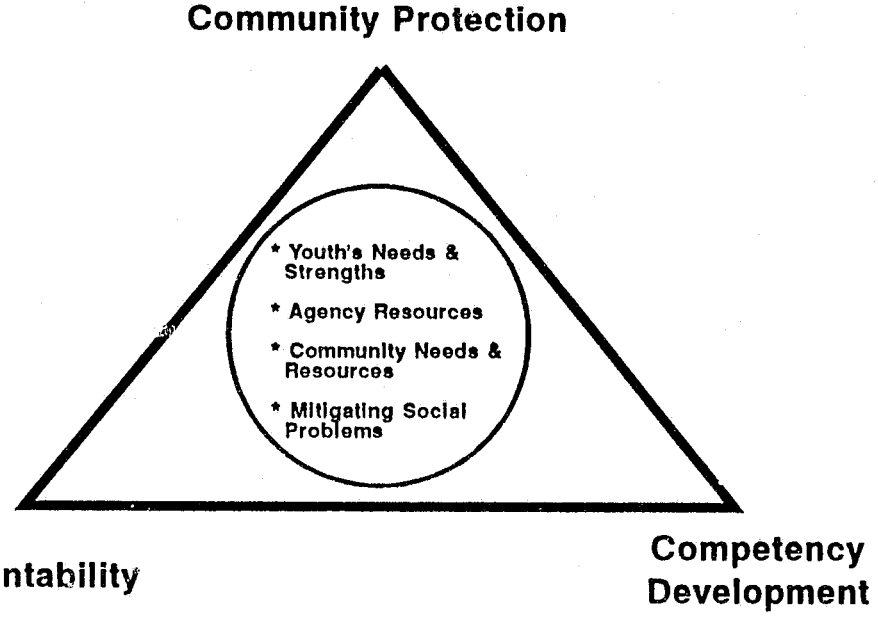
- youth's needs and strengths;
- agency resources;
- community needs and resources; and
- mitigating social problems (e.g., poverty and racism).

An unrealistic case plan is likely to be useless and even counterproductive. Applying inappropriate intervention approaches will probably do little to help the youth. In some cases it will make future attempts more difficult, as the youth may lose self-esteem because of failures or develop further resistance to intervention. Inappropriate case plans also can be detrimental to the agency and community. Successive failures and continued drug and alcohol use and delinquent behavior by youth lead to agency image problems and community disorganization.

A thorough case assessment should indicate both problems and strengths of the individual youth and his or her family. Problems must be addressed in order of priority. However, incorporating individual strengths for both youth and their families is sometimes neglected in case planning. For example, is the youth intellectually bright? Does s/he have talents in art, music or athletics? Is s/he able to understand the causes of his or her behaviors, feelings, and actions that result from these precipitating factors? Does s/he have any positive relationships with peers, family, teachers, or others? Is the family committed to supporting the youth through the change process? Any strengths that are found should be used as building blocks in the case intervention plan. For example, a youth who understands the relationship between his or her problems, feelings and behaviors will be likely to

Figure 14-D

MATCHING NEEDS AND RESOURCES



benefit from individual, and possibly family counseling. A youth with a particular talent may be directed into more productive activities.

The case plan will need to address several areas, including the following.

- **Community risk.** Can the youth remain in the community without committing further crimes, or should s/he be removed until appropriate behavior changes occur?

- **Youth responsibility.** Interventions should include ways of teaching the youth that s/he is accountable for his or her behaviors. This may include restitution to the victim or community.

- **Substance abuse.** The plan should be appropriate for the level of drug/alcohol involvement. For example, a youth who is addicted will need more intensive intervention than someone who is engaged in high risk use (Nowinski, 1990).

- **Youth development.** The plan should reflect the youth's assessed needs for development in areas such as education, communication, social skills, recreation, stress management, self-esteem, and spirituality (Nowinski, 1990).

- **Family and environmental problems.** Problems that are affecting the youth's drug use or delinquency may include substance use by family members, family communication problems, lack of parenting skills, other types of family dysfunction, negative peer associations, and many others (Nowinski, 1990).

Agency resources help determine the intervention plan. The size of caseloads, number of personnel, staff interests and abilities, special programs, legal requirements, and many other factors define services that can be provided within the agency. For example, if an agency has a urinalysis program, it can be used to detect and monitor drug involvement. Some probation and aftercare agencies use specialized caseloads to provide close supervision, drug education, and treatment for drug-involved youth. Others have restitution programs, employment resources and further innovative services. Some state-run juvenile justice systems have specific residential treatment programs for drug-involved juveniles. Financial resources, creativity of staff, and space are some of the factors that can limit or enhance an agency's services.

Community attitudes also must be assessed. If the community is feeling a strong need for protection because of recent juvenile crimes, citizens will expect interventions that provide security from such incidents in the future. However, if community sentiment leans toward holding youth accountable for their behavior, residents may expect that youth will pay restitution or do community service as part of the consequences of illegal behavior. If community members feel drugs are contributing to problems for youth and want to see adolescents have opportunities for further competency development, treatment programs may be stressed.

Community services will be vital in accomplishing an agency's mission and the individual case intervention goals for each youth. Formal community resources include drug treatment, educational programs, health care, social welfare systems, and religious organizations. Youth employment opportunities, recreation programs, and social clubs are also important community resources. Some communities have a core of concerned citizens who volunteer services ranging from those that offer the youth a relationship with a positive adult role model, to advisory and advocacy groups. Sometimes communities provide a limited range of resource options; many times the available resources are insufficient to meet the needs.

Complaints often are heard about long waiting lists for treatment services.

Court climate and expectations also affect case planning. A judge's attitude toward a particular violation, a treatment or supervision option, and even the personnel involved in a case, can influence outcome. Courts also have latitude in granting discretion to juvenile justice agencies and professionals for developing and implementing intervention plans.

Mitigating social factors are another consideration in case management. The financial, social, and employment resources of youth and their families may influence the treatment plan. For example, if a youth comes from a disadvantaged family, and the only community drug treatment resources available are financed by private insurance payments, the youth will not be eligible. This presents a challenge to juvenile justice agencies, as all youth have a right to equal treatment and protection.

After considering these factors in treatment matching, the final selection of supervision, treatment strategies, and resources will be largely subjective. Because youth are different, varied interventions should be outlined in their individual case plans.

A case plan consists of several elements, including the following.

- **Goals**, are general statements of what should be accomplished. For example, a goal might state: *John will develop needed skills to function without using drugs.*

- **Objectives**, are steps required to achieve a goal. These should be written in behavioral terms. There may be several objectives for each goal. Examples might include:

  - *John will undergo urinalysis randomly each week, as determined by his probation officer, until he has tested negative for drug use for three consecutive months;*

  - *John will attend a drug education group beginning immediately and continuing for three months; at completion, his knowledge and attitudes about drug use will be evaluated using a written test given by the group leader to determine his continuation in the group; and*

  - *John will receive outpatient drug treatment starting in one month and continuing until his therapist, his probation officer, and John agree that his treatment goals have been met.*

- **Time Frame** refers to when the intervention will begin and end. In the sample objectives given above, John was to begin random urinalysis immediately and stop when he met certain criteria; he was to begin drug education and continue for three months; he was to commence treatment in one month and attend until his treatment goals have been met.

- **Criteria for successful completion** is the measurement to be used to determine that the youth has accomplished a particular objective. For example, John will have negative urinalyses for three months, will demonstrate appropriate knowledge and attitudes about drug use, and will accomplish treatment goals.

- **Persons responsible** are the individuals who are accountable for each task. For example, in the first objective above, John and his probation officer are responsible; in the second example, John and the group leader are responsible; and in the third example, John, his therapist and his probation officer will determine goal achievement.

- **Expected benefit** is what the youth can anticipate if the case management objectives are completed. For example, urinalysis, attendance at drug education group, and participation in therapy can be discontinued if successfully completed. It is especially important for youth who achieve their goals to receive rewards frequently and promptly. Rewards might include extra privileges and freedoms, tangible rewards, and praise (APPA, 1992, Guideline 14-2, 14-3).

These elements of the case plan can be written in the form of a contract that the youth, case manager, and sometimes parents and court personnel sign.

Developing and implementing an effective case plan often involves partnership between the juvenile justice system and other community systems. It is important to remember that the ultimate goal of each system is the same: making a positive difference in the lives of youth. Multidisciplinary teams are useful in both assessment and treatment of youth. These teams may provide direct services to the client or consultation to those who are providing services. Multidisciplinary teams may be composed of a variety of professionals, including health care professionals (physicians, nurses), legal professionals (attorneys, law enforcement), social welfare professionals, educators, mental health professionals, juvenile justice professionals, and others.

Case consultation teams review case data and provide suggestions to professional staff on treatment planning or implementation. These suggestions often can be very valuable when several interventions have been attempted without success. A team of persons from varied backgrounds can provide a new perspective and generate useful ideas for assessment or intervention.

Multidisciplinary treatment teams are composed of an array of professionals who are actually involved in treating the identified youth. They may meet periodically to discuss the progress and problems of the case and adjust treatment plans and interventions accordingly. In some cases this involves the coordination of professionals and services from a variety of agencies. It can be difficult to maintain multidisciplinary teams because of the demands on the time of individual members. However, those who are successful report favorable results for the youth served.

Performance of Services

Just as drug involvement becomes gradually more problematic, the process of recovery is also progressive. Intervention is not a single event; rather, it usually consists of a series of treatment and supervision strategies of varying levels of intensity. Each step is designed to meet the needs of a youth at a particular time in the recovery process (Nowinski, 1990).

Sobriety and non-delinquent behavior should be the overarching goal for interventions with youth who are identified as drug- or alcohol-involved. However, intervention plans for achieving this goal may be very different because of the factors discussed in the previous sections on case assessment and planning.

Drug-use identification methods are used to detect and monitor drug involvement. As such, the use of results should be related to the agency's mission and the program purpose, as discussed in Chapter 5. Program purposes can be viewed as corresponding to the components of the agency's mission:

- community protection;
- accountability; and
- competency development.

Juvenile justice agencies must be responsible for providing and arranging for the services youth need. Often, services related to supervision of youth are provided by juvenile justice agencies while therapeutic

services are provided by medical, mental health or social welfare programs. However, some juvenile justice agencies have developed their own treatment programs that combine supervision and treatment strategies. In practice, supervision and treatment are concepts that often are merged or are viewed on a continuum with no distinct separation between them. However, for clarity they are presented here as separate strategies.

Juvenile justice staff may perform multiple roles when intervening with drug-involved youth. They may be direct providers of services, brokers, organizers, and advocates for needed services (NCJJ, 1991). In the remainder of this section, several treatment and supervision options will be discussed. No attempt is made to determine who should provide these services. That will depend on many agency and community factors, as well as the needs and resources of the youth and family. However, those responsible for case management will need to provide ongoing supervision and monitoring of the youth and the case plan, even if very few services are provided directly. Some services are more appropriate than others at particular points in the continuum of juvenile justice services. For example, short-term drug education can be incorporated in a detention setting, but long-term drug treatment would be more appropriate for an institution or probation agency.

Supervision Strategies

Community Protection. Community may refer to an open population area, such as a town or city, or a closed environment, like an institutional community. The purpose of identifying drug use among juveniles for community protection is to ensure a drug-free environment and enhance safety and security. Through detection, deterrence and control of the presence of drugs a reduction in the number of juveniles committing drug-related offenses is expected.

Appropriate supervision strategies related to community protection include:

- providing security to control the source of drug supply. This is useful in either a geographic or an institutional community.

- monitoring drug use among juveniles. Periodic random screening can indicate the level of use in a community setting and can alert juvenile justice professionals to potential problems if high levels of use are found.

It also may be appropriate to use the results of drug-use identification techniques for purposes that pertain specifically to the agency and more generally to the community. Agencies working with delinquent or at-risk youth have a responsibility to undertake the identification of youth problems, including substance abuse. Once recognized, an obligation exists to confront and ameliorate these problems. Agencies that fail to intervene appropriately may place themselves in legal jeopardy, especially if those youth present a danger to themselves or others. Therefore, for the legal protection of the agency and staff, identification of drug use should be followed by appropriate intervention strategies. These should always be documented carefully to demonstrate that responsible action was taken.

Program evaluation is also an important use of the results of drug-use identification procedures. Compiled information about the extent of drug use among youth, types of drugs used, effectiveness of intervention strategies, and relapse rates are useful for monitoring programs and making appropriate management decisions.

In addition, aggregated drug-use information is needed for community and professional awareness. Professionals, such as health care providers, educators, and social welfare personnel should be made aware of

the extent of drug involvement among adolescents whom they may be seeing concurrently in their professional practices. Such knowledge may sensitize them to probe for substance abuse indicators or risk factors among their clients.

Communities that are aware of the extent of drug use among youth may choose to respond with appropriate prevention programs or community education. In addition, some community leaders and citizens who become concerned about these problems may be able to play an advocacy role for needed treatment programs.

Youth Accountability. The practice of holding youth answerable for their behaviors helps them develop a sense of social awareness and responsibility. Drug identification procedures for accountability are used to detect the presence of drugs and monitor compliance with court orders or program rules to maintain abstinence (see APPA, 1992, Guideline 14-1.).

Supervision for accountability must demonstrate intolerance for drug use to the youth. A positive finding of drug or alcohol use, when accountability is the focus, might result in an array of interventions, including:

- increased supervision;
- counseling;
- changes in program status;
- disciplinary actions (sanctions); and
- legal actions.

Increased supervision by the juvenile justice system involves a range of approaches such as increased drug testing, more frequent contacts with juvenile justice personnel, and electronic monitoring. Resourcefulness may be required to develop supervision strategies that do not overburden staff but are effective in limiting juvenile drug use. The ultimate goal of such strategies should be teaching youth to self-limit their own behaviors.

In addition to the supervision provided by juvenile justice professionals, it is often important to enlist the involvement of family members or surrogate families (e.g., foster families). Responsible adults may need to structure and monitor the youth's activities and whereabouts and see that they comply with conditions for urinalysis and treatment. Those with whom the youth lives are best able to control access to privileges that may be used as contingents for continuing abstinence (Weinrott, 1987).

Counseling includes confronting youth's drug use and providing guidance and instruction in a verbal interaction. Counseling sessions need to be reciprocal, with youth and counselors sharing in the exchange. Counseling implies more than just "talking to" a juvenile; youth also must be heard. This is an opportunity to find out more about the motivation a youth has for continued drug use. The youth may need to talk about family or school problems or peer relationships. Juvenile justice professionals need to be skilled in providing firm, but empathetic, goal-directed counseling that will help youth develop effective knowledge and skills for coping with issues related to drug use. It is also helpful to involve family members in counseling.

Changes in program status may include discharging a youth from a program because of continuing drug use, transfer to another program that can better meet his or her needs, or extending the amount of time a youth will remain in a program. As noted in Figure 14-B, the juvenile justice system includes less restrictive options, such as probation, as well as those that sharply limit a youth's freedom and provide constant supervision, such as detention or institutionalization. There are often possibilities for planned and coordinated movement among these

programs, depending upon the youth's response and performance at a given level.

Disciplinary actions, or sanctions, involve progressively more stringent strategies such as:

- verbal or written warnings;
- loss of privileges and freedom (e.g., earlier curfew, travel restrictions);
- mandated community service; and
- reprimands or disciplinary hearings.

Juvenile justice agencies and professionals must be creative in developing appropriate and effective disciplinary strategies. Discipline implies an intervention that generates learning, correction, and development on the youth's part. Youth will respond differently to various disciplinary approaches. At times, a juvenile's opinion of a sanction may be different from an adult's judgment of the same consequence. Thus, disciplinary responses must be devised with the individual youth in mind. There are no "one size fits all" approaches to discipline. (See APPA, 1992, Guideline 14-1.)

Legal actions may include making recommendations to the court for appropriate interventions or treatment, revocation or violation of probation proceedings, or prosecution of previously adjusted cases. Such legal recourses are options available in many situations if youth continue their drug involvement. When used for legal purposes, it is vital that results of drug-use identification procedures be handled appropriately. For example, documentation of chain-of-custody procedures must be precise (APPA, 1992, Guideline 14-5). Legal recourse should be used only after other strategies have been exhausted. In addition to the results of drug-use identification procedures, other case data should be considered before taking legal action (APPA, 1992, Guideline 14-6).

