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Building Safe Communities

State and Local Strategies
for Preventing Injury and Violence

NCJRS

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ACQUISITIONS

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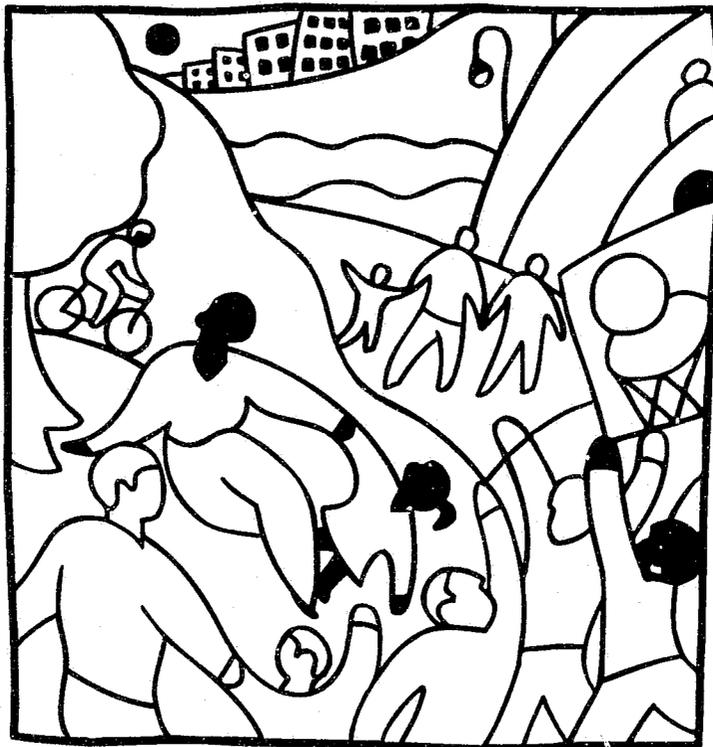
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Building Safe Communities

State and Local Strategies
for Preventing Injury and Violence





DEPARTMENT OF HEALTH & HUMAN SERVICES

Public Health Service

Maternal and Child Health Bureau

Health Resources and
Services Administration
Rockville MD 20857

DATE: July 29, 1994

FROM : Jean Athey, Ph.D. *Jean Athey*
Director, Injury Prevention and EMSC Programs

SUBJECT: New Injury and Violence Prevention Publication from the Children's
Safety Network at the National Center for Education in Maternal and
Child Health

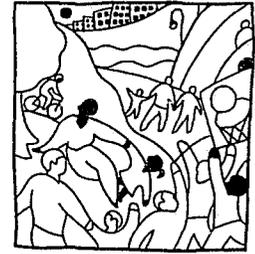
TO: Maternal and Child Health Colleagues

I am pleased to send you a copy of our newest publication, *Building Safe Communities: State and Local Strategies for Preventing Injury and Violence*. This document provides an in-depth description of 29 cases where health departments and others at the state, county, or community level have implemented creative programs and strategies to prevent injury and violence among children and youth. The case studies are designed to inform policymakers and government officials; however, they are also meant to be used as a training tool. Each case has suggestions for cross-systems development and includes ideas about natural coalition partners in a specific area of injury or violence, as well as suggestions for other maternal and child health settings where a similar program could be developed.

As you know, the Maternal and Child Health Bureau (MCHB) is committed to development of the infrastructure for delivery of health care services to all mothers and children in the country. In addition, MCHB activities must be consistent with the health objectives outlined in *Healthy People 2000*, which focus on the leading cause of death among children and adolescents, injury and violence. Through *Building Safe Communities* we hope to inform you of some of the efforts at the state, county, and community levels that have successfully integrated injury and violence prevention into a variety of settings; we hope you will, in turn, share your ideas about creative programs and strategies with us. These case studies are only the first installment. We will periodically send you new ones.

We would like your feedback on *Building Safe Communities*, as well as your ideas for future case studies to add to the notebook. Please call us or use the evaluation form, which you can mail or FAX to us, and let us know what you think—your ideas and input are important to us. Please call the Children's Safety Network at the National Center for Education in Maternal and Child Health at (703) 524-7802 to share your ideas for making communities healthier and safer.

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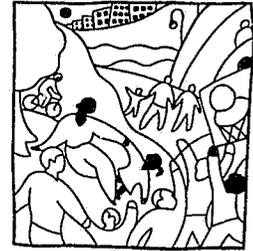
We would like to thank the many people who assisted in the development of *Building Safe Communities: State and Local Strategies for Injury and Violence Prevention*.

Sue Gallagher and Susan Brink assisted in developing the conceptual framework for the *Building Safe Communities* project and provided insights that helped us focus on the most important aspects of the programs.

In reviewing *Building Safe Communities*, Sue Gallagher, Chris Miara, Murray Katcher, Victor LaCerva, Carol Delaney, and Laura Kavanagh drew upon their wealth of experience in injury and violence prevention to give us suggestions for making this publication as useful as possible.

Building Safe Communities could not have happened without the willing participation of the people involved in the programs described in the case studies. We appreciate their generosity in sharing their time and their valuable experiences in developing, conducting, and evaluating state, county, and local injury and violence prevention programs.

Introduction



Building Safe Communities

Over the past decade, as injury and violence have been recognized as first-order public health crises, state and local health departments have played an increasingly important role in addressing these challenges. From a home visiting program to install smoke detectors in Rhode Island, to a program to distribute coupons for gun trigger locks in California, health departments are finding creative, practical ways to keep children and families safe.

Maternal and child health (MCH) programs, health departments, and their partners in prevention are tackling the full range of injury and violence problems facing America's families, including homicide, suicide, motor vehicle crashes, and drowning. Yet many public health professionals are unaware of strategies their colleagues across the country are using to prevent injury and violence.

Building Safe Communities describes strategies used by 29 programs, and reflects on lessons learned by the project staff. We examine how those strategies might apply to other communities.

In each prevention effort, whether successful or not, there are abundant lessons for other people or programs tackling child and adolescent injuries. We asked health professionals from many parts of the nation to spend time talking with us about what went right and what went wrong in their injury prevention efforts. They graciously shared rich, detailed, insights about everything from counseling adolescents in abusive relationships, to producing multilingual materials, to working with the media.

The strategies described in this notebook only begin to scratch the surface of what state and local programs are doing to prevent injuries and violence. We hope that the contents pro-

vide a flavor of the diverse range of creative and promising strategies now being implemented all across the country.

Inclusion of a program in *Building Safe Communities* does not imply endorsement by Children's Safety Network. Specifically, programs or strategies included in this volume were chosen because they:

- provide valuable lessons for people or programs interested in preventing injuries and violence;
- demonstrate diverse strategies for preventing injury and violence among children, adolescents, and families that are being implemented by MCH programs, or demonstrate strategies that are particularly adaptable to MCH settings or activities;
- illustrate critical components of successful injury

and violence prevention programs; and

- describe a broad range of injury causes, targeted age groups, and MCH settings.

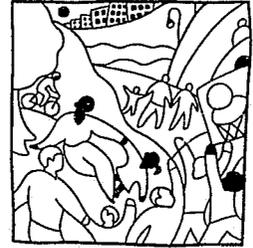
Additional case studies, intended to complement this "starter set," will be mailed to those with *Building Safe Communities* notebooks in the

first half of 1995. Injury sections will be added (such as lead poisoning and pedestrian injuries); new target groups will be explored (including Native Americans); and new programs will be mined for valuable lessons.

We would greatly appreciate readers taking the time to fill out and return the evaluation form found at the back of *Building*

Safe Communities. We would also appreciate specific suggestions for additional programs to include in subsequent sets of case studies. A blank case study in the appendices can be filled in to transmit ideas for future case studies to us, or for your own project planning and evaluation.

Section II



How to Use This Book

Building Safe Communities provides information on state and local programs that address 14 types of unintentional injury or violence within our communities. The notebook is organized by injury category, using tabs to identify specific types of injury. The first two tabs, Alcohol and Firearms, refer to critical injury and violence risk factors. The remaining 12 tabs deal with unintentional injuries and types of violence.

Overview of Material

For each of the 14 injury categories (identified by tabs), an introductory section includes four types of information. Following the tab marked Homicide/Assault, for example, you will find a brief overview of national data on the impact of homicide on children and families, as well as promising prevention strategies. Next comes a list of MCH settings which could incorporate homicide prevention

strategies into their work. A third section suggests initial steps for integrating homicide prevention into MCH settings. In the fourth section, we have included a list of key local and state agencies, services, or groups that are likely to be helpful in planning and carrying out homicide prevention activities.

Case Studies

The 29 case studies included in the notebook follow the introductory materials. Each of the case studies contains the following information:

Start and end dates

Target population

Audience reached

Program Description

Objectives

Program Components

Summary of MCH Roles or

Possible MCH Roles

Coalition Partners in Prevention

Sustaining the Program

Adapting the Program to
Community Needs

Resources Needed

Staffing Requirements

Fiscal Requirements/Source
of Funding

Lessons Learned

*Products/Publications
Developed/Used*

Contact Person

Focus on Age Groups, Target Audiences, Settings, or Geographic Areas

To look for case studies by type of injury, please use the table of contents or go directly to the tabs that interest you. If you are particularly interested in learning about programs that worked in a specific setting, such as WIC clinics, indices at the back of the *Building Safe Communities* notebook allow you to identify those cases. Other indices list programs by

the age group that the program hoped to protect from injury or violence, by the target audience for the intervention, and by state.

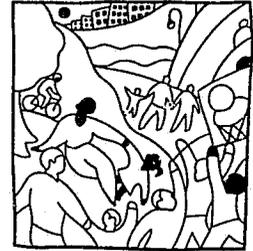
Additional Resource Information

Each case study names a contact person who can provide additional information about the project.

Appendices

The appendices include two items that may be helpful as you plan your injury and violence prevention activities. One is a list of nine key activities for state MCH agencies, which may also be applicable to other organizations. The second item is a case study worksheet, a blank copy of the format used in the *Building Safe Communities* case studies.

This worksheet may be useful in planning your new injury or violence prevention projects, or in providing a framework for summarizing the work you have already accomplished.



Glossary

Adolescent Pregnancy and Parenting Programs

These programs provide services to pregnant adolescents, adolescent parents, and their families and help to reduce repeat adolescent pregnancies; improve the social, educational, and health outcomes for adolescent mothers and their babies; and promote adoption as a positive alternative for unmarried pregnant adolescents.

Anticipatory Guidance

This guidance contains information for parents on what to expect in the child's current and next developmental phase. Injury and violence prevention are ideal topics for anticipatory guidance, particularly since children's risk for different types of injury and violence varies with their developmental stage.

Breast/Cervical Cancer Screenings

These health services for women include pap smears and

mammograms (with follow-up). Public Health Service efforts are directed toward targeted populations, including African American and Native American women. The Public Health Service has focused on comprehensive screening programs that eliminate financial barriers to receiving these services. Many women at high risk for a range of unintentional and violent injuries use these services.

Children with Special Health Needs (CSHN)

These programs, which address chronic or disabling conditions through improved community-based care, are funded through the Maternal and Child Health Block Grant. Children with special health needs are at higher risk for motor vehicle-related injuries and child abuse.

Community and Migrant Health Centers

These centers offer services to improve health care for the underserved and disadvantaged.

The centers provide primary health care and coordination of federal, state, and local resources to serve migrant and seasonal farm workers and their families.

Community Integrated Service Systems (CISS)

Funded by the Maternal and Child Health Bureau, this program focuses on developing and implementing infrastructures within communities and facilitating comprehensive health care systems for women, children, and families.

E Codes (External Cause of Injury Codes)

These codes supplement the International Classification of Diseases codes, providing a systematic way to classify information which doctors, nurses, paramedics, and social workers may enter in the medical record. E codes may be grouped into large categories to classify falls, fires, drowning, etc. They may also be very precise, referring, for

example, to a specific type of fall (e.g., E884.0 fall from playground equipment). E codes create a picture of how and where the injury occurred, and, in conjunction with other data, serve as the foundation for injury prevention activities such as evaluating the impact of a new law.

Emergency Medical Services for Children (EMSC)

According to the Institute of Medicine, pediatric emergency medical services should "encompass prevention, prehospital care and transport, emergency department and inpatient care at local hospitals and specialty centers, and assistance in gaining access to appropriate follow-up care including rehabilitation services." A grant program of the federal Maternal and Child Health Bureau, the EMSC program expands and improves statewide systems of emergency medical services to address the needs of acutely ill and seriously injured children.

Family Planning Clinics

These clinics provide a broad range of effective family planning methods to help people, especially those with low incomes, to achieve their desired number and spacing of children. Family planning clinics are also a source of primary care for many people.

Health Care Services for Homeless Youth

Health care services for the homeless can include primary

health care services for homeless children and youth, mental health care services, and substance abuse treatment. This program, administered by the Bureau of Primary Health Care, funds approximately 119 projects across the country in local public health departments, community and migrant health centers, inner-city hospitals, and local nonprofit community agencies.

Healthy Start

This federally funded program specifically aims to reduce infant mortality. Special grants help selected communities expand health and social services and make it easier for women to obtain care for themselves and their babies. Activities include providing women with health and social services (such as housing), conducting neighborhood outreach to help women learn about services and prenatal care, and offering education about childbirth and infant care.

Home Visiting

This promising strategy for delivering preventive services directly in the home can help at-risk families become healthier and more self-sufficient. Delivering injury and violence prevention services through home visiting can also help to prevent or reduce serious and costly problems in the future. Important services include parenting instruction and support for young mothers, counseling about the risks of guns in the home, and delivery of safety supplies, including smoke detectors.

Trauma Registry

This collection of data on patients who receive hospital care for certain types of injuries (such as burns) is primarily designed to ensure quality trauma care process and outcomes in individual institutions and trauma systems. A secondary purpose of the registry is to provide useful data for the surveillance of injury morbidity and mortality.

WIC

The Special Supplemental Food Program for Women, Infants and Children (WIC) provides supplemental foods, nutrition education, and access to health care for low-income pregnant, postpartum, and lactating women, and for infants and children up to 5 years of age who are at nutritional risk. WIC is federally funded, although many states contribute additional funds. WIC is administered by state health departments and Native American tribal organizations. In 1991, 4.7 million women and children received WIC benefits.

Women's Health Programs

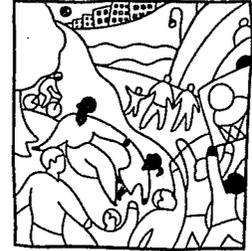
These programs provide prevention and treatment services for pregnant and postpartum women and for young women of prechildbearing age. Services include nutritional education and counseling; prevention and treatment of alcohol and other drug use; mental health services; HIV/AIDS education, counseling, and testing; prevention and

treatment of sexually transmitted diseases; and clinical preventive services.

Wrap-Around Services

This term is used in children's mental health to describe

individualized interventions that are developed by a multidisciplinary team, focusing on the strengths and needs of the child and family within their community environment. These services can encompass any or all areas of the child's life.



Reducing Injury and Violence Risk Factors

Alcohol

“In a national survey of college students, approximately 50 percent of those who had been victims of a crime acknowledged using alcohol or other drugs before the crime occurred.”³

An Overview

Alcohol Plays Leading Role in Injury and Violence

Alcohol is a leading risk factor for injury and violence. Alcohol use and abuse increases the likelihood of virtually all types of injury, including traffic-related injuries, falls, drownings, fires, homicide and assault, child abuse and neglect, and suicide. Consequently, injury and violence are the leading cause of alcohol-related deaths in the United States: 15 to 50 percent of deaths among people who drink heavily are caused by traffic crashes, homicide and other violence, suicide, and falls.¹

Alcohol is a major contributor to deaths and injuries in traf-

fic crashes. The National Highway Traffic Safety Administration (NHTSA) reports that alcohol was involved in approximately half of all fatal traffic crashes in 1991.² Every 26 minutes, someone dies in an alcohol-related traffic crash; 19,900 people died in these crashes during 1991.² Every 1.5 minutes, someone is injured in an alcohol-related traffic crash; 318,000 people were injured in crashes involving alcohol in 1991.² More than 1.8 million drivers were arrested in 1991 for driving under the influence of alcohol—an arrest rate of 1 for every 92 licensed drivers in the United States.²

Adolescents and Alcohol: The Lethal Connection

Adolescents are at especially high risk—both as victims and perpetrators—for injury and violence involving alcohol.

Crashes: Among young people ages 16–20 years, 20 percent of drivers and 34 percent of pedestrians killed in fatal crashes during 1991 were legally intoxicated.²

Sexual assault: Between one-third and two-thirds of sexual assault and acquaintance rape cases among teens and college students involve alcohol.³

Crime: In a national survey of college students, approximately 50 percent of those who had been victims of a crime acknowledged using alcohol or other drugs before the crime occurred.³

Suicide: Youth ages 10–19 years who used firearms to commit suicide are more likely to have been drinking than those who used other methods.⁴

Drowning: 40 to 50 percent of young males who drowned had used alcohol prior to drowning.³

Parental abuse of alcohol affects children's injury rates: children and adolescents whose mothers abuse alcohol are twice as likely to be seriously injured as children of mothers who do not use alcohol.⁵ When both parents abuse alcohol, a child's risk of injury is even greater.⁵

Policy and Prevention

All states and the District of Columbia have laws that

establish the minimum drinking age at 21 years. NHTSA estimates that these laws have reduced by 13 percent the number of traffic fatalities involving drivers ages 18–20 years, and have saved approximately 12,360 lives since 1975.² These laws have also been linked to reductions in other types of unintentional injury and to decreases in alcohol-related suicides.⁶ In many states, however, these laws are not well enforced.

Data that document the role of alcohol in injury and violence and the cost of these injuries are essential in order to motivate policymakers and health care providers to change alcohol-related policies. The majority of state and local areas do not have systems in place to collect these data; many hospital emergency departments do not routinely test blood alcohol levels in all trauma patients.

Community and neighborhood coalitions are rapidly recognizing the role that alcohol plays in injury and violence. Maternal and child health (MCH) agencies need to coordinate with other agencies that have jurisdiction over alcohol, such as the parks and recreation department, local zoning board, and alcohol beverage licensing authority, in order to monitor the sale of alcohol in communities.

Many injury prevention programs have paid relatively little attention, until recently, to risk factors for injury and violence such as alcohol, firearms, and poverty; instead, they have

focused on a specific type of injury such as homicide or motor vehicle crashes. Increasingly, MCH programs are recognizing the potential for reducing a range of injuries by reducing alcohol use and abuse. Alcohol abuse prevention efforts have evolved during the last decade from reliance on educational approaches alone, to more comprehensive programs that combine public policy, enforcement, environmental changes, and education.

Notes

¹Marx, J. (1990). Alcohol and Trauma. *Emergency Medicine Clinics of North America* 8(4):929–938.

²U.S. Department of Transportation, National Highway Traffic Safety Administration. (1992). *1991 Alcohol Fatal Crash Facts*. Washington, DC: U.S. Department of Transportation, National Highway Traffic Safety Administration, National Center for Statistics and Analysis, Research and Development.

³U.S. Department of Health and Human Services, Office of the Inspector General. (1992). *Youth and Alcohol: Dangerous and Deadly Consequences*. Washington, DC: U.S. Department of Health and Human Services, Office of the Inspector General.

⁴Brent, D. A., Perper, J. A., and Allman, C. J. (1987). Alcohol, firearms, and suicide among youth: Temporal trends in Allegheny County, Pennsylvania, 1960 to 1983. *Journal of the American Medical Association* 257(24):3369–3372.

⁵Bijur, P. E., Kurzon, M., Overpeck, M. D., and Scheidt, P. C. (1992). Parental alcohol use, problem drinking, and children's injuries. *Journal of the American Medical Association* 267(23):3166–3171.

⁶Jones, N. E., Pieper, C. F., and Robertson, L. S. (1992). The effect of legal drinking age on fatal injuries of adolescents and young adults. *American Journal of Public Health* 82(1):112–115.

Promising MCH Settings

There are many ways to incorporate alcohol-related injury prevention into existing MCH services and programs. Following are some of the MCH programs that could play a part in preventing alcohol-related injuries.

Adolescent Health Clinics
Adolescent Pregnancy and Parenting Programs*
School-Based/Linked Health Clinics
Child Health Clinics
Community and Migrant Health Centers*
EMS and EMSC Programs*
Family Planning Clinics*
Health Care Services for Homeless Youth*
Health Fairs
Home Visiting Programs*
Mental Health Service Sites
Outreach Vans
Prenatal Clinics
Primary Care Clinics
Rape Crisis Centers
Sexually Transmitted Diseases (STD) Clinics
Substance Abuse Prevention/Treatment Programs
WIC Clinics and Classes*
Women's Health Programs*

Incorporating alcohol-related injury prevention into MCH services doesn't have to be difficult. First steps can be as simple as asking adolescents "Have you drunk alcohol in the last month? How much? Have you ever been in a car with a driver who had been drinking?" But don't stop there!

If adolescent alcohol use and abuse is a problem in your area, you may want to bring together interested staff to brainstorm about additional ways to address the problem in your setting. Here are some questions you may want to ask:

- Do we need to collect more or different types of information from adolescents and families if we are going to help prevent their alcohol-related injuries?
- What kinds of resources or information do adolescents and families need to prevent these injuries?
- Can we educate adolescents and families individually or in group settings about preventing alcohol-related injuries?
- Can we assess, treat, or refer adolescents for this type of injury?

Training materials, manuals, and protocols already exist for many types of injuries. Check with your state health department, regional MCH office, or the Children's Safety Network for more information on available prevention materials.

As you plan alcohol abuse prevention activities, think about possible changes in the following areas to strengthen your prevention efforts:

Medical records
Other data collection
Protocols for assessment, treatment, and referrals
Protocols for anticipatory guidance*
Educational materials available in waiting rooms in all settings
Educational materials to be handed to consumers with discussion
Educational forums
Referrals
Adolescent and family follow-up
Training for staff
Linkage with other community resources

*See Glossary

Priority Partners in Prevention

Alcohol-Related Injury

Local and State Government Agencies and Programs

City and county administrators; Department of Transportation; Office of Highway Safety; governor's highway safety representative; Department of Parks and Recreation; state alcohol and drug abuse director; substance abuse prevention and treatment programs; alcoholic beverage licensing authorities; local zoning boards; and child fatality review committees.

Local and State Legislators and Other Elected Officials

City and county councils; mayors and their staff; the governor and staff; the state attorney general and staff; and state representatives and senators on relevant committees.

Law Enforcement Agencies

Police chiefs; sheriffs; police unions; and police training programs.

Schools, Parent-Teacher, and Student Groups and Associations

Teachers, principals, superintendents and their associations; school health personnel;

school boards; college and university administrators and faculty; and Students Against Drunk Driving (SADD) and other student organizations.

Media

Editorial boards; Op-Ed page editors; city desk reporters; consumer reporters; sportswriters; and sportscasters.

Health Care Providers

Pediatricians; family physicians; school-based clinic staff; nurses; trauma and emergency room physicians; emergency medical services for children and emergency medical services personnel; other health professionals; local hospitals and trauma centers; health maintenance organizations; rehabilitation facilities; coroners' and medical examiners' offices; social workers; and local medical societies.

Business Community

Insurance companies; alcohol retail outlets; and chambers of commerce.

Civic Groups and Service Clubs:

Kiwanis Clubs; League of Women Voters; Junior League; Rotary Clubs; Girl Scouts and Boy Scouts; Boys and Girls Clubs; and 4-H clubs.

Nonprofit Organizations

Mothers Against Drunk Driving (MADD) chapters and community and neighborhood groups.

Local and National Celebrities

Sportscasters; media personalities; and sports celebrities.

Researchers

Centers for Disease Control and Prevention-funded Injury Control Research Centers; state and local universities; and community colleges.

Religious Communities and Places of Worship

Foundations

Survivors of Alcohol-Related Injuries and Their Families

Maternal and child health and other health department staff are in a unique position to prevent unintentional and violent injuries. For assistance in these efforts, please call or write Children's Safety Network, NCEMCH, 2000 15th Street North, Suite 701, Arlington, VA 22201-2617. Phone (703) 524-7802 / Fax (703) 524-9335.

Case Study

Restricting the Sale of Alcohol at Public Events

Lead Agency: Department of Health and Human Services, Municipality of Anchorage, Alaska

Start/End Dates: August 1992–Ongoing

Target Population: Policymakers, those who attend public events in Anchorage, residents of Anchorage (approximately 250,000 people), and nonprofit organizations that typically hold fundraising events.

Audience Reached: The project is still in the initial stages.

Program Description

Objectives

- Develop criteria for evaluating applications for permits to sell alcohol on municipal property.
- Establish procedures for formal review by the health department and other agencies of all applications for permits to sell alcohol in a public place.
- Enforce the existing ordinance banning the sale of alcohol in public places and delete the provision allowing this ordinance to be waived.
- Educate policymakers and the community about the relationship of alcohol to injuries and the economic cost of alcohol-related injuries.
- Persuade nonprofit organizations that hold fundraising events to look for sponsorship from soft drink manufacturers and other companies rather than beer manufacturers.

Program Components

Enforce Existing Laws

Although a city ordinance prohibits the sale of alcohol in municipal parks, the Anchorage city council passed a waiver in 1985, stating that individuals or groups could purchase a permit for \$25 to sell alcohol on municipal property. The parks and recreation administration has authority to grant the permits; there is no review or approval process. A health educator at the city health department is developing a program to enforce the existing ordinance prohibiting alcohol in public parks, and to set up a stricter approval process for permits, involving the health department, city police, and parks and recreation staff.

Educate the Community—Public, Professionals, Policymakers

It became clear that extensive education was needed to inform citizens, health care providers,

nonprofit organizations, and policymakers in Anchorage about the significance of alcohol use as a risk factor for unintentional injuries and violence and about the cost of alcohol-related injuries to the city and the state.

The education program targets nonprofit organizations because they often sponsor public events in the city. To raise sufficient money, these organizations often ask the beer industry to sponsor the event in exchange for advertising rights and permission to set up a beer tent. Most of these events are family oriented or focused on sports and recreation.

Public health professionals and other health providers have resisted efforts to support regulation of alcohol availability on public property as a prevention strategy.

Possible MCH Roles

The state health department can support city and county health departments in advocating for alcohol regulation. The state maternal and child health agency can contribute significantly to shifting the debate over alcohol policy from rights to health and safety. The state could endorse enforcement of the ordinance prohibiting the sale of alcohol on municipal land. For state health departments unable to take positions on individual ordinances or regulations, more general policy statements or testimony before policymakers about the impact of alcohol on the health of their citizens might intensify the debate about the appropriate role of alcohol in the state's public life.

More data are needed to underscore the contribution of alcohol to injuries in Alaska and other states, and to document the cost of treating these injuries. Additional data could be a significant tool in motivating policymakers and health providers to address the problem of alcohol abuse. MCH programs and health departments can help hospitals develop alcohol data collection systems and analyze the collected data. Health departments can bring people together to facilitate linking alcohol injury and medical cost data.

Evaluation

The program evaluation will track the following changes:

- Changes in the number of alcohol-related laws.
- Changes in the fees for obtaining a license to sell alcoholic beverages.
- Changes in the number of neighborhood alcohol outlets.
- Changes in the number of times that the health department is involved in the permit process when alcohol is going to be sold at an event held on municipal property.
- Changes in the number of times that a permit is granted for an alcohol-related event on municipal property.

The city has passed four of the five ordinances proposed by neighborhood groups. One ordinance allows the city to charge fees for renewing a liquor retail license (previously no fee was charged); another requires public hearings to be held prior to granting a new liquor retail license. Still pending is an ordinance that would require a neighborhood impact statement before granting a liquor retail license for a new neighborhood alcohol outlet, as well as a moratorium on new liquor outlets along thoroughfares with high crime rates and a large number of low-income families. In addition, a neighborhood group successfully blocked a large liquor store from obtaining a license to open an additional outlet in the community.

Coalition Partners in Prevention

The police department and the Anchorage Department of Health and Human Services have been the most supportive coalition partners thus far in the campaign to restrict alcohol sales. The police have actively encouraged the city administration to work with the health department (in addition to parks and recreation and law enforcement) in reviewing permit applications to sell alcohol on municipal property. This collaboration resulted partly from a specific alcohol-related event that required

a considerable police presence. Since cutbacks in funding have resulted in a force of only 13 police officers on duty at any one time for the entire city of Anchorage, the police looked to the health department to help prevent the event from taking place. Although the police and health departments were not able to stop the event, together they were able to limit the number of hours during which alcohol could be sold.

The parks and recreation department, newspapers, nonprofit organizations, and local community and neighborhood groups have also assisted the program. Neighborhood groups are especially effective in accomplishing the project's objectives since they want to reduce the availability of alcohol and the number of alcohol-related events taking place in their local communities. These groups are central to the work of effecting changes in alcohol policy in Anchorage because they more fully understand the role that alcohol plays in crime. Neighborhood and community groups are willing to talk with local policymakers about reducing the availability of alcohol and enforcing alcohol-related laws.

The health department has also worked with the State Social Workers of Alaska. The health educator who is developing this program is delivering a presentation on the role of alcohol in family violence at the annual conference of State Social Workers of Alaska in the fall of 1994.

Sustaining the Program

Since this program involves changes in policy, the health educator hopes that certain components will become standard procedure, such as involving the health department in reviewing permits for alcohol-related events on municipal property.

Adapting the Program to Community Needs

Ordinances and regulations restricting alcohol sales and advertising vary greatly among states and localities, so it is essential to examine local regulations as well as the nature of the decision-making

groups enacting the regulations. This is important in determining what approach will be most effective in reducing alcohol-related injuries.

Many local health departments are experimenting with strategies such as trying to restrict the number of alcohol outlets in a given area, or trying to ban alcohol advertisements on public transportation or state campuses. Organizing neighborhoods to prevent alcohol injuries by focusing on a law or policy that is needed, or an existing law or policy that needs to be enforced, can be an effective strategy anywhere.

Resources Needed

Staffing Requirements

A half-time health educator within the city health department spends 10 hours per week on the alcohol policy project, providing alcohol education and building support for changes in alcohol policy.

Fiscal Requirements

Total funds expended: a portion of the health educator's salary (equivalent to 10 hours per week), funded by the city health department.

Lessons Learned

Teach Policymakers and Communities To Consider Policy Solutions to Injury Problems

Educational activities should target decision makers and focus on the relationship between alcohol and injury. Focusing on gaining support from top management in the health department has been very productive. The head of the health department, who is appointed by the mayor, serves as the link between the health educator and the mayor's office.

It has been more difficult than expected, however, to convince the state injury professional community to focus more attention on alcohol and injuries, partly because many in this community (especially

within the health department) are reluctant to consider policy solutions to the problem of alcohol-related injuries. Consequently, the health educator has focused her efforts on residents and groups in the community to help promote change at the local level, highlighting another valuable lesson learned.

Recognize Neighborhood Groups as Valuable Allies

The health department needs to cultivate a close relationship with community and neighborhood groups. The health educator is developing an alliance with these groups, empowering them to work to change the city's alcohol policy.

Forge the Link Between Traditional Health Issues and Alcohol

The Anchorage health department also has responsibility for health issues related to noise levels. This is significant because the health department can stop an alcohol-related event when a community wants to keep down the noise level and understands the link between restricting the sale of alcohol and minimizing noise levels at public events.

Products/Publications Developed/Used

Manual for Community Planning to Prevent Problems with Alcohol Availability, by Friedner Wittman, Ph.D., and Patricia Shane, M.P.H., California State Department of Alcohol and Drug Programs. Available from the Institute for the Study of Social Change, University of California at Berkeley, 2232 Sixth Street, Berkeley, CA 94710. Telephone (510) 540-4717. Single copies available at no charge.

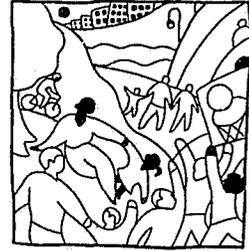
Alcohol Use at Community Events: Creating Policies to Prevent Problems, developed by the University of California at San Diego. Available from Ava Gill, University of California at San Diego, 0176-9500 Gilman Drive, La Jolla, CA 92093-0176.

Surgeon General's Workshop on Drunk Driving: Proceedings. Available for loan from Librarian, National Center for Education in Maternal and Child Health, 2000 15th Street North, Suite 701, Arlington, VA 22201-2617. Telephone (703) 524-7802.

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Reducing Injury and Violence Risk Factors



Firearms

An Overview

Adolescents Are at Greatest Risk

Firearms kill 14 children and adolescents in this country each day, on average. In 1991 alone, 5,300 children under 19 years of age died from firearm homicides, suicides, and unintentional shootings.¹

The firearm homicide rate for youth ages 15–19 years increased 186 percent from 1985 through 1991.^{1,2} For young black males in the same age range, the firearm homicide rate increased 230 percent during this same period.^{1,2} Firearm injuries are now the leading cause of death for adolescent black males.²

Firearms are used in more than 84 percent of teenage homicides and 67 percent of teenage suicides.³ Although many Americans feel that a gun in the home increases their safety, in fact, a gun in the home is 43 times more likely to kill a family member or friend than to be used in self-defense.⁴

Firearm Injuries: Costs and Consequences

In 1992, the cost of direct medical expenses, emergency services, and claims processing for the victims of gun violence nationwide totaled approximately \$3 billion.⁵ The average cost of medical treatment for one patient hospitalized with a gunshot wound is more than \$33,000.⁵

“Firearms are used in more than 84 percent of teenage homicides and 67 percent of teenage suicides.”³

In many cases, individual trauma centers, hospitals, and local and state governments foot the bills. According to the U.S. General Accounting Office, approximately 80 percent of patients who suffer violence-related injuries are uninsured or eligible for government assistance for medical care costs.⁷

Policy and Prevention

Although unintentional deaths caused by firearms are a small percentage of all firearm deaths among children, many of these deaths can be prevented. As many as 30 percent of all unintentional childhood shooting deaths could be prevented by the presence of two safety features: trigger locks and loading indicators.⁸

Licensing of firearms is a significant component of the problem of adolescents' access to firearms. A federal license to sell firearms is easy to get and rarely revoked. In 1994, more than 255,000 Americans were licensed to sell guns by the federal Bureau of Alcohol, Tobacco and Firearms.⁹ In 1991, the Bureau performed compliance inspections on fewer than 4 percent of all existing dealers. Although more than 5,900 violations were found, only 17 dealers' licenses were revoked.¹⁰

Recent data indicate that U.S. pediatricians and other health care providers routinely see children from families that own firearms, including a worrisome number of families that

keep loaded and unlocked handguns. In a survey of more than 5,200 families using a combined total of 29 pediatric practices in urban, suburban, and rural areas, 37 percent of the families reported owning guns. Thirteen percent of the families owning handguns reported keeping these guns loaded and unlocked.¹¹

Only now are health professionals beginning to consider how best to raise the issue of firearms with patients and their families. Health professionals themselves need considerable training to overcome their misperceptions that guns in the home are rare or that guns and fighting are not appropriate issues for anticipatory guidance (see Glossary). Training needs to include information on how to identify violence-related injuries, how to introduce questions about violence and engage clients in discussions of violence, and how to document through medical records the client's history of violence (for assailants as well as survivors).

Alcohol and other drug abuse, depression, and mental illness too often are overlooked as risk factors for firearm homicide and suicide. Training and protocols for assessing, treating, and referring clients for substance abuse and mental health treatment and support are important, especially for health professionals in school-based health clinics. Linkages with the substance abuse prevention and treatment and mental health communities are also critical to

firearm injury prevention efforts. Few health departments are directly addressing the issue of limiting child and adolescent access to firearms in their communities or states. Health departments need to join with law enforcement personnel, school officials, the mental health community, and other community partners to educate their communities and policymakers about the true risks associated with guns, and to support public policy initiatives that restrict child and adolescent access to firearms.

(For more information on firearm injuries and their prevention, please see the Alcohol, Home Safety, Family Violence, Homicide/Assault, and Suicide sections of this notebook.)

Notes

¹National Center for Health Statistics. (1994). Unpublished data prepared by L. A. Fingerhut.

²Fingerhut, L. A. (1993). Firearm mortality among children, youth, and young adults 1-34 years of age, trends and current status: United States, 1985-90. *Advance Data from Vital and Health Statistics*, No. 231. Hyattsville, MD: National Center for Health Statistics.