It must be stressed that if drug-use identification methods indicate a youth is **not** using drugs or alcohol, responses also should occur. Youth who maintain abstinence should be rewarded for their accomplishments and encouraged to continue striving for sobriety. In these instances, interventions may be almost opposite of those cited above. For example, supervision may be decreased and privileges and freedoms restored. Drug testing may be decreased or discontinued. Counseling may need to continue but become more focused on praise and encouragement, and continuing development of effective coping strategies. Changes in program status may result in movement to programs that provide more freedom and privileges. Recommendations also may be made to courts to discontinue interventions or change delinquent status or program commitment. **Youth who demonstrate responsible behavior by maintaining abstinence must receive reinforcement in the form of positive responses.** Ultimately, these reinforcers may be more effective than sanctions for drug use.

Competency Development. The juvenile justice system recognizes that youth are not fully developed and need guidance and nurturance. Competency development implies that juveniles need *habilitation* because of deficits in their maturation and development. Various kinds of skill development, such as social, vocational, and life skills, as well as therapeutic interventions, are required for competent, functional living (Maloney, Romig, & Armstrong, 1988).

The principal intervention strategies include treatment and education. Treatment may be offered within the juvenile justice system, or youth may be referred to drug treatment agencies. Treatment must directly confront drug and alcohol use and help youth overcome dependencies. Treatment also may need to

address other factors that are associated with drug involvement, including:

- family problems;
- school problems;
- peer influence;
- physical or sexual abuse;
- rape;
- prostitution;
- adolescent parents; and
- mental illness or multiple diagnoses.

Specific treatment modalities will be discussed in the next section.

Educational interventions are also a part of competency development. Drug education is vital for youth to learn about the effects of drugs and ways of averting further drug involvement. Drug education may occur in a group setting or during individual counseling. In some cases, youth may be assigned independent learning tasks, such as writing an essay or preparing a report. Educational interventions are more comprehensive than drug education alone. For example, youth with drug and delinquent behaviors that are related to school problems and negative peer associations may need to develop social and vocational skills. They also may need help with basic academic skills. Improvements in these areas often have a positive impact on drug use and delinquent behavior.

Additional intervention approaches for competency development include enhancement of pro-social attitudes, amelioration of behaviors, and improvement of self-esteem. Helping youth gain success in socially accepted roles is important. Providing opportunities for youth to experience positive accomplishments also is likely to lead to increased self-esteem.

Crisis and Emergency Interventions

During the supervision or treatment of drug-involved youth, crises and emergencies may occur. A crisis implies a state of disequilibrium in which conditions are deteriorating and usual coping strategies are not effective. A crisis often includes a component of loss or potential loss, such as divorce or death of parents, changes in schools, health problems, and separations. An emergency is a sudden, serious incident that requires immediate action. Crises that are not resolved may escalate to emergencies, including incidents such as illnesses, injuries, suicide attempts, and physical aggression (Janosik, 1984).

Substance abuse may generate or be precipitated by crises and emergencies. For example, a youth who is experiencing the loss of a parent because of divorce or loss of friends because of a family move may turn to drugs or alcohol for solace. On the other hand, a youth who is drug-involved may experience emotional and behavioral problems that ultimately result in emergencies. These might include occurrences such as overdoses, illnesses during periods of withdrawal, suicide attempts, or aggressive behavior due to the psychological effects of the drugs.

Juvenile justice personnel should be prepared to handle crises and emergencies when they arise. Preparation includes being attentive to changes in the youth that may signal a crisis or progression to an emergency. Such differences may include losses like those described above or behavioral changes such as withdrawal, sleeping and eating problems, changes in appearance, relationship problems, and agitation or aggression. Preparation also involves the development of appropriate agency policies to be followed in crises and emergencies. It is recommended that staff receive training in the implementation of these policies.

Intervention in a crisis or emergency should include three steps.

- **Assessment.** Develop an understanding of what is happening to cause this crisis or emergency.
- **Intervention.** Take appropriate action to ensure the safety of the youth involved. Remain calm and in control. Follow agency policies and procedures.
- **Follow-through.** When a crisis or emergency is over, there is still much work to do to assure its resolution. Youth who have experienced a crisis or emergency will need counseling, self-esteem building interventions, and reassurance that someone still cares about them. Crises and emergencies can be used to build coping skills for the future.

Treatment Interventions

There is no clear delineation between supervision strategies and treatment interventions. In this chapter several treatment modalities frequently used for drug-involved youth are described. The supervision strategies discussed in the previous section are typically performed within the purview of the various components of the juvenile justice system. The treatment modalities described in this segment may be offered within juvenile justice agencies or by health care, mental health and social welfare systems in the community.

Debates have been waged about the effectiveness of treatment for nonvoluntary clients. However, research has shown that nonvoluntary participation in treatment can improve retention. Concomitantly, the length of time in treatment is positively related to treatment success. Thus, coercion to enter and remain in treatment, through the court authority, can enhance the effectiveness of intervention (Leukefeld & Tims, 1988).

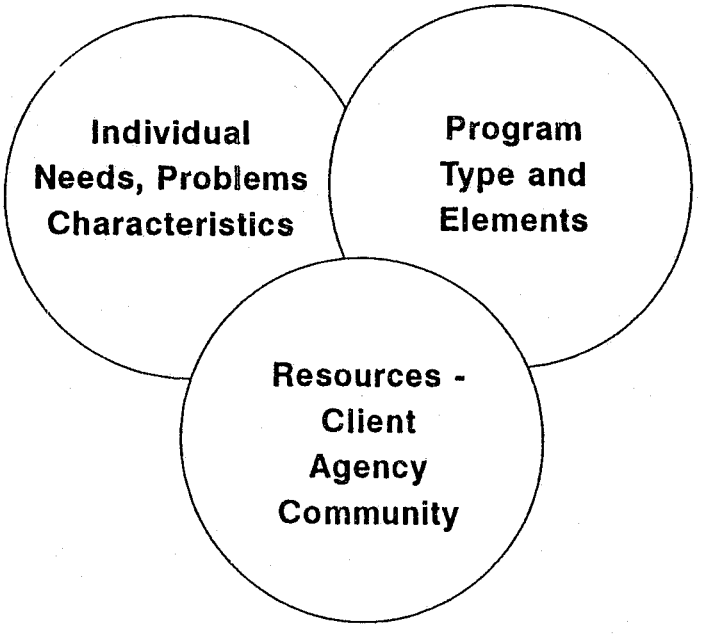
Treatment matching. As with supervision strategies, a single treatment approach will not be effective with all youth. Thus, skillful practitioners must consider many factors when developing a juvenile's treatment plan. Three areas should be assessed:

- needs, problems and characteristics of individual youth;
- program type and elements; and
- available resources.

These are depicted in Figure 14-E.

Figure 14-E

TREATMENT MATCHING



Individual variables: Research that clearly demonstrates successful outcomes with specific combinations of client and program factors is sparse. Patient characteristics that have been analyzed in studies of matching clients with treatment programs usually have not been specific to adolescents. However, the following individual variables have been reported to have general relevance to treatment selection (McLellan and Alterman, 1991; American Probation and Parole Association and the National Association of Probation Executives [APPA & NAPE], 1988).

- *Social and economic status and support*. Those with greater social and economic supports and limited psychiatric problems do well in most treatment programs and seem to gain from either inpatient or outpatient interventions comparably. Those with lower socioeconomic status and more serious psychiatric problems do less well in treatment; results are particularly poor in outpatient settings.

- *Psychiatric problems*. Those with severe drug dependence, a family history of substance abuse and antisocial personality disorders generally have poorer outcomes in all types of treatment programs.

- *Problem severity*. The extent of drug involvement (i.e., misuse, abuse, dependence) and other mitigating factors influence the effectiveness of treatment.

- *Cognitive style*. Conceptual level and locus of control (perceiving control of one's situation as being internal or external) are important factors. Youth with lower conceptual levels need simple rules and external controls. Youth whose conceptual skills are developed more fully may be able to think at a more complex and independent level. They may have increased capacity to develop internal control of their behaviors.

- *Self-esteem*. This may be a critical factor for certain treatment interventions, particularly those involving interactions with other youth. Thus, people with higher self-esteem may function better in group settings than those with lower self-esteem.

These client-related factors should be taken into account when selecting treatment resources; otherwise, effectiveness of interventions is likely to be limited, at best.

Program factors: McLellan and Alterman (1991) suggest several program factors that are variables in selecting appropriate treatment options.

- Treatment settings suggest the location or intensity of the program, and include inpatient, outpatient, day-hospital, partial hospital, residential, and others.

- Treatment modalities or intervention strategies are diverse and consist of self-help approaches (such as AA or NA), therapeutic communities, pharmacotherapy, drug-free abstinence, detoxification, aversive conditioning, as well as others.

- Treatment elements are specific program components within a particular modality or setting, such as group therapy, education, family counseling, individual therapy, and social service assistance.

- Program quality includes the administrative caliber, qualifications of staff, and other factors that determine whether or not the program is managed properly and delivers appropriate services.

Tangible resources: The third major area of consideration for treatment matching is available *tangible resources*. These include:

- Client resources, such as private insurance and transportation for attending treatment programs;
- Agency resources, consisting of staff, funds for purchasing services, or programs that provide treatment; and
- Community resources, such as treatment programs and the available space within them, or financial means for developing additional treatment options.

There is no magic formula for effective treatment matching. However, practitioners need to be skillful in assessing individual needs, and knowledgeable of existing programs and resources.

MacDonald (1989) lists several criteria to consider when selecting a treatment program, including the following.

- It should be drug-free.
- It should contain a strong family component, especially for those youth with involved family members.
- There should be a peer component, using positive peer pressure.
- The program should provide aftercare services for support and reinforcement.
- It should be based on pro-social, community-based values.
- It should provide appropriate ancillary services, such as health care and education in a residential program.
- There should be ongoing program evaluation and modification to determine and improve effectiveness.

Treatment Programs. This section describes several types of treatment programs. In some instances, information is available on how these should be adapted to meet the needs of juveniles. Several of these approaches have been evaluated for their effectiveness in treating adolescents; however, few clinical studies of treatment for this population have been undertaken. Most research available is based on adult populations. Many treatment programs for adolescents are derived from programs for adult substance abusers. However, efficacy with adults cannot be generalized to a juvenile population. Clearly this area needs more research specific to adolescent populations. However, one research finding that has been reported for youth is that early detection and treatment is important since younger and less-addicted drug users do better in treatment (Kusnetz, 1986; Schinke, Botvin, & Orlandi, 1991).

An additional factor that makes treatment matching and selection of appropriate treatment resources difficult is the lack of an accrediting body to evaluate substance abuse treatment programs and set standards for care (MacDonald, 1989; Schinke, Botvin, & Orlandi, 1991). Without such uniform standards, individuals must judge each program separately, using their own criteria.

The following specific treatment approaches are presented as an overview to serve as an introduction to various treatment options for adolescents.

1) **Therapeutic Communities** emphasize self-help and rely heavily on ex-addicts as peer counselors, administrators, and role models. Therapeutic communities provide a highly structured milieu. There are program stages through which members must progress, and this advancement is noted with special tasks and ceremonies. The stages progressively demand more responsibility and provide more freedom. Group encounter sessions are often confrontational, focusing on openness and honesty. Social and vocational skills also are taught. Research has shown that the longer clients remain in therapeutic communities, the more likely they are to have positive results (APPA & NAPE, 1988; Schinke, Botvin, & Orlandi, 1991).

Therapeutic Communities have been adapted to treat adolescent offender populations. Some are operating in juvenile justice institutions, while others work with youth who are on probation or parole. Some research has indicated that adolescents need a minimum of a year in this type of residential treatment to ensure post-treatment success (Mullen, Arbiter, & Glider, 1991).

Several modifications to adult therapeutic community models have been suggested for those serving juveniles. Some of these include (Mullen, Arbiter, & Glider, 1991):

- breaking down "images" associated with negative social functioning;
- the addition of "no sex" to the other cardinal rules of "no use of drugs or alcohol" and "no violence;"
- increased supervision to prevent youth from leaving the program or engaging in antisocial behavior or negative peer activities;
- more recreational activities to promote leisure skill-building and prevent boredom;
- earlier and greater family involvement while the youth is in treatment, parent training and support for behavior and value changes, and assessment of families for potential for youth to return home;
- addition of an academic education component;
- transition and aftercare services to provide needed support when youth return to their home and community environment;
- increased staff-to-youth ratio and continuity of staff;
- separation of boys and girls except for occasional program activities; and
- limiting the size of the program to 45 or fewer youth to reduce antisocial behavior, attempts to abscond, and negative influence of peers.

2) **Outpatient Treatment Programs** emphasize counseling and other clinical methods rather than medications or residential treatment. They may be located in counseling or mental health centers, educational or vocational programs, social service organizations, or community centers, and they are usually readily available and relatively inexpensive. They often focus on developing coping and social skills to eliminate drug use or support a youth through continuing abstinence. Family and individual therapy, behavior modification, stress reduction, psychotherapy,

problem solving, and many other approaches are used to help clients manage social and emotional problems. (APPA & NAPE, 1988; Nowinski, 1990; Schinke, Botvin, & Orlandi, 1991).

Outpatient treatment is most appropriate for youth who do not have acute medical or psychiatric problems. Random urine screening or other drug- use identification techniques are often used in conjunction with outpatient treatment as a tool to reinforce abstinence. A difficulty inherent in outpatient treatment is that youth remain in the environment in which substance abuse began and continued to occur which is frequently a major barrier in changing drug-related behaviors (Schinke, Botvin, & Orlandi, 1991).

3) **Twelve-Step Programs** are self-help groups such as Alcoholics Anonymous (AA) and Narcotics Anonymous (NA). They often are used with other treatment methods, but may be the only treatment modality used. These approaches provide peer support and models of drug-free lifestyles, sponsor drug-free social activities, and emphasize prosocial values (National Task Force on Correctional Substance Abuse Strategies, 1991).

The twelve-step process consists of a series of cognitive, behavioral, and spiritual tasks, including:

- an admission of powerlessness;
- assessment of character defects;
- restructuring of impaired self- esteem and damaged relationships; and
- commitment to a higher power.

Several studies indicate that twelve-step programs are likely to be most successful with adults from lower-middle to upper-middle socioeconomic levels who are socially and verbally skilled. On the other hand, self-help has been less successful with those lacking these skills, those who are uncomfortable with spiritual or religious themes, persons who do not wish to engage in self-disclosure and those who are not ready to abstain (APPA & NAPE, 1988).

It is important to note that AA and NA are very different organizations with diverse jargon, style, substance and social tradition (Gifford, 1989). Care should be taken to refer youth to the most appropriate approach, based on their assessed needs. AA focuses on alcohol dependence and behaviors, while NA focuses on drug addiction and uses drug-specific language and approaches. NA developed more recently and reflects the milieu of the late 1970s and 1980s, according to Gifford (1989). He believes this makes it a more applicable organization for the needs of many drug-involved youth.

4) **Day Treatment** is a specialized approach that provides a highly structured daily program as an alternative to residential treatment (Nowinski, 1990; Schinke, Botvin, & Orlandi, 1991).

5) **Other Residential and Hospital-Based Programs** include modified therapeutic communities, short-term residential programs, and hospital-based programs. Many of these programs have developed to serve more clients and reduce costs. Some types of these programs include (APPA & NAPE, 1988):

- *Modified therapeutic communities* generally retain clients for six to nine months and have more limited treatment goals. This approach may be effective for those with social and

family supports, as it focuses on helping clients reach a drug-free state and develop practical skills.

- *Short-term residential programs* provide three to six months of treatment. It attempts to help the chemically dependent person eliminate drug use, to re-establish family relationships, and to provide survival skills without resorting to criminal activity.

- *Hospital-based programs* frequently are operated by private for-profit hospitals. They may last from a few weeks to a few months (usually depending upon third party reimbursement), and target persons from mid- to upper-socioeconomic levels. They generally operate from a medical model and have several medical and other professional staff members. These treatment modalities often emphasize group therapy and drug education. These programs are highly structured and include academic education, family therapy, recreation, and individual counseling, in addition to the substance abuse components. Many use a 12-step recovery program (Schinke, Botvin, & Orlandi, 1991).

6) **Detoxification Programs** provide short-term detoxification for drug-involved persons. They are not designed to treat substance abuse; rather, they assist individuals through a period of physical withdrawal and, in some cases, help prepare them for further treatment and rehabilitative services. These programs are sometimes affiliated with hospitals, or they may be separate units that are part of substance abuse facilities or programs (APPA & NAPE, 1988).