³National Center for Health Statistics. (1994). [Firearm homicides account for 2,853 out of 3,365 homicides for ages 15-19 and firearm suicides account for 1,280 out of 1,899 suicides for the same age group]. Unpublished data prepared by L. A. Fingerhut.

⁴Kellerman, A. L., and Reay, D. T. (1986). Protection or peril? An analysis of firearms-related deaths in the home. *New England Journal of Medicine* 314:1557-60.

⁵Miller, T. R., and Cohen, M. A. (forthcoming). Costs of penetrating injury. In

R. Ivatury and C. G. Cayten (Eds.), *Textbook of Penetrating Trauma*. Philadelphia: Lee and Civiga.

⁶Rice, D. P., MacKenzie, E. J., and Associates. (1989). *Cost of Injury in the United States: A Report to Congress*. San Francisco: University of California, Injury Prevention Center, and The Johns Hopkins University, Institute for Health and Aging.

⁷U.S. General Accounting Office. (1991). *Trauma Care: Lifesaving System*

Threatened by Unreimbursed Costs and Other Factors. Washington, DC: U.S. General Accounting Office.

⁸U.S. General Accounting Office. (1991). *Accidental Shootings: Many Deaths and Injuries Caused by Firearms Could be Prevented*. Washington, DC: U.S. General Accounting Office.

⁹Bureau of Alcohol, Tobacco and Firearms, Office of Public Affairs. (1993). Printout.

¹⁰Bureau of Alcohol, Tobacco and Firearms. (1991). *Compliance Operation Fact Book*. Washington, DC: Bureau of Alcohol, Tobacco and Firearms, Office of Compliance Operations.

¹¹Senturia, Y. D., Christoffel, K. K., and Donovan, M. (1994). Children's household exposure to guns: A pediatric practice-based survey. *Pediatrics* 93(3):469-475.

Promising MCH Settings

There are many ways to incorporate firearm injury prevention into existing MCH services and programs. Following are some of the MCH programs that could play a part in preventing firearm injuries.

Adolescent Health Clinics
Adolescent Pregnancy and Parenting Programs*
School-Based/Linked Health Clinics
Breast/Cervical Cancer Screenings*
Child Health Clinics
Children with Special Health Needs (CSHN) Service Sites*
Community and Migrant Health Centers*
EMS and EMSC Programs*
Family Planning Clinics*
Health Care Services for Homeless Youth*
Health Fairs
Home Visiting Programs*
Immunization Campaigns and Clinics
Mental Health Service Sites
Outreach Vans
Prenatal Clinics
Primary Care Clinics
Rape Crisis Centers
Sexually Transmitted Diseases (STD) Clinics
Substance Abuse Prevention/Treatment Programs
WIC Clinics and Classes*
Women's Health Programs*

Incorporating injury prevention into MCH services doesn't have to be difficult. First steps can be as simple as warning parents of severely depressed adolescents about the dangers of keeping a gun in the home, or, for parents of young children, passing out locks to those who say they have a gun at home. But don't stop there!

If gun homicide, gun suicide, or unintentional gun injuries are a problem in your area, you may want to bring together interested staff to brainstorm about additional ways to address the problem in your setting. Here are some questions you may want to ask:

- Do we need to collect more or different types of information from children, youth, and families if we are going to help prevent firearm injuries?
- What kinds of resources, information, or safety supplies do children, youth, and families need to prevent these injuries?
- Can we provide information, supplies, or coupons for supplies (such as trigger locks)?
- Can we educate children, youth, and families individually or in group settings about preventing injuries from guns?
- Can we assess, treat, or refer children and youth for this type of injury?

Training materials, manuals, and protocols already exist for

many types of injuries. Check with your state health department, regional MCH office, or the Children's Safety Network for more information on available prevention materials.

As you plan firearm injury prevention activities, think about possible changes in the following areas to strengthen your prevention efforts:

Medical records
Other data collection
Protocols for assessment, treatment, and referrals
Protocols for anticipatory guidance*
Educational materials available in waiting rooms in all settings
Educational materials to be handed to children, youth, and families with discussion
Educational forums
Referrals
Family follow-up
Training for staff
Linkage with other community resources

*See Glossary

Priority Partners in Prevention

Firearm Injury

Local and State Government Agencies and Programs

City and county administrators; local zoning boards; child fatality review committees; mental health programs; child welfare agencies; social services; local housing authorities; public housing agencies; Healthy Start grantees;* and Community Integrated Service Systems (CISS) grantees.*

Local and State Legislators and Other Elected Officials

City and county councils; mayors and their staff; the governor and staff; the state attorney general and staff; and state representatives and senators on relevant committees.

Law Enforcement Agencies

Police chiefs; sheriffs; police unions; and police training programs.

Schools, Parent-Teacher, and Student Groups and Associations

Teachers, principals, superintendents and their associations; school boards; school health personnel; college and university administrators and faculty; and school social workers and psychologists.

Media

Editorial boards; Op-Ed page editors; city desk reporters; consumer reporters; local television stations; and radio stations with a large number of adolescent listeners.

Health Care Providers

Pediatricians; family physicians; school-based clinic staff; nurses; trauma and emergency room physicians; emergency medical services for children and emergency medical services personnel; other health professionals; local hospitals and trauma centers; health maintenance organizations; rehabilitation facilities; coroners' and medical examiners' offices; state chapter of the American Academy of Pediatrics; and social workers.

Business Community

Insurance companies; chambers of commerce; and firearms dealers.

Civic Groups and Service Clubs

Kiwanis Clubs; League of Women Voters; Junior League; Rotary Clubs; Girl Scouts and Boy Scouts; Boys and Girls Clubs; 4-H clubs; and neighborhood watch groups.

Nonprofit Organizations

Tenant organizations; domestic violence programs; rape crisis organizations; alternative youth programs; local chapter of the National Association for the Advancement of Colored People

(NAACP); community and neighborhood violence prevention initiatives; and local and state coalitions affiliated with Handgun Control, Inc.

Legal System

Juvenile justice program; Neighborhood Legal Services Programs; legal aid programs; and public defenders.

Child Care Centers and Family Child Care Homes

Administrators; staff; licensing and regulatory agencies; and Head Start.

Researchers

Centers for Disease Control and Prevention-funded Injury Control Research Centers; state and local universities; and community colleges.

Religious Communities and Places of Worship

Foundations

Survivors of Firearm

Injuries and Their Families

*See Glossary

Maternal and child health and other health department staff are in a unique position to prevent unintentional and violent injuries. For assistance in these efforts, please call or write Children's Safety Network, NCEMCH, 2000 15th Street North, Suite 701, Arlington, VA 22201-2617. Phone (703)524-7802 / Fax (703) 524-9335.

Case Study

Facts FIRST: The Firearm Injury Reporting, Surveillance, and Tracking (FIRST) System in California

- Lead Agency:** Contra Costa Health Services Department, California
- Start/End Dates:** July 1993–June 1994
- Target Population:** Data collection population: all persons injured by a gunshot wound in Contra Costa County between July 1, 1993, and June 30, 1994.
- Audience Reached:** Findings will be disseminated to Health Services Department programs, and to community-based programs, health departments, law enforcement agencies, health care providers, local and state legislators, coalitions, and other organizations in California and in other states.

Program Description

Objective

- Provide countywide baseline data needed to plan and carry out effective firearm injury prevention programs, and to evaluate the impact of these programs and related policies.

Program Components

Despite alarming rates of injury and death associated with firearms, existing state, county, and city databases currently provide an incomplete picture of firearm injuries and deaths in Contra Costa County. The Firearm Injury Reporting, Surveillance, and Tracking (FIRST) System is the county's first source of specific aggregate data on firearm injuries and deaths.

Collect Detailed Information about Each Firearm Death and Injury for One Year

FIRST collected data from July 1, 1993, to June 30, 1994. Information gathered included demographic data on gunshot victims and offenders, types of guns involved in a firearm injury or death, location of the shooting, circumstances surrounding the shooting, source of payment for medical care, and health outcomes of gunshot victims.

FIRST relied primarily on data collected routinely by law enforcement, the county trauma center and other hospitals, and the county coroner.

Possible MCH Roles

The FIRST system was located within the county health department's Prevention Program; the local emergency medical services (EMS) agency provided oversight.

Maternal and child health (MCH) programs may contribute funds, epidemiological expertise includ-

ing data analysis, and necessary software for firearm injury surveillance projects. MCH staff or interns can work on firearm injury surveillance projects or analyze existing data from a variety of sources—including external causes of injury codes (E codes, see Glossary), the coroner's office, law enforcement agencies, and emergency rooms—to gain a better understanding of local firearm injuries.

Local health departments can also testify before regulatory and legislative bodies concerning the need for local data on firearm injuries, and can share their data, once analyzed, in policy forums such as city council hearings.

Evaluation

Process evaluation notes document the establishment of FIRST. These notes and FIRST quarterly reports are available upon request.

Statistics will be generated following data collection. A final data report of FIRST's findings will be available in fall 1994 (pending funding).

Coalition Partners in Prevention

Partners included all local law enforcement agencies; hospitals, including the local trauma center; the coroner; the local Childhood Injury Prevention Coalition; and PACT, the local violence prevention coalition.

Sustaining the Program

Funds are not available to extend the FIRST surveillance project and there are no plans to incorporate the system into ongoing data collection programs. Funding ended in June 1994 when data collection ended. Program staff are seeking funds for thorough data analysis and a report of findings. Ideally, the FIRST system would be operational during and after implementation of programs and policies to reduce firearm injuries in order to evaluate their impact and to determine whether the epidemiology of firearm injury changed.

Adapting the Program to Community Needs

The FIRST system could be replicated by other health departments if all essential reporting organizations (i.e., law enforcement, hospitals, coroner) cooperate and are able to report data. A modified firearm injury reporting system might involve only hospitals and the coroner. Even time-limited studies of firearm deaths and injuries can provide extremely useful information for choosing prevention strategies and targeting them effectively.

Resources Needed

Staffing Requirements

The project is staffed by a full-time project coordinator, with supervisory and technical assistance from an epidemiologist, and additional assistance from public information staff and clerical staff.

The ability to work well with reporting agency administration and staff (e.g., police chiefs and personnel, nurses, hospital administrators) is essential. Staff must be familiar with database programs, epidemiological studies and their design, and basic statistics. Familiarity with graphics and report layouts is important in order to produce final data reports that are both understandable and compelling.

Fiscal Requirements

The FIRST system is funded through a one-year grant from the State of California Emergency Medical Services Authority.

Lessons Learned

Obtain the Support of Key Persons and Organizations During the Earliest Planning Stages

Early involvement of law enforcement and hospital representatives promotes shared understanding of the importance of firearm injury surveillance and

the effective use for such data in decreasing firearm injuries. These initial discussions lay the groundwork for collecting and reporting data efficiently.

Be Prepared to Address Law Enforcement Agencies' and Hospitals' Concerns and Red Tape in Accessing Their Data

It took time for FIRST staff to obtain consent from various levels of data "gatekeepers" to participate in the study. As expected, staff needed to resolve issues of confidentiality and data collection procedures. In addition, most of the agencies involved had limited funds and staff resources to contribute to data collection.

Allow for Difficulties in Extracting Law Enforcement and Hospital Data — It May Not Be Accessible or Classified in an Easy-To-Use Format

FIRST staff discovered that some of the variables they sought were not computerized, which meant that staff had to develop paper report forms by pulling case files and extracting data by hand. Law enforcement data were classified or accessible only by the type of crime that occurred, not by the type of injury.

Expect a Delay of One to Two Months Between the Incident and the Time It Is Reported

Sources of data, such as law enforcement agencies, hospitals, and coroners' offices, need time to document specific information for a case before data can be considered complete and available. Additional time is needed to collect or report the data.

Be Prepared to Respond to Data Requests Before Completing the Project

FIRST staff handled numerous requests for local data by analyzing other available data, such as the previous year's data from the coroner's office and E-coded hospital discharge data. FIRST makes these analyses available until the system's data collection is completed and analyzed.

Prepare Early for Final Reports

Like many injury prevention data collection projects, FIRST funds expire when the data collection ends; to date, no analysis or dissemination of project findings has been funded. FIRST staff prepared well in advance for the data analysis phase by identifying: (1) the audience for the dissemination of findings, (2) the purpose and scope of the final report, and (3) key variables in the data analysis.

Products/Publications Developed/Used

FIRST staff are working to secure funding to thoroughly analyze the collected data and to generate a final report on their findings (due fall 1994). In addition, prevention program staff are developing a document on building data and surveillance capacity within local health departments.

All FIRST materials are available, including forms, quarterly reports, a list of data fields, and process notes.

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Case Study

Working with a City Council in California to Regulate Gun Dealers

- Lead Agency:** Collaborating agencies and individuals included Youth ALIVE, Oakland City Attorney's Office, and a Sergeant from the Oakland Police Department
- Start/End Dates:** January 1992–June 1992
- Target Population:** Gun dealers in Oakland, California.
- Audience Reached:** Gun dealers in Oakland, California.

Program Description

Objectives

- Require gun dealers in Oakland, California, to carry \$1 million in liability insurance.
- Reduce the number of gun dealers in Oakland, California.
- Educate the community about local solutions to the firearms problem.

Program Components

In 1992, Oakland City Council's Public Safety Committee became increasingly concerned about the violence in the city and how best to prevent it. The mayor's office and the city council organized city-wide and community forums on violence, attracting many residents who were upset about violence in the community and Oakland's increasingly negative reputation as the gun capital of northern California.

Members of the Public Safety Committee instructed the Oakland City Attorney's Office to identify regulatory actions that the city council could take to reduce gun violence. The City Attorney's Office asked for assistance from Youth ALIVE, a statewide youth violence prevention agency.

Gather Local Data on Firearm Injuries to Use for Advocacy

Youth ALIVE realized that data on firearms deaths and injuries and their cost to the community would be compelling information for the city council. Since there was no time to set up a formal local surveillance system, Youth ALIVE looked for a way to do some informal data collection and analysis. After extensive searching, the organization's director located a staff person in the Oakland County Hospital Trauma Services office who was willing to help Youth ALIVE utilize data that had been compiled for other reports. As a result, Youth ALIVE was able to give city council members accurate information on all gunshot wound patients treated at the hospital during the previous year.

Educate City Council Members About Local Firearm Injuries and Promising Violence Prevention Strategies

The city council held numerous hearings on violence prevention and the proposed gun dealer ordinance. The director of Youth ALIVE testified that, at Oakland County Hospital alone, aggregate charges for gunshot wound patients in the previous year totaled more than \$2 million. The director also demonstrated that patients with gunshot wounds used a disproportionate amount of hospital resources compared to all other trauma patients.

Two high school students involved with Youth ALIVE testified before the city council and showed a videotape taken on New Year's Eve, illustrating the increasingly widespread practice of celebrating the stroke of midnight by firing handguns into the air.

Coalition members also tried to determine the best approach for the city council to use in restricting the flow of guns locally. The coalition tried to answer a number of questions, including: "What aspects of gun dealer businesses could local jurisdictions regulate and what was out of their hands?" "How did California's preemption law restricting some aspects of local firearms regulation affect the city council's options?" "Should tort reform or litigation be considered as strategies?" Coalition members conferred with other criminal justice and injury prevention experts.

Draft an Ordinance to Regulate "Kitchen Gun Dealers" in Oakland

The Bureau of Alcohol, Tobacco and Firearms estimates that 74 percent of federal firearms licensees operate their businesses out of their homes. These "kitchen gun dealers" are allowed to receive shipments of guns or have the guns left on their doorsteps; in many areas, they are not required to have safes in which to lock the weapons. According to the Oakland Police, kitchen gun dealers have become an important step in a often-used path by which handguns end up on the streets of Oakland.

The City Attorney's Office drafted an ordinance requiring all gun dealers in Oakland, including those

operating out of their homes, to register with the city as gun dealers and businesses and to operate as businesses. Under existing zoning and commercial codes, businesses are required to have set hours of operation and their physical plants must meet certain codes. Kitchen gun dealers would therefore be required to lock all firearms in safes, and guns could no longer be delivered to a dealer's home and left on the doorstep.

Possible MCH Roles

Local health departments can contribute to efforts to reduce the availability of firearms by providing information to regulatory and legislative bodies about the extent and cost of local firearm injuries, and by educating policymakers concerning promising approaches to preventing gun violence. Local health departments can research the number of gun dealers in their county or city as well as the local and state regulations that currently apply to them. State health departments can provide this information to health departments within their states. Health departments can also work with policymakers at all levels to place appropriate restrictions on gun manufacturers and dealers and to reduce the tendency among adolescents to carry and use guns.

Evaluation

The gun dealer ordinance met Youth ALIVE's first objective of requiring gun dealers in Oakland to carry \$1 million in liability insurance.

Since the Oakland City Council passed the gun dealer ordinance in 1992, the number of licensed gun dealers in Oakland has decreased from approximately 115 prior to enactment to approximately 50 in mid 1994. The Oakland police officer who worked on the ordinance and drafted relevant police enforcement policies believes there will be fewer than 10 gun dealers in Oakland by the end of 1994, due to the inability of many of the existing dealers to meet the new requirements.

The educational impact of the city council hearings and media coverage of the gun ordinance debate

has not been measured, but three nearby cities (including San Francisco and Berkeley) have passed gun dealer ordinances based on Oakland's.

Coalition Partners in Prevention

Partners include the Oakland City Council, Oakland City Attorney's Office, Youth ALIVE, and the Oakland Police Department.

Sustaining the Program

The gun dealer ordinance passed by the city council in 1992 remains in effect; there have been no efforts to repeal it. In the process of working on the ordinance, the city council and other coalition members began a dialogue (which is ongoing) between policymakers and community members concerning violence prevention in Oakland, community priorities, and promising approaches.

Adapting the Program to Community Needs

Local governments are often unfamiliar with the regulatory tools that can be used to restrict the flow of guns into their communities. In addition, many state and local regulatory bodies assume that they cannot take action because of the existence of a state preemption law. These laws limit the rights of local jurisdictions to pass any laws or regulations regarding firearms. Even when a state has a preemption law on the books, local regulatory action on the sale of firearms may still be possible, particularly in the area of zoning. It remains an open question whether cities' rights to regulate gun dealers through zoning are restricted by most preemption clauses. Every mayor and city council has contacts with their state legislature and can communicate their vision of the flexibility and authority that local governments need regarding firearms and firearm dealers. Numerous state legislatures are considering bills to exempt specific cities or counties from state preemption laws; other state legislatures are considering overturning these laws.

One of the coalition partners, Youth ALIVE, is preparing a document for community members and

organizations that details the process of developing, passing, and implementing the gun dealer ordinance.

Resources Needed

Staffing Requirements

The Oakland gun ordinance project took only six months from inception to passage. The Director of Youth Alive spent about 5 percent of her time for six months collecting and analyzing local data, interpreting it for the city council, and providing information on promising violence prevention strategies.

The police sergeant obtained permission from the chief of police to devote about 120 hours to redrafting the ordinance text, designing police forms for enforcement of the policy, etc.

The two youth who testified before the city council prepared their own testimony.

Fiscal Requirements

The campaign to draft, advocate for, and pass the Oakland ordinance regulating gun dealers had no budget, and was accomplished without any funds. All staff time was contributed by the collaborating agencies and individuals.

Lessons Learned

Youth Living in Violent Communities Can Be Compelling Advocates for Gun Dealer Regulations.

"Why is it that we can walk to buy any kind of gun that we want but we have to take the bus to get school supplies?" asked an Oakland teenager who testified as an expert witness at a city council hearing. Children and adolescents are uniquely able to communicate to policymakers and to the media the fear and anger that results from living in gun-infested communities. These young people also remind both voters and policymakers that votes on gun dealer regulations and violence prevention measures are not about hunters having the maximum choice of weapons, but about giving our nation's youth a chance to grow and blossom.

Police Have a Great Deal of Credibility with Policymakers about the Gun Trade

A police sergeant was a key player in drafting the new ordinance. He brought valuable knowledge to the council hearings about what kind of gun regulations were most likely to reduce gun crime, what regulations police would be most able to enforce, and what language was essential to achieve the desired effect and promote enforcement.

If You Can't Find a Sympathetic Organization, Find a Sympathetic Person

Oakland County Hospital was not willing to permit a large-scale study of their medical and billing records related to firearms; it would have taken too long to foster hospital enthusiasm and support, given the city council's calendar. Fortunately, one hospital employee was sympathetic to the coalition and was willing to take the initiative to ensure that local information on the health care costs of violence in Oakland was part of the debate.

Hearings on Any Specific Violence Prevention Initiative Can Be an Opportunity to Begin a Broader Discussion with Policymakers

The city council hearings on the proposed gun dealer ordinance created a dialogue between community members, agencies, and policymakers about future violence prevention programs and priorities. Youth ALIVE and the teens who testified were invited to return to present updates on data, costs, promising prevention approaches, and programming in Oakland.

Products/Publications Developed/Used

Chapter 2, Article 10, To Establish Additional Requirements for Firearm's Dealers in the City of Oakland (copy of the legislation).

Youth ALIVE is preparing a descriptive document for city agencies, community members, and organizations which details the process of developing, passing, and implementing the gun dealer ordinance.

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Case Study

A Gun Storage Education and Trigger Lock Coupon Program

Lead Agency: Monterey County Health Department, California

Start/End Dates: December 1992–Ongoing

Target Population: Parents who have guns in the home; health care providers.

Audience Reached: Mothers who use WIC clinic services; parents of children served by Child Health and Disability Clinics and pediatricians' offices; and employees at the local prison.

Program Description

Objectives

- Educate parents about the risks associated with improperly stored guns.
- Educate health care providers and community service providers concerning the firearm injury problem.
- Increase the availability and use of low-cost trigger locks in the community.
- Work toward achieving the *Healthy People 2000* goal of a 20 percent reduction in the proportion of people who possess weapons that are stored inappropriately.

Program Components

Provide In-Service Training

The program provided in-service training for public health nurses, nutritionists at WIC programs, and nursing and medical staff at the county hospital. Participants learned about the problem of unintentional firearm injuries and the increased risk of homicide and suicide when guns are present in the home. Educating so many health delivery staff about the gun violence epidemic made the next step (asking them to get involved in preventing gun injuries) very productive.

Establish a Trigger Lock Discount Coupon Program

Health department staff telephoned a sample number of gun store owners and firearm retail outlets to determine their level of interest in providing discount coupons to the public for trigger locks. The telephone survey confirmed that some gun store owners and retailers were interested in working

together on trigger lock coupons, so letters were sent to all gun store owners and firearm retailers throughout the county, asking them to attend a planning meeting held at the health department. The division chief of the health department was involved in the planning because of the sensitivity of the topic.

Nine invitations were sent to gun store owners and retailers; three gun shop owners attended the meeting at the health department. The Salinas Police Department sent a representative to support the program and to discuss how weapons need to be locked during transport. Health department staff educated the gun store owners about firearms as a public health issue. The store owners, in turn, educated health department staff about the variety of lock boxes and trigger locks.

All three gun shop owners who attended the meeting agreed to offer a 25 percent discount on trigger locks and to provide gun safety education. (A trigger lock costs approximately \$13.00 with the 25 percent discount coupon.)

Distribute Trigger Lock Discount Coupons

A total of 6,000 discount coupons for trigger locks were printed on bright yellow paper, and 2,000 of the coupons were distributed through the WIC program at the county health department. Most of the remaining 4,000 trigger lock coupons were distributed through public health nursing; through the Health Education Department, the Impacto Coalition (a coalition of groups with the common goal of delivering health promotion information to the Spanish-speaking residents of the county), the county hospital, school presentations, the Teen Pregnancy Prevention Program, community health fairs, and retail outlets that sell guns and ammunition. Health department staff recount the story of one father who came to their table at a health fair with three small children trailing behind him and picked up five trigger lock coupons—one for each of his guns at home.

Trigger lock coupons were also included with the pay stubs of employees at the county jail. Staff working at the jail were considered an important tar-

get group since most of these employees were required to own guns for their work.

Develop Bilingual Educational Materials on Gun Safety for Parents

Injury Prevention Program staff at the health department developed a number of educational materials in both English and Spanish, including two companion handouts: *Stop the Violence: Ten Things You Can Do* and *Stop the Violence: Ten Things to Teach Kids*. Project staff also developed a visiting checklist card called *Where Is My Child?* that suggests important questions for parents to ask whenever their child visits another home. The checklist contains questions about whether a gun is present in the home, and, if so, how it is stored. The checklist card informs parents that the incidence of gun ownership is so high that parents should consider checking with adults about the presence and storage of guns in every home visited by their children.

Incorporate Gun Storage Education, Trigger Lock Coupons, the Visiting Checklist Card, and Other Materials into Ongoing Public Health Services

Injury Prevention Program staff at the county health department sent a letter to public health providers and health educators in the county outlining the extent of the firearms problem and suggesting three messages for parents:

1. Make sure your children know that guns and bullets are dangerous and are not to be touched. Teach them: "If you see a gun, don't touch it. Tell an adult."
2. If you keep a gun in your home, be sure to store it locked up and unloaded. Bullets should be stored and locked in a separate place.
3. Make sure your children cannot get hold of a gun at any of the places they visit. Talk to your relatives, babysitters, and the parents of your children's friends.

As a result of the in-service training, WIC staff chose education about the storage of firearms as the

topic for three weeks of WIC classes. More than 900 women participated in classes on risks associated with guns in the home and safe storage methods.

Nurses in the well-child clinic also began asking each parent a set of simple questions: "Is there a gun in your house? Where is it kept? Is it locked up? Are there guns in the houses where your child visits? Have you ever seen a trigger lock?"

Educate Parents about Firearm Injuries, Proper Gun Storage, and a New California Law

Health department staff have given numerous presentations to a variety of public audiences on firearm injury and prevention. A 10-minute film, *Guns and Kids*, has been shown, followed by a presentation and discussion.

The program provides handouts on proper gun storage, anger management, and California's new law on parental liability and firearm injuries. This law mandates that adults who own firearms can be fined, jailed, or both if a child finds their gun and uses it to injure or kill someone.

Possible MCH Roles

The Monterey County Health Department developed, implemented, and evaluated the gun storage education and trigger lock coupon program. The health department educated health professionals and parents in diverse public health settings (including WIC classes and well-child visits) about the risks associated with improperly stored guns in the home. The health department also established a discount program with gun stores in the area and distributed thousands of trigger lock coupons to health department program consumers and other parents, including jail employees who regularly keep firearms at home.

Evaluation

More than 1,000 clients received educational training and coupons in a variety of settings between December 1992 and September 1993. Pretests and

posttests have been developed in English and Spanish for WIC clients. Of the 22 posttests returned, 56 percent of the respondents indicated that they had talked with their children about guns and gun safety; 23 percent reported that they had changed their gun storage procedures at home; 25 percent said that they had told a friend or neighbor about trigger locks; and 12 percent reported that there were guns in the homes visited by their children.

Coalition Partners in Prevention

Partners include gun store owners, the county hospital, the county jail, the Teen Pregnancy Prevention Program, social service organizations, and local violence prevention programs.

Sustaining the Program

The Injury Prevention Program continues to work on a protocol for nurses to incorporate questions about guns in the home into their assessments. Program staff expect that WIC clinic staff and other health department staff will continue to look for ways to include gun injury prevention in their work with clients. Program staff hope to work with the state chapter of the American Academy of Pediatrics to incorporate anticipatory guidance (see Glossary) on firearms into well-child visits and primary care.

The Injury Prevention Program coordinator has presented information on Monterey County's gun storage education and trigger lock coupon program to a gathering of small southern California health departments, to nurses in small county health departments, and to a meeting of all nursing directors in California health departments.

The chamber of commerce in Salinas may work with local gun stores so that they agree to include a trigger lock with all guns purchased by families with children under a certain age.

Adapting the Program to Community Needs

This low-cost gun education and trigger lock coupon program can be incorporated into many public and private settings. Private pediatricians, health maintenance organization (HMO) staffs, well-child clinics, adolescent parenting programs, primary care clinics, and women's health programs could incorporate programs educating parents about firearms. A nursing director or nursing office can designate one staff nurse to assume responsibility for implementing a protocol on appropriate gun storage and trigger lock coupons.

Before replicating the program, it is important to take time to assess parental barriers to purchasing trigger locks, and the approaches that would be most effective in overcoming those barriers.

County and state health departments can undertake additional activities to prevent unsafe firearm storage and firearm deaths. More research is needed at the local level to understand the barriers that keep parents from removing guns from their home or purchasing and using trigger locks. Alternative means of delivering trigger locks can be explored. Trigger locks might be purchased to distribute to families at public health settings or home visits as needed along with other safety supplies such as child safety seats or smoke detectors. Health departments might also work with gun dealers to establish programs to include a trigger lock with every gun sold to a family with young children at home.

Resources Needed

Staffing Requirements

The coordinator of the Injury Prevention Program spent several weeks obtaining support from gun stores for the coupon program and subsequently developing the program. Once gun safety messages and coupon distribution were incorporated into ongoing health services, the coordinator's administrative assistant spent 2-4 hours per week overseeing the program.

In-service training sessions for health providers were an important initial component of the program (see Program Components).

Fiscal Requirements

The cost of printing the trigger lock coupons was minimal. Some gun dealers may view the coupons as an advertising tool and may be willing to pay for printing. Service clubs and local medical societies might also be willing to pay for printing the coupons and to help distribute them.

Lessons Learned

Prepare and Support Health Providers in Dealing with Frustrations In Obtaining Accurate Information on Sensitive Issues

In-service training sessions on the firearm injury epidemic had further increased interest (which was already high) among county health department nurses in tackling the issue of guns with families. Some nurses became frustrated when most of the women replied instantly that there were no guns in their homes. Nurses occasionally felt that it was not worth raising the question when so few replied affirmatively.

It was useful to remind the nurses that, according to a health department survey, 50 percent of the 10th graders in Salinas reported guns in their homes. This suggested that some of the health department's consumers may have had firearms in their homes but felt uncomfortable admitting it.

The visiting checklist card (*Where Is My Child?*) helped mothers realize that, even if they do not have a gun in their own home, the incidence of gun ownership is so high that mothers should consider checking with adults in every home visited by their children to determine whether there is a gun present, and, if so, how it is stored.

It would be interesting to test various gun-related protocols or questions with parents and to assess whether a different approach might elicit more affirmative and accurate responses. Nurses may feel

more motivated to continue to counsel families about firearms if their sense of the scope of gun ownership and their individual ability to increase safe behaviors are confirmed.

Set Up a Simple Reporting System Early to Count Trigger Locks Bought with Coupons

Although at least one gun dealer has told staff that health department coupons have been returned, the health department does not have an exact count. If the trigger lock coupon program is expanded, the health department will designate one person to follow up with gun dealers and track the number of trigger lock coupons redeemed.

Track the Use of Trigger Lock Coupons by Color-Coding and/or Numbering Them

In retrospect, it would have been helpful to be able to track the settings where families who purchased trigger locks got their discount coupons. Did WIC clinic classes generate more trigger lock purchases than health fairs or other outlets? Did the rate of coupon use change, depending on the type of health provider presenting the coupon and the safety message?

Don't Wait Until the End to Evaluate Your Project

Only a minimal number of the more than 2,000 trigger lock coupons were redeemed. If the health department had tracked the number of coupons redeemed throughout the project, they might have been able to find ways to increase the mothers' interest in using the coupons. Questions that could have been asked early in the project include the following: Did many mothers want to buy trigger locks but not have the money to do so? Were the mothers convinced by their partners that this was not appropriate? Was transportation to gun stores a barrier? Were parents unconvinced of the threat posed to their children by unlocked and loaded guns in the home? Getting answers to some of these questions early in the project might have helped the health department modify the program and directly address specific barriers that prevented families with guns from buying trigger locks.

Products/Publications Developed/Used

The Injury Prevention Program at the Monterey County Health Department developed the following handouts:

Safe Gun Storage (Lugar Seguro de Armas)

Stop the Violence: Ten Things You Can Do (Termine La Violencia: Diez Cosas Que Usted Puede Hacer)

Stop the Violence: Ten Things to Teach Kids (Termine La Violencia: Diez Cosas Que Puede Enseñar A Los Niños)

Where Is My Child? (Lista De Donde Esta Mi Hijola Hoy?) Visiting Checklist Card

Dealing With Anger (Sobre Llevando El Coraje)

Trigger Lock Coupons (English/Spanish)

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Case Study

Kids Say No to Guns: A Toy Gun Trade-In and Poster Contest in Michigan

Lead Agency:	Children's Hospital of Michigan
Start/End Dates:	October 1992–April 1993
Target Population:	Students in grades K–5 at an elementary school in Detroit, Michigan.
Audience Reached:	498 students in grades K–5 at Neinas Elementary School, Detroit, Michigan.

Program Description

Objectives

- Involve elementary school students in developing safety messages about firearms.
- Encourage students to exchange their toy weapons for a new nonviolent toy.
- Select one student poster with a safety message about guns and distribute it within the community.

Program Components

Neinas Elementary School was selected because the Department of Social Work at Children's Hospital of Michigan already participates in the school's mentor program.

Sponsor a Poster Contest about Guns

Hospital staff explained the program and poster contest rules to students in 18 classes. The poster contest theme was "Things People Should Know About Guns." All students in grades K–5 at Neinas Elementary School were eligible to participate. Posters were judged on content, creativity, originality, and quality by a committee of Children's Hospital staff, school staff, and parents.

Children were given two weeks (including time in their art classes) to complete their posters. Three children in each grade won awards for their posters and were honored at an assembly.

A total of 18 grand prizes were awarded for posters. Winners received a tote bag and toys valued at \$100 each.

Exchange Toy Weapons for Nonviolent Toys

In addition to explaining the poster contest rules, hospital staff explained that there would be an

opportunity to exchange toys at the upcoming assembly. Children were asked to plan to turn in their toy weapons (and any toys that could be used to hurt people) for a new nonviolent toy valued at \$10.

Only one new toy per student was allowed, but children could turn in as many toy weapons as they liked. If children did not have a toy weapon at home they were encouraged to bring in a toy belonging to someone else or to write a story about how guns hurt people.

The principal sent a letter to all parents explaining the program. Parents were asked to help by having children bring their toys to school in brown paper bags that had been stapled shut.

Sponsor Events for Students, School and Hospital Staff, and Parents

Events were planned for both the hospital and the elementary school to reward poster contest winners, exchange violent toys, provide positive role models for the children, and involve parents.

The first assembly to honor the poster contest winners and turn in toy guns and other weapons was held at Children's Hospital. One hundred and seventy students traveled by school bus to the hospital, whose hallways were lined with student posters. A former gang member spoke to the children about the negative aspects of belonging to a gang and about the need to solve disagreements peacefully; five students also read their essays.

The second assembly, held at Neinas Elementary School, was attended by 328 students. The Wayne County Sheriff's Department participated in the assembly, during which 316 students turned in toy weapons and received new toys.

Distribute the Winning Poster in the Community

One poster was selected for display in the community. Parents and staff distributed the poster to stores and community agencies and the school principal sent a poster to every Detroit public school.

Possible MCH Roles

Although the maternal and child health agency did not play a role in this project, county or state health departments could sponsor similar programs. Health departments could participate in any aspect of the project, particularly in educating children, teachers, and families about the dangers of guns; sharing ideas for supplemental activities, training, and materials; disseminating the winning poster in clinics and throughout the community; and assisting with media coverage of the awards event. Health departments could also become designated sites where children can exchange their toy guns for non-violent toys.

Evaluation

The number of posters entered in the contest and the number of toy guns turned in were considered measures of the children's interest as well as of the program's success. Nearly 500 students participated in at least one aspect of the toy gun trade-in and poster contest program. More than 450 posters were entered in the contest and more than 480 toy guns were exchanged for other toys. One of the children who won a prize in the poster contest participated in a violence prevention panel at the hospital during the following year.

Speaking at assemblies for the elementary school children offered opportunities for the Detroit and Wayne County police to explore methods of teaching children and their families about gun safety.

The project has produced a written evaluation entitled *Kids Say No To Guns: Project Evaluation*.

Coalition Partners in Prevention

Partners include the Children's Hospital of Michigan, Detroit Police Department, Wayne County Sheriff's Department, and Latino Family Services (a nonprofit, community-based social service organization operating in southwest Detroit).

Sustaining the Program

Neinas Elementary School and Children's Hospital have continued to collaborate on additional violence prevention projects. Parenting workshops and Kids Safety Week were both scheduled for late spring 1994. Other Detroit public schools have asked Children's Hospital to work with them on gun violence prevention projects. The need for additional funding remains a barrier.