The amount of time needed for detoxification depends on the type of substances abused and their particular withdrawal symptoms, which can range from a few days to several weeks. Treatment methods vary according to the withdrawal symptoms produced by the substance used. For example, alcohol withdrawal might cause tremulousness or even life-threatening delirium tremens; withdrawal from alcohol and other depressants produces anxiety and hyperactivity and must involve medical management; withdrawal from stimulants often leads to fatigue and depression (APPA & NAPE, 1988).

Medical detoxification may include drug substitution. With this process, one drug is used to replace the abused drug, such as methadone for opiates and librium for alcohol. These drugs help control the rate and severity of withdrawal, but do not have the same effects as the drug of abuse. Other medications may be used to treat the uncomfortable symptoms of withdrawal (APPA & NAPE, 1988).

7) **Pharmacotherapy** uses medications to treat substance abuse. The major categories of pharmacotherapy are (APPA & NAPE, 1988):

- Drug substitutes that provide a more controllable form of addiction. Methadone maintenance for heroin addicts is an example.

- Antidipsotropic drugs cause unpleasant reactions when used with other substances and thus create an aversion to their use. An example is Antabuse, which causes a violent physical reaction when alcohol is consumed.

- Antagonists are drugs that block the effects of certain drugs at the brain's receptor sites.

- Psychotropic medications control symptoms associated with drug use and withdrawal. For example, tranquilizers or lithium may be used to control anxiety or depression.

Methadone maintenance has been studied more than other pharmacotherapy treatment methods. It has been proven to be effective in helping those with opiate addictions to avoid illicit drugs and criminal behavior (Gerstein & Lewin, 1990). Typically, however, adolescent drug users are not addicted to opiates (Schinke, Botvin, & Orlandi, 1991). Thus, this treatment method is seldom used with youth.

Some practitioners advocate that all youth treatment should be drug-free because of the theory that one dependency may be substituted for another. This opinion would exclude the use of any pharmacotherapy approaches with adolescents (MacDonald, 1989).

Other treatment modalities. Several additional treatment methodologies can be identified that may be used in a variety of treatment programs. These include the following.

- *Drug education* focuses on the effects of drugs and alcohol on health and behavior. Programs using educational approaches often include development of social skills, problem-solving skills, and thinking and reasoning skills, with factual information on drugs and alcohol (APPA & NAPE, 1988).

- *Group therapy or group counseling* emphasizes benefits gained by persons with similar problems relating to each other in a supportive and therapeutic setting. Confrontation is encouraged in many drug treatment groups for reducing denial and providing feedback (APPA & NAPE, 1988).

Peer associations are particularly important for adolescents who are engaged in the developmental task of separating from family and forming their own identities. Peer groups can have a significant effect on attitudes and behavior. This influence can be either positive or negative. Peer groups may be located in schools, community agencies, residential programs, churches, and on the streets (such as gangs). Four categories of peer group programs have been identified by Resnik and Gibbs (1988):

(1) *Positive peer influence programs* which emphasize group interaction and positive influence of the group on the individual member;

(2) *Peer teaching programs* which emphasize youth conveying information to their peers.

(3) *Peer counseling, facilitating, and helping programs* which focus on peers helping peers. Through these programs, youth who provide help develop a sense of responsibility. The "helper" often benefits more than the peer who is helped; and

(4) *Peer participation programs* which create new roles for youth, giving them decision-making power and responsibility. These programs emphasize youth empowerment and accountability.

- *Family therapy* is a modality involving treatment of the identified client with drug or alcohol problems with his or her family members. A family therapy perspective often views the identified client as representative of the family's problems. Thus, family members may be reluctant to participate because of uneasiness about disclosure of family problems or fear of disturbing the equilibrium that has been achieved with the

"problem" family member. Alternative models of family therapy consist of counseling family members individually and focusing on family issues in individual client counseling (APPA & NAPE, 1988).

As juveniles are not yet independent, family interventions may be especially important in addressing the basis of their drug and alcohol involvement. Some juveniles may not be living with their families of origin, but may be in adoptive families, foster family placements, or other family surrogate situations. Regardless of the definition of family used, involving those who are significant in the youth's life is important.

Family interventions may include classes to help parents understand substance abuse and to improve parenting skills. Counseling and educational programs for siblings of identified youth may also be helpful (MacDonald, 1989).

- *Cognitive behavioral interventions* have been found to be effective in reducing subsequent delinquency and are being evaluated for effectiveness with drug-involved youth. Cognitive skills training focuses on development of a cluster of abilities that are often deficient in delinquent or drug-involved youth. These include:

  - recognizing and avoiding potential problems;
  - impulse control;
  - anger management;
  - considering consequences of an action;
  - generating alternative solutions/problem solving;
  - taking personal responsibility;
  - time management;
  - assertiveness;
  - creating logical plans for reaching goals;
  - recognizing cause-effect relationships;
  - social networking;
  - coping with authority; and
  - coping with stress and anxiety.

  Methods of teaching these skills include role-playing, modeling, self-control training, critical thinking, values clarification, general education, cognitive restructuring, and behavior modification techniques (Hawkins, et al. 1987; APPA & NAPE, 1988).

Other Innovative Intervention Approaches

As juvenile justice and treatment professionals struggle to find answers to the problem of adolescent substance abuse, new programs and approaches are being developed. It is not possible to review all such efforts. However, a few are highlighted below as examples.

Boot Camps have been developed as sentencing options in several states. They provide a military style, short-term, shock incarceration for young drug offenders and others convicted of nonviolent crimes.

After-School Programs usually provide treatment services three to five times a week lasting

approximately two to four months. Some of these programs also provide weekend activities. These are representative of a modified intensive outpatient treatment which allows youth to live at home and continue attending their regular school. However, intensive treatment can be more expensive because it uses more resources. This treatment approach usually includes group therapy, individual counseling, parent education, and family therapy (Nowinski, 1990).

Therapeutic Adventure provides structured group activities intended to build self-esteem, group cohesion, trust, communication, and other skills and strengths. It can be used alone or in combination with other types of treatment and can focus on many problems, including substance abuse (Nowinski, 1990).

Partial Hospitalization/Day Treatment provides intensive daily interventions. A youth continues to live at home, but does not attend his or her regular school. This reduces the influence of the social environment and association with former negative peers, but some contact is still possible. These programs combine academic education, substance abuse treatment, family education and treatment, and structured activities for leisure time. There is often an emphasis on twelve-step programs (Nowinski, 1990).

Halfway Houses provide transitional living arrangements, usually following a period of residential or inpatient treatment. This allows a youth to return gradually to community living while still receiving supportive reinforcement for abstaining from drug and alcohol use. Youth may work or return to school, develop independent living skills, participate in twelve-step programs and other treatment modalities (Nowinski, 1990).

Supervised Independent Living Programs provide resources and support to older youth needing assistance in developing independent living skills and maintaining sobriety. These often emphasize development of vocational, social, personal management, and coping skills.

Relapse and Relapse Prevention

Youth in the juvenile justice system who are using drugs may be at various stages of drug-involvement. If their use of drugs and alcohol can be detected early, and appropriate interventions can be provided, progression to more serious drug or alcohol use may be curtailed. However, for those whose patterns of chemical use have reached the stages of habitual use or addiction, recovery issues become more complex.

Drug and alcohol addiction is a chronic and relapsing condition. Recovery requires changes in attitudes, behaviors, and values. Because of these issues, recovery is not a static condition; it is an ongoing process. Relapse occurs when attitudes and behaviors revert to ones similar to those exhibited when the youth was actively using drugs or alcohol. Although relapse can occur at any time, it is more likely earlier in the recovery process. At this stage, habits and attitudes needed for continued sobriety, skills required to replace substance use, and identity with positive peers are not firmly entrenched (Nowinski, 1990).

Whether treatment is provided by juvenile justice professionals or by community treatment agencies, those who supervise youth in juvenile justice settings must be aware of the potential for relapse and prepared to intervene as needed. It has been estimated that 40 to 60 percent of persons who are recovering from chemical dependence relapse at least once following their first *serious* attempt at treatment. Studies have shown that offenders who are actively using drugs are involved in approximately three to five times the number of crime days as non-drug users; thus, relapse tends to accelerate the level of subsequent criminal activity (Bell, 1990; Peters, 1991).

Adolescents are at particularly high risk for relapse because of their developmental stage. Many typical adolescent issues include physical and emotional changes which exacerbate relapse tendencies. Chemical dependency may have delayed normal development, making it difficult for recovering youth to function in age-appropriate ways. This produces discomfort in the all-important social milieu of youth. Some may return to substance use as a way of managing these uncomfortable feelings (Bell, 1990).

Bell (1990) also indicates there are *predisposing factors* and *precipitating factors* that may result in relapse for adolescents. *Predisposing factors* place youth at increased risk and include elements such as:

- learning disabilities;
- dual or multiple diagnosis;
- high stress personalities;
- inadequate coping skills;
- lack of a support system;
- dysfunctional families; and
- lack of impulse control.

Precipitating factors are upsetting events that interfere with adolescents' abilities to work through recovery. Examples of these include:

- divorce or separation of parents;
- moving away from old friends;
- changing schools;
- loss or death of family members; and
- breakup of relationship with boyfriend or girlfriend.

A youth who is truly recovering from chemical addiction will not suddenly begin using drugs or alcohol. Juvenile justice professionals, other youth workers, and parents can learn to identify warning signs that relapse may occur. Many of these signs also are indicators that a youth whose substance use has been at an earlier stage may be progressing to habitual use or dependency.

Bell (1990) lists 39 adolescent relapse warning signs that may occur in ten phases of relapse. (These will only be listed here; further reading is suggested to investigate the full explanation of each phase and warning sign.)

These warning signs provide the observant professional with many clues and opportunities to intervene *before* youth return to drug and alcohol use. Keys to preventing relapse are education and openness. Youth can learn to identify when they are in the early phases of relapse. Open communication will allow them to discuss problems and feelings with caring adults who can support them as they continue in their recovery efforts (Bell, 1990).

Relapse prevention emphasizes teaching recovering persons to recognize and manage relapse warning signs. One model for this process that has been applied to adolescent populations (Bell, 1990) includes the following nine steps (Gorski, Kelley, & Havens, 1991). Other theoretical approaches and relapse prevention models also have been developed. (For example, see Marlatt & Gordon, 1985.) Practitioners are encouraged to explore various models when developing an approach to relapse prevention.

1. *Self-regulation and stabilization*: Relapse-prone individuals need to return to stable physical, psychological and social functioning. This leads to the ability to self-regulate thinking, feeling, memory, judgment, and behavior.

2. *Integration and self-assessment*: Self-assessment involves detailed reconstruction of the presenting problems, alcohol and drug-use history, recovery, and relapse history to identify past causes of relapse. Exploration of presenting problems

Table 14-A

WARNING SIGNS OF ADOLESCENT RELAPSE

Phase One: Return of denial

1. Impatience and frustration;
2. "Everything-is-OK" syndrome;

Phase two: Avoidance and defensive behavior

3. Believing "I'll never drink/use again";
4. Worrying about others instead of self;
5. Resentment toward drinkers and users;
6. Beginning to avoid family gatherings;
7. Dwelling on past treatment experience;
8. Superficial aftercare involvement;

Phase three: Crisis building

9. Concentration and memory problems;
10. Rigid, impaired, or inappropriate judgment;
11. Procrastination;
12. Believing that people expect too much;
13. Misuse of recovery principles;
14. Strained relationship with family;

Phase four: Immobilization

15. Daydreaming and "spacing out";
16. Unpredictable mood swings;
17. Reappearance of problems at school;

Phase five: Confusion and overreaction

18. Periods of confusion;
19. Intensified home-life problems;
20. Loss of confidence in AA/NA friends and counselors;
21. Overreacting to real or imagined criticism;
22. Recovering peers start to complain;

Phase Six: Depression

23. Experiencing boredom and apathy;
24. Becoming ugly and irritable;
25. Becoming lazy and uncooperative;
26. Periods of deep depression;
27. Declining health and physical appearance;
28. Returning to chemical-using associates;
29. Believing sobriety is miserable;

Phase seven: Behavior loss of control

30. Using improbable excuses for behaviors;
31. Displaying inappropriate behavior and responses;
32. Hostile arguments and behavior at home;
33. Explosive behavior at school;
34. Impulsive behaviors;

Phase eight: Recognition of loss of control

35. Feeling self-pity and using sympathy-evoking tactics;
36. Dwelling on pretreatment experiences;
37. Thinking of chemical use;

Phase nine: Option reduction

38. Withdrawing from all forms of help;
39. Having major attitude change; and

Phase ten: Return to alcohol or drug use.

helps identify critical issues that can trigger relapse.

3. *Understanding and relapse education*: Persons who are prone to relapse need accurate information about what causes relapse and what can prevent it. This may include reading assignments and structured relapse education sessions.

4. *Self-knowledge and identification warning signs*: This involves teaching persons to identify the sequence of problems that has led from stable recovery to chemical use in the past. An individualized warning sign list is developed to help them examine irrational thoughts, unmanageable feelings, and self-defeating behaviors.

5. *Coping skills and warning sign management*: Ways of responding to stressors or warning signs are then taught. This may include learning to avoid situations that trigger potential relapse; learning to challenge irrational thoughts and control the emotional and mental pressures that emerge; and learning to identify issues that create the initial warning signs.

6. *Change and recovery planning*: Scheduling recovery activities that focus on warning signs helps persons recognize and manage them as they occur.

7. *Awareness and inventory training*: Persons prone to relapse can be taught to take daily inventories that monitor compliance with their recovery program and check for signs of relapse.

8. *Significant others and involvement of others*: Relapse-prone individuals need the help of others, such as family members, twelve-step program sponsors, counselors, and supportive peers. The more directly others are involved in relapse prevention planning, the more likely they are to support efforts to intervene when relapse warning signs occur.

9. *Maintenance and relapse prevention plan updating*: The plan must be reviewed and updated regularly. In the early stages this may occur monthly; after sobriety has been maintained for several years, an annual update may be sufficient.

Peters (1991) offers some suggestions for relapse prevention among criminal offenders. While these are specific for populations of incarcerated adults, many of the recommendations could be applied to youth in various parts of the juvenile justice system. The program approaches he suggests include:

- *Assessment of past relapses* - This approach involves development of an individualized description of the sequence of events leading to relapse. This should include structured programs providing education and opportunities for rehearsal of coping skills. Relapse prevention should be provided well before an offender's expected release from a program to allow time for building relapse prevention skills.

- *Strategies to aid community re-entry* - Offenders who have been removed from the community need assistance with the transition and help in establishing contact with needed treatment services. Frequent monitoring for drug use also may be important.

- *Court-ordered treatment* - Follow-up community treatment may be stipulated by the court as a condition of probation or aftercare. Requiring substance abusers to participate in relapse prevention programs can aid in successful recovery. Community supervision can provide

needed incentives to sustain the recovery process until internal motivation can be strengthened through peer support, confrontation, and other methods. Court-ordered treatment is effective in preventing relapse for offenders who are unlikely to attend treatment on their own.

Understanding relapse, and preventing it among juvenile offenders who are working toward recovery, is a vital role for juvenile justice professionals. Whether or not they provide initial treatment services, these personnel have a significant opportunity and responsibility to intervene with youth when they recognize signs of relapse. Some of the skills required include assessment, education of youth, confrontation of denial, brokering of community resources, and building support systems for youth.

Monitoring and Enforcement of Supervision and Treatment

Monitoring, the next part of the case management process, is a form of supervision that implies watchfulness and involves tracking the youth and their progress. Monitoring should be undertaken with the goals and objectives of the treatment plan in mind to determine if a juvenile and his or her family have completed specific tasks. It is also important to determine the extent to which other persons having responsibility for accomplishing the treatment plan are performing their tasks. This may include other staff, treatment programs, and others. Monitoring should be proactive, preventive and regular. Problems should be discovered before they develop sufficiently to further jeopardize the youth's health, legal status or general welfare (NCJJ, 1991).

If the youth or others who are responsible for carrying out part of the case plan are not in compliance with it, the causes must be assessed. Sometimes noncompliance is a choice; other times it is a result of circumstances that cannot be controlled. Based on the results of this monitoring assessment, juvenile justice professionals may need to take different actions. In some instances, the case plan may require revisions to enable those responsible to comply. This may require re-assessment, classification, and development of different goals, objectives and tasks (NCJJ, 1991).