Adapting the Program to Community Needs

Teachers and school administrators are often looking for ways to integrate violence prevention activities into the classroom setting. Poster contests are an inexpensive way to do this. Most hospitals have community relations offices that schools can work with on violence prevention projects. Awards programs such as poster contests can be integrated into existing youth leadership activities, for example, by having high school students educate younger students about violence prevention and serve as judges for the poster contest.

Resources Needed

Staffing Requirements

Hospital staff volunteered their time to speak to classes. Four or five nurses, a pastoral care representative, a recreation therapist, and four social workers participated. A kindergarten teacher became the school's liaison with hospital staff. The program required minimal training: half an hour to brief staff on contest rules and how to handle students' questions.

Fiscal Requirements

The budget for the program was \$9,600. All funds were used to purchase toys for the toy gun trade-in and prizes for the student winners of the poster contest.

The federal Maternal and Child Health Bureau (MCHB) funded the program through an Emergency

Medical Services for Children (EMSC) grant to the Michigan Department of Health.

Lessons Learned

Working with Schools Means Working According to Their Timetable

Hospital staff learned to rely on school staff for the specific program operations. School staff required signoff on a number of issues, including arranging appropriate times for hospital staff to speak to students, scheduling events, and ensuring that students completed their posters.

Many School Administrators and Teachers Are Looking for Ways to Address Violence with Their Students

Teachers and school administrators were responsive to the poster and toy trade-in program because they felt that children in their school needed to hear more antiviolence messages. Teachers also appreciated the new art supplies provided by the hospital for use in the rest of their classroom work.

Replacing Toy Guns with Other Toys Is a Logistical Challenge

Shopping for 500 new toys was a huge challenge. The hospital's recreational therapist helped in selecting toys that were fun, stimulating, and appropriate for the various age groups. Finding adequate storage space for the new toys until they were given away was a problem that required planning ahead.

Products/Publications Developed/Used

Things People Should Know About Guns (one-page flyer that lists five simple messages about guns and includes two children's drawings with antigun messages).

Kids Say No To Guns: Project Evaluation.

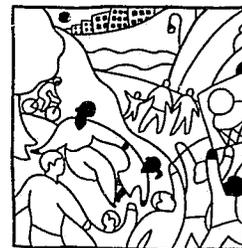
Poster Contest Rules.

Classroom Presentation Outline.

A letter from the school principal to the parents was developed outlining specifics of the toy weapon exchange program.

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Preventing Unintentional Injuries

Bicycles

An Overview

Children and Adolescents Are at Greatest Risk

In 1991, 44 million children and adolescents ages 16 years and under rode bicycles, representing nearly half of all bicyclists in the United States.¹ Bicycles are associated with more childhood injuries than any other consumer product except automobiles.² The most serious injuries result from collisions between a bicycle and a motor vehicle,² accounting for 90 percent of all bicycle-related deaths.³ In 1992, 315 children ages 16 years or younger died in crashes with motor vehicles.³ In addition, each year more than 400,000 children are treated in

emergency departments for these injuries.²

Helmets Save Lives, Reduce Medical Care Costs

Head injury is the most common cause of death and serious disability in bicycle crashes.⁴ Children under 15 years of age accounted for 41 percent of head injury deaths and 76 percent of nonfatal head injuries from 1984 to 1988.⁵ Bicycle riders who wear helmets reduce their risk of head injury by 85 percent.⁴ If every child between the ages of 4 and 15 years of age wore a bicycle helmet, as many as 155 deaths and 45,000 head injuries would be prevented each year.⁶ Bicycle helmets also significantly reduce the medical care costs

“Head injury is the most common cause of death and serious disability in bicycle crashes.”⁴

associated with bicycle-related injuries; for children ages 4–15 years, every dollar spent on bicycle helmets saves \$2 in medical care costs.⁶

Policy and Prevention

Young children, who depend on their parents to purchase helmets for them, are the group least often protected, and thus at greatest risk for bicycle-related head injuries.² Unfortunately, less than 2 percent of children who ride bikes wear helmets regularly.⁵ The cost of helmets is often a barrier to helmet usage, especially for children from low-income families. Purchasing helmets in bulk for giveaways or for sale at low prices is an effective way to increase access to helmets for these children.

Legislation requiring helmet use, when combined with education and public awareness programs, appears to result in a dramatic increase in helmet use among children. For example, Howard County, Maryland,

passed a law in 1990 requiring helmet use for bicyclists under 16 years of age. Reinforced through joint education campaigns by the police department and school system, bicycle helmet use increased from 4 percent (prior to the law) to 47 percent (after enactment), giving Howard County the highest documented rate of helmet use in the country.⁷ Health departments can educate policymakers about the importance of bicycle helmet use and the savings in medical care costs as a result of promoting helmet use.

Health departments can also coordinate with other local agencies such as law enforcement and parks and recreation to distribute helmets, educate children and parents, and teach bicycle safety skills to young riders.

(For more information on bicycle injuries and their prevention, please see the Sports section of this notebook.)

Notes

¹Bicycle Institute of America. (1993). *Bicycling Reference Book* (1992–93 ed.). Washington, DC: Bicycle Institute of America.

²Wilson, M. H., Baker, S. P., Teret, S. P., Shock, S., and Garbarino, J. (1991). *Saving Children: A Guide to Injury Prevention*. New York: Oxford University Press.

³Insurance Institute for Highway Safety. (1993). *Fatality Facts 1993*. Arlington, VA: Insurance Institute for Highway Safety.

⁴Thompson, R. S., Rivara, F., and Thompson, D. C. (1989). A case-control study of the effectiveness of bicycle safety helmets. *New England Journal of Medicine* 320(21):1361–1367.

⁵Sacks, J. J., Homgreen, P., Smith, S. M., and Sosin, D. M. (1991). Bicycle-associated head injuries and deaths in the United States from 1984 through 1988. *Journal of the American Medical Association* 266(21):3016–3018.

⁶Children's Safety Network Economics and Insurance Resource Center. (1993). *Bicycle Helmets Save Medical Costs for Children*. Landover, MD: National Public Services Research Institute and the National SAFE KIDS Campaign.

⁷Cote, T. R., Sacks, J. J., Lambert-Huber, D. A., Dannenberg, A. L., Kresnow, M., Lipsitz, C. M., and Schmidt, E. R. (1992). Bicycle helmet use among Maryland children: Effect of legislation and education. *Pediatrics* 89(6):1216–1220.

Promising MCH Settings

There are many ways to incorporate bicycle injury prevention into existing MCH services and programs. Following are some of the MCH programs that could play a part in preventing bike injuries.

Adolescent Health Clinics
School-Based/Linked Health Clinics
Child Health Clinics
Children with Special Health Needs (CSHN) Service Sites*
Community and Migrant Health Centers*
EMS and EMSC Programs*
Health Fairs
Home Visiting Programs*
Outreach Vans
Primary Care Clinics
Substance Abuse Prevention/Treatment Programs
WIC Clinics and Classes*
Women's Health Programs*

Incorporating bicycle injury prevention into MCH services doesn't have to be difficult. First steps can be as simple as providing free helmets to low-income families or distributing discount coupons for bicycle helmets. But don't stop there!

If bicycle injuries are a problem in your area, you may want to bring together interested staff to brainstorm about additional ways to address the problem in your setting. Here are some questions you may want to ask:

- Do we need to collect more or different types of information from families if we are going to help prevent bike injuries?
- What kinds of resources, information, or safety supplies do families need to prevent these injuries?
- Can we provide information, supplies, or coupons for supplies (e.g., bike helmets)?
- Can we educate children, adolescents, and families individually or in group settings about bike safety?
- Can we assess, treat, or refer children and adolescents for this type of injury?

Training materials, manuals, and protocols already exist for many types of injuries. Check with your state health department, regional MCH office, or the Children's Safety Network for more information on available prevention materials.

As you plan bike safety activities, think about possible changes in the following areas to strengthen your prevention efforts:

Medical records
Other data collection
Protocols for assessment, treatment, and referrals
Protocols for anticipatory guidance*
Educational materials available in waiting rooms in all settings
Educational materials to be handed to the family with discussion
Educational forums
Referrals
Family follow-up
Training for staff
Linkage with other community resources

*See Glossary

Priority Partners in Prevention

Bicycle Injury

Local and State Government Agencies and Programs

City and county administrators; Department of Transportation; Office of Highway Safety; governor's highway safety representative; state pedestrian and bicycle coordinator; Department of Parks and Recreation; state U.S. Consumer Product Safety Commission designees; and Healthy Start grantees.*

Local and State Legislators and Other Elected Officials

City and county councils; mayors and their staff; the governor and staff; the state attorney general and staff; and state representatives and senators on relevant committees.

Law Enforcement Agencies

Police chiefs; sheriffs; and police unions.

Schools, Parent-Teacher, and Student Groups and Associations

Teachers, principals, superintendents and their associations; school health personnel; school boards; student organizations such as fraternities and sororities; and college and university administrators and faculty.

Media

Editorial boards; Op-Ed page editors; city desk reporters; consumer reporters; sportswriters; and sportscasters.

Health Care Providers

Pediatricians; family physicians; school-based clinic staff; nurses; trauma and emergency room physicians; emergency medical services for children and emergency medical services personnel; other health professionals; local hospitals and trauma centers; health maintenance organizations; rehabilitation facilities; coroners' and medical examiners' offices; state chapters of the American Academy of Pediatrics; and social workers.

Business Community

Sports equipment retailers; mass merchandisers that sell bicycles and helmets; insurance companies; and chambers of commerce.

Civic Groups and Service Clubs

Kiwanis Clubs; League of Women Voters; Junior League; Rotary Clubs; Girl Scouts and Boy Scouts; Boys and Girls Clubs; and 4-H clubs.

Nonprofit Organizations

Bicycle clubs and associations; local and state SAFE KIDS Coalitions; local Red Cross chapters; local and state consumer groups; and community and neighborhood groups.

Local and National Celebrities

Sportscasters; media personalities; and sports celebrities.

Fire Departments, Fire Fighters, and Fire Fighters' Unions

Researchers

Centers for Disease Control and Prevention-funded Injury Control Research Centers; state and local universities; and community colleges.

Religious Communities and Places of Worship

Foundations

Survivors of Bicycle Injuries and Their Families

*See Glossary

Maternal and child health and other health department staff are in a unique position to prevent unintentional and violent injuries. For assistance in these efforts, please call or write Children's Safety Network, NCEMCH, 2000 15th Street North, Suite 701, Arlington, VA 22201-2617. Phone (703) 524-7802 / Fax (703) 524-9335.

Case Study

Montgomery County's Bike Helmet Law and Safety Program

- Lead Agency:** Montgomery County Health Department, Maryland, as lead agency for the Montgomery County SAFE KIDS Coalition.
- Start/End Dates:** Spring 1991–Ongoing
- Target Population:** Children and adolescents at risk for bicycle-related head injuries in Montgomery County, Maryland (a suburban area with a population of about 800,000).
- Audience Reached:** All children and adolescents under 18 years of age in Montgomery County, Maryland, and their parents.

Program Description

Objectives

- Pass an ordinance requiring children between the ages of 4 and 18 years to wear bicycle helmets when riding bicycles on all county roads and paths.
- Develop a comprehensive, multifaceted, community-based bicycle safety campaign as part of the implementation of the law.

Program Components

The Montgomery County Health Department, as lead agency for the Montgomery County SAFE KIDS Coalition, organized the bike safety effort. Representatives from various county government departments, private sector agencies and organizations, and individual volunteers comprise the coalition.

Educate County Council Members

The coalition's legislative committee sent letters to all coalition members asking them (and a friend) to write to Montgomery County Council members urging them to support the bill. They also sought the support of respected national injury prevention groups and asked them to send letters as well. The National SAFE KIDS Campaign prepared written and oral testimony for the council hearing.

The legislative committee worked to set up meetings with council members and coalition partners and to schedule these meetings before the public hearing on the bill in order to more fully educate and prepare council members. The legislation was passed unanimously by the council in June 1991, and was signed into law by the county executive later that month.

Educate the Community

The law became effective September 13, 1991, but police could not issue citations until January

1992. The intent was to allow time to conduct an educational campaign before tickets would be issued. An intensive education program began in the county following the law's enactment. The program uses education, public awareness, and implementation of legislation to increase bicycle helmet use among children. Specifically, the program:

- Informs parents and school-age children that Montgomery County law requires children to wear helmets when riding bicycles;
- Responds to public inquiries about the law, helmets, or bicycle safety, and maintains a bicycle safety/helmet hotline;
- Encourages the purchase of bike helmets through distribution of discount coupons; partnerships with businesses, bike shops, and pediatricians; and provision of consumer information;
- Promotes bicycle safety through bike rodeos; makes materials available to teachers and youth leaders; and helps schools, PTAs, and youth groups sponsor bike safety education and special events;
- Promotes awareness of bike safety through the broadcast and print media;
- Supports the bicycle helmet education and enforcement activities of police departments; and
- Establishes a system to make helmets available to children from low-income families.

Distribute Helmets to Low-Income Children

As of October 1993, approximately 2,500 helmets had been distributed free of charge to low-income children in Montgomery County. Each child who receives a helmet is also required to receive bicycle safety education.

The Montgomery County SAFE KIDS Coalition reaches these children through a variety of ways. In selected WIC clinics, bike helmets are individually fitted, the children watch a bike safety videotape, and both the child and the parent are counseled about the importance and correct fit of a helmet. Fire

department and health department personnel have staffed these clinics. Helmets are also available to police officers who request them for needy children. In addition, helmets are distributed to children from low-income areas at bike rodeos sponsored by the recreation department.

Summary of MCH Role

As the lead agency for the Montgomery County SAFE KIDS Coalition, the Montgomery County Health Department coordinated the work of planning, implementing, and evaluating the law and the bike helmet/bike safety program. The head of the county health department worked with Montgomery County's chief of police to gain support for the helmet ordinance. This helped to generate high-level support from other county departments and the county executive.

The Maryland Department of Health and Mental Hygiene provided funding to evaluate the helmet law; the director of the state's Injury Control Program testified at the Montgomery County Council hearing; and the salary for a full-time staff person working on this project at the Montgomery County Health Department was paid through Centers for Disease Control and Prevention (CDC) funds, administered by the state health department.

Evaluation

Helmet Distribution to Low-Income Children

By October 1993, approximately 2,500 free helmets had been distributed to low-income children in Montgomery County. Each child who receives a helmet is also required to receive bicycle safety education.

Enforcement

As of September 1, 1993, no documentation of a citation for violating the statute could be found. It is not possible to determine how many warnings have been issued, since most police departments do not require officers to submit warnings. Anecdotal evi-

dence suggests that enforcement varies from officer to officer. Some officers issue warnings, others ask children riding without helmets to dismount and walk their bikes home. One police department steps up enforcement in a neighborhood after the children have already participated in an educational program and helmets have been distributed to the low-income children.

Impact of the Helmet Law

The Montgomery County Health Department consulted with the Maryland Department of Health and Mental Hygiene to develop a study to evaluate the impact of the law. With the help of consultants from the University of Maryland and Johns Hopkins University, the Department of Health and Mental Hygiene designed and funded an observational study of helmet use among children before and after enactment of the law. Unfortunately, the results of the study were determined to be unreliable due to a small sample size.

Coalition Partners in Prevention

The following groups endorsed passage of the bill at the Montgomery County Council hearing: county officials from the health, police, and fire departments; trauma doctors and specialists; representatives from the local medical society and from the emergency medical services (EMS) system; people who had suffered head injuries; PTA officials; school-age children who would be affected by the law; and experts in injury prevention, including an epidemiologist from The Johns Hopkins University Injury Prevention Center (funded by CDC), and the director of the Injury Control Program for the Maryland Department of Health and Mental Hygiene.

Montgomery County Recreation Department

The Montgomery County Recreation Department serves as the coalition's expert on organizing children's bicycle safety events. The department has taken the lead in organizing countywide bicycle rodeos that teach children bicycle safety skills. These large-scale rodeos also draw media

attention, allowing the coalition to reach a wider audience with information about bike safety and the helmet law.

The recreation department is also a major distributor of helmets to low-income children. For example, the department works with community groups at Christmas to give bicycles to low-income children. The Montgomery County SAFE KIDS Coalition provides the department with helmets to accompany the bicycles. Recreation department staff distribute the helmets and ensure that each helmet is properly fitted. Whenever possible, helmets are also distributed at department-sponsored rodeos or educational programs in low-income areas.

Montgomery County Fire and Rescue Department

The Montgomery County Fire and Rescue Department has been very active in SAFE KIDS Coalition activities. The department helps to promote the bike helmet law in a variety of ways. Paramedics have visited PTA meetings to discuss bicycle safety and stimulate interest in bike safety projects. Paramedics also have distributed copies of the *Bicycle Safety Resource Guide* to PTA presidents. Fire and Rescue Department personnel have helped with bike rodeos and helmet distribution to low-income children. The Fire and Rescue Department's booth is the distribution point for bike safety information at the Montgomery County Fair.

Police Departments

Several area police departments have been very involved with bicycle safety activities and are represented on the SAFE KIDS Coalition. For example, the Gaithersburg City, Rockville City, Montgomery County, and Maryland National Capital Park Police Departments participated in a program that rewarded children for wearing bike helmets. Hardee's (Roy Rogers) Restaurants provided coupons for cookies, distributed by community service officers to children wearing helmets.

The Maryland National Capital Park Police community safety officer developed a bike safety program that was taught to over 100 officers. The goal of this program was to increase the officers' knowledge

about bicycle safety and helmet use, teach them how to give a presentation on bike safety and how to organize a bike rodeo, and review enforcement procedures. The program content has been provided to other police departments for their use and the Capital Park Police have encouraged other police departments to become interested in bike safety. The Park Police have also given school presentations to more than 2,000 children and have organized bike rodeos and distributed helmets to low-income children.

Montgomery County Police Department's school safety officers presented 288 programs reaching 44,000 schoolchildren between November 1991 and February 1993. The department's community services section presented at middle schools, community organizations, and bicycle rodeos.

Public/Private Partnerships

The private sector has contributed to the success of the program in a variety of ways:

- The Montgomery County Chamber of Commerce representative to the SAFE KIDS Coalition arranged for production of a bike helmet poster featuring a Washington Redskins football player. Kaiser Permanente paid for the printing and design of the poster. A total of 20,000 posters were printed and distributed in the Washington/Baltimore area.
- Shady Grove Adventist Hospital and Washington Adventist Hospital sponsored a bike safety poster contest in area schools. They also produced a *Bike Safety Workbook* that has been distributed to every elementary school teacher in the county.
- Montgomery General Hospital and Suburban Hospital have produced and printed *Bike Safety Brochures*. Montgomery General sponsored a bike rodeo at the hospital and Suburban held a health/fitness event that included a bike rodeo and ride.
- Kaiser Permanente arranged and paid for production of the *Bicycle Safety Resource Guide* (a guide to developing a local bicycle safety program), at a cost of more than \$2,000. The county recreation department took the lead in

designing the guide, with help from other SAFE KIDS Coalition members.

- Service club members frequently assisted at bike rodeos and several clubs have made donations to purchase bike helmets for low-income children.
- 4-H volunteers conducted more than 27 bike safety rodeos and educational presentations at recreation department campsites.

Sustaining the Program

When CDC funding for the staff position ended, the county health department could no longer afford to retain a full-time staff position in bike safety. The program continues with staffing at only 25 percent of a full-time position.

Adapting the Program to Community Needs

This program can be replicated in other communities. Many communities, in fact, are basing their efforts to enact a bike safety ordinance on the successful experience in Montgomery County.

Resources Needed

Staffing Requirements

At least one full-time staff person was required, especially while working to obtain passage of the bike helmet law. The county program now operates with a part-time (25 percent) staff position and the assistance of other coalition members.

Police officers were trained by other officers in the importance of using bicycle helmets, practicing bicycle safety, giving presentations, organizing bike rodeos, and enforcing the statute.

Fiscal Requirements

Program costs included salary expenses for one full-time staff position; funds to purchase helmets for distribution (at a cost of approximately \$13 per

helmet when bought in bulk), and funds to purchase materials such as brochures and resource guides.

Funding sources: The Maryland Department of Health and Mental Hygiene (including funding provided by CDC, and administered by the Department of Health and Mental Hygiene); and money raised by the coalition from a variety of sources, including service clubs, an insurance company, and a city within Montgomery County.

Lessons Learned

Identify a Legislative Leader as Advocate

Identifying a strong advocate on the county council for the coalition's bike helmet bill was essential. As one coalition member describes the role of their advocate, "She gave us insight into preparing testimony for the public hearing and approaching council members for support."

Let the Children Speak—They Make Excellent Witnesses for Injury Prevention Legislation

Children had an influential role to play in the public hearing on the bike helmet ordinance. Anne May, chair of the coalition's legislative committee, explained: "The kids were the greatest. They added humor to an otherwise grim topic. Basically, the children were saying that they needed and wanted a bike helmet law for their own protection. This helped the council to focus on what we (the bill's supporters) were trying to do."

Organize for Success

The coalition did not know that the bicycle helmet bill had been introduced until after the fact—the news was aired on the radio. However, since the coalition had been planning to work on getting a bill introduced, coalition members were able to provide the legislator who sponsored the bill with support and information within 24 hours. As a result, the coalition became involved in refining the legislation and worked closely with the legislator to obtain passage of the law. The legislator sent a staff representa-

tive to a meeting of the coalition to guide members through the process.

Take the Basics into Account, such as Storing and Transporting Helmets

A number of administrative and logistical issues had to be considered, including where to store the helmets that were being purchased in bulk and how to transport them to various locations. Other Montgomery County SAFE KIDS Coalition members assisted the county health department in storing and transporting the helmets. Another lesson: Be prepared for government procurement restraints that may increase the time it takes to actually get the helmets, and plan the program accordingly.

Consider Alternatives to Charging Low-Income Families for Helmets

Although the Montgomery County SAFE KIDS Coalition understands the reasons for charging for the cost of these helmets, it proved to be too cumbersome in this situation. The coalition instead asked low-income families to show proof of a medical assistance card, free lunch card, or other similar identification in order to obtain a free helmet.

Plan a Variety of Ways to Get Helmets to Children from Low-Income Families

The health department used many mechanisms to distribute helmets to low-income children. Choosing just one method, such as giving away the helmets to public housing residents, will reach only some of the children in need.

Products/Publications Developed/Used

Helmet Law flyer in English and Spanish describing the new Montgomery County bike helmet law.

Bicycle Safety Poster featuring a Washington Redskins football player.

Bicycle Safety Workbook for elementary school teachers and students.

Bike Safety Brochure.

Bicycle Safety Resource Guide.

Contact Person

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Case Study

Ride Right: Iowa's Bicycle Safety Awareness Program

Lead Agency: Health Promotion Unit of the Iowa Public Health Department.

Start/End Dates: July 1992–Ongoing

Target Population: All ages, especially adolescents and young adults.

Audience Reached: Iowa's population statewide.

Program Description

Objectives

- Increase bicycle safety during a statewide bike tour.
- Encourage helmet use year round by all bicyclists.

Program Components

Add a Bike Safety Component to the "Annual Great Bike Ride Across Iowa"

The adolescent health consultant at the Iowa Department of Public Health established the Ride Right Committee as the safety promotion component of the *Register's* Annual Great Bike Ride Across Iowa, the annual bicycle tour sponsored by *The Des Moines Register*. The bicycle tour coordinator at the newspaper was interested in promoting safety and

asked the health department's adolescent health consultant (who had participated in the tour for 17 years) to direct the bike safety component of the tour. The Ride Right Committee decided to focus on bike helmet promotion during its first year.

Conduct an Extensive Media Campaign about Bike Helmets

Prior to the bicycle tour an extensive media campaign reached the public with the message that helmets save lives; this message was delivered directly to tour participants through brochures and meetings with bike clubs promoting helmet use. During the tour, the Ride Right Committee worked to reduce hazards and promote safety by rewarding positive behavior and by using signage, displays, and other means.

Summary of MCH Role

The adolescent health consultant at the Iowa Public Health Department chairs the safety commit-

tee for the bike tour and coordinates all committee activities. Although the consultant is located in the Bureau of Health Promotion, the position is funded through Title V.

Evaluation

A survey measuring the rate of bicycle helmet use during the tour was conducted by a college intern. In 1992, more than 90 percent of the tour participants wore helmets—a rate well above the percentage observed informally in previous years.

Coalition Partners in Prevention

The main coalition partners are the newspaper, *The Des Moines Register*, and participating bike clubs. Other coalition partners include the Iowa Medical Society, emergency medical technicians (EMTs), and insurance companies. Many other organizations, such as the local chapter of the American Cancer Society and the Covenant Hospitals' Traumatic Injury Program, supply volunteers to help with activities prior to and during the tour. These activities include publicizing public service announcements, making signs, checking the roadway, and staffing tables. The American Cancer Society chapter was particularly concerned about skin protection, so the Ride Right Committee distributed 10,000 tubes of sun screen.

Sustaining the Program

Now in its second year, the Ride Right program has become widely recognized and well established. The Ride Right logo is a familiar sight to bicyclists throughout the state.

The health department has received funds from the governor's Office of Highway Safety to implement bike safety programs in local communities. The health department adapts the Right Ride concept to local needs by providing materials and information about conducting bike rodeos and by working with local bike clubs. These projects are generally aimed at children rather than adolescents.

Adapting the Program to Community Needs

The National Bicycle Tour Directors Association has adopted the Ride Right bicycle safety program for use in all of the tours sponsored by the association throughout the country. Adolescent health or injury prevention coordinators can contact the tour director in their state to collaborate on bike helmet promotion efforts.

Resources Needed

Staffing Requirements

The adolescent health consultant at the Iowa Public Health Department has spent approximately 100 hours per year planning and carrying out activities, coordinating the volunteers, and meeting with bike clubs.

Fiscal Requirements

Staff time is funded through Title V or is voluntary. The media campaign and other materials cost approximately \$10,000.

Funding Source: Title V funds cover the adolescent health consultant's full-time salary. *The Des Moines Register* contributed approximately \$5,000, and an equal amount was provided in-kind from a variety of organizations, such as the American Cancer Society, pharmaceutical companies, and others.

Lessons Learned

Pumping Up: Sports and Safety

Combining health promotion with a high profile sports or recreation event is an excellent way to associate safety with fitness and thus make the concept more appealing to adolescents. Collaboration between the health department and bicycle tour promoters increases the visibility of both.

Make Media Your Partner

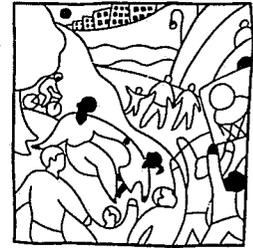
Develop a partnership with a statewide newspaper or other major media source when launching a promotional campaign—this is essential to getting the message out to the broadest possible audience and providing widespread publicity for the program.

Products/Publications Developed/Used

A packet of information developed by *The Des Moines Register* is available, including press releases, brochures for tour participants, bumper stickers, helmet use evaluation forms, and a project description.

Contact Person

Tim Lane, Adolescent Health Consultant
Bureau of Health Promotion
Iowa Department of Health
Lucas State Office Building, Third floor
Des Moines, IA 50319-0075
Phone (515) 281-7833
Fax (515) 242-6384



Preventing Unintentional Injuries

Drowning

An Overview

Very Young Children and Adolescent Males Are at Greatest Risk

In the United States, 1,595 children and adolescents ages birth to 19 years drowned during 1991.¹ One study in California found that for each child who drowned, 3 were admitted to hospitals, and 14 received emergency department treatment for near-drowning injuries.² Direct care costs for childhood drowning are estimated to exceed \$200 million annually.³

Very young children are at especially high risk for drowning and near-drowning. In fact, infants are the only age group

for which the drowning rate increased from 1971 through 1988.⁴ Approximately 40 percent of infant drownings occur in bathtubs.⁴ Infants also drown in buckets, toilets, and residential swimming pools.⁴ These drownings often occur when a child is left unattended in the bath or in the care of an older sibling.^{5,6}

Drowning is the leading cause of injury death among very young children (ages 1–2 years).⁷ Although toddlers are most likely to drown in residential swimming pools, they also drown in bathtubs, whirlpools, hot tubs, and buckets.⁴ Drowning rates for children in this age group have changed little over time, despite the availability of effective prevention strategies such as pool fencing.⁴

“One study in California found that for each child who drowned, 3 were admitted to hospitals, and 14 received emergency department treatment for near-drowning injuries.”²

Adolescent males are also at high risk for unintentional drowning. The drowning rate for adolescent males is 11 times higher than for adolescent females.¹ Male adolescents are most likely to drown in natural bodies of fresh water,⁸ and alcohol consumption is often involved.⁹

Near-Drowning: Long-Term Costs and Consequences

The consequences of nonfatal immersion injuries can be devastating. Acute care costs are estimated to range from \$2,000 for near-drowning victims who have prompt and full recovery, to \$80,000 for victims with severe and permanent brain damage.³ Severely impaired survivors also incur institutional care costs close to \$100,000 per year.³ An estimated 20 percent of hospitalized survivors of near-drowning have severe and permanent neurological disability.³

Drowning Rates Differ by Region and Level of Income

Drownings that do not involve boating are most frequent in southern and western states (such as California, Arizona, and Florida) that have warm climates and many residential pools.¹⁰ Drowning death rates are also highest in rural areas—the rural:urban ratio is 15:1 for boat-related drownings and 3:1 for other drownings.¹⁰ In addition, drowning death rates

are four times higher in areas with the lowest per-capita income, compared to areas with the highest per-capita income.

Policy and Prevention

In about two-thirds of all unintentional drownings, specific information is not available on the circumstances surrounding the incident, making implementation of targeted prevention strategies more difficult.¹¹ Additional efforts are needed to collect and analyze local and state data on drowning and near-drowning.

State and local MCH agencies need to work with Emergency Medical Services (EMS) providers, local health care providers, and fire departments to educate their peers, policymakers, and the public about drowning as a critical health and safety problem and about effective prevention strategies such as pool barriers, laws requiring boat passengers to wear life preservers at all times, and enforcement of minimum legal drinking age laws. Health departments can also help educate parents and health professionals about the need for constant supervision of toddlers during baths, the use of covers for spas and hot tubs, and the hazard presented by five-gallon buckets.

(For more information on drowning injuries and their prevention, please see the Alcohol and Home Safety sections of this notebook.)

Notes

- ¹National Center for Health Statistics. (1994). Unpublished data prepared by L. A. Fingerhut.
- ²Wintemute, G. (1990). Childhood drowning and near-drowning in the United States. *American Journal of Diseases of Children* 144:663-669.
- ³U.S. Department of Health and Human Services. (1990). *Childhood Injury in the United States: A Report to Congress*. Atlanta: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention.
- ⁴Brenner, R., Smith, G., and Overpeck, M. (1994). Divergent trends in childhood drowning rates, 1971 through 1988. *Journal of American Medical Association* 271(20):1606-1608.
- ⁵Budnick L., and Ross, D. (1985). Bathtub-related drownings in the United States, 1979-81. *American Journal of Public Health* 75:630-633.
- ⁶Jenson, L., Williams, S., Thurman, D., and Keller, P. (1992). Submersion injuries in children younger than 5 years in urban Utah. *Western Journal of Medicine* 157:641-644.
- ⁷National Center for Health Statistics. (1988). Unpublished mortality file data.
- ⁸Wintemute, G., Kraus, J., Teret, S., and Wright, M. (1987). Drowning in childhood and adolescence: A population-based study. *American Journal of Public Health* 77:830-832.
- ⁹Howland, J., and Hingson, R. (1988). Alcohol as a risk factor for drownings: A review of the literature (1950-1985). *Accident Analysis and Prevention* 20:19-25.
- ¹⁰Baker, S., O'Neill, B., Ginsburg, M., and Li, G. (1992). *The Injury Fact Book*. (2nd ed.). New York: Oxford University Press.
- ¹¹National Center for Health Statistics. (1990-91). *Vital Statistics of the United States II: Mortality, Part A, 1987-1988*. Washington, DC: U.S. Department of Health and Human Services.

Promising MCH Settings

There are many ways to incorporate drowning prevention into existing MCH services and programs. Following are some of the MCH programs that could play a part in preventing child and adolescent drowning deaths and injuries.

Adolescent Health Clinics
Adolescent Pregnancy and Parenting Programs*
School-Based/Linked Health Clinics*
Child Health Clinics
Children with Special Health Needs (CSHN) Service Sites*
Community and Migrant Health Centers*
EMS and EMSC Programs*
Health Fairs
Home Visiting Programs*
Immunization Campaigns and Clinics
Outreach Vans
Primary Care Clinics
Substance Abuse Prevention/Treatment Programs
Women's Health Programs*
WIC Clinics and Classes*

Incorporating drowning prevention into MCH services doesn't have to be difficult. First steps can be as simple as asking parents if they ever leave young children alone or with an older sibling in the bathtub or letting parents know that young children often drown in five-gallon buckets. But don't stop there!

If child and adolescent drowning is a problem in your area, you may want to bring together interested staff to brainstorm about additional ways to address the problem in your setting. Here are some questions you may want to ask:

- Do we need to collect more or different types of information from families if we are going to help prevent drowning injuries?
- What kinds of resources and information do families need to prevent these injuries?
- Can we provide resources, information, or coupons for supplies (e.g., discount coupons for pool fencing)?
- Can we educate families individually or in group settings about safe bathing practices, the need for isolation pool fencing, and other drowning prevention techniques?
- Can we assess, treat, or refer children and adolescents for this type of injury?

Training materials, manuals, and protocols already exist for many types of injuries. Check with your state health department, regional MCH office, or the Children's Safety Network for more information on available prevention materials.

As you plan drowning prevention activities, think about possible changes in the following areas to strengthen your prevention efforts:

Medical records
Other data collection
Protocols for assessment, treatment, and referrals
Protocols for anticipatory guidance*
Educational materials available in waiting rooms in all settings
Educational materials to be handed to families with discussion
Educational forums
Referrals
Family follow-up
Training for staff
Linkage with other community resources

*See Glossary

Priority Partners in Prevention

Drowning

Local and State Government Agencies and Programs

City and county administrators; Department of Parks and Recreation; local zoning boards; building code officials and inspectors; state U.S. Consumer Product Safety Commission designees; and Healthy Start grantees.*

Local and State Legislators and other Elected Officials

City and county councils; mayors and their staff; the governor and staff; the state attorney general and staff; and state representatives and senators on relevant committees.

Schools, Parent-Teacher, and Student Groups and Associations

Teachers, principals, superintendents and their associations; school boards; and school health personnel.

Media

Editorial boards; Op-Ed page editors; city desk reporters; and consumer reporters.

Health Care Providers

Pediatricians; family physicians; school-based clinic staff;

nurses; trauma and emergency room physicians; emergency medical services for children and emergency medical services personnel; other health professionals; local hospitals and trauma centers; health maintenance organizations; rehabilitation facilities; coroners' and medical examiners' offices; and social workers.

Business Community

Pool, hot tub, and spa manufacturers and distributors; realtors' associations; realty boards; insurance companies; and chambers of commerce.

Civic Groups and Service Clubs

Kiwanis Clubs; League of Women Voters; Junior League; Rotary Clubs; Girl Scouts and Boy Scouts; Boys and Girls Clubs; and 4-H clubs.

Local and National Celebrities

Sportscasters; media personalities; and sports celebrities.

Fire Departments, Fire Fighters, and Fire Fighters' Unions

Nonprofit Organizations

Local and state SAFE KIDS Coalitions; local Red Cross chapters; local and state consumer groups; and community and neighborhood groups.

Child Care Centers and Family Child Care Homes

Administrators; staff; licensing and regulatory agencies; and Head Start.

Researchers

Centers for Disease Control and Prevention-funded Injury Control Research Centers; state and local universities; and community colleges.

Religious Communities and Places of Worship

Foundations

Survivors of Near-Drowning and Their Families

*See Glossary

Maternal and child health and other health department staff are in a unique position to prevent unintentional and violent injuries. For assistance in these efforts, please call or write Children's Safety Network, NCEMCH, 2000 15th Street North, Suite 701, Arlington, VA 22201-2617. Phone (703) 524-7802 / Fax (703) 524-9335.

Case Study

A Comprehensive Multicultural Drowning Prevention Project

Lead Agency: Childhood Injury Prevention Program at the County of Orange Health Care Agency, California

Start/End Dates: January 1991–Ongoing

Target Population: Parents of children in Orange County, California, who are at risk for drowning or near drowning; health care providers for these families; policymakers.

Audience Reached: Parents of children in Orange County, California, who are at risk for drowning or near drowning; health care providers for these families; policymakers.

Program Description

Objective

- Expand and improve existing child drowning prevention efforts in Orange County.

Program Components

Residents of Orange County have become increasingly concerned about children in their community who are dying or becoming disabled as the result of preventable drowning-related incidents. In January 1991, the County of Orange Health Care Agency began to approach the problem of childhood drowning in a systematic way, using funding from the California Department of Health Services.

Collect and Use Local Data

The Health Care Agency's first goal was to gather additional county data on drownings and near

drownings; these data would form the basis for later decision making about interventions and outreach.

A voluntary drowning reporting system was established, consisting of hospitals, the coroner's office, fire departments, and emergency medical services (EMS) agencies. The participants agreed to report all drowning and near-drowning incidents in Orange County for all ages. Two separate specialized data collection forms were designed, one for EMS and one for hospital environments. Data collection at the hospital sites is feasible because children involved in immersion incidents are almost always admitted to local hospitals at least overnight.

Provide Home Visiting Follow-Up by Public Health Nurses for All Drowning Incidents

For drowning and near-drowning incidents involving children under five years of age, a complete surveillance investigation is conducted by a public health nurse. The nurse assesses the physical condition of near-drowning victims, educates parents about signs and symptoms indicating the need

for medical attention, and reviews hospital discharge instructions to ensure parental compliance. The visit by the public health nurse provides a liaison between the families and the health care and social services systems, linking families with sources of support and services.

The nurse also assesses the home and pool environment and recommends environmental modifications. Follow-up visits are conducted as needed to assess the child and to determine whether the recommended environmental changes have been made. Volunteer parents provide parent-to-parent support for families of drowning victims.

Develop Policy Recommendations

Epidemiological research, local surveillance data, and current technology were reviewed in order to develop policy recommendations. Recommendations were incorporated into a policy statement presented at public hearings and city council meetings.

Educate Policymakers

County health department staff use local surveillance data to educate policymakers in the county's 31 cities and unincorporated areas. Project staff suggest ways that legislators can reduce drowning risks for children in their county by enacting ordinances or taking other measures.

Educate Professional Groups

In collaboration with the Orange County Pool Safety Network, a multidisciplinary coalition of community constituents, the program directs educational messages and activities toward communities of professionals and citizens. Training of health professionals and public safety personnel emphasizes the extent of childhood drowning in Orange County and the risk factors for drowning, and dispels common myths about drowning (e.g., that swimming lessons can "drown proof" a child, that drownings occur only among children of higher socioeconomic levels, or that drownings occur because "bad parents" aren't watching their children).

Develop Culturally Competent Materials

Orange County has many Hispanic and Southeast Asian residents, and it is essential to provide them with culturally appropriate materials and messages. The program has produced drowning prevention brochures in nine languages, with the assistance of the county health department's multicultural staff.

Educate Communities

The drowning prevention brochures are distributed by neighborhood realty agencies, local libraries, recreation and parks agencies, and multicultural outreach workers.

The Childhood Injury Prevention Program cosponsored a countywide CPR training day and provided community education at other local events including the Orange County Fair and KidsExpo. Articles on childhood drowning were prepared and distributed to editors of community newsletters.

Summary of MCH Role

The California State Maternal and Child Health (MCH) and Emergency Preparedness and Injury Control (EPIC) branches fund Orange County's drowning prevention program with a three-year grant. With MCH and EPIC funds, the project collects local drowning data; provides public health nurse follow-up for all drowning incidents in the county; develops policy recommendations and educates policymakers; educates professional groups and the community at-large; and develops and distributes culturally competent materials.

A half-time public health nurse with the drowning prevention project conducts a home visit with the families of all drowning or near-drowning victims under five years of age in the county. The County Health Department trains its public health nurses so that nurses conducting home visits can identify drowning hazards in or around the home, and can talk with families about bath safety and other preventive behaviors.

Evaluation

The Childhood Injury Prevention Program reviewed all local EMS agency reports (1991) for drowning or near-drowning incidents. Program staff also reviewed 1991 admissions to Children's Hospital of Orange County and coroner's records to assess what percentage of all drowning cases were actually being reported to the surveillance system.

The immersion surveillance program will allow the Childhood Injury Prevention Program to monitor changes in the number and type of drownings and near-drownings in Orange County.

The Childhood Injury Prevention Program also monitored the number and type of public health nurse contacts, educational materials developed and disseminated, and presentations made by staff and volunteers.

In 1992, the Childhood Injury Prevention Program's public health nurse did home visits with 57 of the 87 families with drowning and near-drowning cases among children ages birth to four years. The public health nurse was unable to contact 30 families because of insufficient identifying information and/or lack of response to telephone calls, letters, and home visits.

Childhood Injury Prevention Program staff discovered that 9.4 percent of the drowning and near-drowning cases transported by paramedics were not reported to the surveillance system. Reviews of 1991 admissions to Children's Hospital of Orange County and the coroner's records found five more unreported cases of drowning or near drowning.

More than 30,000 multilingual drowning prevention brochures have been distributed. The Childhood Injury Prevention Program has also published two reports on the epidemiology of local drownings and near-drownings.

More than 100 presentations have been made to groups of nurses, paramedics, parents, realtors, service clubs, policymakers, and other community groups. Significant print and broadcast media coverage has also sustained public awareness of the program.

Coalition Partners in Prevention

County of Orange Health Care Agency partners include emergency departments, the coroner's office, Orange County Pool Safety Network, fire departments, EMS agencies, County Council of Realty Boards, the pool and spa industry, parents, and building and safety personnel.

Sustaining the Program

The Drowning Prevention Program plans to work with the county's MCH division to assist them in developing a plan to integrate injury prevention activities within their existing maternal and child health work scope.

Childhood Injury Prevention Program staff provide consultations to other California counties in developing childhood injury prevention programs.

Adapting the Program to Community Needs

Although the expense of this childhood drowning prevention program might make it difficult for county health departments to replicate the entire project, many of the program components could be replicated with only minimal or moderate expense. Establishing a local drowning data collection system, incorporating drowning into home visiting programs, developing policy recommendations and educating policymakers, and disseminating culturally competent materials are all promising and relatively inexpensive endeavors.

Resources Needed

Staffing Requirements

The drowning prevention project was staffed by a full-time program manager and a half-time public health nurse within the Childhood Injury Prevention Program. The project also uses the part-time services of an epidemiologist and half-time services of a clerical assistant.

The public health nurses' surveillance activities were very time-consuming. As the project generated more and more community interest in childhood drowning, the public health nurse conducted significantly more community and professional trainings than expected. In addition, a great deal of time was needed for case management and follow-up work from home visits with client families. The project recommends that other health departments hire a full-time public health nurse if they plan to initiate this level of surveillance and public health nurse service.

Fiscal Requirements

The project is funded through a three-year grant of \$285,000 from California's Maternal and Child Health (MCH) and Emergency Preparedness and Injury Control (EPIC) branches.

Lessons Learned

Convincing Policymakers to Take Action: Local Data Makes the Difference

"The importance of having local injury data, presented in an understandable way for local officials, can't be overemphasized," states project director Amy Dale. Detailed local data have been invaluable in demonstrating the magnitude of the childhood drowning problem to members of the media, policymakers, health and safety professionals, and the public. Even the building officials charged with developing and enforcing barrier codes were not well educated about the nature and circumstances of childhood drownings within Orange County. County officials were greatly influenced by data confirming childhood drowning as a serious local problem.

Surveillance Doesn't Have to Mean Dry Statistics

Public testimony by Childhood Injury Prevention Program staff included both statistics and anecdotes obtained through the surveillance system. Compelling case studies of toddlers who had drowned or were neurologically impaired helped policymakers and the public fully comprehend the

tragedy of childhood drowning and understand that many childhood drownings are preventable. Surveillance data also indicated a need for prevention brochures in a variety of languages. Now available in nine languages, the brochures have been well received by the county's multicultural communities and have become an essential tool in reaching out to these communities.

The Intensity of Surveillance Can be Modified Over Time

In-depth surveillance for two-and-a-half years provided the drowning prevention project with the ability to make some generalizations about childhood drowning. For example, data on drowning location were similar throughout the surveillance period, continuing such intensive surveillance would probably yield similar data. Thus, the project is focusing on more limited surveillance activities during 1994.

Find Unity in Diversity: Everyone Can Support Education

Despite markedly diverse views on how to prevent childhood drowning within Orange County, everyone could agree that community education was essential. Realtors and representatives of the pool and spa industry preferred to focus on parental supervision rather than fencing barriers. They were eager to work with the project to conduct educational activities through which they were seen as contributing to prevention efforts.

Educate the Media and Enlist Their Help in Getting the Message Out

Working with the media proved to be time consuming and, at times, frustrating. Although media coverage of childhood drowning was an important vehicle for educating both citizens and policymakers, the Childhood Injury Prevention Program constantly worked to ensure that the media had accurate data and information about drowning. A lot of misinformation about children and drowning existed. Many people, including reporters, believed (incorrectly) some of the common myths about childhood drown-

ing (e.g., that swimming lessons can “drown proof” a child, that drownings occur only among children of higher socioeconomic levels, or that drownings occur because “bad parents” aren’t watching their children).

So many members of the media were reporting on drowning incidents that it became an ongoing challenge to educate all of them. The media appreciated the accuracy of the data provided by the Childhood Injury Prevention Program and were generally open to learning about drowning prevention and myths.

Develop a Strategy for Year-Round Media Attention

Because more drownings occur in summer, it has been difficult to get media attention year round. A public relations firm has volunteered to help the Pool Safety Network in developing a year-round plan for periodic media events.

Parents Make Powerful Educators and Advocates

Drawing from the human perspective can be a very valuable educational resource. Program staff combined data with a personal approach by locating parent volunteers who donated countless hours to participate in educational programs. Reporters often preferred to focus on the human angle in their coverage, but were sometimes unrealistic in their expectations about the interview capabilities of grieving parents.

Health Departments Can Coordinate and Encourage Policy Actions

Many traditional allies (including health care providers, public safety professionals, health educators, researchers, social service providers, and parents) are not trained in policy development. Although virtually all coalition members supported the development of stronger codes requiring isolation fencing for pools and spas, many were unfamiliar and uncomfortable with the political process. Health departments can conduct both formal and informal training. Childhood Injury Prevention Program staff provided consistency in the long-term process of achieving policy change.

Long-Term Policy Change: Take It One Step at a Time

The drowning prevention project strongly supports isolation fencing as the only pool barrier supported by current epidemiological evidence. It became clear, however, that it would be a significant accomplishment for local jurisdictions to adopt even relatively weak regulations for newly constructed pools and spas. The Childhood Injury Prevention Program prepared and disseminated a policy statement supporting isolation fencing and offering additional barrier recommendations. Staff also decided to support any reasonable local efforts to strengthen barrier codes as important “first steps” on the road to stronger ordinances.

Products/Publications Developed/Used

A Guidebook for Preventing Childhood Drowning

Is Your Pool or Spa Protected? A Guide to Playing it Safe: Kids or No Kids!

Prevent Childhood Drowning, a brochure available in nine languages.

Immersion Injury Prevention Project—Preventing Childhood Drowning

Immersion Surveillance Summary 1991 & 1992

All of these materials are available from the Childhood Injury Prevention Program, County of Orange Health Care Agency, 801-C North Broadway, Santa Ana, CA, 92701. Phone (714) 834-5728, Fax (714) 834-3492.

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Case Study

Just A Few Seconds: Phoenix's Drowning Prevention Campaign

Lead Agency: Fire-Pal (Fire and Life Safety Public Awareness League), a nonprofit community organization in Phoenix, Arizona.

Start/End Dates: 1989–Ongoing

Target Population: Parents with children under 5 years of age.

Audience Reached: From 1989 through 1993, the project distributed 1.5 million information cards to young families in Phoenix, Arizona, along with at least 1 million other public awareness eye-catchers such as magnets and bumper stickers. In addition, 10 billboards have displayed drowning prevention messages continuously for three years, and 200,000 banners have been placed at local bus stop shelters. Students in 254 schools have brought home magnets and lunch menus imprinted with a message on drowning prevention.

Program Description

Objective

- Reduce the incidence of childhood drowning and immersion injury through educational and environmental interventions.

Program Components

A simple theme—that it takes just a few seconds for a child to drown—frames the program's activities. Fire-Pal (a nonprofit community-based organization) and the Phoenix Fire Department lead an effort to raise drowning prevention issues among parents of children under 5 years of age. Fire-Pal serves as a mechanism through which funds and in-kind donations are obtained.

Collect Information on All Local Drowning Events

The Fire Department uses a computer-aided dispatch system to track each call and its outcome. The department generates a drowning report on each call, including the circumstances, race, age, presence or absence of a barrier, and other information. This information is then used in public awareness efforts.

Conduct a Multifaceted Media Campaign

The "Just a Few Seconds" multifaceted media campaign included radio and television public service announcements and news coverage, billboard and bus stop signage, and a variety of giveaway items with "kids appeal," such as magnets, decals, and buttons.

Hold a Kick-Off Press Event

The chief of the Phoenix Fire Department, the president of Fire-Pal, and the president of the United Phoenix Fire Fighters Union held a kick-off news conference in a school auditorium where they described all 47 drowning-related calls (including 11

fatalities) so far that year. Children participated in the news conference, representing the 11 fatalities.

Produce—and Get on the Air—TV and Radio Public Service Announcements

The Just A Few Seconds campaign produced and distributed 26 public service announcements (PSAs) for television and radio use. The president of Fire-Pal at that time was the general manager of a local television station, KPHO-TV, which donated time for production of a 30-second public service announcement.

Copies of the PSA were distributed to members of the media who were asked to broadcast it. Fire-Pal also hosted a lunch for the public service directors of the local television stations, again distributed the public service announcement, and asked the directors to ensure that it would be aired on their stations. Subsequently, another station recorded 26 directed messages (10–15 seconds each) which were distributed at another media luncheon.

Build Relationships with Key Media Outlets

The fire department participates in a special phone line with 36 news agencies. Through this phone line, the fire department reports on every drowning call, the circumstances surrounding the call, and the outcome.

Use Local Drowning and Near-Drowning Incidents as Opportunities to Drive Home Prevention Messages

Three powerful advocacy tools were vital to the media campaign:

- A recording of an actual 911 call about a childhood drowning incident, during which the 911 operator was instructing the parent in how to perform CPR until the paramedics arrived.
- A videotape of a 3-year-old child falling into an unattended residential swimming pool.
- A local television news station's recording of an actual paramedic's response to a child

drowning in a pool. The 14-minute news segment was reproduced and made available both as a giveaway and as a free rental at local video rental outlets.

Produce Billboard and Bus Stop Signage and Give-Away Items

One of the directors of Fire-Pal was a principal in a local advertising agency that provided Fire-Pal with pro bono artwork and design. Fire-Pal asked businesses and nonprofits in the community to help produce the items, through in-kind services (such as printing) or donations.

Use Paramedic and Fire Captains to Educate Children

A team of fire captains (the "Stop Water Infant Mortality Team") was formed to educate and distribute materials in elementary schools (grades K–8) in the Phoenix area. Age-appropriate educational materials were developed and integrated as one of 26 modules in an existing public safety curriculum rotated among all area public and private schools. Five fire captains made numerous public presentations at health fairs, community service clubs, and other forums.

Put on an "April Pools Day" Event

The annual April Pools Day event was recently added to the program to stimulate and maintain public awareness and reduce barriers to drowning prevention. On April Pools Day, the project enlists the assistance of more than 4,100 community volunteers, drawn from local troops of Boy Scouts and Girl Scouts and other voluntary agencies and from school systems. These volunteers blanket the residential portions of the city and distribute a placard to every household, describing risks and remedies associated with residential pool drownings among children. Volunteers receive tee shirts for their participation.

Summary of MCH Role

State health department staff work with Fire-Pal to monitor changes in drowning morbidity and mor-

tality. The health department has conducted statistical analyses showing a dramatic drop in drowning deaths since the campaign began.

Part of the impetus behind Fire-Pal's campaign was the state's cut in the health department's public information campaign funds. Although some aspects of a media campaign can be costly, others such as providing local drowning data to media outlets and participating in meetings with editorial board members, are not necessarily expensive.

Evaluation

In 1989 when the project began, there were 79 injuries and 15 deaths in the Phoenix area related to drowning or immersion among children under 5 years of age. In 1990, there were 32 injuries and 11 deaths; in 1991, 37 injuries and 5 deaths.

Fire-Pal was not directly involved in the passage of legislation requiring a four-sided barrier around pools, but the media attention given to the drowning issue by the Just a Few Seconds campaign helped stimulate local politicians' interest in the legislation.

Coalition Partners in Prevention

Partners include the Phoenix Fire Department, Fire-Pal, the United Phoenix Fire Fighter's Union, local media, the public school system, paramedic captains, Boy Scouts and Girl Scouts, local businesses, and the regional telephone company.

Sustaining the Program

Campaign activities have promoted an atmosphere conducive to legislation and other environmental interventions. In 1990, the city enacted a residential pool barrier code. This code, affecting new and existing residential dwellings, requires households with children under the age of 6 years to erect protective pool structures.

The Phoenix Fire Department donates corporate communications staff time to the ongoing campaign.

Adapting the Program to Community Needs

Fire-Pal can offer this model campaign to other organizations in the state and across the country. For a fee (ranging from \$50 to \$1,000 on a sliding scale), Fire-Pal will prepare artwork and offer a limited use two-year contract to other cities. Approximately 20-30 cities outside Arizona are now using elements of the program.

Pro-bono art design and production can be a tremendous help to your project, but be sure to test both your messages and the art with the audience it is intended for.

Additional drowning prevention strategies can be adopted by public health and community programs including testifying before policymakers about the local drowning problem, and incorporating drowning prevention into home visiting programs.

Resources Needed

Staffing Requirements

The campaign requires at least one staff person dedicated fulltime to the project.

Fiscal Requirements

The Phoenix Fire Department donates corporate communications staff time, valued at approximately \$100,000. Educational materials cost \$60,000.

April Pools Day and other items such as tee shirts, cards, and magnets are made possible each year through annual donations of \$25,000 from U.S. West (a regional telephone company), Holsum (a local bakery), and other groups. The United Phoenix Fire Fighter's Union provided money for April Pools Day in 1992-93.

Funding source: Existing fire department and community-based resources and in-kind contributions.

Lessons Learned

Working with Fire Departments

Doug Tucker, division chief of the Phoenix Fire Department, underscores one reason for the success of the program: For the first time, the public saw the fire department as a seller of safety. Explains Chief Tucker: "The idea that government was not just trying to pass a new law or change a lifestyle but instead was selling safety . . . well, that was shocking and new to the public." Fire departments are traditionally well-respected and are natural and essential partners in this type of effort.

Local Survivors of Injury Are Effective Advocates

The coverage given to tragic local drowning events in Phoenix helped overcome the complacency of pool owners. Dramatic audiotapes of a 911 recording and a videotape of a paramedic team trying to resuscitate a child riveted the community and created a significant opportunity for prevention.

Involve the Community

Community members should schedule newspaper editorial meetings and use coalition partners' resources, such as fire department recordings of actual 911 calls, to share the problem and its solution with the broader community.

Tips for Working with the News Media

It is essential to work with the news media, not just with public service directors and feature reporters. In Phoenix, Fire-Pal worked with the news media to create a videotape on the Just a Few Seconds campaign; the videotape examines swimming pools and their hazards, and can be shown at presentations before civic groups. Encouraging the media to ride along on drowning-related calls is a good way to engage their support.

Get "Movers and Shakers" Involved in the Program

Obtaining high-level support for the campaign from the Fire Department, the Fire Fighters Union,

and local media has enhanced the program's success and enabled Fire-Pal to raise money and obtain in-kind support.

Products/Publications Developed/Used

Two public service announcements (30 seconds and 15 seconds in length) depicting potential drowning situations.

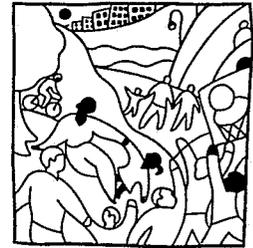
Bumper stickers (in English and Spanish), magnets, and tee shirts printed with the message: "Just a few seconds. Remember, children need constant watching."

Cards with the printed message: "Designated child watcher. Just a few seconds . . ." (with emergency procedures listed on the back).

Information cards (in English and Spanish) with information about "What to do if you find a child in trouble in a pool," "How to prevent a drowning," "How pools should be secured," "How to avoid drownings in other places," and "How to learn CPR."

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Preventing Unintentional Injuries

Fires & Burns

An Overview

Young Children, Especially Those from Low-Income Families, Are at Greatest Risk

In 1991, fire and burn injuries killed 1,228 children ages birth to 19 years in the United States.¹ Young children are at especially high risk: 60 percent (740) of the children who died were ages birth to 4 years of age.¹ The majority (93 percent) of fatal burns to children and adolescents are unintentional.² Residential fires are the leading cause of death (84.3 percent), followed by other fires (4.5 percent), and scald burns (1.9 percent).² Scald burns are not usually fatal, but result in

more than 100,000 children ages birth to 4 years receiving treatment in emergency departments each year.³

Children from low-income families are at higher risk for burn injury because of substandard housing, use of alternative heating sources (such as space heaters), lack of working smoke detectors, extremely hot water in multiunit low-income housing, and economic constraints on providing adequate adult supervision.⁴ African American and Native American children are at higher risk for residential fire burns than white children.² Children in the South, particularly in the southeast region, are at greater risk than children living in the West.²

“... 90 percent of all fire deaths among children occur in homes without working smoke detectors ...”⁵

Burn Injuries: Costs and Consequences

The cost of burn injuries is staggering. For burns sustained by children ages birth to 19 years in just one year, total lifetime societal losses are valued at approximately \$3.5 billion (including \$383 million for medical care costs, \$221 million for disability, and \$2.8 billion for pain and suffering).²

Policy and Prevention

Although 90 percent of all fire deaths among children occur in homes without working smoke detectors,⁵ several states still do not have smoke detector laws on the books. The laws that do exist are not always well enforced. In many homes that have smoke detectors, the batteries have been removed or no longer work. MCH agencies can be effective advocates for strong smoke detector laws and their enforcement.

Door-to-door smoke detector installation and battery check programs conducted by health and fire department personnel working in conjunction with other local agencies, service clubs, and organizations, are an effective way to place smoke detectors in the homes of low-income families with children. Unfortunately, only a small number of these programs exist. Maternal and child health (MCH) agencies can coordinate with other door-to-door home visiting programs (such as lead poisoning screening, weatherization, and prenatal and post-

natal care programs) to install smoke detectors, change batteries, check homes for other fire and burn hazards, and educate parents and caregivers about burn prevention.

Many of the children at greatest risk for scald burns live in apartment buildings where tenants do not have access to the hot water heater(s) and cannot regulate the hot water temperature at the source; however, few programs have been conducted to install anti-scald devices in these multiunit dwellings. MCH agencies can bring public housing agencies, tenant organizations, and other key players together to develop comprehensive strategies for reducing fire and scald risks in low-income housing.

MCH agencies can also use traditional MCH settings such as WIC clinics and well-child clinics to educate families about preventing fires and burns and to distribute safety supplies such as smoke detectors, batteries, and bath thermometers.

(For more information on fire and burn injuries and their prevention, please see the Alcohol and Home Safety sections of this notebook.)

Notes

¹National Center for Health Statistics. (1994). Unpublished data prepared by L. A. Fingerhut.

²McLoughlin E., and McGuire, A. (1990). The causes, cost and prevention of childhood burn injuries. *American Journal of Diseases of Children* 144:577-683.

³Wilson, M. H., Baker, S. P., Teret, S. P., Shock, S., and Garbarino, J. (1991). *Saving Children: A Guide to Injury Prevention*. New York: Oxford University Press.

⁴Athey, J. L., and Kavanagh, L. (1991). Childhood burns: The preventable epidemic. *Zero to Three* (June issue): 8-13.

⁵U.S. Fire Administration. (1990). *Curious Kids Set Fire*. Washington, DC: U.S. Fire Administration, Federal Emergency Management Agency.

Promising MCH Settings

There are many ways to incorporate fire and burn prevention into existing MCH services and programs. The following are some of the MCH programs that could play a part in preventing fire and burn injuries.

Adolescent Pregnancy and Parenting Programs*
School-Based/Linked Health Clinics
Child Health Clinics
Children with Special Health Needs (CSHN) Service Sites*
Community and Migrant Health Centers*
EMS and EMSC Programs*
Family Planning Clinics*
Health Fairs
Home Visiting Programs*
Immunization Campaigns and Clinics
Outreach Vans
Prenatal Clinics
Primary Care Clinics
Substance Abuse Prevention/Treatment Programs
WIC Clinics and Classes*
Women's Health Programs*

Incorporating fire and burn prevention into MCH services doesn't have to be difficult. First steps can be as simple as reminding parents to test smoke detectors monthly and change smoke detector batteries every year. But don't stop there!

If fire and burn injuries are a problem in your area, you may want to bring together interested staff to brainstorm about additional ways to address the problem in your setting. Here are some questions you may want to ask:

- Do we need to collect more or different types of information from families if we are going to help prevent fire and burn injuries?
- What kinds of resources, information, or safety supplies do families need to prevent these injuries?
- Can we provide information, supplies, or coupons for supplies (e.g., smoke detectors and smoke detector batteries)?
- Can we educate families individually or in group settings about preventing fire and burn injuries?
- Can we assess, treat, or refer families for this type of injury?

Training materials, manuals, and protocols already exist for many types of injuries. Check with your state health department, regional MCH office, or the Children's Safety Network for

more information on available prevention materials.

As you plan fire and burn prevention activities, think about possible changes in the following areas to strengthen your prevention efforts:

Medical records
Other data collection
Protocols for assessment, treatment, and referrals
Protocols for anticipatory guidance*
Educational materials available in waiting rooms in all settings
Educational materials to be handed to families with discussion
Educational forums
Referrals
Family follow-up
Training for staff
Linkage with other community resources

*See Glossary

Priority Partners in Prevention

Fire and Burn Injury

Local and State Government Agencies and Programs

City and county administrators; state fire marshal's office; lead screening programs; weatherization programs; home visiting programs; child welfare agencies (especially those with home visiting programs); Healthy Start grantees;* state U.S. Consumer Product Safety Commission designees; and local housing authorities.

Local and State Legislators and Other Elected Officials

City and county councils; mayors and their staff; the governor and staff; the state attorney general and staff; and state representatives and senators on relevant committees.

Fire Departments, Fire Fighters, and Fire Fighters' Unions

Schools, Parent-Teacher, and Student Groups and Associations

Teachers, principals, superintendents and their associations; school-based clinic staff; school boards; school health personnel; and English as a Second Language (ESL) classes.

Media

Editorial boards; Op-Ed page editors; city desk reporters; and consumer reporters.

Health Care Providers

Pediatricians; family physicians; school-based clinic staff; nurses; trauma and emergency room physicians; emergency medical services for children and emergency medical services personnel; other health professionals; local hospitals and trauma centers; burn units; health maintenance organizations; rehabilitation facilities; coroners' and medical examiners' offices; and social workers.

Business Community

Hardware and home improvement stores; realtors' associations; realty boards; insurance companies; and chambers of commerce.

Civic Groups and Service Clubs

Kiwanis Clubs; League of Women Voters; Junior League; Rotary Clubs; Girl Scouts and Boy Scouts; Boys and Girls Clubs; and 4-H clubs.

Nonprofit Organizations

Local or state SAFE KIDS Coalitions; tenant organizations; neighborhood food distribution programs; neighborhood youth programs and centers; community and neighborhood groups; local Red Cross chapters, and local and state consumer groups.

Legal System

Neighborhood Legal Services Programs and legal aid programs.

Child Care Centers and Family Child Care Homes

Administrators; staff; licensing and regulatory agencies; and Head Start.

Researchers

Centers for Disease Control and Prevention-funded Injury Control Research Centers; state and local universities; and community colleges.

Religious Communities and Places of Worship

Foundations

Local and National Celebrities

Survivors of Fire and Burn Injury and Their Families

*See Glossary

Maternal and child health and other health department staff are in a unique position to prevent unintentional and violent injuries. For assistance in these efforts, please call or write Children's Safety Network, NCEMCH, 2000 15th Street North, Suite 701, Arlington, VA 22201-2617. Phone (703) 524-7802 / Fax (703) 524-9335.

Case Study

Fire Safety in Church Communities of Color in Rural North Carolina

- Lead Agency:** Harnett County Health Department, North Carolina
- Start/End Dates:** July 1, 1992 – June 30, 1993
- Target Population:** Three rural churches of color, whose members included many families at high risk for residential house fires in Harnett County, North Carolina.
- Audience Reached:** A total of 324 households reached through six rural churches of color (the three initial churches and three additional churches that later asked to join the program).

Program Description

Objectives

- Increase the percentage of church members that have working smoke detectors in their homes from 4 percent to 50 percent by June 1993.
- Increase knowledge of safety and fire prevention among families at high risk.

Program Components

Identify a Coordinator in Each Church

Initially, the health educator in charge of the project at the county health department identified a coordinator at each of three rural churches of color. Each coordinator agreed to take responsibility for handling all aspects of the smoke detector giveaway program for church members, from publicizing the free detectors to organizing the sign-up and installa-

tion process. In the first church, the retired pastor took responsibility. In the second, the board of deacons accepted the challenge. In the third, the youth director and a church youth group coordinated the program. As other area churches heard about the program, they became interested in participating. The health department was unable to provide smoke detectors to these three additional churches (which were responsible for obtaining their own smoke detectors) but staff members shared their own expertise and the experience of the three initial churches with the coordinators of these giveaway programs.

Spread the Word

Each church decided how to publicize the free smoke detectors. Some churches verbally announced the program on Sunday; others included written materials in the church bulletin, posted information on the church bulletin board, and handed out information at church meetings. Word of mouth was also an important method of disseminating information about the program.

The health department donated 100 hand-held fans to each church as incentives for the churches and their members to participate. The fans, which were very popular, publicized the phone number of the health department on the back, together with the fire safety message "Smoke Detectors: Don't Stay Home Without One." Many of the fans were used every Sunday and helped to spread the word about the project.

Install Smoke Detectors and Batteries

Anyone interested in receiving a smoke detector and batteries was asked to fill out a very short form. The churches offered to install the detectors; the youth group and the board of deacons scheduled appointments both during the week and on weekends to install detectors. Fire departments also were available to install the detectors.

Educate Families about the Need To Replace Batteries

When daylight savings time ended in the fall, the health department aired announcements on a local Christian radio broadcast asking families who were participating in the church smoke detector giveaway program to change the batteries in their detectors. At the same time, the churches read or provided printed announcements on Sunday reminding families to change the batteries.

Summary of MCH Role

The North Carolina state health department awarded 25 injury prevention minigrants to local health departments to focus on distributing smoke detectors in fiscal year 1993. The Harnett County Health Department used its grant funds to coordinate the smoke detector distribution program through rural minority churches. MCH nurses spoke with consumers about the importance of having working smoke detectors and referred their consumers to the health educator to arrange for installation of a smoke detector.

Evaluation

The health educator, with help from the coordinator from each church, carried out an observational survey of a random sample of families who had been given smoke detectors. Each detector was checked to verify that it was working.

The health educator and church coordinators also conducted a telephone survey, during which the person who had received the smoke detector was asked to put down the phone and push the test button on the detector to make sure it was still working.

At the end of the grant period, 73 percent of the 324 families who received smoke detectors through the church programs had working smoke detectors.

Coalition Partners in Prevention

The fire marshal was very helpful in providing local fire data for the grant application. Ace Hardware sold smoke detectors to the health department for only \$5.80 each. Several health department staff members who had not been involved in the initial project became coordinators for similar programs or recruited additional coordinators in their own or other churches. Fire department officials and staff answered questions, provided data and advice, and installed some of the smoke detectors.

Sustaining the Program

Although the county health department was unable to continue to give away free smoke detectors after the grant ended, several community service groups have expressed an interest in replicating the project or donating small numbers of smoke detectors to church programs. Some of these groups have expressed interest in focusing on families with young children. There now exists a well-established system for identifying families and installing a working smoke detector in their homes as funds become available.

As a next step, health department staff hope to target mobile homes in the area.

Adapting the Program to Community Needs

Churches are a strong community resource too rarely called on in campaigns to prevent injury and violence. Church leaders and members may well be able to reach families at risk for any number of unintentional and violent injuries who do not regularly make use of preventive health services.

It may be productive to think about other respected community groups who might be able to do similar projects, such as Boy Scout and Girl Scout troops and fire departments. Getting youth involved in installing smoke detectors is an exciting way to meet two prevention challenges at the same time, by promoting youth leadership development while you protect communities from fire.

Smoke detector installation programs are particularly appealing to community groups and local businesses because of the tangible results possible (i.e., a specific number of families protected from fires) and the low cost of the safety supplies involved. Smoke detector messages also are relatively easy to understand and brief, thus making short, free media messages more possible.

To replicate this program, two essentials are necessary: a community health department or other organization willing to involve the target audience in planning for the project, and flexibility about the specific way the project will be carried out.

Resources Needed

Staffing Requirements

The health educator worked approximately 20 hours per week on the project throughout the grant period; many of these work hours were on evenings and weekends. The health educator gave each of the church coordinators a packet of information on fire prevention, and provided initial informal training for each coordinator individually, usually during evening hours.

Fiscal Requirements

The project funded half of the health educator's salary. The North Carolina Health Department's Injury Prevention Program awarded a \$3,600 grant to the project, and the county provided \$750. Smoke detectors and other materials and supplies cost \$4,345; support from the business community enabled the project to purchase supplies at reduced cost.

Lessons Learned

Keep the Sign-Up Simple

It was important to balance the desire to obtain at least some information about the families receiving the smoke detectors with the need to make the sign-up process easy, quick, and noninvasive. After initial feedback, the short sign-up form was reworked to be much easier to read and to remove a question interpreted by some families as requiring information on family income. In the final version of the form, all questions could be answered *yes* or *no*.

To further simplify the process of getting a smoke detector, the youth group at one church filled out forms for anyone who wanted help. Through positive word of mouth, people discovered how easy it was to sign up for a smoke detector, and church coordinators feel this approach greatly increased the number of participants.

Figure Out Which Steps Need a Coalition and Which Don't

Although the health educator had envisioned a three-church event to kick off the smoke detector campaign, she found that all three churches were very focused on working with their own members and were not interested in participating in a broader community event.

Initially, local fire departments had volunteered to install the smoke detectors, but there were relatively few requests for their assistance. (Unfavorable media coverage about a fire fighter arrested for arson caused some people to feel uncomfortable about having a fire fighter in their home.) Many families

appeared to be more comfortable having someone from their own church help to install the detector.

Coordination of Community Projects Can Be Time-Intensive

Virtually all of the guidance, problem solving, and oversight by the health educator had to be provided to the churches in the evenings or on weekends, since most of the participating church members worked full-time.

Although the health educator had hoped to do more training and problem solving with the churches as a group, she found that each project had unique needs and interests and that she needed to work with each church individually. The health coordinator went to the churches or members' homes for all meetings, instead of asking the church coordinators to come to the health department.

Storage of Smoke Detectors Can Be a Problem

Storing large numbers of smoke detectors in a small county health department facility was a major problem. The health educator had to find storage space for them throughout the building.

Products/Publications Developed/Used

Hand-held fans imprinted with the message:
"Smoke Detectors: Don't Stay Home Without One."

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Case Study

Children in Double Jeopardy: Integrating Fire Prevention into a Home Lead Screening Program in Rhode Island

- Lead Agency:** Injury Prevention Program and the Division of Family Health, Rhode Island Health Department
- Start/End Dates:** 1991–Ongoing
- Target Population:** Low-income families at high risk for residential house fires in the region of Providence, Rhode Island.
- Audience Reached:** More than 3,000 households in 1991 and 1992. Almost 900 smoke detectors were installed and 300 batteries replaced.

Program Description

Objective

- Inspect 2,000 residences each summer in neighborhoods at high risk for house fires, and install smoke detectors and batteries as needed.