If a determination is made that the case plan is sound, methods of motivating a youth or others to comply are needed. Motivation can include rewards for compliance or sanctions for noncompliance (NCJJ, 1991). For a youth, sanctions might involve increased supervision, lengthening the stay in a program, loss of freedoms, or change in status, as in revocation of probation. Sanctions should progress gradually from least to most restrictive. Many youth will respond favorably to rewards for complying with expectations. (See APPA, 1992, Guideline 14-1.) It is expedient to emphasize a youth's "pay-offs" for meeting their treatment goals. For example, there may be decreased supervision, increased freedoms and privileges, or positive changes in legal status. However, actions that appear to be rewards or sanctions to adults sometimes have the opposite effect on youth. Consider the youth who needs attention and positive interactions with adults. Decreased supervision may not be a reward; rather, youth may continue negative behaviors to maintain high levels of supervision.

Noncompliance by an adult or agency may be more difficult to address; however, it is important that a youth see that everyone involved is responsible for his or her behaviors. If parents are behaving irresponsibly, court orders may be sought. If agencies or professionals are shirking their responsibilities, ultimate sanctions might include censure or withdrawal of clients, but less drastic means of encouraging improved performance should be attempted initially.

Record Keeping

Documenting the intervention process is essential. It provides data for evaluating a youth's progress and accomplishments or reformulating the case plan as needed. It also provides information for court reports and the basis for possible court testimony. Most agencies have forms and policies for case documentation. Intervention for substance abuse may be only one of several areas to be noted in such records.

Case Closure

This final step is important at several levels. There may be a legal requirement to file a final report or have the youth appear before the court when treatment goals have been completed. Formal recognition of achievement can be very important in the therapeutic process with youth. The act of closure also provides an opportunity to obtain feedback about services. Youth, parents, professionals and agencies involved in the case plan can be asked (through formal or informal means) to provide information on their perceptions of the intervention process.

LEGAL CONSIDERATIONS

Legal considerations for developing and implementing drug-use identification programs were discussed in Chapter 8. However, there also are legal factors related to interventions that should be noted. Juvenile justice agencies and professionals have a responsibility to address both the protection of the community and the needs and rights of individual youth. Implementing interventions must consider both responsibilities, and legal obligations must be met.

It would be irresponsible to release youth with known drug and alcohol problems without attempting to manage and treat presenting problems. Without such interventions, youth are likely to continue drug use and involvement in delinquent behavior, placing the community in jeopardy.

There is an obligation to provide interventions that address identified problems of youth, especially when responses to their delinquency involve a loss of freedom. For example, a youth may be adjudicated as a delinquent because of theft. Subsequently, drug-use identification techniques may verify drug involvement. A relationship between this drug use and profit-generating crimes is likely. If the youth's freedom is restricted through detention, incarceration, or conditions of probation, it also is the responsibility of the juvenile justice system to attempt to ameliorate the conditions contributing to initial delinquent behavior and subsequent loss of freedom. This legal principle is often called "duty to treat." It places a responsibility upon professionals to do more than just identify drug use; they must attempt to intervene in such a way that the problem will be corrected and the youth will be able to function freely and responsibly in society. It is not only imperative that intervention be provided; it also is important that all possible efforts be made to provide the most appropriate intervention available. For instance, if, with a combination of supervision strategies and outpatient counseling, a youth continues to abuse drugs, it may be necessary to place the youth in a more restrictive environment, such as a juvenile institution or a residential treatment program. Conversely, if a youth on probation demonstrates responsibility by attending outpatient treatment sessions, and supervision strategies indicate the youth is not continuing to abuse drugs, residential treatment would not only be unnecessary, but an infringement upon the youth's freedom.

Confidentiality issues surrounding drug-use identification techniques were discussed in Chapter 8. It is important to establish effective policies to determine which agency personnel have access to assessment and screening results. Confidentiality and

individual privacy must be protected (APPA, 1992, Guidelines 13-1 and 15-1).

Confidentiality principles also apply to youth receiving drug treatment and intervention services. Youth have a right to privacy about their treatment participation, except in medical emergencies, child abuse reports, and for communication among staff within a program who need the information to provide appropriate services. If information needs to be shared between programs, a youth (and in some states his or her parents) must be notified and asked to sign a release of information form. In certain cases, when information sharing is vital and the youth and/or parents will not sign a release of information, a court order may be requested.

Appropriate case monitoring and documentation is another area with potential legal ramifications. It is the responsibility of juvenile justice professionals to document progress or problems and report them, as required, to the court. Lack of such follow-up and record keeping could result in premature discharge from needed treatment, or a requirement to participate beyond the optimal therapeutic period. Either case is unfair to the youth and could place the professional in legal jeopardy.

YOUTH WITH SPECIAL NEEDS AND CIRCUMSTANCES

It is vital to develop effective interventions for all drug-involved youth. However, there are some special groups of adolescents for whom particular considerations may be needed. Pregnant or parenting youth, juveniles at risk of HIV infection, and minority youth are discussed briefly as examples of special groups.

Pregnant and Parenting Youth

If a determination is made that a youth is pregnant and drug-involved, there are additional concerns for her health and that of her unborn child. Referrals for prenatal care and education are needed. There are increasing numbers of babies being born addicted to drugs or suffering from effects related to substance exposure *in utero*. Maternal use of alcohol, heroin, cocaine, or other drugs may result in birth complications, low birth weights, as well as health and developmental problems. In addition to physical abnormalities, as they mature, these infants may experience emotional, behavioral and learning problems. In some cases these problems subside with age; in other instances they continue or become worse. It is crucial that efforts be made to intervene in this cycle of drug involvement, for the sake of the adolescent parent, and for the future of her child. However, few drug treatment programs exist that specifically address the needs and problems of adolescent pregnant women. In fact, programs may turn away pregnant teens because they lack the resources to meet their special needs.

Adolescent females (and sometimes males) who are parents, and drug-involved, present unique problems when they come into contact with the juvenile justice system. If they are actively parenting their children, interventions need to consider the care of these youngsters. However, there are very few residential drug treatment programs that will accept a woman and her children. Removing a child from a mother's care may involve psychological costs to both mother and child, as well as financial costs for care. In addition to intervening to change a youth's drug use, educational efforts should include information on how drugs affect children and a parent's ability to care for them.

Juveniles At Risk of HIV Infection

Although the incidence of diagnosed cases of Acquired Immune Deficiency Syndrome (AIDS) among adolescents is low, the risk of exposure to the Human Immunodeficiency Virus (HIV), the causative agent of AIDS, is considered to be substantial among adolescents. HIV is transmitted in three ways:

- exchange of body fluids during sexual intercourse;
- inoculations of blood from an infected to an uninfected person; and
- from an infected mother to her infant during pregnancy, the birth process, or possibly through breast milk.

From the time a person is infected with HIV until AIDS symptoms occur can be ten years or more. The average latency period of the virus appears to be about five to seven years. Thus, youth who are exposed as teenagers may not become ill until they are adults. This is the reason statistics about the number of cases of AIDS among adolescents is misleading. Many more adolescents may be infected with the virus but be unaware of their infection because they have no medical symptoms.

Adolescent development information tells us that many youth are at risk of exposure to HIV because they tend to be impulsive and engage in risky and experimental behaviors. Youth generally also believe they are invincible and immortal: somehow, bad things will not happen to them, and they will live forever.

Two of the ways in which HIV is transmitted place drug-involved youth directly in the path of this epidemic. The use of contaminated needles and syringes for injecting drugs is the primary way HIV is passed from one person to another with the exchange of blood. Youth who inject drugs intravenously are at high risk. Sharing needles and drug paraphernalia is a common practice, because needles are not readily available, cost too much, or there is a ritual of sharing paraphernalia among users. Although the risk of infection increases with the number of exposures, it can occur with the first exposure.

Similarly, risky sexual behavior is likely to occur among drug-involved youth. Risky sexual behavior is generally vaginal or anal intercourse without a condom. However, there is a slight risk even with a condom or with some other forms of sexual activity. Youth who are involved in drug use may be at increased risk for three reasons.

- They may engage in sex to generate income or obtain drugs;
- Their judgment may be clouded because of drug effects, and may, therefore, interfere with the practice of safer sex; and
- The use of drugs may weaken their immune system and allow HIV infection to occur more readily.

Whether a youth uses drugs, he or she is at increased risk of contracting HIV if sexually active with a partner who uses intravenous drugs because of the partner's increased risk. For youth who are drug-involved, especially those who have used intravenous drugs or been sexually promiscuous, the possibility of HIV infection should not be discounted. Efforts also should be made to assess these areas. The possibility of HIV testing should be explored if there are exposure indicators, as early detection and medical attention can sometimes delay progression of the disease process. Care must be taken, however, to assure that confidentiality is maintained. Anonymous testing may be preferred. Agencies should develop policies and procedures about these issues *before* they are needed.

If it is learned that a youth is HIV-infected, efforts should be made to obtain appropriate medical treatment while helping the youth make necessary lifestyle changes. If a youth is not infected, risk reduction strategies should be stressed. AIDS education is appropriate for all youth in all parts of the juvenile justice system. However, some communities and agencies have philosophical differences about issues such as providing or teaching youth how to use condoms, or needle exchange programs. Agencies and professionals must weigh their responsibilities and risks, as well as the welfare of the youth in their care, in determining the most appropriate and beneficial approach to take.

Minority Youth

Minority youth are strongly over-represented in the juvenile justice population. Blacks, Hispanics, and other non-Caucasians constituted 60 percent of the juveniles in public custody facilities in 1989 (Allen-Hagen, 1991). In many cities, racial minorities of all ages compose a larger percentage of arrestees testing positive for drug use than their proportion in the general population (*Drug Use Forecasting Annual Report*, 1990). This data does not mean that minority youth are more likely to use drugs and alcohol or engage in delinquent activities. However, because minority youth are over-represented in the juvenile justice system, professionals must be sensitive to their needs in developing interventions.

Differences for minority youth include cultural background, life experiences, values, educational background, vocational and life goals, use and choice of drugs and alcohol, responses to intervention and treatment, and quality of family participation in treatment and recovery. Poverty and disadvantage are common elements in minority youth experiences. Language differences may present barriers in communication. Religious beliefs and preferences also may be different from those of the majority of staff members (Sweet, 1989).

In delivering services, it is important to remember that some minority cultures value finding solutions within their communities and churches and may be reluctant to accept help from "outsiders." Staff members from the same ethnic backgrounds can be valuable in relating to youth's cultures and families and providing positive role models. For example, in some cultures, "family" connotes an extended group of related and unrelated individuals who are involved in a youth's life. These persons should not be discounted in interventions. On a practical level, because minority group members often experience lower incomes, material resources and services such as transportation may be limited. These issues present barriers to program participation and may require innovative and creative solutions (Sweet, 1989).

ENVIRONMENTAL INTERVENTIONS

Most of this chapter has focused on interventions with individual youth. However, this is only one level of involvement (refer to Figure 1). The environmental level includes:

- family;
- peers;
- community;
- religious affiliation; and
- school experiences.

To focus interventions exclusively at the individual level without consideration of the environmental and societal levels may be self-defeating. The creation of a community that will reinforce prosocial behavior is an important goal (Hawkins, et al., 1987). It becomes increasingly difficult to effect change as the locus of intervention broadens, the number of persons increases, and the complexity of problems becomes greater.

However, the influence of environmental and societal factors on behavior should not be excluded.

It is productive to attempt to intervene with those most directly associated with youth who are drug-involved, including family and peers. This may include family therapy or provision of social services needed for families. As illustrated in the section on treatment approaches, peer influences are powerful with adolescents. Using positive peer pressure approaches should be considered.

Every possible effort should be made to maintain youth in their homes and communities. However, at times this may be detrimental because of very dysfunctional families, negative peer associations and community disorganization. The possibility of removing a young person and relocating him or her to a healthier environment may be an intervention of last resort.

Changing disorganized communities is a difficult task. A common denominator for successful interventions appears to be the involvement and determination of residents rather than the efforts of persons external to the community. Juvenile justice professionals may be able to help indigenous leaders acquire information and develop skills needed to motivate their fellow citizens to effect change. Often, educational and religious organizations can play an instrumental role in this effort.

SOCIETAL INTERVENTIONS

Confronting problems at the societal level is very difficult. It may seem that one professional or one agency can have little influence on conditions such as poverty, racial prejudice and employment opportunities. However, these problems do influence environmental conditions and individual behaviors. Strategies that individuals or small groups can undertake to address these problems include exercising their right to vote, contacting elected officials and expressing opinions, and staying informed about societal conditions and political processes. Professionals also can contribute to changes at this level by conducting research that adds to the common knowledge base and can be used to make informed policy decisions. At the most minute level, professionals can carefully document case plans and results. These often can be aggregated and analyzed to arrive at findings that have general applicability to larger groups. Agencies also can develop programs with one goal being to analyze and disseminate results to help others benefit from their efforts. Busy professionals often find it difficult to take the time to write articles and contribute to journals or popular publications. However, this valuable contribution can help in achieving broader change. Agency management information systems also should be designed to record as much information with as little effort as possible.

CONCLUSION

Drug-use identification techniques, without appropriate interventions, are of little value. This chapter has emphasized a case management model for developing appropriate responses to drug-involved youth. Supervision strategies, treatment options, and the importance of treatment matching were discussed. Selecting supervision and treatment responses that are related to an agency's mission is also important.

Legal considerations for responding to drug-involved youth were discussed briefly. Special consideration also was given to interventions with youth who have special needs. In addition to individual interventions, family, environmental, and societal interventions are stressed.

This chapter should help juvenile justice professionals develop a drug-use identification program

that includes appropriate interventions based on the mission, needs and resources of the agency. In the final chapter, staff responsibilities and training will be presented.

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CHAPTER 15

STAFF RESPONSIBILITIES AND TRAINING

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INTRODUCTION

Detailed information pertaining to the implementation of the three components of a drug-use identification program -- assessment, drug recognition techniques, and chemical testing -- has been presented in this module. Whether an agency decides to institute one of the components, or all three, new responsibilities will be required of staff.

Many decisions regarding a drug-use identification program will be based upon existing staff resources and the potential for expanding them. Programming and staffing decisions need to be made simultaneously as there must be an adequate number of staff members qualified to perform each of the procedures required of the program. Therefore, while planning the new program, administrators should outline all of the roles required and determine whether it will be necessary to hire new staff or whether these duties can be carried out by existing personnel. Agencies that do not have the option of hiring new staff may have to modify some elements of the drug-use identification program or other existing programs to compensate. The many decisions that must be made before implementing a drug-use identification program have been outlined in previous chapters. This chapter will provide planners with explanations of the duties and responsibilities required of each of the components of a drug-use identification program. It will list areas of expertise that will be necessary to assist in the implementation of the program. Finally, the qualifications required of staff who will carry out these duties will be outlined.

Staff training is a vital part of any successful program. Initial and ongoing sessions for orientation and development must be provided to keep staff apprised of current trends; review and update procedures; and instill fresh, vital outlooks. All contribute to employee motivation, morale and commitment. The second section of this chapter will outline the necessary components of an effective training program for staff.

After reading this chapter, participants will be able to:

- describe the role of the Drug-Use Identification Program Coordinator and list at least eight duties associated with this position;
- list at least six responsibilities of the assessment program staff;
- list at least six responsibilities of the drug recognition techniques program staff;
- compare and contrast the responsibilities associated with the following chemical testing programs: programs using onsite instrument-based methodology; programs using onsite non-instrument-based methodologies; and programs that contract for laboratory services.
- identify at least six areas of expertise that can be beneficial in the planning and implementation of drug-use identification programs, and give an example of how special expertise in these areas can be useful;
- list the three basic areas in which staff must demonstrate qualifications to carry out the functions of their positions and explain the importance of each of these areas to the successful implementation of drug-use identification programs;
- describe five steps in the training process; and

- discuss the importance of team building for an effective program.

BASIC STAFF RESPONSIBILITIES AND QUALIFICATIONS

The screening techniques used, volume of screening anticipated, and community and agency resources will dictate the number of positions an agency will need. In agencies where volume of screening is low, one staff person may be appointed to fill several positions. Because of the complexity of the procedures and legal issues associated with chemical testing, this component requires a greater commitment of staff resources than assessment and drug recognition techniques. In reading this chapter, attention should be focused on staff *responsibilities* rather than titles and positions. When developing drug-use identification programs, administrators must distribute these duties according to the particular needs and resources of their own agencies.

Drug-Use Identification Program Coordinator

It is recommended that a Drug-Use Identification Program Coordinator be designated, whether one, all three, or a combination of components of a drug-use identification program are employed (See American Probation and Parole Association [APPA], 1992, Guidelines 17-55 to 17-59, 18-10). This position should be filled soon after the decision to establish the program is made. Because this person will oversee and coordinate the program policies and operations, s/he should be involved in the initial planning stages. Duties of this position may be slightly different depending upon many decisions (e.g., which of the components of the drug-use identification program are implemented, whether onsite or laboratory testing is conducted). Responsibilities of the position may include, but are not limited to, the following:

- assist in development of policies and procedures governing the program;
- handle contract negotiations and renewals for program instrumentation and supplies, and recommend and implement changes when needed;
- act as liaison between contracting agencies, ensuring that contract obligations are fulfilled and that services rendered are satisfactory;
- take steps, when services are not satisfactory, to solve problems, re-negotiate contracts, or seek services elsewhere;
- coordinate training opportunities for agency personnel, and coordinate programs for staff to demonstrate proficiency;
- accumulate and analyze monthly reports;
- make budgetary decisions in compliance with agency policy;
- monitor legal issues, such as court challenges, and testifying requirements;
- assist in selection and/or hiring of staff involved in the program;
- oversee quality control and quality assurance measures for onsite laboratories;
- coordinate inspection of chemical testing laboratories;
- initiate appropriate remedial action if laboratories or community resources fail to comply with agency policy and guidelines regarding chemical testing operations;

- assist in evaluation program design and implementation, and analysis of results regarding the drug-use identification program; and
- oversee the collecting, recording, organizing, processing, and reporting of data for the evaluation program.

(adapted from APPA, 1992)

In addition to assisting in the selection and hiring of staff who will implement the drug-use identification program, the Coordinator may supervise them. As supervisor, the Coordinator would be responsible for the following, and possibly other, duties:

- overseeing work performance of all supervised employees;
- monitoring progress of employees and administering performance appraisals on a regular basis; and
- taking remedial action, if necessary, when disciplinary problems occur.

Assessment Program Staff

Responsibilities of the assessment program staff include, but are not limited to, the following:

- reviewing delinquency, school, treatment and other pertinent records;
- generating questions and conducting client and collateral interviews;
- administering testing instruments and analyzing results;
- writing and filing reports based upon findings;
- documenting conclusions on forms for evaluation purposes;
- assisting in reliability and validity studies of the assessment instruments used;
- presenting findings to appropriate staff for follow-up;
- assisting in planning and implementation of responses to results; and
- providing testimony in court proceedings when necessary.

One position may encompass all of the above duties, or these functions may be carried out by a number of staff members. To maintain consistency when reassignment of tasks is necessary, it is preferable that most of the staff involved in the assessment program be trained in each of the duties listed above.

If the agency contracts with an outside source for assessment services, some of the above duties will be performed by the contracting agency.

Drug Recognition Techniques Program Staff

Responsibilities of the drug recognition techniques staff may include, but are not limited to, the following:

- conducting drug recognition techniques with youth as stipulated in policies and procedures;
- writing and filing reports based on findings;
- documenting results for evaluation purposes;
- presenting findings to appropriate staff for follow-up;

- assisting in planning and implementation of responses to results; and

- providing testimony in court proceedings when necessary.

These duties may be the function of more than one position, but again, several staff involved in the drug recognition techniques program should receive training in each of the above functions to maintain consistency when changes are necessary.

Chemical Testing Program Staff

The staff functions required for this component of the drug-use identification program will differ depending on whether testing is conducted onsite or by a laboratory. If testing is conducted onsite, duties will differ depending upon whether instrument-based or non-instrument-based equipment is used. As mentioned previously, agencies should not focus on the position titles that will be presented, but rather the *responsibilities* that are inherent in a given position.

On-Site Instrument-Based Testing

If a large quantity of onsite instrument-based testing is conducted, it is recommended that an Onsite Drug Testing Manager be appointed (APPA, 1992, Guidelines 17-60 to 17-68).

The functions of the Onsite Drug Testing Manager may include, but are not limited to, the following:

- providing ongoing training and testing methodology updates;

- managing the onsite testing program and administrative functions associated with it;

- ensuring that there are sufficient personnel with adequate training to supervise and conduct the work of the drug testing program;

- assuring the continued competency of personnel by verifying their skills, reviewing their work performance, and documenting their attendance at trainings and results of proficiency testing services;

- taking remedial action with personnel if disciplinary problems occur, according to agency policy;

- ensuring that the testing program procedural manual is complete, up-to-date, available for personnel performing tests, and that the procedures are followed by those personnel;

- reviewing, signing and dating the procedural manual whenever procedures are initiated or changed;

- maintaining a quality assurance program to assure the proper performance and reporting of test results;

- maintaining acceptable analytical performance for controls and guidelines;

- maintaining quality control testing;

- ensuring and documenting the validity, reliability, accuracy, precision and performance characteristics of each test and test system;

- taking remedial actions necessary to maintain satisfactory operation and performance of the program when quality control systems are not within performance specifications, or when errors are found in reports of analyses;

- while investigating the source of errors, ensuring

that specimen results are not reported until corrective actions have been taken and that the test results provided are accurate and reliable; and

- ensuring that at least a three-month stock of needed, up-to-date equipment and supplies is on hand to avoid any unnecessary shutdown of the program.

(APPA, 1992)

In addition, agencies that decide to use onsite instrument-based testing will need to have someone perform the duties of a Technician (APPA, 1992, Guidelines 17-69 to 17-79), which may include the following:

- ordering supplies and controlling inventory;
- receiving specimens;
- operating instruments;
- complying with quality assurance/quality control and maintenance requirements;
- locating and eliminating sources of mechanical problems in instrumentation;
- testifying in court;
- acting as consultant to juvenile justice personnel on chemical testing issues;
- maintaining required documentation of the testing process; and
- assisting the Onsite Drug Testing Program Manager as directed.

(APPA, 1992)

On-Site Non-Instrument-Based Testing

Agencies that decide to use onsite non-instrument-based testing (or field testing) will not need an Onsite Drug Testing Program Manager, and will appoint an Onsite Noninstrument Testing Specialist (APPA, 1992, Guidelines 18-5 to 18-9) rather than a Technician. This is because field tests are not as complex or time consuming to operate as instrument-based testing. Responsibilities of the Onsite Noninstrument Testing Specialist may include, but are not limited to, the following:

- ordering supplies;
- completing any necessary documentation for testing;
- ensuring that controls have been run before testing any specimens;
- maintaining log sheets, chain of custody forms, and other required documentation;
- ensuring that equipment is properly handled, stored, and maintained;
- running the tests and/or supplying testing kits to other qualified operators; and
- other duties as assigned by the agency Drug-Use Identification Program Coordinator.

(APPA, 1992)

Depending upon the volume of chemical testing conducted by the agency, a number of other personnel may be given responsibility for conducting the field tests in addition to their other duties in the agency. These Testing Operators (APPA, 1992, Guidelines 18-8 to 18-9) must be thoroughly trained in the operation of the equipment and proper documentation of test

results. They must report to the Onsite Noninstrument Testing Specialist for supplies and procedural guidance. It may be common agency procedure to have personnel analyze the test in the youth's presence immediately after the specimen is collected. This will require special skills in dealing with youth who are confronted with positive results.

Contracted Laboratory Testing

If the agency contracts for testing services, the laboratory will take on many of the functions described above. However, some additional duties will be required of the agency, including:

- packaging specimens according to specifications to prohibit tampering and mix-ups;
- transporting specimens to the laboratory, if courier service is not provided;
- receiving results (either by mail or courier) and documenting them on appropriate forms; and
- informing appropriate individuals of results according to agency policy.

Onsite and Contracted Laboratory Testing

It is recommended that agencies that collect urine specimens designate an Onsite Drug Testing Specialist (APPA, 1992, Guideline 11-3) to oversee the collection and processing of specimens. The responsibilities of the Onsite Drug Testing Specialist may include, but are not limited to, the following:

- maintaining a chemical testing control log;
- maintaining documentation of specimen results;
- directing/monitoring the collection of urine specimens;
- overseeing the transfer of urine specimens to a drug testing laboratory;
- maintaining secure storage conditions for unused containers;
- ensuring the availability of sufficient supplies for the uniform collection of urine specimens;
- ensuring that officers conform to the documentation guidelines outlined in the chain of custody procedures; and
- ensuring that chemical testing staff are thoroughly trained in specimen collection, container labeling, transporting of specimens, and storage security.

(APPA, 1992)

In addition, agencies that conduct chemical testing will need personnel to perform the following other duties:

- collecting specimens (saliva or urine) according to agency policies, and taking the necessary steps to ensure the integrity of the specimen;
- properly disposing of used supplies and, in the case of onsite testing, negative specimens;
- properly storing untested and positive specimens;
- entering data into the agency's management information system (MIS); and
- retrieving data from the agency's MIS upon request.

All Programs

As discussed in Chapter 9, employee participation will encourage cooperation and commitment.

Therefore, all program staff should be involved in many aspects of the planning of the drug-use identification program. For continuing success, as stated in APPA's *Drug Testing Guidelines* (1992, Guideline 3-10),

> "personnel involved in drug testing should participate in the continuing review of the drug testing goals, policies, procedures, rules and regulations."

After initiation of the drug-use identification program, it is advisable to review staff roles and responsibilities regularly, and revise them as needed.

SPECIAL EXPERTISE

In addition to the above responsibilities, specialists in a number of areas may be extremely helpful when planning and implementing the drug-use identification program. Individuals within the agency may have expertise in these areas. The agency also may consult professionals from various fields within the community or the juvenile justice system who are willing to provide their services or advice. They may find it necessary to hire consultants to provide expertise in certain areas of the program. Specialists from the following fields can be helpful in planning and implementing a drug-use identification program:

- medical (to explain the physiological effects of drugs on adolescents and other medical conditions that cause symptoms similar to intoxication; to provide information on medications that can affect the outcome of chemical tests; to allay fears among staff surrounding the handling of urine specimens);
- science (to offer objective advice and correct fallacies in the field of chemical testing);
- legal (to discuss the general legal ramifications of drug testing and offer advice in special cases; to help generate support for the program);
- politicians (to offer advice in gaining legislative support for drug-use identification programs);
- research and evaluation (to assist in the design of an evaluation program and in the interpretation and reporting of results);
- substance abuse (to assist in the development of an array of interventions, provide information about available resources in the community, and help to support the program through the acquisition of further resources);
- communications and the media (to offer advice on ways to measure public opinion, and to assist in the dissemination of information); and
- community resources (to supply or maintain a directory of community resource agencies for referral and treatment purposes).

STAFF QUALIFICATIONS

When selecting appropriate staff members for the above positions, program planners must be aware of the qualifications each position requires. Certain characteristics in three basic areas are vital for all program positions. These fundamental areas, which may be used to assess the suitability of individuals for certain positions, include:

- appropriate knowledge and skills;
- consistently effective job performance; and
- appropriate standards of ethics.

Appropriate Knowledge and Skills

Each position requires its own knowledge base and set of corresponding skills. Some positions will require competence in working directly with youthful offenders; others will require technical proficiency. Knowledge of the juvenile justice system, community resources, substance abuse, or adolescent development may be necessary for some positions. All staff involved in the program must be keenly aware of agency policy and procedures. In addition, they must have access to manuals, handbooks, and other necessary documentation that outline these procedures. Specific descriptions of knowledge and skills required of each position will not be presented in this section. Individual agencies must decide the prior education and experience required. In some cases, it will be necessary for the agency to arrange training opportunities to provide staff with the skills essential to their positions. Training programs are discussed in further detail in the next section of this chapter.

Job Performance

As discussed above, personnel must possess appropriate knowledge and skills to carry out the responsibilities of their position; they also must *apply* these abilities in their daily work. Job performance is influenced by a staff member's ability to consistently apply the appropriate skills to the tasks required of a position. For example, personnel must be able to carry out agency policy in addition to understanding it. Staff members must have certain academic knowledge, yet they also must employ interpersonal communication skills to share information when necessary to ensure consistency and follow-through. Many of the above positions require the ability to maintain accuracy when working with tedious tasks and detail. Skill in decision-making will be necessary for certain responsibilities (e.g., choosing screening instruments; selecting which youth require regular chemical testing; responding to test results). In some cases, it will be necessary for staff to prepare for and handle potentially difficult situations (e.g., a youth's volatile reaction when confronted with positive specimens; discussion of sensitive topics with interviewees; knowledge of noncompliance with agency policies and procedures; legal challenges).

Ethical Behavior

All personnel must be conscious of the moral and ethical responsibility they have in carrying out procedures of the drug-use identification program. When errors are made, implications for the agency and the youth can be serious. It is imperative that all procedures be followed exactly as they are outlined in the policy and procedure manual. Employees must respect the privacy of youth through strict adherence to regulations regarding confidentiality. They must be accurate and honest in all aspects of their respective positions (e.g., interpreting and documenting results). In general, personnel must understand the importance of following directions explicitly; when uncertain, they must ask for assistance rather than taking the risk of making an error.

Commitment to and involvement in the program are critical to its success. Personnel must realize the potential influence of their positions on the lives of juveniles and conduct their work accordingly. All staff involved in the process of screening youth must be genuinely concerned for them and treat the juveniles they serve with fairness and respect. This pertains to those who interview juveniles and interpret test results as well as those who maintain chemical testing equipment. It applies to those who enter evaluation data into the MIS and those who write reports to release to the public. They must understand that the program entails a moral responsibility to always provide a *proactive response* to screening results. All drug-use identification program positions are intertwined and personnel should be focused on a common goal. Mistakes may have a chain reaction,

ultimately damaging the agency's efforts to achieve its mission.

Just as staff have certain responsibilities to the agency, an agency has responsibilities to its staff. To enable personnel to develop the knowledge and skills necessary to perform their duties, appropriate educational opportunities must be provided. Training and staff development, a necessary component of any successful program, is discussed in the next section.

TRAINING AND STAFF DEVELOPMENT

In the first part of this chapter information was provided about the responsibilities and requirements of staff involved in a drug-use identification program. As part of the policy development process, training and staff development tasks also must be considered. There are five important goals of a training and staff development program:

- to explain the purpose of the testing program;
- to provide staff with the information and technical knowledge required to perform their jobs;
- to teach staff skills to apply in their job performances;
- to shape staff attitudes and values about issues that affect their work; and
- to build teamwork and cohesiveness among staff.

Any or all of these goals, with specific objectives, may form a given program of training and staff development. The approach taken must be in concert with the goals of the program and the mission of the agency.

Staff Training Programs

There are two fundamental formats for developing staff training programs. Staff may be trained **individually** or in **groups**. Individual training can be accomplished by providing reading material, programmed instruction, computer-assisted instruction, audio-visual instructional aids, or one-to-one instruction. This may be appropriate for some situations in which staff have unique responsibilities that require technical competencies. However, if more than one person needs the same information, it may not be cost-effective or time-efficient to provide individualized instruction. Another drawback of individual instruction is the loss of interaction among learners. Often, people learn as much from others in the learning situation as they do from an instructor. This is particularly true for certain types of subject matter, especially those which emphasize the development of attitudes and values.

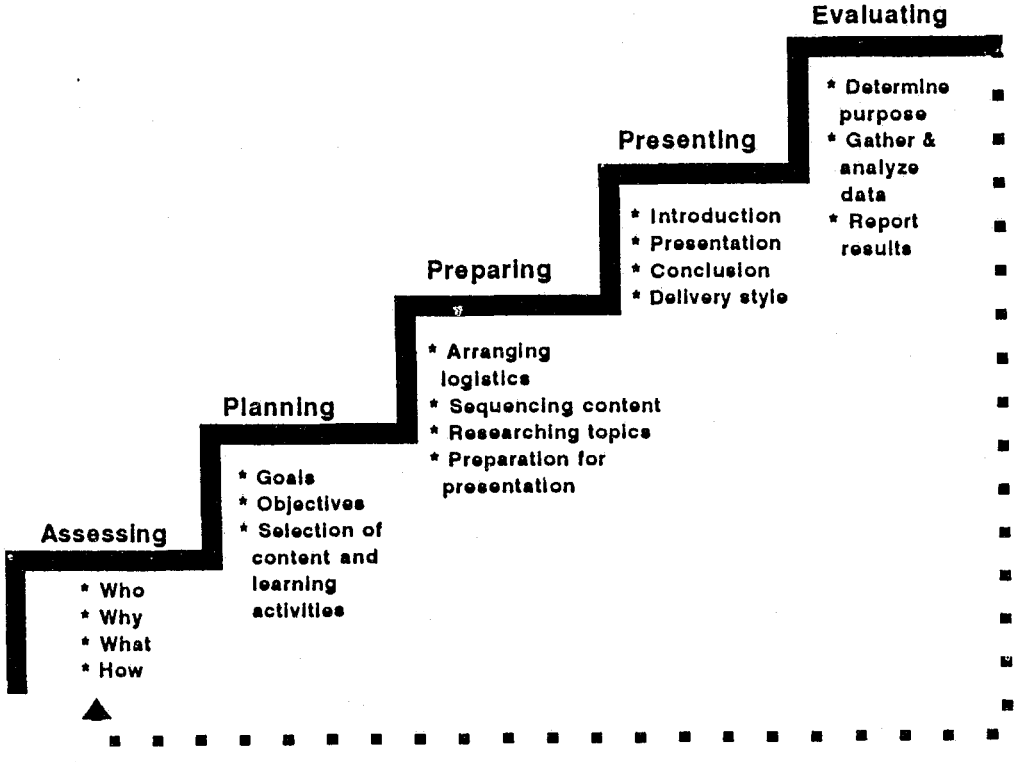
Group instruction involves at least two or more participants and usually requires a facilitator or instructor, although some groups are self-directed. Group interaction is important in influencing values and attitudes, and it is required for team building. A disadvantage of group instruction is the potential sacrifice of individual interests and needs. Participants may learn at varying rates or have contrasting interests. It is more difficult to accommodate these individual differences in groups, but there are ways of adapting group training to meet individual needs.