Program Components

Staff from Rhode Island's Injury Prevention Program and the Division of Family Health expanded an existing lead screening program to include a burn prevention component. The Neighborhood Safety Screening Program provides door-to-door assessments for homes where young children are at high risk for lead poisoning and residential fire injuries and fatalities.

Identify High-Risk Neighborhoods

In 1989, the Division of Family Health convened the Child Loss Committee (a child fatality review committee), a group of physicians charged with studying the causes and contributing factors resulting in the death of children under 5 years of age in Rhode Island. During the course of the study, the committee reviewed 20 years' data on childhood deaths in the state.

Using data from the Child Loss Committee, health department staff found that more than half of Rhode Island house fire deaths occurred in Providence. African American children were at eight times higher risk (64 percent of all deaths) than other children, and 81 percent of the fire deaths occurred in low-income census tracts.

Health department staff also found that the risks for lead poisoning were remarkably similar to the risks for house fires. Data on fire deaths were matched with lead screening areas. All of the neighborhoods where the fatal fires occurred had previously been visited by lead screeners. Forty-five per-

cent of the homes where deaths occurred had been investigated for lead hazards prior to the fire, and few of the houses that burned had working smoke detectors.

Multicultural, Multilingual Teams Provide Door-to-Door Assessments and Install Smoke Detectors

Four teams of five members each, chosen from African American, Hispanic, Cambodian, Hmong, Laotian, Vietnamese, Portuguese, and Caucasian communities, were trained to: (1) provide in-home fingerstick blood tests for lead poisoning, (2) survey homes for working and properly placed smoke detectors, and (3) install detectors and/or batteries as needed. Teams were also trained in cultural competence, child abuse detection, and data collection.

Trained teams went door-to-door in targeted neighborhoods. Team members explained the lead poisoning and burn prevention program to residents, completed data and permission forms, installed detectors or batteries as needed, and tested eligible children for blood lead levels.

Team members did not leave smoke detectors at homes if they were unable to install them. Sometimes, especially when language barriers made communication difficult with the parents, team members asked the children who spoke English to remind their parents about changing smoke detector batteries when resetting their clocks in the spring and fall.

Possible MCH Roles

The smoke detector installation program was built on an existing home visiting/lead poisoning prevention program funded by the maternal and child health (MCH) agency. MCH programs that provide home visiting services might consider adding a similar fire prevention component to their programs. MCH programs can collect and analyze data to document the need for such programs and identify priority neighborhoods. Immunization services might also be added to the prevention services provided. In states where MCH departments provide direct services, families could be referred for home visits by

prenatal, WIC, well-child, and primary care programs.

Evaluation

Home visitors document the number of homes visited, the number of homes with working smoke detectors, and the number of detectors installed and batteries replaced.

The project is adding a follow-up visit protocol to their summer project in 1994, with newly available funding from the Centers for Disease Control and Prevention (CDC). Homes previously visited will be revisited to check for working smoke detectors, replace batteries as needed, and assess the rate of effective smoke detector use by families in the program.

From 1991 through 1992, more than 3,000 households were visited. Almost 900 detectors were installed, and 300 batteries replaced.

Coalition Partners in Prevention

The Providence Fire Department provided technical assistance and trained home visitors in fire safety and detector installation. The Department of Children, Youth, and Families provided child abuse identification and referral training. The Rhode Island SAFE KIDS Coalition provided an initial set of smoke detectors, and several community-based agencies helped recruit staff.

Sustaining the Program

The program is expected to continue indefinitely. A follow-up visit component (funded by CDC), and, in some neighborhoods, an immunization component, have been added to the program.

Adapting the Program to Community Needs

For MCH programs already involved in lead poisoning prevention in the home (or in other types of home visiting), the burn prevention portion of the

Rhode Island project could be replicated as an added component rather than as an entirely new project. Effective multiservice, culturally competent home visiting in low-income neighborhoods requires identification of priority neighborhoods (based on the data), thorough training and oversight of home visiting teams, coordination of necessary supplies, and evaluation of the program.

Resources Needed

Staffing Requirements

Each summer, the health department hires a full-time program coordinator for three months. The four multicultural, multilingual home visiting teams (comprising a total of 20 members drawn from African American, Hispanic, Cambodian, Hmong, Laotian, Vietnamese, Portuguese, and Caucasian communities) received four days of training and information on a range of subjects: lead poisoning, screening, treatment, and prevention; childhood injury prevention with an emphasis on the epidemiology and prevention of residential fire injuries; cultural competence; child abuse identification and referral; community resources and referrals; and program operating procedures. Training also included skills-building in installing detectors, drawing blood, communicating, motivating, and developing leadership. One member of each team was designated team leader.

These multicultural teams also required cultural competence training; much of this training consisted of team members sharing information about their cultures, traditions, and perspectives. Potluck meals were an informal and effective way to introduce different norms and build respect for different cultures.

The health department emphasizes the need to deal constructively and respectfully with all concerns raised by the families being visited. Role playing was a useful way to prepare to work with diverse cultures and deal constructively with difficult situations on the job.

Health department staff described specific cultural practices or beliefs to help educate home visi-

tors about possible feelings and attitudes among the families they would be visiting. Many Southeast Asian families, for example, believe it is offensive for anyone to touch the head of a male because it may cause spirits to leave the body.

Staff were also sensitized to different cultural norms concerning child supervision. Different child rearing practices complicate the task of identifying child abuse. For instance, in some Southeast Asian cultures, children ages 5–7 years take on more responsibility for younger siblings than is common among Caucasians in the United States.

Fiscal Requirements

The program was built on the framework of an existing MCH-funded lead poisoning screening program. Additional costs included salaries for home visiting teams (approximately \$20,000 each summer); the salary of the director (full time for three months); and expenses for smoke detectors, batteries, and installation equipment (\$2,500). The Rhode Island SAFE KIDS Coalition donated the initial supply of First Alert® smoke detectors.

Lessons Learned

Focus on the Neighborhoods with the Greatest Need

It is very important to use data to select target neighborhoods. Staff achieved much higher rates of smoke detector installation when they focused on neighborhoods that showed the highest need, rather than relying on anecdotal information, instinct, or community requests.

Begin the Program with Community Outreach and Information Collection

Project staff walked through each neighborhood where they planned to do extensive home visiting. They stopped people on the street and asked them about the neighborhood. The home visitors also talked about what they hoped to do in the community. In the process, the home visitors obtained infor-

mation that was useful in tailoring their program to the community and, in turn, gained community allies for the project.

Inform and Involve the Local Police

Before beginning to work in a neighborhood, home visiting teams met with local police to let the police know what they would be doing. When residents occasionally called the police with concerns about the strangers in their neighborhood, the police were able to inform citizens about the home visiting program. Residents called the police several times, worried that the drills carried by team members might be guns. In another instance, residents called the police because they were concerned that unknown women might be trying to kidnap babies from the neighborhood.

Use Photo Identification Badges and Team Hats to Help Open Doors

Caps worn by every team member increased the teams' visibility in the neighborhood. The photo identification badges seemed to help residents feel more comfortable about opening their doors. Very few people refused entry to the teams.

Obtain Feedback from Home Visiting Team Members To Improve Performance and Increase Smoke Detector Installation Rates

It was valuable to investigate reasons why smoke detector installations were more successful in some neighborhoods than others. Team members were asked to document each instance in which they were unable to enter a home to install a smoke detector. Project staff learned that if team members were ill at ease in a certain neighborhood, they were more likely to refrain from going into a tenement, or were more likely to knock once and leave, rather than to try again. By talking through strategies to deal with the uneasiness of home visitors, project staff were usually able to increase installation rates in that neighborhood.

Providing weekly feedback to teams on the number of lead poisoning tests they have completed and

the number of smoke detectors they have installed led to increases in both. Feedback also has created opportunities for discussion about problems and barriers to success.

Double Check Translated Materials to Guard Against Inadvertent Changes in Meaning

The project arranged for many of the materials to be translated by local hospital volunteers, and paid for other materials to be translated. Project staff were chagrined to learn that a brochure which had been translated into a southeast Asian language and distributed to families stated that, in case of fire, residents should first call the fire department and then leave their home, instead of instructing them to leave the home immediately (*before* calling the fire department).

Training on a Wide Range of Topics Is Essential for Members of Home Visiting Teams

To provide effective multiple services, home visiting teams needed to be trained in cultural competence, data collection, detection of child abuse, smoke detector installation, and administration of lead poisoning tests.

Identify Issues of Cultural Competence within the Home Visiting Teams

Home visiting teams worked 13 weeks in hot weather in very poor neighborhoods. Team members often got cranky, and tempers flared. The project director found that it was helpful to have a potluck dinner about halfway through the summer to give team members a chance to relax together and talk through dynamics among home visiting staff.

After teams had been making home visits together, additional issues surfaced with respect to understanding and respecting the diverse cultures represented by different team members. For example, what some team members considered sexual harassment was treated as just good fun by other team members from different cultural backgrounds. The project director worked to identify culture, race, and gender issues as early as possible in order to deal

with them directly and avoid dynamics that would impede the work of the home visiting teams.

Transporting Home Visitors and Their Equipment Is Problematic

The project did not have vehicles for use, and relied on team members' cars. This caused problems since team members needed to bring ladders and other equipment with them. Vehicle breakdowns occasionally delayed entire teams in conducting their visits.

Mark Smoke Detectors with the Health Department's Name to Simplify Follow-Up and Data Collection

Families sometimes did not remember whether their smoke detector had been installed as part of the home visiting project. In addition, homes visited the previous summer were often occupied by new families. These factors made it difficult to obtain good data on the program's effectiveness. A sticker listing the health department's name and phone number was placed on each smoke detector when installed, giving families a way to get answers to any subsequent questions.

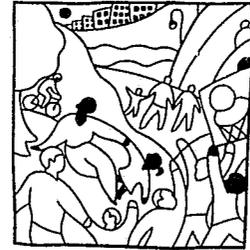
Products/Publications Developed/Used

Integrating Diverse Risk Reduction Activities in a Community.

Outreach Program: Fire and Lead, a 15-page handout describing the lead poisoning/smoke detector home visiting program.

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Preventing Unintentional Injuries

Home Safety

An Overview

More than 5.2 Million Children Suffer Nonfatal Injuries in the Home Each Year¹⁻⁶

In 1991, 3,522 children ages birth to 14 years died as the result of drowning, fires and burns, unintentional use of firearms, poisoning, falls, choking, and suffocation.⁷ A majority of these injuries occurred in the home. Fire and burns are the leading cause of these fatal injuries. In 1991 alone, 1,122 children ages birth to 14 years died from fire and burn injuries.⁷ An additional 18,000 children are hospitalized and 295,000 receive medical treatment for burns each year.¹ Home injury

deaths are also caused by falls, poisoning, choking, suffocation, electrocution, unintentional use of firearms, and drownings.¹⁻⁶ Falls are the leading cause of nonfatal injury, followed by poisoning, and fire and burns.¹⁻⁶

Children under Age 5 Are at Greatest Risk

Children ages birth to 4 years are at greatest risk for home injuries—among children under 5 years of age who die from unintentional injuries each year, more than half die from injuries sustained in the home.¹⁻⁶ Fire and burns are a leading threat to these children: 740 children ages birth to 4 years die from these burns⁷ and more than 100,000 are treated in emer-

“... Among children under 5 years of age who die from unintentional injuries each year, more than half die from injuries sustained in the home.”¹⁻⁶

agency departments.² In 1991, 76 children died from poisoning,⁷ and more than 1 million poisoning incidents were reported to poison control centers throughout the United States.³ Drowning claimed the lives of 687 children in this age group;⁷ many drowned in their own homes or in the homes of friends, neighbors, and family members.

Older Cribs Are a Serious Hazard

Nearly 600 children ages birth to 4 years died from choking and suffocation in 1991.⁷ Cribs are a leading cause of suffocation and strangulation for young children in the home. More than 13,000 children receive hospital treatment for crib-related injuries each year.⁸ In the last decade, 575 children have died from crib-related injuries.⁸ Older, secondhand, or borrowed cribs are the leading cause of these deaths and injuries—many have corner posts or other hazardous features that present suffocation and strangulation risks.

Policy and Prevention

Maternal and child health (MCH) settings have not been fully recognized or utilized as opportunities to provide home safety information and devices to parents. Although many well-child clinics and private pediatricians use anticipatory guidance (see Glossary) protocols on injury prevention, many providers hand out only written

information instead of discussing key issues with parents. Many health professionals particularly fail to discuss with parents the dangers that a gun in the home presents to young children and adolescents.

Some health departments have begun to use home visiting programs to educate parents and caregivers about home safety, to help parents check their homes for hazards, and to install safety devices or make other changes in the environment. Health departments can coordinate with other agencies and organizations to integrate home safety into protocols related to lead poisoning, weatherization, and other home visiting programs.

(For more information on injuries in the home and their prevention, please see the Firearms, Fires and Burns, Drowning, and Family Violence sections of this notebook.)

Notes

¹McLoughlin E., and McGuire, A. (1990). The causes, cost and prevention of childhood burn injuries. *American Journal of Diseases of Children* 144:577-683.

²Wilson, M. H., Baker, S. P., Teret, S. P., Shock, S., and Garbarino, J. (1991). *Saving Children: A Guide to Injury Prevention*. New York: Oxford University Press.

³National Data Collection System. (1992). *Annual Report of the American Association of Poison Control Centers*. (Reported by Rose Anne Soloway).

⁴U.S. Consumer Product Safety Commission. (1989). *Analysis of Choking-Related Hazards Associated with Children's Products*. Washington, DC: U.S. Consumer Product Safety Commission.

⁵Christoffel, T. and Christoffel, K. K. (1987). Nonpowder firearm injuries: Whose job is it to protect children? *American Journal of Public Health* 77(6):735-738.

⁶Secretary of Health and Human Services. *Childhood Injury in the United States: A Report to Congress*. (1989). Atlanta, GA: U.S. Department of Health and Human Services, Public Health Service, Centers for Disease Control and Prevention.

⁷National Center for Health Statistics. (1994). Unpublished data prepared by L. A. Fingerhut.

⁸The Danny Foundation. (n.d.). *The Great American Baby Crib Roundup: A "How To" Booklet*. Alamo, CA: The Danny Foundation.

Promising MCH Settings

There are many ways to incorporate home safety into existing MCH services and programs. Following are some of the MCH programs that could play a part in preventing injuries in the home.

Adolescent Pregnancy and Parenting Programs*

Child Health Clinics

Children with Special Health Needs (CSHN) Service Sites*

Community and Migrant Health Centers*

EMS and EMSC Programs*

Health Fairs

Home Visiting Programs*

Immunization Campaigns and Clinics

Outreach Vans

Prenatal Clinics

Primary Care Clinics

Substance Abuse Prevention/Treatment Programs

WIC Clinics and Classes*

Women's Health Programs*

Incorporating home injury prevention into MCH services doesn't have to be difficult. First steps can be as simple as linking up families who need smoke detectors with community programs to install detectors, or handing out brochures on what makes a crib safe. But don't stop there!

If injuries in the home are a problem in your area, you may want to bring together interested staff to brainstorm about additional ways to address the problem in your setting. Here are some questions you may want to ask:

- Do we need to collect more or different types of information from families if we are going to help prevent injuries in the home?
- What kinds of resources, information or safety supplies do families need to prevent these injuries?
- Can we provide information, supplies, or coupons for supplies (such as smoke detectors and batteries, electrical outlet covers)?
- Can we educate families individually or in group settings about preventing injuries in the home?
- Can we assess, treat, or refer families for this type of injury?

Training materials, manuals, and protocols already exist for many types of injuries. Check

with your state health department, regional MCH office, or the Children's Safety Network for more information on available prevention materials.

As you plan home safety activities, think about possible changes in the following areas to strengthen your prevention efforts:

Medical records

Other data collection

Protocols for assessment, treatment, and referrals

Protocols for anticipatory guidance*

Educational materials available in waiting rooms in all settings

Educational materials to be handed to families with discussion

Educational forums

Referrals

Family follow-up

Training for staff

Linkage with other community resources

*See Glossary

Priority Partners in Prevention

Home Safety

Local and State Government Agencies and Programs

City and county administrators; state fire marshal's office; lead screening programs; weatherization programs; home visiting programs; child welfare agencies (especially those with home visiting programs); Healthy Start grantees;* Community Integrated Service Systems (CISS) grantees;* state U.S. Consumer Product Safety Commission designees; local housing authorities; and agencies that set and enforce building codes.

Local and State Legislators and Other Elected Officials

City and county councils; mayors and their staff; the governor and staff; the state attorney general and staff; and state representatives and senators on relevant committees.

Health Care Providers

Pediatricians; family physicians; school-based clinic staff; nurses; trauma and emergency room physicians; emergency medical services for children and emergency medical services personnel; other health professionals; local hospitals and trauma centers; burn units; health maintenance organizations;

rehabilitation facilities; coroners' and medical examiners' offices; local medical societies; and social workers.

Child Care Centers and Family Child Care Homes

Administrators; staff; licensing and regulatory agencies; and Head Start.

Media

Editorial boards; Op-Ed page editors; city desk reporters; home section staff; consumer reporters.

Business Community

Hardware and home improvement stores; children's toy and furniture retailers; supermarkets and grocery stores; realtors' associations; realty boards; waste management companies; insurance companies; thrift stores; and chambers of commerce.

Civic Groups and Service Clubs

Kiwanis Clubs; League of Women Voters; Junior League; Rotary Clubs; Girl Scouts and Boy Scouts; Boys and Girls Clubs; and 4-H clubs.

Fire Departments, Fire Fighters, and Fire Fighters' Unions

Nonprofit Organizations

Local and state SAFE KIDS Coalitions; tenant organizations; neighborhood food distribution

programs; neighborhood youth programs and centers; local Red Cross chapters; local and state consumer groups; and English as a Second Language (ESL) classes.

Researchers

Centers for Disease Control and Prevention-funded Injury Control Research Centers; state and local universities; and community colleges.

Religious Communities and Places of Worship

Foundations

Local and National Celebrities

Survivors of Injuries in the Home and Their Families

*See Glossary

Maternal and child health and other health department staff are in a unique position to prevent unintentional and violent injuries. For assistance in these efforts, please call or write Children's Safety Network, NCEMCH, 2000 15th Street North, Suite 701, Arlington, VA 22201-2617. Phone (703) 524-7802 / Fax (703) 524-9335.

Case Study

SAFEHOME: Reducing Unintentional Childhood Injuries in Illinois Homes

Lead Agency: McHenry County Health Department, Illinois

Start/End Dates: January 1991–Ongoing

Target Population: Families who have children ages 5 and under and who are clients of prenatal and WIC programs.

Audience Reached: Each year, 100 families receive a home visit, with a three-month follow-up.

Program Description

Objective

- Reduce the number of unintentional childhood injuries occurring in the home.

Program Components

Identify Families At Risk for Home Injuries

The McHenry County Health Department enrolls approximately 50 new families each year in SAFEHOME through the department's prenatal and WIC programs. Families may enroll if they have children 5 years of age or younger and are interested in having a home safety visit.

Conduct Home Visits

A health educator visits clients' homes and talks with parents about how to make their homes safer for infants, toddlers, and preschoolers. After review-

ing with the family a checklist of about 40 items (including kitchen safety, bathroom safety, a child-safe play area, safety supplies, and safe practices), the health educator walks through the house with the parent(s) to point out potential hazards and to recommend solutions. Whenever possible, the health educator installs the needed safety devices at this time. A translator accompanies the health educator on home visits to Spanish-speaking families.

Distribute Free Safety Supplies

Parents receive free safety supplies as needed, including safety gates, smoke detectors, syrup of ipecac, electrical outlet plugs, cabinet and drawer latches, and phone stickers listing emergency numbers. Educational materials and referrals to child safety seat loan programs are also provided.

Do Follow-Up Home Visits

The health educator makes a follow-up visit to each home three months after the initial visit. During this follow-up visit, she checks to ensure that any hazardous conditions noted on the first visit have

been corrected, helps families with problem solving if they have not been able to make their homes safer, and answers any questions about home safety.

Summary of MCH Role

Families are recruited to participate in the health department's SAFEHOME program through MCH prenatal and WIC clinics.

Evaluation

The county health department has begun a statistical analysis of data collected during the home visits (such as the percentage of working smoke detectors found at the first visit and the follow-up visit).

SAFEHOME staff also hope to survey home visitation consumers concerning how often they have taken their children to the emergency room for treatment of injuries and the types of injuries treated. These findings will be compared to the experience of a control group of nonparticipating families.

The county health department is currently collecting emergency department data from all hospitals in the area to document the continuing need for the SAFEHOME program.

Coalition Partners in Prevention

The county health department is helping to establish a local chapter of the Illinois SAFE KIDS Coalition within the county to enable SAFEHOME to expand its program and to promote additional injury prevention efforts.

Sustaining the Program

The McHenry County Health Department expects to continue the SAFEHOME program.

Adapting the Program to Community Needs

Many health departments either direct, fund, or work closely with home visiting programs that could

incorporate a home safety component into their visits. Programs in communities or neighborhoods with a significant number of non-English speaking families could reduce costs and improve the effectiveness of each visit by hiring bilingual health educators instead of sending both a health educator and a translator on visits. Adding home safety components to existing programs that focus on other issues, rather than starting a separate program, could also reduce costs.

Resources Needed

Staffing Requirements

The SAFEHOME program requires one half-time health educator to make 100 home visits per year and to administer the program. The program requires one or more translators or bilingual health educators, depending on the population being served. The health educator and translator need to understand the greatest residential injury risks for their area, the mechanics of using and installing safety devices, and effective methods of communicating with families who have young children and motivating these families to implement safety measures.

Fiscal Requirements

Safety supplies cost approximately \$600 per year for 100 families, half of which is funded through donations. The half-time health educator's salary is also budgeted. SAFEHOME is funded through a preventive health grant from the Illinois Department of Public Health.

Lessons Learned

Establishing a Stream of Referrals

Initially, SAFEHOME was not able to identify sufficient numbers of families to participate in the program; now, the staff is overwhelmed by the demand. The difference appears to be an energetic, motivated health educator who has developed a core group of prenatal nurses and WIC nutritionists who understand the value of the program and are eager to

discuss it with mothers. These nurses and nutritionists have been particularly helpful in promoting the program among their patients. A new statewide network, Healthy Moms, Healthy Kids, links low-income families with services and has been a valuable source of referrals.

Working with Translators on Home Visits

When making home visits to Spanish-speaking households, the project uses a team approach (an English-speaking health educator and Spanish-speaking translator); this approach helps to overcome the language barrier, but presents its own challenges. In many cases, far fewer questions are asked during translated home visits, and this may well be a barrier to the mother's full understanding of either the importance of the safety device or the mechanics of installing or using it.

Since Spanish-speaking mothers tend to be more comfortable dealing with the translator in their native language (rather than with the health educator in English), it is critical that the translator know as much as possible about injury prevention, solutions to common problems in low-income households, and the key messages that need to be repeated throughout the visit. Programs in communities or neighborhoods with a significant number of non-English speaking families should consider hiring bilingual health educators.

Follow-Up Home Visits: Better Sooner than Later

When the SAFEHOME program began, families were revisited six months after the initial home visit. Staff recently decided that a six-month interval may be too long to gain maximum use of the safety supplies. If mothers have questions about how to install or use a certain device, they may choose to wait until the health educator returns instead of calling with a question. An earlier visit may also enhance the learning that took place at the first visit. Consequently, the health educator for SAFEHOME has reduced the interval between the first and follow-up visit from six months to three months.

Products/Publications Developed/Used

SAFEHOME, a module developed by the Statewide Comprehensive Injury Prevention Program (SCIPP) at the Massachusetts Department of Health, was used as a model for the Illinois SAFEHOME program and materials. A SAFEHOME KIT is available from Janet Doherty or Diane Butkus, Injury Prevention and Control Program, Massachusetts Department of Public Health, 150 Tremont Street, Third Floor, Boston, MA 02111. Cost: \$36.00. Phone (617) 727-1246.

Contact Person

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2200 North Seminary
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Case Study

California's Great American Baby Crib Roundup

Lead Agency: The Danny Foundation in Alamo, California

Start/End Dates: August 1992–Ongoing

Target Population: Parents, expectant parents, grandparents, and child care providers.

Audience Reached: 50,000 people in San Ramon Valley, California.

Program Description

Objectives

- Educate parents, expectant parents, grandparents, and child care providers about the dangers of unsafe cribs.
- Collect, from the local community, and dispose of 50 percent of all hazardous cribs during a one-week period.
- Increase public awareness of crib safety and crib injuries.
- Identify which of the donated cribs are safe and distribute them to needy families.
- Destroy the unsafe cribs during an environmentally safe event that attracts media attention, thus drawing more attention to the problem of unsafe cribs.
- Develop a "how to" booklet based on the results of the campaign to aid other communities in replicating the project.

Program Components

The Danny Foundation is a nonprofit corporation that advocates crib and nursery equipment safety. The foundation's efforts focus on the role of baby products in preventing infant injuries and deaths. The Crib Roundup, a hands-on project to remove unsafe cribs from communities, also serves as an educational vehicle for the community.

Determine the Willingness of Community Members To Turn in Unsafe Cribs

This specific approach was undertaken after Danny Foundation volunteers contacted 900 households by phone in one target community and determined that seven of every 10 respondents (69 percent) would turn in cribs to the Danny Foundation without compensation if the cribs were found to be dangerous.

Collect Used Cribs

During a one-week period designated as Roundup Week, local fire stations served as drop-off

areas for the used cribs. Participants could either call for pickup or could transport the cribs to the stations. Banners at each fire station provided important publicity and let people know where to bring the cribs.

Destroy Unsafe Cribs

On the final day of the Roundup, all of the cribs were transported from the fire stations to a central public location that was very visible. Several of the old cribs were kept fully assembled to demonstrate the various hazards to the public.

Public interest was stimulated by the volunteers, promotional items, and the actual cribs. The volunteers distributed posters, brochures, balloons, and other giveaway items, and all volunteers were able to answer questions for participants and spectators. The wood, metal, and plastic pieces from the cribs were separated throughout the day; in mid-afternoon, these pieces were crushed in separate compactors which were as visible and audible as possible.

Educate Community Members about the Risks Associated with Certain Cribs

Radio, television, and newspaper coverage was a critical part of the entire program. To obtain media coverage, the Danny Foundation sent out a press release and made follow-up phone calls to media representatives. Volunteers were available for interviews. The project developed a public service announcement for the radio (in English). A brochure asking for crib donations was translated into a one-page flyer in both Spanish and Mandarin.

Distribute Safe Cribs to Families in Need

At the Roundup, participants were told whether the cribs they had donated were safe. Originally, the organizers had planned to distribute any safe cribs collected to low-income families; however, only 10 of the 100 cribs collected were determined to be safe, so the organizers did not distribute them.

Possible MCH Roles

Neither the state nor the county health department participated in this particular crib roundup.

Public health agencies, in addition to organizing or sponsoring a crib roundup, can disseminate information about crib roundups and crib safety at WIC, prenatal, and well-child clinics. Cribs can be checked for safety during home visits. Crib safety can also be incorporated into health department programs for pregnant or parenting teens. Public health programs can help identify families who need safe cribs.

Evaluation

Following the event, the committee held a meeting to evaluate the program, the objectives, the effectiveness of publicity, the mechanics of the actual crib roundup, and the feasibility of duplicating the event in the future. Participants were asked to complete an evaluation form, and the organizers asked those who donated cribs how they had heard about the roundup; organizers also tracked media reporting of the event.

More than 100 cribs were rounded up and destroyed in compactors for recycling. Media coverage of the event was excellent: three San Francisco television stations and one radio station covered the roundup.

Only 10 (10 percent) of the cribs collected were determined to be safe. The organizers did not distribute cribs to families in need (as originally hoped).

Most of the crib donors said they had heard about the roundup by word-of-mouth prior to the event. Some had seen flyers and other advertisements in grocery stores, and a few had read about the event in a local newspaper.

Coalition Partners in Prevention

The Great American Crib Roundup committee included the San Ramon Valley Fire Protection District, San Ramon Valley Kiwanis Club, Alamo Rotary, and Valley Waste Management, Inc.

Sustaining the Program

The Great American Crib Roundup has become an annual event in San Ramon. Numerous other cities around the country have implemented crib

roundups based on the Danny Foundation model. Several coalitions that have completed roundup events are now also working to introduce and pass state legislation regulating crib safety.

Adapting the Program to Community Needs

Numerous other counties across the country have replicated the crib roundup program. The project has developed a "how to" booklet to serve as a guide for roundups in communities throughout the country.

Resources Needed

Staffing Requirements

It takes a minimum of six months' preparation to hold a roundup; most of this time involves rounding up cribs from local thrift stores and other community locations. This preparation is essential so that project volunteers can begin the actual roundup event with 50 cribs already assembled for passersby to see.

The project paid a part-time event coordinator for six months to direct, develop, and implement the crib roundup. The coordinator worked approximately 10 hours per week for the first 3 months, 20 hours per week for the fourth and fifth months, and 30 hours per week for the sixth month (including follow-up). The event coordinator must be experienced in special events, in fundraising, and in writing letters of intent and small proposals for event funding.

At least 30 volunteers are needed on the day of the roundup. Volunteers are taught the purpose and goals of the crib roundup program and learn to distinguish between safe and unsafe cribs. Training requires only one-half hour.

Fiscal Requirements

The budget for the Great American Baby Crib Roundup was \$13,500. The Danny Foundation

assumed more than two-thirds of the costs. Additional funds were requested and received from the community, and in-kind donations were requested from printers, waste disposal services, and other businesses.

Lessons Learned

Cast Your Coalition Net Strategically

The roundup committee should include members of the community who will not only help carry out the tasks of the crib roundup, but will also link the project to important resources such as printers, media, supermarket chains, etc. The committee should include one representative from each of the following: fire department, service clubs and other organizations, waste management association, local supermarket, school district, and local government.

The Danny Foundation is planning to involve churches in future roundups. Many churches operate child care centers and use old cribs donated by parishioners. In addition, churches often have newsletters and networks that share information about events and issues.

Videotaping the Event Provides Both a Permanent Record and a Persuasive Tool

Videotaping the event and taking still photographs are both useful tools for convincing other groups to get involved the following year, and for stimulating new communities to launch their own event.

Timing Is Everything

It is important to check with the local chamber of commerce, schools, and government agencies to be sure that no other major events have been scheduled during the time period chosen for the concluding Roundup event.

Tips for Maximizing Media Coverage

Radio, television, and newspaper coverage is a critical part of the program. Following press releases, it is important to make follow-up calls during

roundup week and on the morning of the final event. The press places a high value on the final count of cribs destroyed.

“Annual Events” May Take Longer Than One Year to Take Hold

According to the organizers, it takes two years to launch a crib roundup program. The roundup was much more successful during the second year than the first. Media also doubled the coverage for the second year's event.

Products/Publications Developed/Used

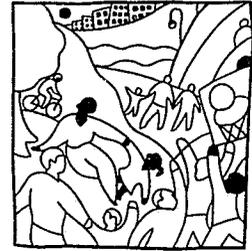
The Great American Baby Crib Roundup: A “How To” Booklet, a guide for roundups in communities throughout the country. Includes details on the types of advance planning needed, publicity pointers, and details on the mechanics of a successful crib roundup. Appendices include sample program objectives, budget, timeline, logos, flyers, public service announcements, press releases, and agendas. Available at no charge from the Danny Foundation.

Infant Crib Safety Act, model state legislation making it illegal to sell unsafe cribs. To date, no state has passed such legislation; however, in March 1994, legislation was introduced in California. Available from Danny Foundation, or from Children's Safety Network at NCEMCH, 2000 15th Street North, Suite 701, Arlington, VA 22201-2617. (703) 524-7802.

Is Your Crib Safe? (brochure highlighting the importance of crib safety and listing potential crib hazards).

Contact Person

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Preventing Unintentional Injuries

Motor Vehicles

"In 1992 alone, safety belts saved 5,226 lives and prevented 136,000 moderate-to-critical injuries."

An Overview

Adolescents Are at Great Risk

In 1991, 5,077 children and adolescents ages birth to 19 years were killed while driving or riding in cars, trucks, or motorcycles.¹ Of those killed, 72 percent were between 15 and 19 years of age.¹

Although safety belt use in general has increased dramatically from 11 percent in 1982² to 66 percent in 1993,³ adolescents continue to wear safety belts less than older drivers. In a nationwide survey of students, 41 percent reported that they wore a safety belt the last time they rode in a vehicle.⁴ Less than 22 per-

cent of the students surveyed reported that most of their friends usually wear a safety belt.⁴

Alcohol use is a major contributor to motor vehicle-related deaths among adolescents. In 1991, 20 percent of drivers 16–20 years of age who were killed in traffic crashes were legally intoxicated.⁵ One study by the Centers for Disease Control and Prevention indicates that as many as one-third of adolescents involved in fatal crashes may be legally intoxicated.⁶

Young Children Are also At Risk

Children 4 years of age or younger account for more than

10 percent (534) of the motor vehicle occupants ages birth to 19 years who were killed in 1991.³ The National Highway Traffic Safety Administration (NHTSA) survey of trends in child safety seat use in 19 major cities reports that use has increased dramatically from 22 percent in 1981 to 84 percent in 1990.⁷ In many localities, however, usage remains much lower. The NHTSA survey also indicates that child safety seats are misused at least 30 percent of the time; however, other research suggests that as many as 80 to 92 percent of child safety seats are misused in some way.⁷

Low-income families are less likely than others to use child safety seats. These families are also less likely to use child safety seats correctly.⁸

Safety Belts, Safety Seats Save Lives

In 1992 alone, safety belts saved 5,226 lives and prevented 136,000 moderate-to-critical injuries.³ Belt use in states with a safety belt law is nearly double that in states with no law.³ Unfortunately, these laws are not always well enforced and many people still choose not to wear a safety belt. In 1992, an additional 8,913 deaths and 232,000 moderate-to-critical injuries could have been prevented if every front seat occupant had buckled up.³

In 1992, 268 children under 5 years of age were saved as the result of using child safety

restraints.³ If child safety seats had been used 100 percent of the time, approximately 455 deaths and 50,000 serious injuries to children under 5 years of age could have been prevented.³ All 50 states and the District of Columbia have child passenger safety laws on the books; however, these laws contain many loopholes, and, like safety belt laws, are not always well enforced.

Policy and Prevention

Strengthening and enforcing child passenger safety laws and safety belt laws will significantly reduce motor vehicle-related injuries among children and adolescents, especially when coupled with improved enforcement of minimum drinking age laws. Collaboration between health departments, state highway safety offices, the governor's highway safety representatives, and others in the traffic safety community to promote motor vehicle safety could be improved in many states.

(For more information on motor vehicle injuries and their prevention, please see the Alcohol section of this notebook.)

Notes

¹National Center for Health Statistics. (1994). Unpublished data prepared by L. A. Fingerhut.

²U.S. Department of Transportation, National Highway Traffic Safety Administration. (1991). *Idea Sampler: Buckle Up America*. Washington, DC: U.S. Department of Transportation, National Highway Traffic Safety Administration.

³U.S. Department of Transportation, National Highway Traffic Safety Administration. (1994). *1994 Occupant Protection Idea Sampler*. Washington, DC: U.S. Department of Transportation, National Highway Traffic Safety Administration.

⁴American School Health Association, Association for the Advancement of Health Education, and Society for Public Health Education, Inc. (1989). *The National Adolescent Health Survey: A Report on the Health of America's Youth*. Oakland, CA: Third Party Publishing Company.

⁵U.S. Department of Transportation, National Highway Traffic Safety Administration. (1992). *1991 Alcohol Fatal Crash Facts*. Washington, DC: U.S. Department of Transportation, National Highway Traffic Safety Administration, National Center for Statistics and Analysis, Research and Development.

⁶Centers for Disease Control and Prevention. (1991). Quarterly table reporting alcohol involvement in fatal motor-vehicle crashes. *Morbidity and Mortality Weekly Report*, 40:24.

⁷U.S. Department of Transportation, National Highway Traffic Safety Administration. (1991). *Child Passenger Safety Resource Manual*. Washington, DC: U.S. Department of Transportation, National Highway Traffic Safety Administration.

⁸U.S. Department of Transportation, National Highway Traffic Safety Administration. (1991). *Strategies to Increase the Use of Child Safety Seats by Low-Income Families: A Report to the Committees on Appropriations, U.S. House of Representatives, U.S. Senate*. Washington, DC: U.S. Department of Transportation, National Highway Traffic Safety Administration.

Promising MCH Settings

There are many ways to incorporate motor vehicle injury prevention into existing MCH services and programs. Following are some of the MCH programs that could play a part in preventing motor vehicle injuries.

Adolescent Health Clinics
Adolescent Pregnancy and Parenting Programs*
School-Based/Linked Health Clinics
Child Health Clinics
Children with Special Health Needs (CSHN) Service Sites*
Community and Migrant Health Centers*
EMS and EMSC Programs*
Family Planning Clinics*
Health Care Services for Homeless Youth*
Health Fairs
Home Visiting Programs*
Immunization Campaigns and Clinics
Outreach Vans
Prenatal Clinics
Primary Care Clinics
Substance Abuse Prevention/Treatment Programs
WIC Clinics and Classes*
Women's Health Programs*

Incorporating motor vehicle injury prevention into MCH services doesn't have to be difficult. First steps can be as simple as asking parents if they use a safety seat for their infants and children every time they ride in their car, or giving adolescents who ride motorcycles coupons for helmets. But don't stop there!

If motor vehicle injuries are a problem in your area, you may want to bring together interested staff to brainstorm about additional ways to address the problem in your setting. Here are some questions you may want to ask:

- Do we need to collect more or different types of information from children, youth, and families if we are going to help prevent motor vehicle injuries?
- What kinds of resources, information or safety supplies do children, youth, and families need to prevent these injuries?
- Can we provide information, supplies, or coupons for supplies (e.g., child safety seats)?
- Can we educate children, youth, and families individually or in group settings about the importance of safety seats and seatbelts and other approaches to motor vehicle injury prevention?
- Can we assess, treat, or refer children and youth for this type of injury?

Training materials, manuals, and protocols already exist for many types of injuries. Check with your state health department, regional MCH office, or the Children's Safety Network for more information on available prevention materials.

As you plan motor vehicle injury prevention activities, think about possible changes in the following areas to strengthen your prevention efforts:

Medical records
Other data collection
Protocols for assessment, treatment, and referrals
Protocols for anticipatory guidance*
Educational materials available in waiting rooms in all settings
Educational materials to be handed to the children and with discussion
Educational forums
Referrals
Children and youth follow-up
Training for staff
Linkage with other community resources

*See Glossary

Priority Partners in Prevention

Motor Vehicle Injury

Local and State Government Agencies and Programs

City and county administrators; Department of Transportation; Office of Highway Safety; the governor's highway safety representative; and Healthy Start grantees.*

Local and State Legislators and Other Elected Officials

City and county councils; mayors and their staff; the governor and staff; the state attorney general and staff; and state representatives and senators on relevant committees.

Law Enforcement Agencies

Police chiefs; sheriffs; police unions; and police training programs.

Schools, Parent-Teacher, and Student Groups and Associations

Teachers, principals, superintendents and their associations; school boards; Students Against Drunk Driving (SADD) and other student organizations; and school health personnel.

Media

Editorial boards; Op-Ed page editors; city desk reporters; consumer reporters; and traffic reporters.

Health Care Providers

Pediatricians; family physicians; school-based clinic staff; nurses; trauma and emergency room physicians; emergency medical services for children and emergency medical services personnel; other health professionals; local hospitals and trauma centers; health maintenance organizations; rehabilitation facilities; coroners' and medical examiners' offices; local medical societies; social workers; the state chapter of the American Academy of Pediatrics (AAP); and AAP Safe Ride Coordinators.

Business Community

Mass merchandisers and other retailers that sell child safety seats; car dealers; car rental companies; automobile service chains; gas stations; insurance companies; and chambers of commerce.

Civic Groups and Service Clubs

Kiwanis Clubs; League of Women Voters; Junior League; Rotary Clubs; Girl Scouts and Boy Scouts; Boys and Girls Clubs; and 4-H clubs.

Nonprofit Organizations

Local and state SAFE KIDS Coalitions; local chapter of the National Association of Women Highway Safety Leaders, Inc.; local Mothers Against Drunk Driving (MADD) chapters; local Red Cross chapters; local American Automobile Association clubs; and local and state consumer groups.

State and Local Child Safety Seat Loan/Rental/Giveaway Programs

National Highway Traffic Safety Administration Regional Offices

Child Care Centers and Family Child Care Homes

Administrators; staff; licensing and regulatory agencies; Head Start.

Local and National Celebrities

Fire Departments, Fire Fighters, and Fire Fighters' Unions

Researchers

Centers for Disease Control and Prevention-funded Injury Control Research Centers; state and local universities; and community colleges.

Religious Communities and Places of Worship

Foundations

Survivors of Motor Vehicle Injuries and Their Families

*See Glossary

Maternal and child health and other health department staff are in a unique position to prevent unintentional and violent injuries. For assistance in these efforts, please call or write Children's Safety Network, NCEMCH, 2000 15th Street North, Suite 701, Arlington, VA 22201-2617. Phone (703) 524-7802 / Fax (703) 524-9335.

Case Study

Kentucky Safety Seat Loaner Program

- Lead Agency:** Division of Maternal and Child Health, Kentucky Department of Public Health
- Start/End Dates:** July 1983–Ongoing
- Target Population:** Pregnant women identified through county health departments, clients receiving services through the WIC and well-child programs, consumers of other health department services, and low-income families.
- Audience Reached:** Nearly 49,000 safety seats have been purchased for consumers of health department services.

Program Description

Objectives

- Educate parents and caregivers concerning the importance of using child safety seats.
- Provide a child safety seat to families otherwise unable to obtain one.

Program Components

More than 100 out of Kentucky's 120 counties have integrated a child safety seat program into ongoing local health department services. Candidates for safety seats are identified through MCH programs and services (e.g., prenatal, WIC, and well-child programs and services).

Health Department Staff Educate Mothers-To-Be about Safety Seats and Issue Seats

Initially, a health department staff member, usually a nurse or social worker, educates the mother-

to-be about the importance of using child safety seats and explains the Kentucky child passenger safety law. The family is then issued a child safety seat. Some health departments also distribute pamphlets such as a safety seat checklist. Most health departments request a \$5.00 deposit which is refunded when the seat is returned.

Seat Usage Is Checked Every Six Months

Typically, the safety seat loan agreement is renewed every six months after the child is born; staff check the seat, and confirm the mother's ability to use the seat correctly. (In counties with a give-away rather than loaner program, each seat is checked to ensure that the straps are in the uppermost position and that the child is facing forward.) When the child grows out of the loaner seat, it is returned to the health department. Infant seats are usually returned when the child weighs 20 pounds; convertible seats are usually returned when the child reaches 4 years of age.

Health Department Staff Restore Used Seats for New Families

Health department staff use project funds to order replacement parts and repair the seats. If the child safety seat has had normal wear and tear, health department staff replace parts such as pads and buckles, and clean and refurbish the seats for the next family. Normally, a convertible child safety seat lasts 3–5 years, although some have lasted 10 years. Infant seats typically can be used by 10–15 families. (If a child safety seat has been involved in a crash, families are asked to return it immediately since it is no longer safe to use; the seat is then destroyed and a new one is issued to the family.)

Most nonparticipating counties have very small health departments with insufficient staff to manage the program.

Summary of MCH Role

The state maternal and child health (MCH) division provides Title V funds to purchase 4,000 to 5,000 safety seats per year. The state MCH office has provided training opportunities for county staff and sends educational materials, such as the American Academy of Pediatrics newsletter, *Safe Ride News*, to participating counties. Although county health department staff do most of their own trouble shooting, the Kentucky Department of Health has designated a professional resource person who consults on issues such as safety seat recalls, educational materials, and training opportunities or approaches.

Evaluation

More than 100 out of Kentucky's 120 counties have integrated a child safety seat program into ongoing local health department services. Nearly 49,000 safety seats have been purchased for use by consumers of state health department services.

Evaluation methods vary by county and health department. Some health departments, such as the Barren River District Health Department, survey the mothers twice—before they receive the seat and when they return it. The first survey asks why the

mother needs the seat, why she is unable to buy a seat, and how often she uses safety belts. When the seat is returned, mothers are again surveyed about how often they used the seat, why they did not use the seat (if so indicated), and whether the child was involved in any crashes. Not all health departments use written surveys; many staff ask similar questions verbally.

After training the mother to use the child safety seat, a health department staff member asks the mother to demonstrate that she can use the seat correctly. Both the staff member and the mother initial a written form certifying that training has been provided.

Currently, there is no formal evaluation component to assess actual usage of the safety seats. Each year, the Kentucky State Police conduct an informal observational survey by checking passing cars for child safety seats and safety belt use. The state does not yet have a formal mechanism for asking local health department staff or participating mothers about their perceptions of the program.

On average, half of the child safety seats are returned statewide. County evaluation results are not currently combined or analyzed by the state.

Coalition Partners in Prevention

Partners include local health departments, Kentucky State Police, and the state SAFE KIDS Coalition. The Louisville/Jefferson County SAFE KIDS Coalition has a safety seat check clinic to teach health department personnel and parents how to install and use the child safety seats.

Sustaining the Program

This program is integrated within other programs in county health departments. The state MCH division has been able to secure Title V funds consistently for the program after funding by the state police ended in 1988.

Adapting the Program to Community Needs

Kentucky State Health Department staff have recently shifted their focus from a loaner program to a giveaway program. Staff feel that most other health departments would find giveaway programs far easier to administer and no more expensive than loaner programs (after adding in the costs of replacing parts and refurbishing seats).

Resources Needed

Staffing Requirements

At the state level, one professional staff member in the MCH division of the state health department devotes 5–10 percent of her time to this program; all other staff work within local health departments, and do not receive separate compensation for time spent on the program.

Health department staff need to be trained in effectively educating and motivating mothers to use the seats correctly, and in maintaining and repairing the safety seats.

In previous years, regional trainings have been held for health department staff. Last year, a one-day workshop was held to train the trainers; the following day, the trainers educated health department staff. Kentucky State Police used a portion of the grant from the National Highway Traffic Safety Administration to conduct hands-on training for 100 staff members of local health departments.

Fiscal Requirements

The MCH division of the Kentucky Department of Health spent \$150,000 during FY 1992–93 on infant and child safety seats, replacement parts, and rental of storage space. Staff estimate that \$200,000 would be needed to fully address the need for safety seats among families currently identified by local health departments.

The cost of a convertible child safety seat is approximately \$37 direct from the manufacturer, plus an additional \$1 charge per seat for shipping and handling. If purchased in bulk from a discount

store, each seat costs approximately \$40. Pads and buckles that need to be replaced due to normal wear and tear cost approximately \$20.

Funding sources: From 1983 to 1988, the Kentucky State Police Department supplied the funding for the Safety Seat Loaner Program. In 1988, the MCH division at the Kentucky Department of Health began purchasing the child safety seats with Title V funds. The state health department does not fund local health departments to train mothers or to distribute or repair the child safety seats. Local health departments maintain the program as a complement to their ongoing work in prenatal, WIC, and Well-Child clinics. Several years ago, some local health departments received donations from local Kiwanis Clubs to cover additional seats and repair costs.

Lessons Learned

Make Safety Feel Real—Boost the Popularity of Safety Programs among MCH Consumers by Providing a Tangible Device or Service

The Safety Seat Loaner Program has been very popular with mothers who utilize MCH services and with the health and human services community. They view the program as important because it meets a clear need and provides mothers with a tangible safety device.

It has not been difficult to convince mothers that safety seats are necessary because (1) health department staff stress the importance of using the seats and explain Kentucky's law regarding safety seat use, and (2) mothers receive a tangible means of making their children safer.

While this program has been widely accepted by most of the mothers, local health departments report that some mothers dislike the fact that the seat has been previously used.

Combine Safety Seat Loan Renewals and Returns with Other MCH Appointments and Programs

In some counties, child safety seat returns are not strictly enforced. Local staff often become discouraged when people take advantage of the program and do not return the seats. Several counties are working to

increase the rate of return by combining mothers' appointments for safety seat loan renewal or return with other MCH programs such as immunizations.

Giving Away Safety Seats May Be No More Expensive than Loaning Them—and Far Easier for Health Departments

State MCH staff and certain counties are considering changing to a giveaway program to eliminate the time and effort spent on repairing and recycling seats. Refunding the initial \$5.00 deposit when the seat is returned can create logistical problems. Local health departments may not have access to petty cash or may have difficulty issuing a check, so mothers may have to wait for their refunds. Reformulating the program as a giveaway program avoids these problems.

In addition, the time and money spent by county health departments to repair the returned seats is perceived as a burden and a problem. Local health department staff feel they do not have time to order parts and repair the seats. The cost of replacement parts may approximate the cost of a new seat. Manufacturer recalls of safety seats for defects also create a significant amount of work for both state and local staff. There have been two recalls since the Kentucky program began: one was handled by the state, the other by local health departments. Staff must first locate the seats, then replace or repair them, using new parts sent by the manufacturer.

Build Safety by Building Coalitions

Variability in state and local health department funding and the amount of staff time needed for the program have been challenges to sustaining the program at current levels. State and local health department staff have expressed frustration about the lack of funds to purchase additional seats to meet the demand. One county reports that coalition building made it possible to secure funds from other safety advocates to help pay for seats when the health department was unable to meet demand.

Train More Staff in Order to Accommodate Mothers Who Drop In

Staff should include a number of employees trained in this program in order to accommodate mothers who drop in while visiting other programs.

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Case Study

Teaching Teens to Buckle Up: Training Professionals in Massachusetts

- Lead Agency:** Bureau of Family and Community Health, Massachusetts Department of Public Health
- Start/End Dates:** 1989–1992
- Target Population:** Children and adolescents.
- Audience Reached:** 50 professionals per year who work with adolescents, including educators, health care providers, police, and community service providers.

Program Description

Objective

- Train professionals working with adolescents in ways to increase safety belt use among teens.

Program Components

Conduct Half-Day Training Sessions for Teachers and Other Professionals

Staff from the health department's Passenger Safety Program conducted half-day training sessions several times each year for professionals in regions throughout the state. Initially focused on teachers, the sessions evolved into community-based training in ways to develop and implement community education programs. Trainers used the National Highway Traffic Safety Administration (NHTSA) curricula which they disseminated to all participants, presented audiovisual materials, and provided hand-

outs. Trainers also demonstrated examples of effective educational methods, such as playing *Safety Jeopardy*. After completing the training, the professionals were expected to provide information to the youth in their settings.

Summary of MCH Role

The director of the Injury Prevention and Control Program, located in the state maternal and child health (MCH) agency, supervises the Massachusetts Passenger Safety Program staff. The MCH agency provides substantial support for the program, including the site, computers, production and printing services, statistics and evaluation services, a resource library, and postal services.

Evaluation

A participant questionnaire was distributed at the end of each training session.

Coalition Partners in Prevention

Safety officers in each region became resources for those planning the training as well as referral sources for those who had completed the training. The Massachusetts Head Injury Association and the Greenery Rehabilitation Group, Inc., collaborated on several sessions.

Sustaining the Program

The Governor's Highway Safety Bureau now funds regional occupant protection coordinators (outside the health department) throughout the state to plan and conduct the training sessions. Passenger Safety Program staff trained these coordinators in a variety of issues.

Adapting the Program to Community Needs

The curricula designed for these trainings were developed by NHTSA for use nationwide. In addition, each state has a governor's highway safety representative that can serve as a resource. These training sessions could easily be incorporated into the activities of an injury prevention program, and would be useful for any professionals who run programs for adolescents.

Training resources and personnel for teacher training may also be available from your state contact for the Comprehensive School Health Education Network, funded by the Centers for Disease Control and Prevention. Each state has a designated training center whose mission is to provide training or information about training sources in comprehensive school health education. Training centers are typically housed in the state department of education or department of health, but are occasionally based at nonprofit organizations or universities. These training centers should be useful contacts to work with on providing training for teachers on violence prevention.

Resources Needed

Staffing Requirements

Training sessions were planned and implemented by one staff member. Each session required approximately 40 hours (over several weeks) for planning and preparation, and several days for follow-up.

Staff preparing to conduct similar training programs need to know how to assess the resources already available to communities and to determine what is lacking. Staff also need to have knowledge of crash dynamics and the principles of occupant protection, as well as expertise in effective training techniques and methods of reaching teens and educating adults.

The health educator providing the training was already knowledgeable about these issues because she had attended several NHTSA-sponsored trainings as well as state and national traffic safety conferences.

Fiscal Requirements

Major costs included staff time and the NHTSA curricula. Food and space were donated; audiovisual materials had been purchased previously by the Passenger Safety Project at a one-time cost of \$2,000. Each training session cost approximately \$200 for food (which, in this case, was donated to this program) and \$100 for other materials such as flip charts.

The MCH agency provides in-kind support including the site, computers, production and printing services, statistics and evaluation services, a resource library, and postal services. The Governor's Highway Safety Bureau funds the training component of the Massachusetts Passenger Safety Program and pays for staff time (including secretarial support).

Lessons Learned

Teaching Schools To Teach Safety

Contact school personnel known to have a particular interest in health and safety (e.g., the school nurse) in order to gain access to schools; schools with students who had been injured or killed in a crash were often more receptive to the training.

Schedule teacher in-service training well in advance. Plan the training component a full year in advance so that teachers will be prepared for the following school year. Schools are asked to address many public health issues and it is often difficult to schedule time on their limited agendas.

Provide prepared materials to teachers and other professionals—they have neither the time nor the resources to develop their own.

Community Trainings

Publicize community trainings at least one month in advance, informing a variety of groups including schools, agencies serving youth, and community centers.

Set clear goals and objectives for each training session and review them with participants at the beginning of the training session. This gives participants a good understanding of what to expect and what they will learn.

Limit class size to a maximum of 25–30 students for effective interactive training sessions.

Hire part-time educators that can travel throughout the state, conducting specific “Reaching Youth” training for teachers and other professionals who work with adolescents.

Refresher Courses

Schedule in-service refresher training for teachers every two or three years to provide updates for those who have completed the initial training.

Products/Publications Developed/Used

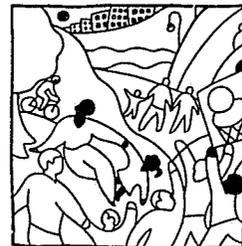
Restrain Yourself and *Beating the Odds* (NHTSA curricula).

Safety Jeopardy, a game used by teachers to educate youth.

Lists of participants, sample agenda, and lists of audiovisual materials (available from Passenger Safety Program staff).

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Preventing Unintentional Injuries

Occupational

An Overview

Work Is a Significant Cause of Nonfatal Injury Among Adolescents

The U.S. Department of Labor estimates that 4 million children in this country are legally employed. At minimum, an additional 22,000 children work illegally—more than any year since 1938.¹ A 1985 Massachusetts hospital-based study found that 24 percent of all adolescents treated in emergency rooms were injured in job-related incidents.² A General Accounting Office review of workers' compensation records in 33 states identified at least 128,000 youths injured on the job and 48 killed during 1987

and 1988 (excluding children killed and injured on family farms).¹

Agriculture Is the Second Most Dangerous Occupation in the United States, and Children Comprise a Significant Portion of this Work Force

Approximately 300 children and adolescents die each year from farm injuries, and 23,500 suffer nonfatal trauma.³ The fatality rate for family farm injuries among children increases with the age of the child.³ The rate for males ages 15–19 years is twice the rate for young children and 26 times the rate for females of the same age group.³ Farm injuries can be deadly—

“A 1985 Massachusetts hospital-based study found that 24 percent of all adolescents treated in emergency rooms were injured in job-related incidents.”²

more than half of the injured children and adolescents die before receiving any medical treatment; another 20 percent die en route to a hospital, and only 7 percent live long enough to receive inpatient care.³ Farm machinery is the most common cause of fatal and nonfatal agricultural injuries.³

Legal Child Labor

In general, U.S. child labor laws permit employment of children as young as 14 years of age, except in manufacturing, mining, and certain other occupations that have been declared hazardous (and banned for youth 14 and 15 years of age). Many jobs involving hazardous equipment such as slicing machines, baking, and commercial driving are restricted to youth 18 years of age and older. Children ages 12 and 13 years, however, may be employed on any farm with the consent of the parent.⁴

Many states place restrictions on child labor, such as limits on the number of hours students may work on school days and non-school days.¹ In many states, schools are required to issue work permits for minors before they may take jobs.¹

Illegal Child Labor

Abuses of state and local child labor laws include permitting adolescents to work beyond daily hour limits, allowing adolescents to use hazardous machinery or perform commer-

cial driving, and employing children below the allowable age (such as in sweat shops).

The estimated 4 million migrant and seasonal farm workers in the United States are the poorest and most exploited work force in the country.¹ Their children are exploited, too. Nearly all migrant children are working in the fields before they reach their teens—and thus comprise the largest single child labor force in the country.¹ Often, these young people work and play in fields sprayed with toxic pesticides and few are able to take classes long enough to graduate from high school.¹

For urban children, garment industry sweatshop work appears to be an increasingly common source of illegal employment. Health and safety conditions in sweatshops are often very hazardous.

Occupational Injuries Due to Violence

Each year, an estimated 800 to 1,400 people are murdered at work, and an unknown number of nonfatal injuries result from violence in the workplace.⁵ Although women have low death rates from occupational injury, they are more likely to die as victims of workplace assault than from any other type of injury at work.⁶

Policy and Prevention

Most adolescent health professionals do not discuss safety at afterschool and summer jobs as part of their anticipatory guidance with adolescents or their parents. Health departments could develop and experiment with protocols to educate health providers about how best to raise the issue of safe work environments and practices with adolescents and their parents. Educating farm families about the risk of injury to their children is a particularly important task for pediatricians in rural areas.³

Expanded emergency medical systems with trained paramedics, and regionalized trauma centers should be a part of a comprehensive approach to reducing farm injuries and fatalities. Preventing occupational injuries will require additional collaboration among health departments, migrant health centers, state and federal labor departments, manufacturers of farm equipment, and the Occupational Safety and Health Administration.

Better data collection systems need to be established to assess more fully the extent of illegal child labor practices and the resulting injuries. Currently, the Department of Labor collects no data on children under 14 years of age, and little data on children under 16 years of age.

Public and private health providers can help educate policymakers about the extent of

injuries resulting from child labor and the changes needed in child labor laws.

Notes

¹Butterfield, B. D. (1990). Children at work. *The Boston Globe* 237(112):1-16.

²Anderka, M., Gallagher, S. S., and Azzara, C. A. (1985). Adolescent work-

related injuries. Paper presented at the American Public Health Association Annual Meeting, Washington, D.C.

³Rivara, F. P. (1985). Fatal and nonfatal farm injuries to children and adolescents in the United States. *Pediatrics* 76(4):567-573.

⁴U.S. Department of Labor. (1984). *Child Labor Requirements in Agriculture Under the Fair Labor Standards Act, Child labor Bill No. 102*. Washington, DC: U.S. Department of Labor.

⁵Hales, T., Seligman, P. J., Newman, S. C., and Timbrook, C. L. (1988).

Occupational injuries due to violence. *Journal of Occupational Medicine* 30(6):483-487.

⁶Bell, C. A. (1991). Female homicides in United States workplaces, 1980-1985. *American Journal of Public Health* 81:729-732.

Promising MCH Settings

There are many ways to incorporate occupational injury prevention into existing MCH services and programs. Following are some of the MCH programs that could play a part in preventing occupational injuries.

Adolescent Health Clinics

Adolescent Pregnancy and Parenting Programs*

School-Based/Linked Health Clinics

Breast/Cervical Cancer Screenings*

Children with Special Health Needs (CSHN) Service Sites*

Community and Migrant Health Centers*

EMS and EMSC Programs*

Family Planning Clinics

Health Care Services for Homeless Youth*

Health Fairs

Mental Health Service Sites

Outreach Vans

Primary Care Clinics

Sexually Transmitted Diseases (STD) Clinics

Substance Abuse Prevention/Treatment Programs

Women's Health Programs*

Incorporating child labor and adolescent occupational injury prevention into MCH services doesn't have to be difficult. First steps can be as simple as talking to parents of adolescents about common safety issues at teenagers' first jobs. But don't stop there!

If child labor and occupational injuries are a problem in your area, you may want to bring together interested staff to brainstorm about additional ways to address the problem in your setting. Here are some questions you may want to ask:

- Do we need to collect more or different types of information from children, youth, and families if we are going to help prevent their occupational injuries?
- What kinds of resources and information do children, youth, and families need to prevent these injuries?
- Can we educate children, youth, and families individually or in group settings about preventing occupational injuries?
- Can we assess, treat, or refer children and youth for this type of injury?

Training materials, manuals, and protocols already exist for many types of injuries. Check with your state health department, regional MCH office, or the Children's Safety Network for more information on available prevention materials.

As you plan activities to prevent child labor and occupational injuries, think about possible changes in the following areas to strengthen your prevention efforts:

Medical records

Other data collection

Protocols for assessment, treatment, and referrals

Protocols for anticipatory guidance*

Educational materials available in waiting rooms in all settings

Educational materials to be handed to children, youth, and families with discussion

Educational forums

Referrals

Children and youth follow-up

Training for staff

Linkage with other community resources

*See Glossary

Priority Partners in Prevention

Occupational Injury

Local and State Government Agencies and Programs

City and county Administrators; the Department of Labor; local Department of Employment Services; youth employment programs; and the Job Training Partnership Administration (JTPA).

Local and State Legislators and Other Elected Officials

City and county councils; mayors and their staff; the governor and staff; the state attorney general and staff; and state representatives and senators on relevant committees.

Law Enforcement Agencies

Police chiefs; sheriffs; and police unions.

Schools, Parent-Teacher, and Student Groups and Associations

Teachers, principals, superintendents and their associations; school-based clinic staff; school boards; and school health personnel.

Media

Editorial boards; Op-Ed page editors; city desk reporters; and consumer reporters.

Health Care Providers

Pediatricians; family physicians; school-based clinic staff; nurses; trauma and emergency room physicians; emergency medical services for children and emergency medical services personnel; other health professionals; local hospitals and trauma centers; health maintenance organizations; rehabilitation facilities; migrant health centers; coroners' and medical examiners' offices; local medical societies; and social workers.

Business Community

Insurance companies; businesses that employ adolescents; and chambers of commerce.

Civic Groups and Service Clubs

Kiwanis Clubs; League of Women Voters; Junior League; Rotary Clubs; Girl Scouts and Boy Scouts; Boys and Girls Clubs; and 4-H clubs.

Nonprofit Organizations

Youth service programs.

Local and National Celebrities

Local Trade Unions

Legal System

Neighborhood Legal Services Programs and legal aid programs.

Researchers

Centers for Disease Control and Prevention-funded Injury

Control Research Centers; state and local universities; and community colleges.

Religious Communities and Places of Worship

Foundations

Survivors of Occupational Injuries and Their Families

Maternal and child health and other health department staff are in a unique position to prevent unintentional and violent injuries. For assistance in these efforts, please call or write Children's Safety Network, NCEMCH, 2000 15th Street North, Suite 701, Arlington, VA 22201-2617. Phone (703) 524-7802 / Fax (703) 524-9335.

Case Study

Minnesota Youth in the Workplace: Surveying the Danger

- Lead Agency:** Injury Prevention Unit and Disease Prevention and Control, Minnesota Department of Health
- Start/End Dates:** February 1990–January 1992
- Target Population:** Students in grades 10–12.
- Audience Reached:** The school-based survey reached 3,050 students in 39 schools that are geographically and demographically representative. The telephone survey reached 534 adolescents.

Program Description

Objective

- Provide a description of the incidence and severity of work-related injuries among Minnesota's high school population.

Program Components

Develop Surveys To Assess Adolescent Work-Related Injuries

A physician specializing in occupational medicine within the Office of Chronic Disease/ Environmental Health observed the lack of population-based data on work-related injuries among adolescents, and developed two survey instruments—a written survey and a telephone survey. Both surveys asked the same questions: work history, history of injuries, type of work performed at the time of injury, events surrounding the injury, and possible impact of the injury on work, school, and other activities.

Written Survey: During the 1990–91 school year, a researcher from Minnesota State University disseminated a school-based written survey of work-related injuries to 3,050 students in grades 10–12, through teachers in each school district. The researcher regularly administers a health and traffic safety survey for the Department of Education, and agreed to coordinate dissemination of the work injury survey for the Health Department.

Telephone Survey: Health department consultants administered a telephone survey to 534 adolescents under 18 years of age who experienced work-related injuries that had been reported to Workers Compensation. Interviews were conducted between October 1990 and January 1992.

Summary of MCH Role

When the study began, the injury prevention program was located in the maternal and child health (MCH) agency within the Minnesota Department of Health. MCH provided administrative

oversight for CDC-funded staff involved in the study of adolescent occupational injuries.

Evaluation

Telephone survey results were validated by comparing information provided by selected respondents to information noted by their physicians in their medical records. The school-based survey results will be validated by comparing the results to those of the 1992 Minnesota Department of Education student survey.

The surveys provided a great deal of information about the scope of the adolescent injury problem, common causes of injury, and occupations associated with high rates of injury.

The adolescents' descriptions of their injuries were very consistent with the information in their medical records, with two exceptions: respondents and medical providers differed in their definitions of medications prescribed, and adolescents defined scarring as a medical consequence but physicians did not.

Agricultural injuries are probably underrepresented because they are inadequately reported by the Minnesota Workers Compensation system.

Coalition Partners in Prevention

Participating schools allowed teachers to administer the survey. The Department of Labor and Industry provided information on injuries reported to Workers Compensation. The researcher from the state university coordinated dissemination of the survey to school districts.

Sustaining the Program

The Department of Education has agreed to include some questions on work-related injuries in its student survey on health and traffic safety.

Researchers are using study results to plan a more indepth study that includes exposure to specific hazards. Follow-up may include a study of effective workplace interventions to reduce adolescent injuries.

Adapting the Program to Community Needs

Local and state MCH agencies can help assess the extent of child labor and adolescent work-related injuries in their area, and can work with their state Labor Department and others to develop prevention strategies based on their findings.

If it is difficult to obtain permission to administer surveys in area schools, an alternative strategy is to ask the state department of education to include questions about work-related injuries in existing school surveys, such as the Youth Risk Behavior Survey (an annual nationwide survey of the prevalence of risk behaviors among adolescents).

Resources Needed

Staffing Requirements

The following staff were needed to complete the survey project: a survey designer, administrator, telephone interviewers, and data entry and data analysis professionals.

The telephone survey was very labor intensive, requiring three to six interviewers working 6-10 hours per week for approximately 15 months. The primary expense for the written survey involved staff time for survey design and data entry.

Fiscal Requirements

The student survey cost \$7,010 (including printing, compensation for staff who administered the survey, and data entry). The telephone survey cost \$16,182 (including printing, salaries for staff interviewers, photocopying of medical records, long distance calls, postage, and data entry).

Funding source: The Centers for Disease Control and Prevention (CDC) awarded a grant to the Minnesota Health Department for childhood injury prevention activities.

Lessons Learned

Consider Both Benefits and Challenges When Choosing Survey Methods

To gain maximum benefits from survey information, it is important to weigh the pros, cons, costs, and desired outcomes of differing methods for collecting, coding, and analyzing data. For example, editing student responses to the written survey was very time consuming and the responses were difficult to code. The telephone surveys were also time consuming, but provided detailed information not available through the written surveys. Costs for the telephone survey, however, were more than double the costs for the written survey, primarily because of salaries for staff interviewers.

Products/Publications Developed/Used

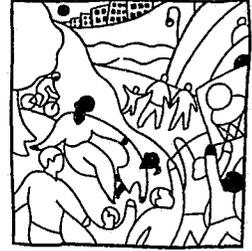
Written survey instrument.

The final report on the results of the survey has been submitted for publication.

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Preventing Unintentional Injuries

Playgrounds

An Overview

Young Children Are At Greatest Risk

Approximately 200,000 children are treated in emergency departments for playground-related injuries each year¹ and more than 3,600 children are hospitalized.² Seventy percent of the injuries involve public playground equipment, often at schools, child care centers, and parks. Most of the injured children are under 12 years of age. The few deaths that occur are mostly the result of head injuries from falls.² Ninety percent of serious injuries (fractures, multiple injuries, strangulation, and concussions) and more than 50 percent of all injuries happen

when children jump or fall from playground equipment to the surface below.²

Playground Surfaces and Equipment Are Key

The type of playground surface affects the likelihood of injury. Falls onto surfaces composed of packed earth, grass, concrete, or asphalt account for two-thirds of all fall-related injuries on playgrounds.³ The height of playground equipment, lack of guardrails to prevent falls, and equipment design that promotes entrapment and strangulation are also contributing factors.

“Almost 50 percent of child care centers do not have impact-absorbing surfaces under their playground equipment. . .”⁴

Policy and Prevention

Schools and child care centers are an obvious focal point for activities to reduce playground-related injuries. Almost 50 percent of child care centers do not have impact-absorbing surfaces under their playground equipment⁴ and playground-related injuries are the leading type of school injury among elementary school students.⁵

Despite this, many communities have yet to conduct assessments of playground hazards in schools, child care centers, and public recreation areas. In addition, only a small number of states and local areas routinely collect (or require schools to report) data on the number of

playground-related injuries that take place at schools or in child care settings. Health departments need to coordinate with school authorities and with parks and recreation department officials to ensure that new playgrounds and new equipment meet safety guidelines and to establish procedures for routine inspection and maintenance of public playgrounds.

Notes

¹Sosin, D. M., Keller, P., Sacks, J. J., Kresnow, M., and van Dyck, P. C. (1993). Surface-specific fall injury rates on Utah school playgrounds. *American Journal of Public Health* 83(5):733-735.

²Wilson, M. H., Baker, S. P., Teret, S. P., Shock, S., and Garbarino, J. (1991). *Saving Children: A Guide to Injury Prevention*. New York: Oxford University Press.

³Tinsworth, D. K., and Kramer, J. T. (1989). *Playground Equipment-Related Injuries Involving Falls to the Surface*. Washington, DC: U.S. Consumer Product Safety Commission, Directorate of Epidemiology, Division of Hazard Analysis.

⁴Centers for Disease Control and Prevention. (1988). Playground-related injuries in preschool-age children in the United States, 1983-1987. *Morbidity and Mortality Weekly Report* 143:125-126.

⁵Sheps, S. B., and Evans, G. D. (1987). Epidemiology of school injuries: A 2-year experience in a municipal health department. *Pediatrics* 79(1):69-75.

Promising MCH Settings

There are many ways to incorporate playground injury prevention into existing MCH services and programs. Following are some of the MCH programs that could play a part in preventing playground injuries.

School-Based/Linked Health Clinics

Child Health Clinics

Children with Special Health Needs (CSHN) Service Sites*

EMS and EMSC Programs*

Immunization Campaigns and Clinics

Primary Care Clinics

Incorporating playground injury prevention into MCH services doesn't have to be difficult. First steps can be as simple as making available brochures for parents that discuss safe and unsafe playground surfaces and provide tips for checking for playground hazards. But don't stop there!

If playground injuries are a problem in your area, you may want to bring together interested staff to brainstorm about additional ways to address the problem in your setting. Here are some questions you may want to ask:

- Do we need to collect more or different types of information from parents and families if we are going to help prevent their playground injuries?
- What kinds of resources and information do parents and families need to prevent these injuries?
- Can we provide resources and information (e.g., a playground safety checklist)?
- Can we educate parents and families individually or in group settings about preventing playground-related injuries?
- Can we assess, treat, or refer children for this type of injury?

Training materials, manuals, and protocols already exist for many types of injuries. Check with your state health depart-

ment, regional MCH office, or the Children's Safety Network for more information on available prevention materials.

As you plan activities to prevent playground injuries, think about possible changes in the following areas to strengthen your prevention efforts:

Medical records

Other data collection

Protocols for assessment, treatment, and referrals

Protocols for anticipatory guidance*

Educational materials available in waiting rooms in all settings

Educational materials to be handed to parents with discussion

Educational forums

Referrals

Family follow-up

Training for staff

Linkage with other community resources

*See Glossary

Priority Partners in Prevention

Playground Injury

Local and State Government Agencies and Programs

City and county administrators; Department of Parks and Recreation; Department of Education; state Office of Risk Management; state U.S. Consumer Product Safety Commission designees; and Healthy Start grantees.*

Local and State Legislators and Other Elected Officials

City and county councils; mayors and their staff; the governor and staff; the state attorney general and staff; and state representatives and senators on relevant committees.