The Training Process

There are five steps in the training process. These are sequential steps, but one does not have to be completed before the next one begins. Figure 15-A shows the progression of activities.

Figure 15-A

STEPS OF THE TRAINING PROCESS



Assessment

Assessment of needs and resources for a drug-use identification program was discussed in Chapter 7. This assessment should incorporate elements of information needed before planning and delivering a training program. Assessing both the needs of the agency and the needs and resources of staff members is important. One must determine what the agency needs from staff in the way of job performance skills and attitudes. For example, do they need expertise in collecting urine samples, conducting chemical tests, and intervening with drug-involved youth? Do they need to learn approaches for developing competencies in youth as well as holding them accountable? Job descriptions, agency missions, and program purpose statements will help determine the training that is needed. Interviews or questionnaires to supervisors and program administrators also may be helpful.

The plan for a training program should be grounded concurrently in an assessment of the agency's needs and an appraisal of what staff members bring to their jobs, and therefore, to training programs. It is helpful to know about the educational background, skill level, interests and attitudes of those who will be involved in a drug-use identification program. Past experiences with training programs will affect staff

attitudes toward training. Sometimes, those responsible for planning training programs will know this information from previous interactions with staff members. In other instances, it will be necessary to seek additional information.

This may be done formally or informally. Informal methods might include observations and casual conversations with staff members and administrators. Formal assessment methods might include surveys of individual staff, structured interviews, and group meetings. Chapter 7 provides more detailed information on needs and resources assessments.

The purpose of the assessment phase is to determine:

- **who** will participate in training;
- **why** training is needed;
- **what** the content of training should be; and
- **how** staff and administrators are likely to respond to training.

Planning

The planning process builds on the assessment. The first task of planning is to establish goals and instructional objectives for the training program. Goals are general aims; instructional objectives specify what the learner is to know or be able to do as a result of the training. They also indicate how the content will be delivered and how the learning will be measured. The following are examples of training goals and objectives.

Goal 1: To prepare participants to conduct chemical testing of juveniles in the agency.

Objective 1: After viewing a video and individual reading, participants will list the seven categories of drugs and the effects each has on youth physically, behaviorally, and psychologically. This will be done with 90% accuracy on a written test.

Objective 2: Upon completion of a presentation by the instructor and individual reading, participants will demonstrate the proper chain-of-custody procedures for a urine specimen in a simulated situation. This will be done to the satisfaction of the instructor.

Objective 3: Following an interactional activity and discussion on the value of drug screening, participants will express positive agreement with the program at least 75% of the time using a Likert Scale questionnaire of attitudinal items.

Goal 2: To prepare participants to intervene effectively with drug-involved youth.

Objective 1: Following a panel presentation and individual reading about various treatment approaches, participants will design effective case treatment plans when presented with a case example. This will be done to the satisfaction of the instructor.

Objective 2: Following a presentation by the instructor and individual reading, participants will list, with 90% accuracy on a written test, the principles for implementing responses with drug-involved youth in the juvenile justice system.

Objective 3: After interactional small group activities and discussions, participants will express the importance of appropriate interventions with drug-involved youth in a brief paragraph to the satisfaction of the instructor.

The preceding examples illustrate the types of goals and objectives that might be developed for a training program. A common goal for most training programs might be reinforcing the purpose of the program. Notice that each objective contains:

- **what** is to be learned (categories of drugs, chain-of-custody procedures, case planning);
- **who** is responsible (instructor and participants);
- **how** the learning will occur (presentation, reading, activity); and
- **how** it will be **measured** (test, questionnaire, demonstration).

Thorough goals and objectives provide a general framework for the training. Another way to approach this is to prepare a grid similar to the one in Figure 15-A.

This approach to organizing training content, instructional activities, and ways of measuring learning makes it easy to look for certain elements in the training design. It ensures a comprehensive list of content areas, based on the assessment of training needs. It also makes it easier to include varied approaches to the training and appraisals, because the list of learning activities and measurements can be scanned readily. If there is much repetition, other activities can be substituted.

As adult learners enter training programs with different learning needs and styles, it is wise to consider more than one way of approaching each area of content. In this example, at least two methods are provided for each. Often, one can be an individualized form of instruction, such as reading text or handout materials. Other approaches may include presentations or interactional activities that involve instructor-to-learner or learner-to-learner activities.

It is important to select appropriate learning activities for each type of content. In the example above, some of these are illustrated. There are three types of content that may be included in a training session:

- information;
- skills; and
- values or attitudes.

Each of these requires different types of learning activities. Information involves exposure of the learner to factual data and concepts. This may be conveyed through lectures, texts, audio-visuals and other means. Skills are behaviors to be performed. Therefore, to learn how to do them, participants will need information and an opportunity to perform the skill. Values and attitudes are internal. No one can tell another person how he or she should feel. Thus, these are influenced by activities that allow participants to experience new emotions and learn how others perceive similar phenomena. Opportunities to interact with other participants will be most productive in modifying attitudes and values. Several examples for teaching each type of content are presented in Table 15-A.

Preparing

The third step of the training process is preparation. This involves several activities that should be completed before the training is delivered, including:

- arranging the logistics of the training;
- sequencing the content;
- researching topics; and
- preparing for presentation.

Arranging the logistics of the training. Training sessions can be flawed because of inadequate structure

Figure 15-B

TRAINING PLAN

Content Area	Learning Activities	Measurement
7 categories of drugs	Video Text	Test (90%)
Chain-of-Custody Procedures	Presentation by instructor Text	Stimulation to (trainer's satisfaction)
Value of drug screening	Interactional activity for values clarification and discussion	Attitudinal questionnaire (75% agreement)
Case planning for intervention with drug-involved youth	Panel presentation Text	Small group preparation of case plan (to trainer's satisfaction)
Principles for implementing responses	Presentation by the instructor Text	Test (90%)
Value of appropriate intervention with drug-involved youth	Small group exercise and discussion	Written paragraph (to trainer's satisfaction)

Table 15-A

CONTENT PRESENTATION METHODS

Information	Skills	Attitudes and Values
• presentations, lectures	• demonstration	• values clarification activities
• audio-visuals	• simulations	• discussions
• demonstrations	• case examples	• debates
• texts, handouts	• role plays	• audio-visuals
• panels	• games	• articles/handouts
• discussions	• texts	• evocative questioning
• debates	• audio-visuals	• role plays
• observation	• structured tasks	• opinion papers
• questioning	• coaching	• case studies
• field or site visits	• modeling	• experience sharing
	• clinical practice	• modeling
		• games
		• field or site visits

and preparations that distract from the learning process. Three aspects are especially important:

- facilities;
- arrangement and climate; and
- equipment and supplies.

Facilities includes the physical space to be used for the training. The room should be large enough to accommodate the participants and trainers comfortably. However, a room that is too large for the size of the group can make interaction difficult. The room should be comfortable; it is inadvisable, however, to try to conduct training in a lounge or area not suitable for instructional purposes. For example, the room should provide a focal point for presenters, and chairs and tables for taking notes. If possible, the facilities should be private, eliminating distractions and intrusions. They also must be readily accessible to the trainer and participants; training time can be wasted looking for keys to unlock rooms.

Arrangement and climate refer to the physical organization and comfort of the facilities. Seating of participants will depend on the number of participants and the type of instruction that will take place. If the instruction will be mostly didactic, such as presentations, audio-visuals, and demonstrations, classroom style seating is desirable. If the instruction will be interactional, seating participants in a "U," circle, or other arrangement to facilitate discussions, is preferred. If the planned activities necessitate breaking into small groups, the needed space must be arranged. It is important to ensure a climate that will foster the learning process. Therefore, the comfort of participants is important. The training space should be quiet so participants can hear well. It is important that audio-visuals be clearly visible to participants. Rest room facilities should be nearby; access to refreshments (coffee, tea, soft drinks) also is helpful. Frequent breaks should be scheduled for the comfort of participants. Smoking/non-smoking decisions must be made and a smoking area designated, if permitted.

Equipment and supplies sometimes can make or break a training session. If audio-visuals are to be used, make sure all equipment is available and the trainer knows how to operate it. Have the necessary equipment and supplies such as newsprint, easels, markers, handouts, and overhead transparencies ready well before the training session. These should be organized so they are readily accessible during the training program.

Sequencing the content. Complex information and skills are built upon simpler data and abilities. Thus, content needs to be presented in the order that will best facilitate learning by participants. Generally, sequencing of content should be as follows.

1. Review and clarify previously acquired knowledge and abilities needed for learning new information and skills.

2. Present simple, concrete information and skills next.

3. Build knowledge and skill levels toward complex and abstract information and skills.

4. Reinforce learning by having participants apply newly acquired knowledge or skills in problem-solving situations.

Researching topics. In some cases, subject matter experts will be asked to make presentations. However, the trainer must be able to field questions, interpret information in light of agency policies, and plan for application of the information to realistic problem situations. If one is presenting a portion of content that is not already an area of expertise, there are several ways of developing a knowledge base. Reading current literature, including texts, periodicals and abstracts, will be essential. It is also useful to attend workshops and seminars, if available. Finally, discussions with colleagues or experts in the field can be helpful.

Preparing for presentations. This will depend on the personal style of the trainer. Some people like to use outlines; others prefer to write out the information needed in a presentation. It is important to set aside enough time to rehearse the presentation until it is comfortable and can be given with little reliance on notes. Practicing the presentation in the room in which it will be given can be helpful. Finding a colleague or family member who will listen and provide constructive criticism is another alternative.

Audio-visuals and other tangible aids needed for instruction should be prepared in advance. These may include a wide range of materials including lists on newsprint, overhead transparencies, use of videos, as well as many others. If a demonstration of equipment is to be made, arrangements should be planned. Audio-visual aids should meet the following criteria.

1. The information presented must be correct. Use of out-of-date materials is unwise.

2. The information must be appropriate for the presentation. Use of irrelevant material wastes valuable time. Trainers should consider the organization, presentation and pacing of audio-visuals to determine appropriateness.

3. They must be clearly visible or audible to the entire group. If the group is too large, or equipment is poor, do not try to use audio-visuals.

4. Trainer-prepared visuals, such as overhead transparencies and newsprint, must be large, clearly written, and placed where participants can see them.

5. Audio-visuals should enhance the learning process by presenting or reinforcing important points.

If interactional activities are planned, be sure that all needed supplies are available. It is a good practice to rehearse these as well. If possible, have a colleague or family member follow the instructions to make sure they are clear.

When using guest speakers, panels and other outside resources for any part of the training it is important to be as clear as possible about what is expected. Trainers should ascertain that the presenters have a thorough understanding of the topics they are to address and should provide them with objectives, descriptions, agendas, and other information that will be helpful as they prepare. Guest presenters also need to know about the participants: the number, their level of knowledge about the topic, what they expect to gain from the session, and information about many other areas. Be sure presenters have sufficient time to prepare adequately. Select guest presenters carefully. A person who is knowledgeable or skillful in a particular area may or may not be a good presenter. It usually is possible to find someone with both qualities.

If handouts are to be used with a segment of the training session, prepare these carefully. Make sure they are easy to read. Duplicates of materials that have already been duplicated several times are often very difficult to read. Handouts also must be accurate and current. Do not provide participants with written materials that must be changed during the learning process.

Presenting

If the first three steps in the training process have been done well, the presentation of training should be comfortable and enjoyable. Each training session (or segments of longer training sessions) should have three parts (Sullivan, 1974).

- *Introduction.* This should get the participants' attention and prepare them for learning. They will need to know what can be expected during the session or segment and what they will know or be able to do as a result of it. Introductions often set the tone or climate for the session, indicating whether it will be formal or informal. Participants need to know how the information relates to their interests or needs and why they should learn it.

- *Presentation.* The information conveyed to participants should be clear, well-organized and paced to meet the needs of participants. To maintain interest, a variety of techniques may be used, such as examples, pauses, voice inflections, humor, participant interactions, and question and answer sessions. Audio-visual aids and demonstrations also may enhance the presentation.

- *Conclusion.* Before ending a presentation, a brief summary of important points should be given. If possible, time should be allotted for responding to participants' questions. If the presentation is part of a series of training sessions, it provides a good opportunity to build interest in future sessions. Participants also can be given feedback at this time that provides a sense of achievement.

Other important considerations for presenting the training include appropriate use of eye contact, gestures, body movements, facial expressions, and overall energy level. If possible, choose words that are descriptive and provide variety in the presentation. Change the volume, speed, tone and pitch of voice to maintain interest. Provide a climate of acceptance to encourage participant involvement. This can be done by encouraging and validating ideas and feelings.

Evaluating

It is important that all training efforts be evaluated. There are several considerations in developing the evaluation plan. These include:

- purpose of the evaluation;
- what is to be measured;
- data gathering methods; and
- methods and resources required to conduct, analyze and report evaluation results.

There are several types of training evaluations. Some of the more common ones include the following.

- *Measures of learning*. These include tests to determine what the participants recall of the content that was presented.
- *Measures of competencies*. These are demonstrations by participants of their abilities to perform skills learned during the session.
- *Measures of changes in attitudes or values*. These include questionnaires or attitudinal scales administered before and after the sessions.
- *Measures of implementation*. These consist of questions to participants of their intent or actual use of the material presented in their job performance.
- *Measures of satisfaction*. These are usually questionnaires administered at the end of a training session to determine how well the program met the needs of participants.

Evaluation results are useful for modifying future programs, if indicated. They also may be helpful for justifying continued funding of training or documenting additional training needs.

Team Building

A drug-use identification program will require cooperative efforts among staff, as well as additional responsibilities and adjustments of roles. To increase effectiveness of the program in accomplishing its objectives, staff must actively collaborate. Anything less than this diminishes the potential benefit of the program and the professionalism of staff.

Much attention is given today to team work. Teams are not a new concept; we have had sports teams, and other kinds of teams, for a long time. However, viewing personnel as teams is a more recent development. The characteristics of teams include the following (Krueger, 1986).

- Team members share a common objective. They work to accomplish an end that is well-defined. Similar to sports teams, they have a common goal and put all their efforts into reaching it.
- There is an equality of membership in work teams. It is recognized that the work of each member is vital to the functioning of the team. Thus, there are no distinctions among team members as to rank or status.
- Teams have shared responsibility for making decisions and solving problems. When obstacles hinder movement toward the objective, the team has a responsibility to work toward resolution of the problem. When new challenges arise, the team shares in the decisions for addressing it.
- Team members have individual responsibilities; however, they understand others' tasks, also. There is a division of labor in work teams to improve efficiency. Nevertheless, ideally, more

than one member can perform each task if needed.

- Teams provide personal and professional support to members. They also provide feedback, when needed, to improve individual performance and team effectiveness.

Planners can facilitate effective team work and staff cohesion with a drug-use identification program in several ways. These include:

- involving staff in the decision-making process as much as possible;
- setting clear, achievable goals and objectives for the program and communicating these effectively to the work team;
- establishing effective procedures for conducting the program;
- maintaining constructive communication among team members and between the team and administrators or other staff;
- allowing the team latitude to solve problems and grow with the responsibilities they have been given;
- providing training opportunities to assist team members in performing their duties proficiently; and
- recognizing and rewarding the team for excellent job performance and allowing them to share in the successes of the program.