Schools, Parent-Teacher, and Student Groups and Associations

Teachers, principals, superintendents and their associations; school-based clinic staff; school boards; and school health personnel.

Media

Editorial boards; Op-Ed page editors; city desk reporters; consumer reporters; sportswriters; and sportscasters.

Health Care Providers

Pediatricians; family physicians; school-based clinic staff; nurses; trauma and emergency

room physicians; emergency medical services for children and emergency medical services personnel; other health professionals; local hospitals and trauma centers; health maintenance organizations; rehabilitation facilities; coroners' and medical examiners' offices; and local medical societies.

Business Community

Insurance companies; local or state playground equipment companies; landscaping and engineering companies; architecture firms; lumber companies; and chambers of commerce.

Civic Groups and Service Clubs

Kiwanis Clubs; League of Women Voters; Junior League; Rotary Clubs; Girl Scouts and Boy Scouts; Boys and Girls Clubs; and 4-H clubs.

Child Care Centers and Family Child Care Homes

Administrators; staff; licensing and regulatory agencies, and Head Start.

Nonprofit Organizations

Local or state SAFE KIDS Coalitions and local and state consumer groups.

Local and National Celebrities

Sportscasters; media personalities; and sports celebrities.

Researchers

Centers for Disease Control and Prevention-funded Injury

Control Research Centers; state and local universities; and community colleges.

Religious Communities and Places of Worship

Foundations

Survivors of Playground Injuries and Their Families

*See Glossary

Maternal and child health and other health department staff are in a unique position to prevent unintentional and violent injuries. For assistance in these efforts, please call or write Children's Safety Network, NCEMCH, 2000 15th Street North, Suite 701, Arlington, VA 22201-2617. Phone (703) 524-7802 / Fax (703) 524-9335.

Case Study

Playing It Safe: Reducing Playground Injuries Among Utah's Elementary School Children

- Lead Agency:** Child Injury Prevention Program (CHIP), Utah Department of Health, Family Health Services Division
- Start/End Dates:** 1987–Ongoing
- Target Population:** The 450 elementary schools in Utah's 40 school districts.
- Audience Reached:** All 40 school districts in Utah.

Program Description

Objective

- Reduce the number and severity of playground-related injuries in Utah among children in grades K–6.

Program Components

Work to Change State Safety Standards for Schools

In 1987, the Department of Environmental Quality (then called the Division of Environmental Health) modified the "Rules and Regulations for the Design, Construction, Operation, Sanitation, and Safety of the Schools." The Childhood Injury Prevention Project (CHIP) recommended necessary changes. The new rules authorized local health departments to inspect school playgrounds and recommend necessary repairs and modifications. In addition, each school was required to have a mini-

mum of three staff members certified in First Aid and CPR.

CHIP then trained local environmental health department personnel to inspect playgrounds for hazards, and launched an educational campaign to make school officials aware of changes in the rules.

Increase Awareness Among School District Personnel

Over a two-year period, the Childhood Injury Prevention Program held approximately 14 seminars across the state for school superintendents, principals, custodians, and local health department personnel. These seminars focused on liability issues, identification and correction of hazards, and equipment warranties.

School superintendents sent letters of endorsement for the seminars. Schools whose administrators attended the seminars were permitted up to 15 percent reduction in their liability insurance rates by the Office of Risk Management. In addition, a single

training session was held dealing with playground supervision for injury prevention coordinators, school nurses, and other school staff.

Help Local Health Departments Work with School Districts in Their Area on Playground Safety

The Childhood Injury Prevention Program contracted with several local health departments to work with school districts in their jurisdictions. Seven of the 12 local health departments have a full-time injury prevention coordinator (partially funded by CHIP) to coordinate a local playground safety project. Some of the coordinators were health educators; others focused on environmental health issues.

Local health departments and school personnel worked together to form safety committees in each school district. The safety committees oversee playground modifications, equipment purchases and repairs, and related safety issues.

Train Teachers To Educate Children about Playground Safety

More than 8,000 elementary teachers were trained in playground safety using the curriculum *Playground Perspectives: A Curriculum Guide for Promoting Playground Safety*.

Train School Personnel in the Use of First Aid, CPR, and Injury Reporting Forms

More than 500 teachers, principals, and staff in 19 school districts were trained in using First Aid. School personnel were also trained to use the student injury reporting form; if used consistently, this form would provide the first comprehensive and accurate picture of the type and frequency of playground-related injuries occurring at individual schools.

Summary of MCH Role

The playground injury prevention project was partially funded by a grant from the federal Maternal and Child Health Bureau (MCHB). Using MCHB funds, CHIP worked to change safety standards for

schools, increase awareness of playground safety issues among school district personnel, assist local health departments to work with school districts in their area, train teachers to educate children about playground safety, and train school personnel in the use of first aid, CPR, and injury reporting forms.

Evaluation

A grant from the Centers for Disease Control and Prevention (CDC) provided funds to evaluate the project, focusing on eight targeted school districts and four control school districts.

Numerous school districts identified and removed or modified unsafe playground equipment. In the Ogden school district, a tax bond was used to provide funding for removing hazardous equipment in all 15 schools in the district. The largest school district in Utah developed a five-year plan to modify and standardize playground equipment in all 65 district schools.

Local Health Departments and School Districts Established Cooperative Working Relationships

Between 88 and 100 percent of Utah school districts voluntarily complete and return the student injury reporting form to both the school district office and the Childhood Injury Prevention Project.

Coalition Partners in Prevention

Partners include the Utah Department of Health, local health departments, the School Boards Association, the Department of Education, the state Office of Risk Management, local school boards, and the Department of Environmental Quality. The School Boards Association, an independent association whose membership consists of individual school boards throughout the state, developed a document on safety policies and procedures—including a playground safety component—to prevent injuries in the schools.

Sustaining the Program

ChIP continues to consult with local health departments and school and child care personnel about playground safety, and presents information on playground safety to various groups. ChIP will work closely with schools to provide training for them, assist with playground inspections (in areas where local health departments don't conduct inspections), and meet with sales representatives of playground equipment manufacturers to choose the safest equipment. The type of assistance provided by ChIP is tailored to meet the specific needs of the school or agency/organization requesting help. ChIP also provides expertise to the Salt Lake City health department in conducting child care inspections.

Numerous local health departments have continued to conduct inspections of school playgrounds.

Adapting the Program to Community Needs

This project could be replicated with a moderate amount of funding and staff time, especially since the Childhood Injury Prevention coordinator in Utah is available to conduct seminars and provide other forms of technical assistance and training. In addition, the playground curriculum guide, *Playground Perspectives: A Curriculum Guide for Promoting Playground Safety*, is available for use by other states.

Aspects of the program that can be done at low-cost or added-on to existing work include forming safety committees in each school district that oversee playground modifications, equipment purchases and repairs, and related safety issues, and working with agencies with regulatory authority over schools to make necessary changes in school safety regulations.

Resources Needed

Staffing Requirements

Initially, the Childhood Injury Prevention Program was staffed by one full-time employee and

one part-time staff member (15–20 percent time). The program is now staffed by one full-time employee; ideal staffing would include an additional full-time employee at the state health department plus a full-time or part-time staff position at the local level in the larger counties.

Workshops were needed to teach the teachers how to use the curriculum and to educate school and local health department personnel about a range of playground safety issues (see *Program Components*).

Fiscal Requirements

The education and implementation components of the project are funded through the federal Maternal and Child Health Bureau as part of the special projects of regional and national significance (SPRANS) grant program. Funding levels were \$50,000 per year for three years, with a \$25,000 extension. The project subsequently received a CDC research grant of \$125,000 per year for three years to conduct the evaluation project (see *Evaluation*).

Lessons Learned

Teach Educators That Injuries Can Be Prevented

Changing people's attitudes about the preventability of injuries has been the most difficult component of this playground safety project, according to the project coordinator at the state health department.

School Insurers Make Powerful Allies

As ChIP staff visited school superintendents to discuss the feasibility of implementing a playground prevention program in their district, they had to help the superintendents realize the potential risks for student injuries at school. All of the superintendents seemed sympathetic to the pain and suffering of injured students, but many gave the ChIP team their full attention only when ChIP staff discussed the money that could be saved by avoiding future litigation. Working together, the state Health Department

and the Office of Risk Management had the combined clout needed to convince schools to make necessary changes in unsafe playground equipment.

Schools were often reluctant to remove unsafe equipment and spend substantial funds on new equipment. The health department consistently tried to work within the system and help school staff find solutions to the problems. When necessary, the Office of Risk Management threatened to raise the school's insurance rates if unsafe equipment remained or was not modified—this was usually the impetus for schools to make the necessary changes.

The Art of Compromise: Partial Solutions Are Better Than None

ChIP recognizes that, in many cases, the most effective means of reducing playground-related injuries is to replace unsafe playground equipment rather than try to repair it. Unfortunately, this is also the most expensive intervention strategy and can place unreasonable financial burdens on schools. ChIP works with school administrators to make schools more aware of the playground safety issue and the status of their playground equipment, and to take actions that will help ensure the safety of children. Schools can make sure that all new equipment is safe and can also modify unsafe equipment.

Products/Publications Developed/Used

Playground Perspectives: A Curriculum Guide for Promoting Playground Safety.

Student Injury Report Form.

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Case Study

North Carolina's Playground Safety Training Workshops

Lead Agency: Recreation Resources Service (RRS), North Carolina State University

Start/End Dates: May 1992–May 1993

Target Population: Public parks and recreation providers, child care and school systems, and school and child care center maintenance staff.

Audience Reached: The initial series of four workshops reached 360 participants. Approximately 40 percent of the local government public parks and recreation staff participated, together with licensed child care providers, school system personnel, and housing authority representatives.

Program Description

Objectives

- Disseminate information about the U.S. Consumer Product Safety Commission (CPSC) playground safety guidelines to the public and to recreation providers.
- Encourage recreation providers to take action to increase playground safety (e.g., by adding adequate levels of wood chips to playground surfaces).
- Increase awareness, especially among schools and child care providers, of the need for age-appropriate playground equipment and of existing guidelines for purchasing safer equipment and surfacing materials.

Program Components

Recreation Resources Service at North Carolina State University provides technical assistance to all

leisure service providers in North Carolina under a memorandum of understanding with the North Carolina Department of Environment, Health and Natural Resources, Division of Parks and Recreation.

Educate Local Government Parks and Recreation Personnel About Playground Injury Prevention

Recreation Resources Service developed a series of four workshops (one statewide and three regional) to educate local government parks and recreation personnel, as well as licensed child care providers and school system personnel involved with playgrounds. The workshops addressed the extent of playground injuries and specific techniques for enhancing playground safety.

Workshops included detailed hands-on training in how to evaluate playground safety hazards, and how best to modify or remove the hazards from the playground setting. After receiving information in a classroom setting, trainees participated in a walk-through of an actual playground safety audit.

Summary of MCH Role

Maternal and child health (MCH) regional nurse consultants who work with child care facilities were invited to the workshops. A state health department consultant in childhood injury prevention with an interest in child care and playground safety served on the planning committee for the statewide conference and helped gather playground safety checklists, CPSC's *Handbook for Public Playground Safety*, and other materials for workshop participants. The consultant also responded to requests (received by the health department) for information and assistance concerning playground safety.

Possible MCH roles: Although the state MCH agency was not involved in the project, state health departments can contribute to similar programs in several ways. The state MCH injury prevention coordinator can serve on the planning committee for the workshops or can present at the workshops. MCH can inform school and child care systems about the playground safety workshops and advocate for playground injury prevention with other state agencies. MCH needs assessments of playground safety can be used to tailor workshops to specific local needs and to develop a statewide playground safety program to provide additional support and guidance for local programs that have participated in the training workshops. A system for collecting data on playground injuries can be established in conjunction with the program.

Evaluation

Participants submitted workshop evaluations immediately after the training. Their evaluations of the workshops were very positive. Respondents applauded the depth of information provided as well as the training style. Several respondents highlighted the practical value of the hands-on training.

To determine the extent to which participants are actually using the information gained from the workshop series, Recreation Resources Service is developing a survey instrument to document specific actions taken to improve playground safety. The survey will be administered to a random sample of

participants who completed the training. Following are two sample questions from the survey: "Has the agency provided an adequate depth of resilient surfacing under and around its equipment based upon the highest accessible point on the play equipment?" "Has the agency developed a playground safety program?"

Coalition Partners in Prevention

Recreation Resources Service established a planning committee with representation from state and local government, parks and recreation providers, representatives from the North Carolina Department of Human Resources, Division of Child Development (the state agency that oversees child care licensing), and the North Carolina Department of Public Instruction (representing the school system). This committee provided points of contact and mailing lists of their clientele, and served as site hosts and facilitators at the conferences.

The state health department's Division of Epidemiology (Injury Control Section) and the regional office of the Consumer Product Safety Commission assisted in the playground safety training. A staff member from the Injury Control Section presented a session on identifying playground hazards, and a representative from CPSC's office in Charlotte delivered a presentation on the *Handbook for Public Playground Safety*.

Sustaining the Program

Organizers feel that the workshops have accomplished their immediate goals, so the workshops will not be repeated except by specific request. Recreation Resources Service has moved toward more intensive playground safety training programs for individual agencies. Topics for these programs include an introduction to the CPSC *Handbook for Public Playground Safety*, hazard identification, and a systematic approach to developing individualized playground safety systems.

Two staff members currently serve as speakers on playground safety issues. They have presented

before child care advocacy groups, community-based injury prevention initiatives, and parent-teacher associations in North Carolina and South Carolina.

Adapting the Program to Community Needs

The workshop model worked well in the three regions of North Carolina where it has been implemented. The resources used in the North Carolina workshops are not state-specific and can be used by other states to plan and conduct workshops on playground safety. Workshop participants can be charged a small fee to cover the cost of materials, meeting space rental, postage, and purchase of training materials (videotape and test gauges). Exhibitor fees can be obtained from playground equipment manufacturers and vendors and used to cover the cost of lunches and breaks.

Resources Needed

Staffing Requirements

Two consultants at Recreation Resources Service shared responsibility for developing, planning, and implementing workshops.

Three to five parks and recreation providers from different communities served on planning committees along with representatives from North Carolina's Department of Environment, Health and Natural Resources (Division of Parks and Recreation and Division of Epidemiology, Injury Control Section); Department of Human Resources (Division of Child Development); and Department of Public Instruction.

Fiscal Requirements

The workshop fee (\$12.00) charged to each participant covered the cost of workshop materials (copying, notebook assembly), preparation of the promotional material, rental of the workshop facility, postage, and purchase of training materials (videotape and test gauges). Exhibitor fees obtained from playground equipment manufacturers and vendors covered the cost of lunches and breaks.

Recreation Resources Service absorbed staff travel costs (approximately \$750) for the development, planning, and implementation phases of the workshop series.

Lessons Learned

Learning by Doing: Hands-On Training and Walk-Throughs

Local government parks and recreation personnel especially appreciated the affordable one-day workshops. Participants cited the hands-on training, especially the walk-through of an actual playground safety audit, as the most valuable component of the training.

Federal Regional Offices Can Support Local and State Injury Prevention Efforts

Working with the CPSC regional office provided important credibility for the North Carolina playground project. Although CPSC regions address many issues (and do not have specific expertise in playground safety), the national office supports the regional staff by funding their travel expenses for the workshops and by providing a scripted slide show highlighting playground safety issues and the development of the *Handbook for Public Playground Safety*.

Products/Publications Developed/Used

Inventory, Audit and Inspection: A Layered Approach to Playground Safety (monograph).

Handbook for Public Playground Safety, U.S. Consumer Product Safety Commission.

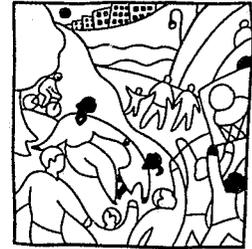
Slides (with script) developed by CPSC, highlighting playground safety issues and the development of the *Handbook* publication.

Inspecting Playgrounds for Hazards (videotape purchased through the National Recreation and Parks Association).

Test gauges and probes.

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Preventing Unintentional Injuries

Sports

“Forty-four percent of injuries sustained by students 14 years of age and older are caused by sports activity.”²

An Overview

Sports-Related Injuries Affect over 2.5 Million Children Annually

The number of children and youth participating in sports activities has increased dramatically over the past few decades. Each year, 30 million children and youth between 6 and 21 years of age participate in community sports programs and another 6 million participate in school-based competitive sports.¹ Almost all children participate in physical education and informal sporting activities.¹

Sports-related injuries among children account for 2.5 million emergency department visits and 100,000 hospitaliza-

tions annually.¹ Sports are the most common cause of nonfatal injury in male and female adolescents ages 13–19 years.¹ Forty-four percent of injuries sustained by students 14 years of age and older are caused by sports activity.²

Of the nearly 6 million children participating in interscholastic sports, 600,000 are injured each year.³ Among children 5–14 years of age who participate in competitive sports, football accounts for the highest number of injuries (one in five), followed by baseball and gymnastics.⁴

Other sports such as horseback riding and skateboarding are also responsible for numerous injuries among children and adolescents. In 1992, an estimated 26,457 children and adoles-

cents ages birth to 14 years required emergency room treatment for skateboarding injuries.⁵ During the one-year period from June 1991 to June 1992, 34,875 children ages 1–14 years required emergency room treatment for equestrian injuries.⁶

Policy and Prevention

Strategies for preventing sports-related injuries include thorough pre-participation physical examinations, proper conditioning and strength-building, use of appropriate safety equipment, adequate supervision and management of athletes, and adequate rehabilitation after injury. Health departments need to educate coaches, athletic trainers, school nurses, school-based clinic staff, sports medicine personnel, and others about the magnitude of sports-related injuries, effective prevention strategies, and resources for educating children, adolescents, and others about injury prevention. Health departments can also encourage health care providers,

especially school nurses and school-based clinic staff, to provide anticipatory guidance (see Glossary) to children and adolescents about sports-related injuries and their prevention.

Few states have systems in place to collect and analyze data on sports-related injuries. Health departments can work with schools and other organizations to conduct a needs assessment of the problem of sports-related injuries in states and communities, and to use the data collected to develop and implement prevention programs. In addition, health departments can bring together a coalition of groups and organizations that regulate and oversee youth sports activities within the state or community, and involve the coalition in developing and implementing prevention strategies.

(For more information on sports injuries and their prevention, please see the Bicycle section of this notebook.)

Notes

¹Davis, J. M., Kuppermann, N., and Fleisher, G. (1993). Serious sports injuries requiring hospitalization seen in a pediatric emergency department. *American Journal of Diseases of Childhood* 147:1001–1004.

²Stanitski, C. L., DeLee, J. C., and Drez, D., Jr. (1994). *Pediatric and Adolescent Sports Medicine*. Philadelphia: W. B. Saunders Company.

³Massachusetts Department of Public Health. (1987). *Massachusetts Sports Injury Prevention Task Force, Summary Brochure*. Boston: Massachusetts Department of Public Health.

⁴Baker, S., O'Neill, B., Ginsburg, M. J., and Li, G. (1992). *The Injury Fact Book*. New York: Oxford University Press.

⁵U.S. Consumer Product Safety Commission. (1992). *Product Safety Fact Sheet, Number 93: Skateboards*.

Washington, DC: U.S. Government Printing Office.

⁶Harborview Injury Prevention and Research Center. (1994). *Equestrian Helmet Safety: A Guide for Riding Clubs and Communities*. Seattle: University of Washington.

Promising MCH Settings

There are many ways to incorporate sports injury prevention into existing MCH services and programs. Following are some of the MCH programs that could play a part in preventing sports injuries.

Adolescent Health Clinics

School-Based/Linked Health Clinics

Child Health Clinics

Children with Special Health Needs (CSHN) Service Sites*

Community and Migrant Health Centers*

EMS and EMSC Programs*

Health Fairs

Primary Care Clinics

Sexually Transmitted Diseases (STD) Clinics

Women's Health Programs*

Incorporating sports injury prevention into MCH services doesn't have to be difficult. First steps can be as simple as putting up a poster that alerts kids and their parents to the large number of skateboard injuries in the U.S., or displaying stylish protective helmets where adolescents will see them. But don't stop there!

If sports injuries are a problem in your area, you may want to bring together interested staff to brainstorm about additional ways to address the problem in your setting. Here are some questions you may want to ask:

- Do we need to collect more or different types of information from children, youth, and families if we are going to help prevent their sports injuries?
- What kinds of resources, information or safety supplies do children, youth, and families need to prevent these injuries?
- Can we provide information, supplies, or coupons for supplies (e.g., bike and skateboard helmets or other protective gear)?
- Can we educate children, youth, and families individually or in group settings about protective gear, pre-sports physicals, and other strategies for preventing sports injuries?
- Can we assess, treat, or refer children and youth for this type of injury?

Training materials, manuals, and protocols already exist for many types of injuries. Check with your state health department, regional MCH office, or the Children's Safety Network for more information on available prevention materials.

As you plan activities to prevent sports injuries, think about possible changes in the following areas to strengthen your prevention efforts:

Medical records

Other data collection

Protocols for assessment, treatment, and referrals

Protocols for anticipatory guidance*

Educational materials available in waiting rooms in all settings

Educational materials to be handed to families with discussion

Educational forums

Referrals

Family follow-up

Training for staff

Linkage with other community resources

*See Glossary

Priority Partners in Prevention

Sports Injury

Local and State Government Agencies and Programs

City and county administrators; Department of Education; and Department of Parks and Recreation.

Local and State Legislators and Other Elected Officials

City and county councils; mayors and their staff; the governor and staff; the state attorney general and staff; and state representatives and senators on relevant committees.

Schools, Parent-Teacher, and Student Groups and Associations

Teachers, principals, superintendents and their associations; school boards; college and university administrators and faculty; athletic trainers, directors, and coaches; and school health personnel.

Media

Editorial boards; Op-Ed page editors; city desk reporters; consumer reporters; sportswriters; and sportscasters.

Health Care Providers

Pediatricians; family physicians; school-based clinic staff; nurses; trauma and emergency

room physicians; emergency medical services for children and emergency medical services personnel; other health professionals; local hospitals and trauma centers; health maintenance organizations; rehabilitation facilities; coroners' and medical examiners' offices; local medical societies; and sports medicine professionals.

Business Community

Sports equipment retailers; insurance companies; and chambers of commerce.

Civic Groups and Service Clubs

Kiwanis Clubs; League of Women Voters; Junior League; Rotary Clubs; Girl Scouts and Boy Scouts; Boys and Girls Clubs; and 4-H clubs.

Nonprofit Organizations

Local and state SAFE KIDS Coalitions; local Red Cross chapters; local or state consumer groups; and local head and spinal cord injury prevention associations.

Sports-Related Organizations

Little League; equestrian associations and riding schools; bicycle clubs and associations; gymnastics, skateboarding, and in-line skating groups; and soccer clubs.

Local and National Celebrities

Sportscasters; media personalities; and sports celebrities.

Researchers

Centers for Disease Control and Prevention-funded Injury Control Research Centers; state and local universities; and community colleges.

Religious Communities and Places of Worship

Foundations

Survivors of Sports Injuries and Their Families

Maternal and child health and other health department staff are in a unique position to prevent unintentional and violent injuries. For assistance in these efforts, please call or write Children's Safety Network, NCEMCH, 2000 15th Street North, Suite 701, Arlington, VA 22201-2617. Phone (703) 524-7802 / Fax (703) 524-9335.

Case Study

The Massachusetts Sports Injury Prevention Network

- Lead Agency:** Injury Prevention and Control Program, Bureau of Family and Community Health, Massachusetts Department of Public Health
- Start/End Dates:** Spring 1987–Ongoing
- Target Population:** Children and adolescents participating in organized sports activities, with a primary focus on high school athletics.
- Audience Reached:** The sports injury surveillance system has been implemented in three high schools. The network's newsletter, *Taking Action!* reaches 300 coaches, athletic trainers, school nurses, and sports medicine personnel.

Program Description

Objective

- Reduce the incidence and severity of athletic injuries among youth.

Program Components

Convene a Statewide Task Force on Sports Injuries and Their Prevention

The extent of sports injuries among children and adolescents in Massachusetts was revealed through a statewide population-based injury surveillance study conducted by the health department's injury prevention program between 1979 and 1982. Regulation and oversight of youth sports involved many groups, thus making it difficult to develop prevention strategies.

Injury program staff convened a statewide task force to document the nature of the problem, cur-

rent prevention strategies, and existing resources, and to recommend action. The Massachusetts Sports Injury Prevention Network is a multiagency group formed by the Massachusetts Department of Public Health in 1987 to provide leadership and advocacy in promoting prevention of sports injuries.

Develop Written Materials To Disseminate Information and Encourage Networking

During the past six years, the Sports Injury Prevention Network has developed a number of products, including a sports injury prevention resource guide, a report on a statewide survey of athletic injury prevention and treatment, and fact sheets. The network also writes and distributes a quarterly newsletter containing information on sports injuries, prevention resources, and updates of network activities. Written by the network coordinator, the newsletter is disseminated primarily to coaches, athletic trainers, and school nurses.

Host Meetings To Foster Coalition Building and Education

The network has sponsored many informational meetings for members and other interested professionals. During its first few years, the network met quarterly. Currently, the network meets annually, although its surveillance and public education working groups meet more often.

Conduct a High School Sports Injury Surveillance Project

The network initiated a sports injury surveillance project in three high schools to demonstrate the value of gathering and analyzing local data to reveal particular patterns of injury relevant to a community or school. The schools were selected because one group of athletic trainers works in all three schools and uses the same reporting forms.

A research assistant in the Department of Health has coded and analyzed information from the forms (including incidence, severity, treatment, and cause of injury; the specific sport involved; the part of the body involved in the injury; and the student's gender). The assistant has written a report which will be provided to the schools and to state associations of athletic trainers, coaches, and athletic directors. Follow-up may include data collection at additional high schools that have athletic trainers and thus report injuries in a standardized format.

Summary of MCH Role

The director of the Injury Prevention and Control Program at the Massachusetts Department of Health supervises the coordinator of the Sports Injury Prevention Network and provides program support (through mailings, printing, clerical help, and access to the health department's extensive injury prevention resource center). In addition, the statewide population-based injury surveillance study conducted by the Injury Prevention and Control Program was very helpful in revealing the extent of sports injuries among children and adolescents in Massachusetts.

Coalition Partners in Prevention

The Sports Injury Prevention Network includes: coaches and directors of youth sports leagues and school athletic programs; athletic trainers; public health and medical professionals; educators; advocates from organizations such as the Head Injury Foundation and The Society for the Prevention of Blindness; and many others.

Sustaining the Program

The network will continue at least as long as it is funded through the Disability Prevention grant from the Centers for Disease Control and Prevention. Staff hope to initiate surveillance projects in several other schools next year.

Adapting the Program to Community Needs

Many of the Sports Injury Prevention Network's strategies, such as convening a task force, developing written materials, and helping schools develop simple forms to document sports injuries, could be adapted by state or local health departments. Initiating and maintaining a sports injury prevention coalition requires a coordinator who can devote a consistent amount of time over the duration of the project.

Because the surveillance project staff were able to use preexisting report forms, data collection and analysis was not too complex. The high school sports injury surveillance project would be most easily replicated in areas where schools have athletic trainers and where school staff are supportive.

Resources Needed

Staffing Requirements

The coordinator for the Sports Injury Prevention Network is funded as a part-time position (10 hours per week). The network's research assistant, a state health department intern, worked full-time for approximately eight weeks to code and analyze the data and write the report. Network

members received in-service training, and the research assistant required minimal training in coding and analysis.

Fiscal Requirements

The coordinator of the Sports Injury Prevention Network is funded through a Disability Prevention grant by the Centers for Disease Control and Prevention. Title V funds all other support including staff, materials, and printing and mailing costs for the newsletter.

Lessons Learned

Collecting and Analyzing Local Data Doesn't Have To Be Hard

The surveillance project demonstrated how data collected by schools can be analyzed to reveal patterns and problems. Prevention strategies can then be tailored to address the situation at each school.

For example, a school nurse who had attended a workshop presented by the director of the Sports Injury Prevention Network realized that her school had a significant number of ice skating-related injuries. Ice skating had recently become a required part of physical education for certain grades in elementary and middle schools. The Sports Injury Prevention Network helped the school nurse devise a simple surveillance system, so she was able to take data to the principal to demonstrate insufficient use of protective equipment in the ice skating classes. School personnel followed up with the School Committee, which purchased additional protective equipment for students and allowed them to choose between ice skating and an alternate activity.

Agreeing on a Common Approach Is Half the Battle

Developing sports injury prevention strategies is usually difficult due to the varying agendas, approaches, and philosophies of those involved (trainers, coaches, parents, athletes, health care providers). Issues that require resolution include:

What interventions are most effective? How much regulation is needed? Who should be responsible for developing and enforcing regulations? How can data be recorded and collected in a uniform manner?

Products/Publications Developed/Used

Sports Injury Prevention and Treatment among Massachusetts High School Interscholastic Athletic Programs: A Status Report.

Bay State Youth Sports Guide: Resources for Sports Injury Prevention.

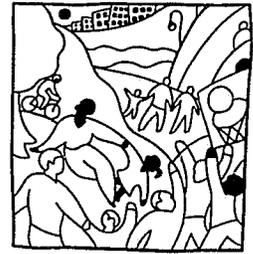
The Use of Local Sports Injury Data for Targeting Prevention Strategies: A Massachusetts Example.

Taking Action! (Massachusetts Sports Injury Prevention Network newsletter).

Sports Injury Prevention Network membership list, meeting agendas, fact sheets.

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Preventing Violence

Family Violence

An Overview

Child Abuse and Domestic Violence Are Closely Linked

Child abuse and domestic violence occur together in the same family 50 to 70 percent of the time.¹² In a 1980 study conducted by the former U.S. Department of Health, Education and Welfare, half of the battered women interviewed reported that their children were either physically or psychologically abused by their fathers.³

Child Abuse

Child Abuse Occurs Frequently in the United States

More than 800,000 cases of child abuse and neglect are doc-

umented each year. The U.S. General Accounting Office estimates that the total number of child abuse incidents is actually 26 times greater than reported.⁴ Approximately 160,000 children suffer life-threatening injuries or long-term impairment each year as a result of child abuse.⁴ At least 1,000 children die each year from the abuse they receive.⁵

Approximately 65 percent of the estimated total number of child maltreatment cases in the United States involve child neglect.⁶ Generally, neglect implies failure of a parent or caregiver to provide a child with minimally adequate food, clothing, shelter, supervision, and/or medical care. Even though child neglect is the most frequently identified form of child maltreatment in the United States, com-

“Approximately 65 percent of the estimated total number of child maltreatment cases in the United States involve child neglect.”⁶

munity concern about families where there is neglect lags far behind the concern shown for families where there is abuse.⁶

Between 1976 and 1992, the number of children reported abused or neglected increased by 333 percent.⁷ This dramatic rise in reported child abuse is only partially explained by new laws requiring certain professions to report all suspected abuse.

Adolescents Are At Higher Risk than Young Children for Nonfatal Child Abuse

Although fatal child abuse is most common among young children, the risk of maltreatment and the rate of nonfatal injury due to maltreatment actually increases with age.⁸ Older victims are perceived as needing less intervention by child protective services. The types of assistance available from child protective services may, in fact, be less helpful to older children.⁹

Child Abuse Has Both Short-Term and Long-Term Consequences

Children raised in abusive and neglectful homes are at high risk for developmental delays, school-related problems, and physical and emotional problems throughout their lives.¹⁰ In one study of maltreated adolescents, 70 percent had academic performance difficulties, 31 percent admitted drug abuse, 35 percent reported aggressive behaviors, 41 percent had homicidal thoughts, and 23 percent had engaged in self-destructive or reckless behav-

iors.¹¹ In a Public Health Service study of youth in a detention facility, 36.5 percent of respondents reported a history of physical abuse and 30.5 percent reported a history of sexual abuse.¹²

Recent research also suggests a link between child sexual abuse and teen pregnancy. Teens who were victimized as children tend to engage in sexual intercourse earlier and are less likely to use contraceptives than teens who were not abused.¹³

Policy and Prevention

Maternal and child health (MCH) programs can help prevent child abuse by ensuring that staff are well trained to teach anger management and appropriate discipline techniques to parents and caregivers and to diagnose maltreatment and assault.

MCH programs can provide home visitors or other support systems to families in high risk situations. Child care, support groups for single parents, parenting education, and supportive relationships with persons in the public health system are some of the ways to help reduce stress among young families. Linkages with the substance abuse and mental health communities are also critical to family violence prevention efforts.

Community service systems must become more responsive to the basic needs of neglectful families by providing safe, stable, and affordable housing, child care, and medical care.

Community efforts should also be directed toward strengthening families, ensuring early intervention, and alleviating social problems that contribute to child neglect, such as alcohol and other drug abuse.

Domestic Violence

Between 2 and 4 Million Women a Year in this Country Are Battered by a Male Partner¹⁴

Studies suggest that between one-fifth and one-third of all women have been physically assaulted by a partner or former partner at least once.¹⁵ Domestic violence is the leading cause of injury among women and is linked to numerous other health care problems including depression, alcohol and other drug abuse, and suicide.¹⁶ Approximately 25 percent of women who seek hospital emergency room treatment do so for battering-related injuries.¹⁴

In the United States, on average, 10 women a day are killed by their batterers.^{17,18} More than twice as many women are shot and killed by husbands or intimate acquaintances as are murdered by strangers using guns, knives, or any other means.¹⁹ When women kill their spouses or partners, it is often within the context of a history of wife abuse.¹⁹

Battering During Pregnancy

Pregnant women are particularly vulnerable to domestic violence, and the repercussions

of this abuse are serious. Studies indicate that pregnant women are twice as likely to be at risk for battery²⁰ and to delay seeking prenatal care until their third trimester.²¹

Battering in Adolescent Relationships

A Massachusetts study of female homicide victims ages 15–19 years found that 30 percent were killed by husbands or boyfriends—underscoring the need to identify and address battering in the adolescent population.³

Effects of Domestic Violence on Children

Children who witness the abuse of their mothers suffer significant short-term and long-term psychosocial consequences. Males who grew up seeing their mothers victimized are 1,000 percent more likely to hurt their adult partners.²²

Lack of Housing and Services Is a Serious Barrier to Family Violence Prevention

In 1987, nearly 40 percent of battered women and children in need of emergency housing were turned away because of lack of space.²³ Lack of emergency housing for battered women and their children could be alleviated by more shelters, more affordable housing, and more nonresidential programs and services for victims of family violence.

Policy and Prevention

Because the cycle of abuse continues and often escalates, producing severe injuries over time, battered women are likely to see health professionals frequently. Despite the fact that battered women are seen and treated frequently in emergency department settings, prenatal clinics, and other public health settings, few are diagnosed as victims of spousal abuse. A recent survey of all emergency departments in California found that as few as 5 percent of domestic violence victims were identified as such in emergency department records,²⁴ even though the Joint Commission for the Accreditation of Healthcare Organizations requires that hospitals have protocols in place to deal with domestic violence. Training in the optimal use of protocols to identify and treat victims of violence, and correct and consistent use of these protocols, has been found to increase the rate of identification of battered women from less than 6 percent to 30 percent.²⁵

Most health departments can expand and improve the quality of their referrals for battered women. Referrals and collaborative prevention efforts should involve not only shelters and hotline programs but also criminal justice agencies, social services, mental health, housing, and legal assistance agencies. Health departments need to educate policymakers about the extent of family violence in their states.

Health departments can promote public policy approaches to reducing family violence, such as ensuring that adolescents not living with their partners are covered by all domestic violence statutes, and advocating for additional funding for shelters and services.

The strong link between child abuse and domestic violence often is not reflected in combined or coordinated data collection, services, or prevention programs for families at high risk for both types of violence. Public health, and MCH programs in particular, can help build comprehensive family violence prevention programs that will ensure optimal safety and advocacy for both mother and child.

Notes

¹Pagelow, M. D. (1989). *The Forgotten Victims: Children of Domestic Violence*. Paper prepared for presentation at the Domestic Violence Seminar of the L.A. County Domestic Violence Council.

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³Schiffrin, E., and Waldron, C. (1992). *Identifying and Treating Battered Adult and Adolescent Women and Their Children*. Boston: Massachusetts Department of Public Health, Women's Health Unit.