CONCLUSION

This chapter has presented information about the roles and responsibilities of staff who are involved in a drug-use identification program. It also has discussed an approach for training staff to undertake these responsibilities. Finally, the importance of team work and ways of facilitating teams were suggested.

This completes the Participant Manual. It has provided an overview of the information and skills needed to develop a drug-use identification program. Most likely, not every question that may develop while starting such a program has been answered. However, the framework for decision making and specific technical information provided serve as a resource for program development.

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Sullivan, B. (1974). Planning for instruction. In *Teaching improvement project.* Lexington, KY: University of Kentucky, College of Allied Health Professions, Center for Learning Resources.

APPENDICES

APPENDIX A

Upper Age of Juvenile Court Jurisdiction

Note: The ages listed below indicate the oldest the child can be and still appear in juvenile court. For example, in Connecticut, a fifteen-year old child would appear in juvenile court and a sixteen year old child would appear in adult court for the same offense.

Age 15	Age 16	Age 17		Age 18
Connecticut[1]	Georgia[5]	Alabama	Montana	Wyoming
New York[2]	Illinois[6]	Alaska	Nebraska*	
North Carolina[3]	Louisiana[7]	Arizona	Nevada	
	Massachusetts[8]	Arkansas	New Hampshire	
	Missouri	California	New Jersey	
	South Carolina[9]	Colorado	New Mexico	
	Texas	Delaware	North Dakota	
		Dist. Columbia	Ohio	
		Florida	Oklahoma	
		Hawaii	Oregon	
		Idaho	Pennsylvania	
		Indiana	Rhode Island	
		Iowa	South Dakota	
		Kansas	Tennessee	
		Kentucky	Utah	
		Maine	Vermont[4*]	
		Maryland	Virginia	
		Michigan	Washington	
		Minnesota	West Virginia	
		Mississippi	Wisconsin	

EXCEPTIONS: If a different upper age of juvenile court jurisdiction is indicated for a certain class of juveniles (e.g. - neglected, abused) within the state, this age is noted below.

1 17 - abused, dependent, neglected, "uncared for"

2 15 - males in need of supervision
17 - females in need of supervision

3 17 - neglected, abused, dependent

4 17 - child in need of care or supervision

5 17 - deprived

6 17 - neglected or abused minor; dependent

7 17 - abused or neglected

8 15 - truant or disobedient at school

9 17 - dependent or neglected

* State's attorney has option to file in either juvenile or criminal court

Source: Statutes Analysis of the Automated Juvenile Law Archive, September 1989, National Center for Juvenile Justice.

Reprinted with permission: National Center for Juvenile Justice.

National Center for Juvenile Justice (1991). *Desktop Guide to Good Juvenile Probation Practice.* Washington, D.C.: Office of Juvenile Justice and Delinquency Prevention.

Extended Age of Jurisdiction

18	19	20	21		25
Massachusetts	Alaska[3]	Michigan	Alabama	Nevada	California[6]
Missouri[1]	Florida	North Dakota	Colorado	Pennsylvania	
North Carolina	New Hampshire	Oregon	Dist. of Columbia	Rhode Island	
Texas	Oklahoma	West Virginia	Georgia	South Carolina	
Arkansas[2]	Minnesota		Idaho	South Dakota	
			Illinois[4]	Tennessee	
			Indiana	Utah	
			Louisiana	Vermont	
			Maine[5]	Virginia	
			Maryland	Washington	
			Missouri		
			Montana		

[1] For commitment to Department of Mental Health; child can be held longer pursuant to express court order after a hearing.

[2] Juvenile Courts shall have jurisdiction beyond 18 and may sentence delinquent to probation for not more than one year beyond date of sentencing; Juvenile Court has no authority to commit juvenile after 18th birthday.

[3] Department of Health & Social Services may apply for and court may grant an additional one year period of supervision past age 19 if continued supervision is in best interests of person and person consents.

[4] For minor adjudged an Habitual Juvenile Offender.

[5] For commitment to Department of Corrections.

[6] Court may retain jurisdiction for commission of certain offenses until person reaches 25 if committed to Department of Youth Authority or mental health facility (can get early release from mental health facility if person's sanity is restored).

Source: Statutes Analysis of the Automated Juvenile Law Archive, March 1989, National Center for Juvenile Justice.

Reprinted with permission: National Center for Juvenile Justice.

National Center for Juvenile Justice (1991). *Desktop Guide to Good Juvenile Probation Practice.* Washington, D.C.: Office of Juvenile Justice and Delinquency Prevention.

Youngest Age at Which Juvenile May Be Transferred to Criminal Court by Judicial Waiver

Note #1: Many judicial waiver statutes also specify specific offenses that are waivable. This chart lists the states by the youngest age for which judicial waiver may be sought without regard to offense.

Note #2: In many states, several ages are listed and tied to specific offenses. This chart lists only the youngest of these ages.

No Specific Age	10	12	13	14	15	16	No Waiver
Alaska	Vermont	Montana	Georgia	Alabama	Dist. of Columbia	California	Nebraska
Arizona			Illinois	Colorado	Louisiana	Hawaii	New York
Arkansas			Mississippi	Connecticut	Michigan	Kansas	
Delaware				Idaho	New Mexico	Nevada	
Florida				Iowa	Ohio	Rhode Island	
Indiana				Massachusetts	Oregon	Washington	
Kentucky				Minnesota	Texas	Wisconsin	
Maine				Missouri	Virginia		
Maryland				North Carolina			
New Hampshire				North Dakota			
New Jersey				Pennsylvania			
Oklahoma				Tennessee			
South Carolina				Utah			
South Dakota							
West Virginia							
Wyoming							

Source: Statutes Analysis of the Automated Juvenile Law Archive, September 1989, National Center for Juvenile Justice.

Reprinted with permission: National Center for Juvenile Justice.

National Center for Juvenile Justice (1991). *Desktop Guide to Good Juvenile Probation Practice.* Washington, D.C.: Office of Juvenile Justice and Delinquency Prevention.

APPENDIX B

Attachment 1

INSTRUCTIONS TO JUVENILE OFFENDERS

1. Cooperate with the Juvenile Probation or Parole Officer and answer all questions honestly.

2. Provide or authorize release of any records requested by the Juvenile Probation or Parole Officer. These may include: legal, medical, psychological, substance abuse treatment, educational, military employment, financial, Juvenile Court, or other records.

3. As a condition of supervision, offender is subject to random urine testing for alcohol and drug usage at such times as juvenile is ordered to submit to these by a Juvenile Probation or Parole Officer.

4. Juvenile is advised that failure or refusal to submit to such testing or tampering with a urine specimen should be considered the same as a "positive" test.

5. Any positive result can lead to revocation and incarceration or such lesser penalty as may be appropriate.

6. Offender will inform the Juvenile Probation or Parole Officer of all arrests and convictions. Inform the Juvenile Probation or Parole Officer of any new arrests that occur prior to sentencing in this case.

ACKNOWLEDGEMENT

I, the undersigned, have read or had read to me the above information and understand these instructions. I understand that the Court will be informed if I fail to cooperate or provide false, incomplete, or misleading information.

_____

Probation or Parole Officer

_____

Signature of Juvenile

_____

Date

Attachment 2

DRUG TESTING AGREEMENT

I, _____
(probationer/parolee)

understand that I have been court ordered to undergo urinalysis drug testing throughout my probation. I further understand that the results of this test will be confidential, with the exception that these results may be made available to my probation officer or the court system when appropriate. I understand that repeated positive drug tests may result in a violation of my probation leading to revocation.

_____
Signature of Juvenile

_____
Juvenile Probation or Parole Officer

_____
Date

Attachment 3

REQUEST FOR DRUG TEST(S)

OFFENDER IDENTIFICATION INFORMATION:

Probationer/Parolee:_____ Age _____ Sex _____

Social Security #:_____ Agency #:_____

Officer Name:_____ Officer District:_____

STATEMENT:

I am neither under the influence of any drugs or medication, nor have I taken any drugs or medication in the past three (3) weeks, other than those listed below. I certify that the urine specimen is my own, has not been tampered with by myself or anyone else, and I have sealed the container.

Medication within the past three (3) weeks:_____

as prescribed for me by: (Physician's Name)_____

Date:_____Time:_____Container sealed by:_____

Collection Observer:_____Juvenile Signature:_____

ADMISSION:

I acknowledge that I have used the following illegal drugs within the past three (3) weeks:_____

_____

Probationer/Parolee Signature:_____Date:_____

REFUSAL TO SUBMIT TO DRUG SCREEN: Date:_____

Probationer/Parolee Signature:_____Officer Signature:_____

TYPE OF DRUG SCREEN REQUESTED:

Reason for Request:____Intake ____ Suspected Drug Use ____ Random Test ____ Scheduled Test ____Other, Specify:_____

_____ Full Drug Screen (Tests for 5 categories) _____ Partial Drug Screen (Tests for 1-3 categories) Specify Drugs:_____

CHAIN OF CUSTODY:

Date/Time	Released By	Received By	Purpose of Change

TEST SITE USE ONLY:

Test Methodology:_____ Test Date:_____

Test Performed:

____Barbiturate ____Benzodiazepine ____THC ____Cocaine ____Amphetamine ____Opiate ____ Other, Specify:_____

Location Sent_____

Container Received by:_____Time:_____

Specimen Tested and Results Were: ____NEGATIVE ____POSITIVE for_____

Specimen Tray #_____ Position #_____

Operator:_____Date:_____

Date Results Received_____

Confirmation Test: Yes_____ No _____ Confirmation Methodology:_____

Test Performed:

____Barbiturate ____Benzodiazepine ____THC ____Cocaine ____Amphetamine ____Opiate ____Other

Specimen Tested and Results Were: ____NEGATIVE ____POSITIVE for_____

Container Received by:_____ Time:_____

Location Sent:_____ Date Sent:_____

Date Results Received:_____

Attachment 4

SUBSTANCE/MEDICATION SCREEN RECORD

Probationer/Parolee
Name:_____ Social Security #:_____

HT:_____ WT:_____ Sex:_____ Age:_____ DOC #:_____

Is the juvenile offender taking any of the following medications or prescriptions? If yes, please list time and amount of last dosage.

	Time/Amount
_____ Allergy Medication (Primatine, etc.)	_____
_____ Antibiotics	_____
_____ Over the Counter Stimulants	_____
_____ Blood Pressure Medicine	_____
_____ Cortisone/Steroids	_____
_____ Arthritis Medication (Advil, Nalfon, etc.)	_____
_____ Water Pills (Diuretics)	_____
_____ Heart Medicine	_____
_____ Sleeping Pills/Sedatives	_____
_____ Food Containing Poppy Seeds (w/in 24 hrs)	_____
_____ Tranquilizers/Antidepressants	_____
_____ Appetite Depressant	_____
_____ Decongestants/Nasal Spray	_____
_____ Cold Medication	_____

Any other drugs or medication? If yes, please list _____

_____

_____ _____
Signature of Juvenile Date

_____ _____
Witness Date

Name of Physician(s)_____ _____
Date

Attachment 5

SPECIMEN COLLECTION CHECKLIST

Name of Specimen Provider _____ DOC# _____

Test Conducted By _____ Date/Time _____

INITIAL EACH STEP UPON COMPLETION

_____ 1. Verify ID of Specimen Provider.

_____ 2. Have Provider sign Consent and Release of Information Form and Substance/Medication Screen Record.

_____ 3. Place Name, DOC#, Agency and Office Number on Container Label, Provider Initials Label.

_____ 4. Give Provider container. Supervising officer present.

_____ 5. Collection observed.

_____ 6. Seal container top tightly. Place Providers Name and DOC# on evidence tape with marker pen. Provider initials evidence tape next to name.

_____ 7. Specimen stored immediately or sent to on-site testing.

_____ 8. Complete Chain of Custody Form to accompany specimen to laboratory.

Attachment 6

SEAL PLACE **SEAL** OVER TOP OF CONTAINER

LABEL Wrap around container, overlapping ends of seal strip.

NAME OF Juvenile_____ CLIENT#_____

Signature

PROBATION OR PAROLE OFFICER _____

DATE/TIME COLLECTED_____

MONITORED BY_____

Signature

Attachment 7

CHAIN OF CUSTODY FORM

Name of Juvenile _____

Signature of Juvenile _____

Juvenile's I.D. Number _____

Specimen Collected By _____

Collection Observed By _____

Date and Time _____

For the Analysis of _____

VERIFICATION, IDENTITY AND CUSTODY OF THE SPECIMEN MAINTAINED BY:

Released By	Received By	Date/Time

TO BE COMPLETED BY TESTING PERSONNEL ONLY

Seal Broken By _____ Date/Time _____

Test Performed By _____ Date/Time _____

Test Verified By _____ Date/Time _____

Attachment 8

URINALYSIS REPORT

Date: _____

Time: _____

Juvenile
Name: _____

Probation or Parole
Officer's
Name: _____

CHECK AND INITIAL APPROPRIATE BOX BELOW:

This specimen is being tested for narcotic, dangerous drug or marijuana:

_____ I HAVE NOT taken any medication, narcotic or over-the-counter drug 72 hours prior to producing this urine specimen.

_____ I HAVE taken medication, narcotic or over-the-counter drug 72 hours prior to producing this urine specimen. I took:

_____

_____

as prescribed for me
by: _____
Physician's name

In producing this urine specimen, I certify: 1) I do not have on my person nor am I using any other urine or device which will cause the substitution of another's urine for my own; 2) I have not taken any substance which will cause any change in my urine for the purpose of avoiding detection of illegal drugs I have used.

I certify the above information is true and understand that giving false or misleading information shall constitute a violation of my probation.

_____
Probationer's Signature

Specimen Collected
at _____

Monitored by _____

Attachment 9

POSITIVE DRUG TEST STATEMENT

I, _____
(juvenile)

understand that I have received a positive urinalysis drug test

for _____ on _____
(Drug) (Date)

I further understand that I have 30 days to request a re-test of the specimen which yielded the positive result and that if I do not request a re-test within 30 days, that this represents an acceptance by me that the result is, in fact, positive. If I do request a re-test, I understand that I will pay all costs associated with the confirmation test, provided the confirmation test is also positive. If the confirmation test is negative, the agency will pay the costs for the re-test.

_____ I do hereby waive my option of a confirmation test and accept the positive result of the initial screen. I recognize that this acceptance constitutes a full admission of drug use during the period covered by the specimen.

_____ I do hereby request a re-test (confirmation test) of the specimen which yielded the above positive result. I will pay the cost for the re-test if the initial positive test is confirmed.

_____ _____
(Signature of Juvenile) (Date)

_____
(Officer Signature)

Attachment 10

AUTHORIZATION FOR RELEASE OF DRUG TEST AND RESULT INFORMATION

Juvenile's Name_____ Birthdate_____

I,_____ and/or_____
(Juvenile's Name) (Name of Parent or Conservator)

Authorize_____
(Releasing Agency)

Disclose To:_____
Name

_____
Street Number Street Name

_____
City State Zip

_____
Name, if any, of person to whom attention should be made

The Following information:_____
(Specify the nature and extent of information to be released)

For the Following Purpose:_____
(State Purpose of Disclosure)

This authorization and consent is made for the purpose of reporting my drug test(s) and drug test result(s) to the above designated individual and/or organization.

This authorization and consent is subject to revocation by the undersigned at any time except to the extent that action has been taken in reliance thereon. If not earlier revoked, this consent terminates on:

_____
Month Day Year

Releasor, its agents and its employees are hereby relieved of any responsibility and liability that may arise from the release or reproduction of such records and/or information.

_____
(Signature of Juvenile) (Date)

_____
(Signature of Parent or Conservator) (Date)

_____
(Witness) (Date)

Prohibition on redisclosure: This information has been disclosed to you from records whose confidentiality is protected by Federal Law. Federal regulations (42 CFR Part 2) prohibit you from making any further disclosure of this information except with the specific written consent of the person to whom it pertains. A general authorization for the release of medical or other information if held by another party is not sufficient for this purpose. Federal regulations state that any person who violates any provision of this law shall be fined not more than $500, in the case of a first offense, and not more than $5,000 in the case of each subsequent offense.

Attachment 11

URINALYSIS TEST RECORD

Agency Submitting Specimen

Date of Run

Lab Tech

Operator's Initials

Calibration Expiration Date

Lot Number of Reagent

Expiration Date of Reagent

Negative Cal. Rate

Low Cutoff

Control Number	IRS	Assay Results	Pos.	Neg.	If Positive, Confirmation Results

Attachment 12

PROBATIONER/PAROLEE STATUS REPORT

To Judge:_____

From:_____
Probation Officer

Approved:_____
Chief Probation Officer

RE: Probationer/Parolee_____

Docket No(s)_____Probation No._____

Offense_____

Probation Date_____Expiration Date_____

Date:_____Attachments:_____

PURPOSE:

NOTIFICATION THAT URINE SPECIMEN WAS TAKEN_____

WAS POSITIVE FOR:_____

WAS NEGATIVE_____

SUMMARY:

Another positive for illicit drugs, within the next six months, will result in a request for a Juvenile Probation or Parole Violation Hearing.

Please respond if this course of action is unacceptable.

Judge's Response: Please indicate any decision below and return it to the probation department.

DECISION JOURNALIZED? Yes_____ No_____
(Note: Decisions such as capias, extension, and early release must be journalized.)

Judge's Signature_____Date_____

Attachment 13

AGENCY MONTHLY DRUG TESTING SUMMARY LOG

Test Site:_____

Report for tests performed
during the month of_____ Facility_____

	Initial		Random		Offender	
	#Pos	#Neg	#Pos	#Neg	#Pos	#Neg
Drug Tested:_____	___	___	___	___	___	___
Drug Tested:_____	___	___	___	___	___	___
Drug Tested:_____	___	___	___	___	___	___
Drug Tested:_____	___	___	___	___	___	___
Drug Tested:_____	___	___	___	___	___	___
Drug Tested:_____	___	___	___	___	___	___
Drug Tested:_____	___	___	___	___	___	___
Drug Tested:_____	___	___	___	___	___	___
Drug Tested:_____	___	___	___	___	___	___
Drug Tested:_____	___	___	___	___	___	___
Total: _____	___	___	___	___	___	___

Attachment 14

DRUG TESTING CONTROL LOG

Probation Officer	Collection Personnel	Offender	Case ID#/ SS#	Time/Date Urine Collected	Time/Date Urine Transferred to Test Site	Date Test Results Received	Results POS/NEG Code	Confirmed YES/NO	Final Action Code

POSITIVE TEST CODES:

1 Opiates
2 Amphetamines
3 Barbiturates
4 Benzodiazepines
5 Cocaine
6 Cannabis (THC)
7 Methaqualone
8 Phencyclidine
9 Alcohol

FINAL ACTION CODE:

A - Verbal Warning
B - Written Warning
C - In-House Sanction
D - Increase Testing Frequency
E - Treatment Ordered
F - Partial Revocation
G - Full Revocation

APPENDIX C

GLOSSARY OF TERMS

GLOSSARY OF TERMS

absorption — physical process that occurs when a substance that has been administered to the body is absorbed into the bloodstream

accuracy — in chemical testing, the ability of a testing method to consistently produce the true identity and/or quantity of the measured substance

adjudication — the process of rendering a judicial decision as to whether the facts alleged in a petition or other pleading are true; an adjudicatory hearing is that court proceeding in which it is determined whether the allegations of the petition are supported by legally-admissible evidence.

adulteration — also called "masking" a specimen, the ingesting of certain substances prior to giving a specimen, or adding of substances to a specimen in order to conceal the presence of a drug in the sample

agglutination — the process of particles forming from the binding of antibody and latex-coated drug metabolite. Agglutination occurs with a negative drug specimen.

AIDS — Acquired Immune Deficiency Syndrome, a final stage of a series of health problems caused by a virus (germ), called the human immunodeficiency virus (HIV), that can be passed from one person to another chiefly during sexual contact or through the sharing of intravenous drug needles and syringes used for "shooting" drugs. AIDS is a deadly disease that destroys the body's immune (defense) system, allowing otherwise controllable infections (opportunistic diseases) to invade the body and cause additional diseases. The AIDS virus may also attack the nervous system, causing delayed damage to the brain.

analgesic — possessing pain-killing properties through the alteration of an individual's perception of pain

anesthetic — possessing pain-killing properties by blocking the actual transmission of nerve impulses from the origin of pain to the brain; may also possess sedative, or sleep-inducing, properties

antagonists — medications that block the effects of drugs at the brain's receptor sites

antibody — a substance which reacts (binds) with a specific drug or drug metabolite

antigen — a substance, alien to the body, which triggers the formation of an antibody

antidipsotropic drugs	medications which cause unpleasant reactions when used with particular substances, thus creating an aversion to those substances
arrhythmia	irregular heartbeat
Ascend Multimmunoassay (AMIA)	an immunoassay chemical testing methodology that analyzes multiple drugs simultaneously
ataxia	a physical condition caused by heavy use of alcohol, characterized by slowed reaction times and an impaired ability to coordinate muscle activity
augmented family	family consisting of individuals who are not "blood relatives" of one another living together in one household; individuals serve the usual functions of family members; also called **surrogate family**
biotransformation	changes that administered substances undergo in the body as a result of normal metabolic functions
blended family	family consisting of some members who are "blood relatives" of one another, and some who are not "blood relatives", living in one household
blood-brain barrier	membrane which acts as a filter to prevent harmful substances from entering the brain from the bloodstream; drugs are capable of passing through this membrane
cannabis	classification of drugs that is derived from the cannabis plant, which is the source for marijuana and hashish
central nervous system depressants (CNS depressants)	classification of drugs that have a depressant effect on the central nervous system (e.g., alcohol, barbiturates, and benzodiazepenes)
central nervous system stimulants (CNS stimulants)	classification of drugs that have a stimulant effect on the central nervous system (e.g., cocaine, amphetamine, and methamphetamine)

chain of custody	the policies and procedures that govern the testing of urine, saliva, or breath in a manner that ensures that the sample and the results are correctly matched to the person intended and that the sample and results are not altered or tampered with from the point of collection through the reporting of test results and disposal of specimens
chromatography	chemical testing method for separating drugs and metabolites
confirmation test	a second test by an alternate chemical method to verify the results of an initial positive test
cross-reactivity	ability of any substance other than the drug intended to produce a positive test result
cutoff level	the point or value chosen for the determination of positives or negatives in drug screening
delinquents	juveniles who commit illegal acts that are considered crimes whether committed by an adult or a juvenile
delirium tremens	a physical condition caused when heavy alcohol use is eliminated, characterized by restlessness, insomnia, severe agitation, hallucinations, body tremors, and possible convulsions and delirium.
designer drugs	chemical copies of controlled substances that are manufactured to replicate the effects of psychoactive drugs
diversion	procedures for handling relatively minor juvenile problems informally, without referral to the juvenile court
due process	the constitutionally-guaranteed right of persons to be treated by the law with fundamental fairness; in juvenile delinquency proceedings, these include the right to advance notice of the hearing, the right to counsel, the right to confront and cross-examine witnesses, the right to refuse to give self-incriminating testimony, and the right to have allegations of conduct that would be criminal if committed by an adult proven beyond a reasonable doubt
endorphins	neurotransmitters that are naturally produced by the brain to moderate emotions, induce pleasure sensations, and control pain

Enzyme Immunoassay (EIA)	an immunoassay chemical testing methodology that uses enzymes to produce the reaction between antibodies and antigens
excretion	process by which substances and their metabolites are eliminated from the body
extended family	family consisting of all "blood relatives," but not limited to just parents and children, living together in one household
false negative	drug screening result reporting that drug or metabolite has not been detected when drug or drug metabolite *is* present in the specimen
false positive	drug screening result reporting that drug or metabolite has been detected when drug or drug metabolite is *not* present in the specimen
Fluorescent Polarization Immunoassay (FPIA)	an immunoassay chemical testing methodology that uses fluorescent tracers to produce the reaction between antibodies and antigens
Gas Chromatography (GC)	a method of separating drugs and metabolites to detect drugs in a specimen using gases
Gas Chromatography/Mass Spectrometry (GC/MS)	specialized form of gas chromatography used in conjunction with mass spectrometry; considered the ultimate method of choice for the unequivocal identification of a drug
half-life	amount of time it takes for the amount of drug present in the body to be reduced by half
hallucinogens	classification of drugs that commonly cause hallucinations when used (e.g., LSD, MDMA)
High Performance Liquid Chromatography (HPLC)	a method of separating drugs and metabolites to detect drugs in a specimen using liquids
HIV	Human Immunodeficiency Virus. The term "HIV" has been internationally accepted in the scientific community as the appropriate name for the retrovirus that is the causative agent of AIDS.
"ice"	street name for methamphetamine in smokeable form

immunoassay	chemical testing method that employ antibodies to detect drugs and metabolites
informed consent	a right of juveniles who will undergo drug screening to be fully informed about the process of and the purpose for screening
inhalants	classification of drugs that are administered to the body through inhalation (e.g., household substances and aerosols such as fingernail polish remover, airplane glue, and hairspray; anesthetic chemicals such as ether and nitrous oxide)
initial test	the first chemical test conducted by a laboratory to identify the presence or absence of drugs in a system; if negative, testing discontinues; if positive, a confirmation test is necessary
instrument tests	chemical tests by a machine that must remain in a stable location and be calibrated and adjusted regularly
Kinetic Interaction of Micro Particles in Solution (KIMS)	an immunoassay chemical testing methodology that uses micro particles to produce the reaction between antibodies and antigens
Latex Agglutination Immunoassay (LAIA)	an immunoassay chemical testing methodology that uses latex particles to produce the reaction between antibodies and antigens
main-lining	injecting drugs directly into a vein
masking	See: adulteration
mass spectrometry	a detection device usually used in conjunction with gas chromatography to specifically identify and quantify the illegal drugs in a specimen
metabolism	the action of enzymes to alter a drug chemically and facilitate its removal from the body
metabolites	substances that are produced in the body through the process of biotransformation
methadone	an opiod used in the maintenance treatment of heroin dependency because it prevents heroin withdrawal symptoms and fulfill's the addict's physical need for the drug
nanogram	unit of measure equal to one billionth of a gram

narcotic analgesics classification of drugs that have analgesic or anesthetic effects on the user (e.g., heroin, morphine, Fentanyl)

negative result test result indicating a drug is not detected at or above the cutoff level of a test

neurotransmitters "chemical messengers" which are released from nerve endings within the body to carry information to the brain and throughout the nervous system

non-instrument tests portable chemical tests requiring no calibration or formal testing adjustments which will sometimes be used at a location outside of a juvenile justice agency or facility.

nuclear family family consisting of two parents (usually married) and their children who have been born or adopted living together in one household

nystagmus involuntary jerking of the eye that may occur when individuals use certain categories of drugs; movement of the eye from left to right is called *horizontal gaze nystagmus*, while an up-and-down jerking movement is called *vertical nystagmus*

off-site testing testing conducted by an outside laboratory that has contracted with an agency to employ chemical testing methodologies for the identification of illegal drugs in specimens; both immunoassay and chromatography testing may be conducted by the off-site laboratory

on-site testing testing conducted within a laboratory that has been established within an agency, and staffed by agency personnel; on-site testing is limited to immunoassay testing for identification of illegal drugs within specimens

"on the nod" a physical effect of narcotic use; head is slumped forward, chin resting on chest, and eyelids are droopy, yet individual will become alert immediately when "awakened"

opiates synthetic pleasure-producing chemicals that are administered to the body which mimic the actions of the body's natural pleasure-producing chemicals (endorphins)

parens patriae	lit., "The father of his country"; from English law, the legal doctrine under which the Crown assumed the protection of certain minors, orphans, and other persons in need of protection. Though not wholly accurate, the phrase is sometimes used to express the benevolent and rehabilitative philosophy of the juvenile court
passive inhalation	condition that occurs when a nonsmoking individual indirectly ingests an illegal substance by being in the presence of another individual who is smoking
PINS	persons in need of supervision; a juvenile status offender who is involved in non-delinquent misbehavior. Depending upon the state, also "CHINS" (Child in Need of Supervision), "JINS" (Juvenile in Need of Supervision), "MINS" (Minor in Need of Supervision), "Beyond Control Child," "Incorrigible," "Wayward Youth," or "Miscreant"
pharmacotherapy	use of medications to treat substance abuse
phencyclidine	also known as PCP, a classification of synthetic drugs; PCP produces effects that are varied and unpredictable
physiological dependence	a state of adaptation to a drug accompanied by the development of tolerance
pipette	a syringe-like device used to pick up and dispense a measured amount of a urine specimen
policy(ies)	a high level overall plan which embraces the general goals of a drug screening program; provides the theoretical framework for deciding what is or is not an acceptable procedure for an agency's drug screening program
positive result	drug detected at or above the cutoff level of a test
potentiation	a result that occurs when combinations of drugs are taken, and one drug exaggerates the effects of the other drug
primary sexual characteristics	physical characteristics involving the development of body parts directly related to reproduction
procedure(s)	a series of steps to be performed in a regular definite order under specified conditions

psychological dependence	a mental state involving a drive to repeated or continuous drug use to achieve pleasure or satisfaction and to avoid discomfort
psychotropic medications	drugs which control symptoms associated with drug use and withdrawal
qualitative analysis	chemical analysis to determine the presence or absence of drugs in a specimen
quality assurance	planned, systematic activities, both operational and organizational, that ensure a testing system routinely produces reliable results
quality control	the routine operational procedures that a laboratory institutes to ensure that its results are continually reliable
quantitative analysis	chemical analysis to determine the amounts of certain drugs in a specimen
Radioimmunoassay (RIA)	an immunoassay chemical testing methodology that uses a radioactively labeled drug to produce the reaction between antibodies and antigens
Rapid Eye Movement (REM)	a part of the sleep cycle that is essential for maintenance of an individual's normal emotional state
REM Rebound Effect	produced when there is an increase in Rapid Eye Movement sleep, causing an increase in dream time; the individual experiences abnormally vivid, frightening dreams
reagent	a substance that takes part in a chemical reaction
reliability	the ability of a screening technique to produce stable results and not be influenced by fluctuating or extraneous factors
scheduled testing	obtaining specimens for testing according to an established schedule that is known to the youth
secondary sexual characteristics	physical characteristics that distinguish males from females
sensitivity	lowest concentration of a drug that is detectable through a chemical test
single parent family	family consisting of one parent and one or more children living in one household

skin-popping	injecting drugs under the skin
specificity	measure of a test's ability to differentiate between drugs that are detected
sphygmomanometer	an instrument for measuring an individual's blood pressure
status offenders	juveniles who have committed deviant acts or misbehaviors that would not be considered crimes if committed by an adult
statute	a law enacted by a state legislature or the U.S. Congress
strabismus	inability to converge eyes toward the bridge of the nose (cross eyes) that may occur as a result of the use of certain categories of drugs
sublingually	administering a drug (often hydrochloride salt of cocaine) by placing it under the tongue, where there are many blood vessels
surrogate family	family consisting of individuals who are not "blood relatives" of one another living together in one household; individuals serve the usual functions of family members; also called **augmented family**
synapse	small gap between nerve endings and brain receptors which neurotransmitters must cross to carry its messages; once across this gap, neurotransmitters bind with receptors, producing effects of drugs on the brain and the body
synesthesia	a phenomenon associated with the use of hallucinogens, where sensory systems become confused (individual may "see" warmth, or "taste" colors)
THC	short version for the active ingredient in marijuana, Delta-9 Tetrahydrocannabinol
therapeutic community	substance abuse treatment strategy which emphasizes self-help, and relies heavily on ex-addicts as peer counselors, administrators, and role models in a highly structured milieu
Thin Layer Chromatography (TLC)	chromatography drug testing methodology performed on a thinly coated plate of glass, or other type of solid support; the coating typically consists of silica gel
tolerance	a physiologic state in which there is a need to progressively increase drug dosage to produce the effect originally achieved by a smaller dose

transfer	the sending of a case from the juvenile court to adult court for trial. See also: waiver
treatment matching	concept of selecting the most appropriate intervention strategy for each individual youth
turnaround time	amount of time that elapses between receipt of a specimen in the laboratory and the availability of test results
unscheduled testing	obtaining specimens for testing at random, without the youth's prior knowledge of when a specimen will be requested
urinalysis	the chemical analysis of urine to determine the presence or absence of substances (in the juvenile justice system, these substances are illegal drugs)
validity	the ability of a screening technique to accurately measure what it was intended to measure
waiver	the juvenile court's relinquishment of its jurisdiction over a minor, and transfer of the case to adult court for trial. See also: transfer
withdrawal	unpleasant physiologic changes that occur when the drug is discontinued abruptly

Sources for the glossary:

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