⁴U.S. General Accounting Office. (1992). *Child Abuse: Prevention Programs Need Greater Emphasis*. Report to the Chairman, Subcommittee on Oversight of Government Management, Committee on Governmental Affairs, U.S. Senate. Washington, DC: U.S. General Accounting Office.

⁵National Center on Child Abuse and Neglect. (1993). *Child Maltreatment 1992: Reports From the States to the National Center on Child Abuse and*

- Neglect*. Washington, DC: U.S. Department of Health and Human Services.
- ⁶Gaudin, J. M. (1993). *Child Neglect: A Guide for Intervention*. Washington, DC: National Center on Child Abuse and Neglect.
- ⁷Merkel-Holgin, L. A. (1993). *The Child Welfare Stat Book 1993*. Washington, DC: Child Welfare League of America, Inc.
- ⁸National Center on Child Abuse and Neglect. (1993). *National Child Abuse and Neglect Data System. Working Paper 2. 1991 Summary Data Component*. Washington, DC: National Child Abuse and Neglect Data System.
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Promising MCH Settings

There are many ways to incorporate family violence prevention into existing MCH services and programs. Following are some of the MCH programs that could play a part in preventing family violence.

Adolescent Health Clinics
Adolescent Pregnancy and Parenting Programs*
School-Based/Linked Health Clinics
Breast/Cervical Cancer Screenings*
Child Health Clinics
Children with Special Health Needs (CSHN) Service Sites*
Community and Migrant Health Centers*
EMS and EMSC Programs*
Family Planning Clinics
Health Care Services for Homeless Youth*
Health Fairs
Home Visiting Programs*
Immunization Campaigns and Clinics
Mental Health Service Sites
Outreach Vans
Prenatal Clinics
Primary Care Clinics
Rape Crisis Centers
Sexually Transmitted Diseases (STD) Clinics
Substance Abuse

Prevention/Treatment Programs

WIC Clinics and Classes*

Women's Health Programs*

Incorporating family violence prevention into MCH services doesn't have to be difficult. First steps can be as simple as placing a note pad and box for women to write confidential notes to the health care provider, and posting a list of phone numbers of local domestic violence shelters in women's restrooms. But don't stop there!

If family violence is a problem in your area, you may want to bring together interested staff to brainstorm about additional ways to address the problem in your setting. Here are some questions you may want to ask:

- Do we need to collect more or different types of information from women and children if we are going to help prevent family violence?
- What kinds of resources or information do women and children need to prevent these violent injuries?
- Can we educate women and children individually or in group settings about appropriate approaches to discipline, family violence shelters, or other behaviors or resources that can prevent family violence?
- Can we assess, treat, or refer women and children

for this type of injury?

Training materials, manuals, and protocols already exist for many types of injuries. Check with your state health department, regional MCH office, or the Children's Safety Network for more information on available prevention materials.

As you plan family violence prevention activities, think about possible changes in the following areas to strengthen your prevention efforts:

Medical records
Other data collection
Protocols for assessment, treatment, and referrals
Protocols for anticipatory guidance*
Educational materials available in waiting rooms in all settings
Educational materials to be handed to women and children with discussion
Educational forums
Referrals
Family follow-up
Training for staff
Linkage with other community resources

*See Glossary

Priority Partners in Prevention

Family Violence

Local and State Government Agencies and Programs

City and county administrators; child welfare and social service agencies; home visiting programs; child fatality review committees; victim assistance programs; mental health programs; substance abuse prevention and treatment programs; senior citizen programs; Healthy Start grantees;* and Community Integrated Service Systems (CISS) grantees.*

Local and State Legislators and Other Elected Officials

City and county councils; mayors and their staff; the governor and staff; the state attorney general and staff; and state representatives and senators on relevant committees.

Law Enforcement Agencies

Police chiefs; sheriffs; police unions; and police training programs.

Legal System

Judges and judicial associations; Neighborhood Legal Services Programs; legal aid programs; and public defenders.

Schools, Parent-Teacher, and Student Groups and Associations

Teachers, principals, superintendents and their associations; school boards; school health personnel; college and university administrators and faculty; women's groups at colleges and universities; and school social workers and psychologists.

Media

Editorial boards; Op-Ed page editors; city desk reporters; and consumer reporters.

Health Care Providers

Pediatricians; family physicians; school-based clinic staff; nurses; trauma and emergency room physicians; emergency medical services for children and emergency medical services personnel; obstetricians and gynecologists; other health professionals; local hospitals and trauma centers; health maintenance organizations; coroners' and medical examiners' offices; social workers; and psychologists.

Business Community

Companies with gift or grant programs; employee assistance programs; and chambers of commerce.

Civic Groups and Service Clubs

Kiwanis Clubs; League of Women Voters; Junior League; Rotary Clubs; Girl Scouts and Boy Scouts; Boys and Girls Clubs; and 4-H clubs.

Nonprofit Organizations

Domestic violence and sexual assault programs; tenant organizations; crisis nurseries and respite care programs; neighborhood food distribution programs; alternative youth services; neighborhood programs and centers; and neighborhood Early Childhood Family Education programs.

Child Care Centers and Family Child Care Homes

Administrators; staff; licensing and regulatory agencies; and Head Start.

Researchers

Centers for Disease Control and Prevention-funded Injury Control Research Centers; state and local universities; and community colleges.

Religious Communities and Places of Worship

Foundations

Survivors of Family Violence

*See Glossary

Maternal and child health and other health department staff are in a unique position to prevent unintentional and violent injuries. For assistance in these efforts, please call or write Children's Safety Network, NCEMCH, 2000 15th Street North, Suite 701, Arlington, VA 22201-2617. Phone (703) 524-7802 / Fax (703) 524-9335.

Case Study

Parent Outreach Project: A Public Health Nursing Program Serving Families at High Risk for Child Abuse

Lead Agency: Amherst H. Wilder Foundation

Start/End Dates: October 1987–October 1990

Target Population: Parents living in Ramsey County, Minnesota, who are in situations of high stress and who are expecting a baby or who have babies ages birth to 12 months.

Audience Reached: Of the 207 families assessed for risk of child maltreatment, 112 families were found to be at risk. Of the total number at risk, 64 families received public health nursing care, linkage to parenting education, and a parent "befriender." A comparison group of 48 families received only standard public health nursing care and referral to parenting education.

Program Description

Objectives

- Reduce the incidence of child maltreatment in a sample of at-risk families.
- Improve the ability of public health nursing and parenting education programs to reach and serve families at high risk for maltreating their children.

Program Components

The Parent Outreach Project used the following approaches: professional casework services of public health nurses, community early childhood/family education classes, and volunteer parent "befrienders" who provided social support to target families.

Identify Families At Risk

Families entered the project through the Public Health Nursing Service. Public health nurses con-

ducted a risk-assessment interview and discussed a variety of health and parenting concerns with the parent(s), including home safety, child development, behavior management, and discipline.

The public health nurses identified families at risk who were expecting a baby or had a young child (birth to 12 months) and who had no substantiated instances of child neglect or abuse. Families chosen for the program had an average of seven risk factors for child maltreatment (for example, a parent who had been maltreated as a child, a parent who was abusing drugs or alcohol, a parent who had been assaulted by their spouse within the last six months, or other risk factors such as economic stress).

Link Families At Risk with Volunteer Parent Befrienders

A public health nurse and a trainer/coordinator of parent befrienders matched a volunteer parent befriender with a specific family and monitored the development of this helping relationship. Befrienders developed an informal, nondirective relationship with the parents to give them an oppor-

tunity to relieve stress, reduce isolation, and receive positive social support and encouragement for their accomplishments. The volunteer befriender worked as an independent member of the service team with the professional service providers. The befriender program was administered by the St. Paul Area Council of Churches. All volunteer befrienders were carefully screened, completed an intensive 16-hour training program, and participated monthly in an ongoing supervision and support program with the volunteer coordinator.

Link Families with Early Childhood Family Education Programs

The parent befriender and public health nurse also linked the family with the Early Childhood Family Education (ECFE) program in their neighborhood. Sponsored by the state through community education, ECFE programs emphasize building on family strengths and "learning by doing" together as a family.

Summary of MCH Role

Public health nurses in Ramsey County took responsibility for the home visiting, developmental monitoring, and risk assessment components of the program. The nurses linked families to parenting training and support resources, and to the befriender program. Nurses and their supervisors spent a lot of time communicating with the parenting education and befriender programs to develop consensus on how to tailor services and standard procedures to reach families in high risk situations more effectively. Nurses enhanced their knowledge and skills concerning child abuse prevention and disseminated information on maternal and child health to key collaborators.

The state maternal and child health agency consulted on the development of the initial grant proposal, but did not take part in the Parent Outreach Project.

Evaluation

The 64 families who were matched with volunteer befrienders received extensive home assess-

ments at 12 and 24 months after entering the project. Staff assessed the developmental status of the child, the risk for maltreatment in the family, child-parent interaction, social isolation, and the quality of the home environment. Parents were also questioned by the lead agency about their experience with the parent befriender program.

Project staff did not complete the same assessments on the families in the comparison group, due to time and fiscal constraints on the public health nurses. County reports of child maltreatment and the initial home and child assessment were essentially the sources for data on the standard care group.

A cost-effectiveness analysis of the parent befriender program was conducted following final data collection.

The research literature suggests that children from families at risk usually experience a decline in their overall developmental status from birth to age 3 years. For the befriended families, however, 80–90 percent of the children experienced normal growth and development over the two-year project period.

At both the 12-month and 24-month interviews, public health nurses rated the befriended families' risk for child maltreatment as substantially lower than at the time of intake, and noted significant reductions in social isolation. The overall rate of substantiated maltreatment over the two years was 6.5 percent (combined befriender and standard care groups). This compares to the 10–20 percent rate of child maltreatment typically found among untreated families in high risk situations during the two years after birth.

Lack of comparable data for the befriender and standard care groups makes it very difficult to assess the separate impacts of the befriender and public health nursing components of the program. There was no statistically significant difference in the incidence of child maltreatment between befriender and standard care groups. Although project parents were highly satisfied with their relationship with their befrienders (93 percent of befriended parents were satisfied and 62 percent were very satisfied) and found their support and guidance very helpful, the addition of a befriender did not appear to reduce the

incidence of child maltreatment compared to standard care over the time period of the study.

Staff in-service meetings were conducted with staff from the Public Health Nursing Service and early childhood collaborating agencies to disseminate the evaluation findings.

Coalition Partners in Prevention

Partners include Ramsey County Public Health Nursing Service, St. Paul Area Council of Churches, Early Childhood Family Education programs in five local school districts in the county, and the Amherst H. Wilder Foundation.

Each agency provided services and devoted significant time to coordination and communication between agencies. Each agency ultimately modified its standard procedures to better identify and serve families at high risk for child abuse.

Sustaining the Program

During the last year of the project period, project staff worked intensively with staff from the St. Paul Area Council of Churches to create a proposal to sustain and expand the parent befriender program. The proposal ultimately received funding from various sources, including major funding from the Kellogg Foundation for a three-year period.

The Public Health Nursing Service continues to provide case management and family assessment and to refer families to be matched with parent befrienders. The Early Childhood Family Education and public health nursing agencies now include information about one another as part of their neighborhood outreach efforts.

Role descriptions and designated responsibilities for each collaborating agency have been clarified and documented in written form, and each agency has appointed a person to provide linkage with other agencies.

A public health nursing service in another Minnesota county has begun a program based on the Parent Outreach Project model, in which public

health nursing staff assume responsibility for coordinating the volunteer befrienders.

The project director has consulted with the Minnesota State Health Department on child maltreatment prevention strategies and also with the Parent Outreach Project as part of a statewide Minnesota Injury Prevention Initiative. Plans are under way for a statewide training program for public health providers on topics related to child maltreatment prevention, to be implemented through a series of regional workshops across the state.

Adapting the Program to Community Needs

The Parent Outreach Project consists of a number of components that can be replicated easily: interagency collaboration, case management, home visiting, health outreach and developmental monitoring, parent education, social support, and linkage to community resources and services.

The cost, resources, and support needed to replicate this program will vary depending on the level of services already available in the community. While many communities have at least some health outreach providers, many do not have established parent education programs.

Resources Needed

Staffing Requirements

Approximately 15 public health nurses and 10 early family education staff participated in the project. One full-time volunteer coordinator was needed to manage a maximum of 30-35 volunteers at any given time.

The public health nurses and parent educators needed specialized in-service training to learn how to: (1) serve multistress/multiproblem families; (2) reach parents in high risk situations in groups; (3) deal with diversity; and (4) address boundary and staff support issues. It was also essential to train the public health nurses to work with volunteers so that

these befrienders could maintain an independent role and avoid being perceived as nursing assistants.

Parent befrienders initially completed 16 hours of training. An ongoing supervision group of 6–8 befrienders met with the volunteer coordinator each month. The *Parent Befriender Training Manual* was developed to assist with training needs.

As the program gradually achieved the goal of modifying collaborating agencies' programs to enhance outreach to parents in high risk situations, the nurses, educators, and other staff felt a greater need for additional training.

Fiscal Requirements

The project was funded at approximately \$150,000 per year for three years. Much of the planning and many of the services were provided in-kind. The overall cost of the parent befriender component of the program was approximately \$35,000. The average program cost per family per year was approximately \$2,000.

Funding source: The project was funded as one of the special projects of regional and national significance (SPRANS) through the federal Maternal and Child Health Bureau. Each of the collaborating agencies also made an "investment in prevention" by donating 30 percent of their costs for the project as an in-kind contribution.

Lessons Learned

Address the Mobility of Families in High Risk Situations

The mobility of families in high risk situations in the project was a significant problem. Approximately one-quarter to one-third of targeted families moved out of range of the project over the three years. For the first time, public health nurses were able to partially address the problem by arranging with their supervisors to continue working with families who had moved across traditional public health geographical divisions within the county. Many nurses drove considerable distances to continue providing services to families in the program.

This also marked the first time that these nurses worked closely with public health nurses in other counties to enhance continuity of services for relocating families.

Establish Community Connections

Meeting with key community agencies and individuals prior to entering each neighborhood proved a worthwhile means of gaining support for the project and preventing duplication of existing services.

Neighborhood implementation teams of five or six locally based service providers who did most of the work with targeted families in the area were very helpful in (1) identifying changes needed in services or in communication patterns between agencies, (2) identifying family needs efficiently, and (3) building and maintaining enthusiasm for the collaboration. Teams typically included the public health nurse, the public health nursing supervisor, an ECFE representative, and befrienders.

Enhance Public Health Nursing Skills, Knowledge, and Professional Linkages

Through the project's family risk assessments, public health nurses became more aware of risk factors for child maltreatment in their health promotion work. The information and knowledge gained by the nurses was disseminated during in-service training for others who were not involved in the project.

By serving on interagency teams, the public health nurses increased their familiarity with available resources and information sharing and reduced professional isolation. For the first time, representatives of the Public Health Nursing Service became members of the advisory committees for parent education programs. As a result, many public health nurses regularly use materials from the parent education groups with families and routinely refer families to the program. Nursing staff also taught the parent education program staff about child immunizations.

Tailor Parent Education Classes to Families in High Risk Situations

The project modified the traditional parent education program to reach an increasing number of

families in high risk situations, using the following methods: holding smaller classes, providing individual follow-up phone calls or home visits, relying more on videotapes than written materials, and arranging transportation to classes. Participating families benefited from attending a community parent education program without being formally labeled as "having a problem."

Reap the Rewards of Volunteer Parent Befrienders

Using volunteers (rather than paid paraprofessionals) as parent befrienders had numerous benefits. The fact that the befrienders were volunteers seemed to circumvent much of the hostility and suspicion some parents felt about having paid human services staff enter their homes. Both the volunteers and the media generated additional positive publicity for the program beyond traditional social services circles. This publicity built community support, which, in turn, laid the groundwork for successful integration of the program into the system.

A volunteer staff, ultimately, will not continue to volunteer without appropriate training, support, and respect. The fact that befrienders were volunteers became a real impetus for staff to run a well-supervised, supportive program and to invest in training and effective communication between collaborative partners in order to retain befrienders.

Although it was difficult to consistently balance the number of available families and volunteers, it was not hard to find sufficient numbers of well-suited volunteers. Retaining volunteers was not a problem as long as their concerns about the families and their communications with other collaborators were respected and addressed.

Setting Aside Funds for Evaluation Is Never Easy, But It Solves Numerous, Critical Problems

Completing all assessments on families in both the standard care group and the befriended group was critical to evaluating the program. Although there were financial and programmatic barriers to having assessors unknown to families rate these families on their risk for maltreatment and other measures, having families assessed by nurses who were

very close to the program raises questions about whether assessment tools were objectively and uniformly applied. Using assessors who were blind to the families' group assignment and individual situation would have allowed more definitive assessment of the efficacy of the parent outreach program model. Setting aside more funds early in the program for outside evaluators would have addressed both the need for "blind" evaluators and the problem of overburdened nurses.

Products/Publications Developed/Used

Assessment for Client Selection.

Parent Befriender Manual.

Project videotape depicting the Parent Outreach Project service model.

Parent Outreach Project Slide Presentation.

Parent Outreach Project Resource Packet.

Parent Outreach Project: Final Report, by Eugene Urbain and Daniel Mueller.

Interagency Collaboration Efforts to Strengthen Families: Learnings From the Parent Outreach Project (report by Kay Andrews and Eugene Urbain).

Parent Befrienders: Social Support For Families At-Risk (report by Kay Andrews).

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Case Study

Identifying and Treating Battered Adult and Adolescent Women and Their Children

Lead Agency: Massachusetts Department of Public Health, in collaboration with the Harvard Injury Control Center at the Harvard School of Public Health.

Start/End Dates: 1992–Ongoing

Target Population: Medical and health care providers in Massachusetts.

Audience Reached: Acute care hospitals and community health centers in Massachusetts, in other states, and abroad.

Program Description

Objectives

- Provide health care practitioners with information on the physical, psychological, and social impacts of domestic violence.
- Train health care providers to detect domestic violence in clinical settings.
- Educate pediatric health care providers to identify signs of domestic violence in the mothers of their patients.
- Help Massachusetts hospitals fulfill the Joint Commission for the Accreditation of Healthcare Organizations' requirement that all acute care hospitals have protocols in place to assess and treat battered women.

Program Components

Develop a Domestic Violence Protocol for Health Care Providers

The Massachusetts Department of Public Health developed a comprehensive protocol to detect and treat battered adult and adolescent women. This protocol is designed for use by providers in emergency rooms, community health centers, private practitioners' offices, obstetric and gynecologic clinics, family planning centers, psychiatric emergency services, chiropractors' offices, pain clinics, and dentists' offices.

Health department staff, battered women's advocates, and other coalition partners reviewed numerous existing protocols and manuals on assessing women for domestic violence. They decided what information was essential, what approaches were best, and what information needed to be adapted specifically to Massachusetts. Every shelter for battered women in Massachusetts was asked to review the coalition's draft protocol.

The protocol developed by the health department and its coalition partners describes how providers can create a nonthreatening atmosphere for interviewing women. It includes sample questions, both indirect and direct, that can be used to initiate a discussion of possible abuse. Following is an example of an indirect approach: "You seem to have some special concern about your partner. Can you tell me more? Does he ever act in a way that frightens you?" A more direct approach might use the following questions: "I notice that you have some bruises. Could you tell me how they happened? Did someone hit you?"

The coalition decided that the protocol also needed to include clinical guidelines for conducting examinations and documenting injuries, information about making appropriate referrals, and information for battered women on obtaining restraining orders and on current Massachusetts laws regarding domestic violence.

The health department also felt it was essential to include information on how domestic violence may differ among adolescents, women in rural areas, women who have immigrated to this country, and women with disabilities; the coalition included in the protocol a section on special populations and an overview of cultural competence issues.

Identify Battered Women through Their Children

Identifying a woman who is being battered has tremendous potential to help both the mother and any children living with her. Battered women sometimes seek help indirectly by taking their children to a pediatrician. Consequently, the protocol identifies six situations that should alert pediatric care providers to the possibility that the mother is being abused:

- the mother brings in her children for frequent pediatric visits
- the mother brings in her children for seemingly insignificant or vague complaints
- the mother and children make late evening or night visits

- there are concerns about the child's behavior
- the mother's partner is hypervigilant, controlling, and verbally abusive
- the mother has obvious injuries

Conduct Educational Forums for Health Care Providers

The Massachusetts Department of Public Health, Massachusetts Health Research Institute, New England Medical Center, and the Massachusetts Academy of Pediatrics developed half-day and full-day courses on implementing the domestic violence protocol. Training will be provided to approximately 1,200 pediatric and perinatal health care providers affiliated with the Department of Public Health's statewide network of maternal and child health clinics and outreach programs. Training will also be provided to 10 neighborhood health care centers affiliated with New England Medical Center and to private physicians at a Massachusetts health maintenance organization.

The training sessions include a summary of facts about domestic violence and a presentation by a domestic violence survivor who describes her experience with her partner and with the health care system. The trainers review clinical guidelines and participants engage in role playing exercises related to common provider-woman scenarios. Participants learn how to assess battered women for immediate danger and how to help them make a safety plan. During the training session, a community resource panel describes services available in the area.

Summary of MCH Role

The Women's Health Unit in the Bureau of Family and Community Health (the lead Title V agency for the state) developed, printed, and distributed 2,000 copies of the protocol, *Identifying and Treating Battered Adult and Adolescent Women and their Children*. Copies were sent to every acute care hospital, emergency department, community health center, and battered women's shelter in Massachusetts. The Women's Health Unit supports

training for health care providers on effective use of the protocol with in-kind contributions, such as office space.

Evaluation

Since March 1993, 400 community-based pediatric and perinatal health care providers have been trained to use the domestic violence protocol developed by the Women's Health Unit at the Massachusetts Department of Health.

Of the providers who attended a training program in 1993, 36 percent were nurses and nurse practitioners, 25 percent were outreach workers, 15 percent were social workers and counselors, 10 percent were case managers, and 9 percent were physicians. Training sessions were held in a number of settings, including community health centers (52 percent), hospitals (14 percent), community-based health outreach programs (14 percent), and others (20 percent).

Training session participants are asked to fill out both pretest and posttest questionnaires to assess changes in knowledge, attitudes, and practice skills. The Department of Public Health developed a tool that was used for nine months in 1993. Department staff are currently revising the tool, which they felt was not specific enough to provide the desired level of detail. On average, the 1993 evaluations reported a 9 percent improvement in knowledge and attitudes and a 16 percent improvement in practice skills.

Coalition Partners in Prevention

The Massachusetts Department of Public Health worked in conjunction with the Coalition of Battered Women's Services, the Harvard Injury Control Center, Project Awake, Children's Hospital, Brigham and Women's Hospital, New England Medical Center, the Asian Women's Project, Boston City Hospital, and the Massachusetts Office of Elder Affairs. Every battered women's shelter in the state also reviewed the protocol before it was published.

Partners for the training component of the project include the Massachusetts Department of

Health, Massachusetts Health Research Institute, New England Medical Center, and the Massachusetts Academy of Pediatrics.

Sustaining the Program

The Women's Health Unit at the state health department distributed 1,000 protocols to all acute care hospitals, emergency departments, community health centers, and battered women's shelters in Massachusetts. An additional 1,000 copies of the protocol have been distributed upon request to health care providers and battered women's advocates in Massachusetts, in other states, and abroad.

One of the coalition members, New England Medical Center, has added new hospital-based advocacy services for battered women and their children and has expanded clinical assessment services.

Adapting the Program to Community Needs

Much of the material in the state's domestic violence assessment and treatment protocol would be applicable in maternal and child health settings in any state. As the recent survey of the implementation of domestic violence protocols in California's emergency departments underscores, "having a protocol" is not the same as implementing it in a truly effective manner. Training for all staff at health care facilities is critical to a consistent, effective program of assessment, treatment, and referral for battered adolescents and women, and their children.

Since states vary in their responses to domestic violence (e.g., reporting requirements for health professionals and procedures for obtaining a restraining order), other health departments would need to modify and adapt the protocol to reflect the particular needs of their state. The Massachusetts domestic violence protocol is published in a looseleaf binder, making it easy for providers and programs to add or change information as appropriate.

Resources Needed

Staffing Requirements

The full-time director at the Women's Health Unit spent approximately six months on the domestic violence protocol project. She was assisted by a graduate student from the Harvard School of Public Health who worked full-time on the project for six months.

A project manager (32 hours per week) administers the project's training component. The Department of Public Health provides secretarial support for the training component and contributes space in its local offices for the training sessions.

Fiscal Requirements

The domestic violence protocol was developed as part of the ongoing work scope of the Women's Unit. The protocol was printed in-house at the Department of Public Health.

The program's training component is funded through a \$50,000 grant award from the Healthy Tomorrows Partnership for Children Program (a collaborative demonstration grant program funded by the American Academy of Pediatrics and the federal Maternal and Child Health Bureau to support community-based initiatives in children's health care). The Massachusetts Health Research Institute is affiliated with the Department of Public Health and provides grants management and other related services to the project. The state health department provided office space, supplies, telephone service, and supervision by the project manager as in-kind contributions.

The training project provides both the survivors of abuse and the community resource personnel with a small stipend for participating in the panel.

Lessons Learned

Save the Child? Save the Mom?

To protect children, it is essential to protect mothers. Yet, advocates for children and advocates for women often hold conflicting views. Although we

know that, in many families, where there is an abused child, there is also a battered wife, the safety of women and the safety of their children are often still viewed as conflicting. Advocates for children who are victims of abuse may blame a battered mother for continuing to expose her children to the abuser, despite her limited choices and her fear of taking any action.

Training staff asked the Department of Child Protective Services staff to discuss how they have implemented programs that address the safety of both mothers and children and to share information about how these programs work. Training sessions on the protocol provided a forum for various groups to talk together about common issues.

Create a Common Vision among Staff about How Battered Women Will Be Helped On-Site

Training sessions held at community health centers engage entire teams in the training process so that physicians, nurses, community outreach workers, and social workers speak a common language and begin to help their consumers in the same ways.

Once Is Not Enough

Although one-time training sessions can motivate health care providers to incorporate domestic violence prevention into their daily routine and can introduce them to useful tools, there is no substitute for additional technical assistance or training a little later in the process, when staff may begin to feel discouraged about their first efforts to interview women or feel that their referrals are inadequate. Ideally, staff at specific health care sites should have regular opportunities to discuss problems in implementing the protocol, make changes in how the protocol is being implemented, and brainstorm about how to strengthen their domestic violence prevention program. Refresher courses for staff who attended the initial training create an opportunity to talk about how the protocol is working and to solve any problems that have arisen. Ongoing training and technical assistance, coupled with regular training for new staff, can increase the number of public and private health settings that integrate domestic violence prevention protocols into their practice in an effective, ongoing way.

Special Populations Have Different Needs

When developing protocols for assessment, treatment, and referrals, consider the differing needs of special populations. For example, battered women who are undocumented workers fear deportation, and will need different referrals for help than will American citizens. Abused adolescents often face different problems from those of adult or elderly women who are being battered. In addition, health care professionals are required to report any suspected domestic violence in women with disabilities.

Battered Adult Women and Battered Adolescents Have Different Needs

Adolescence is characterized by the struggle for independence and self-sufficiency, coupled with risk-taking behavior and a focus on peer relationships. Many teenage women who are being abused by their partners resist seeking help from their parents and other adults, especially authority figures such as police or court officers. These young women may fear that if they seek help, their parents may curtail their newly gained independence.

Many adolescent victims are unable to avoid their abusers because they attend the same school; these young women often have increased fear and sense of entrapment. In addition, adult women have legal options for protection that are not available to teens or may be available only when a parent is present. For example, in some states, an adolescent under 18 years of age may be unable to get a restraining order without a parent present. The full weight of a state's domestic violence laws may apply only to partners living together, and not to teens still living in their respective homes.

Battered women's shelters and programs often are not geared to serving adolescents. Providers should be able to make referrals to shelters and programs that can provide services to abused adolescents.

The Many Voices of Abuse

If a provider suspects that a non-English-speaking woman is being abused, it is important to use the services of an appropriate interpreter. The

ideal interpreter would be a woman from the health facility, who is trained in medical interpretation and who will honor confidentiality. It is important for providers to remember to address the woman directly, not the interpreter. Health staff should *never* ask a family member of the battered woman to serve as a translator. When referring clients, MCH programs should have a list of shelters that have bilingual or multilingual staff.

Products/Publications Developed/Used

Identifying and Treating Battered Adult and Adolescent Women and Their Children Protocol: A Guide for Health Care Providers. Available from the Women's Health Unit at the Massachusetts Department of Health, (617) 727-7222.

A directory of providers and community resource personnel in Massachusetts who are able to conduct training sessions.

Pretest and posttest questionnaires for health care providers attending training sessions on the protocol.

A six-month follow-up survey to assess behavioral changes among providers following training and to determine which specific components of the training program had the most impact.

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Case Study

Women's Health Month in Ohio

- Lead Agency:** Women's Health Program, Division of Maternal and Child Health, Ohio Department of Health
- Start/End Dates:** September 1985–Ongoing
- Target Population:** Ohio's population of women, and the health care providers who serve them.
- Audience Reached:** Ohio's population of women, and the health care providers who serve them.

Program Description

Objectives

- Identify issues affecting the health of women in Ohio.
- Develop programs to address women's health issues.
- Increase public awareness so that more battered women in Ohio learn about the services available to them.
- Educate the public and health care providers concerning women's health issues.
- Help women to network with each other and to take an active role in their own health care.
- Encourage women to work together to have an impact on the health care system.

Program Components

The Ohio Department of Health sponsors and develops activities for Women's Health Month, held each year in September (beginning in 1986).

Identify Key Issues for Women's Health Month

Every year, the health department, in conjunction with community service providers, develops a list of focus issues for Women's Health Month. A priority issue for 1994 is violence against women (defined as rape, including acquaintance rape; domestic violence; incest; marital rape; sexual harassment; and homicide). Other key issues include the impact of racism on women's health and on their ability to access health care; women and addiction; health issues for women with disabilities; and the effects of media messages and advertising images on women's health.

Fund Minigrants to Cosponsor Programs for Women's Health Month

The Women's Health Program sends out a request for proposals (RFP) each year for Women's Health Month grants. The goal is to supplement existing resources in local areas and to encourage nonprofit agencies, private industry, community organizations, and government agencies to cooperate in sponsoring events and educating the commu-

nity about focus issues for Women's Health Month. Organizations can apply for grant funding to cover speakers' fees, advertising, printing, or mailing costs. Individual grants of \$500 may be awarded; if five or more agencies in the same county (or an unlimited number of agencies from three counties) cooperate to sponsor a project, up to \$1,500 can be awarded.

Support a Television Advertising Campaign To Prevent Battering During Pregnancy

This public awareness program, focusing on breaking the cycle of battering as it relates to healthy birth outcomes, reached audiences in 19 county areas. The program developed two public service announcements, funded primarily by the Ohio March of Dimes. One public service announcement compares the devastation of an earthquake to the damage resulting from a male threatening his pregnant partner; the other uses a broken egg to illustrate what can happen to a pregnant woman and her unborn child when the woman is victimized by domestic violence.

Conduct an Outreach Campaign To Inform Women about Domestic Violence Shelters

Each year during Women's Health Month, information on local domestic violence shelters is printed on the outside of plastic bags that contain local newspapers, coupons, and other marketing tools. These bags are distributed to 80,000 households in a six-county area. The number of calls received by local shelters increases each year after the bags are distributed. This program has been funded for four years.

Promote Local, Regional, and State Workshops, Conferences, and Seminars on Women's Health Issues

Numerous workshops, lectures, support groups, and seminars have been held at local, regional, and state levels. Topics have included domestic violence, parenting training, prevention of alcohol and other drug use, assertiveness training for female survivors of incest, self-esteem and violence prevention for adolescents, breast cancer awareness, heart disease, stress management, menopause, reproductive health

concerns, nutrition, sexually transmitted diseases, wellness, and eating disorders.

Summary of MCH Role

The primary developer and funding source for this program is the Division of Maternal and Child Health, which allocates \$100,000 for Women's Health Month activities under the Women's Health Program. Depending on funding, approximately 95-100 grants (\$500 to \$1,500 each) are available annually. The Division of Maternal and Child Health also contributed to the television advertising campaign to prevent battering during pregnancy, which was funded primarily by the March of Dimes.

Evaluation

All approved projects for Women's Health Month must complete a two-page evaluation following the event. All reports submitted by funded projects are monitored by the Bureau of Maternal and Child Health (part of the health department's Division of Maternal and Child Health).

Coalition Partners in Prevention

Women's Health Month is cosponsored by various community agencies and organizations throughout the state.

Sustaining the Program

Women's Health Month in Ohio is now in its ninth year. The Division of Maternal and Child Health has established strong links with women's organizations, women's health groups, and other organizations across the state, and has supported and strengthened programs already in progress.

Adapting the Program to Community Needs

MCH agencies, in addition to initiating a "Women's Health Month", can add family violence

prevention messages and activities to events already being planned. For instance, "Child Abuse Prevention Month," which is recognized each April nationwide, might be an opportunity to educate policymakers about the strong link between child abuse and domestic violence and to advocate for specific policy changes.

State or national "theme months" are an opportunity to keep important injury messages before the public for an extended period of time, to stimulate local interest in prevention activities, and to build diverse coalitions. Every community and state has regular events to which injury prevention messages and activities can be added.

Resources Needed

Staffing Requirements

The program is staffed by a half-time director and a part-time secretary. The program coordinator notes that the program actually requires the full-time services of a director and secretary. (Although both positions are full-time, the director and secretary currently divide their responsibilities between the Women's Health Program and the Rape Prevention Project.)

Conferences, seminars, and workshops are the primary means of educating and training the public and community health service providers.

Fiscal Requirements

Project grants for Women's Health Month total approximately \$100,000. An additional \$8,000-\$10,000 is needed to fund either a spring planning day or a September kickoff event preceding the activities, and to support other statewide events cosponsored by the Women's Health Program. In addition, printing costs for the Women's Health Month brochure and poster average about \$6,000.

The MCH Block Grant funds the majority of this project. Additional funds from the Preventive Health Services Block Grant helped establish rape prevention programs as part of Women's Health Month.

Lessons Learned

Provide Child Care To Increase Participation in Women's Health Month

Organizers of Women's Health Month activities found that it was very difficult to attract adequate numbers of participants unless child care services were provided. These services were particularly critical for low-income mothers.

Focus on a Few Issues—Don't Tackle Too Many at Once

One group decided that limited resources were better used to sponsor luncheon speakers on women's health issues for meetings already scheduled, rather than to arrange full-day conferences. Another group learned that it was better to schedule three workshop choices rather than eight, because too many speakers and topics can overwhelm participants. Some Ohio counties tried to hold health fairs from 8:00 a.m. to 8:00 p.m., but found this timespan too exhausting for most of the participating service providers.

Products/Publications Developed/Used

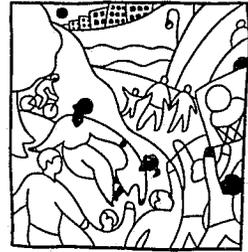
Take Care, Take Charge, Choose Health
(Women's Health Month brochure).

Request for Proposals, Women's Health Month FY 1994 (includes the two-page minigrant evaluation form).

Materials produced by individual projects.

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Preventing Violence

Homicide/ Assault

An Overview

Homicide Disproportionately Affects Infants and Male Youth of Color

In 1991, more than 9,400 infants, children, adolescents, and young adults (ages birth to 24 years) in the United States died as the result of being intentionally assaulted by another person.¹ During the first year of life, homicide claims more lives than any other injury.¹ Homicide is also the leading cause of death among African American males ages 15–34 years.²

Men, young adults, teenagers, and minority group members (particularly African Americans and Latinos) are at increased risk for homicide.

While the homicide rate (per 100,000) in 1991 for all youth ages 15–19 years was 19.6, the rate among Latino male youth was 59.9, and the rate among African American male youth was 134.6.¹

Poverty Is a Major Risk Factor for Homicide^{3,4}

In fact, when socioeconomic status is held constant, differences in homicide rates among racial groups all but disappear.⁵

Family Members and Acquaintances Are Most Often the Perpetrators

More than 15 percent of all homicides are committed by

“... The homicide rate (per 100,000) in 1991 for all youth ages 15–19 years was 19.6, the rate among Latino male youth was 59.9, and the rate among African American male youth was 134.6.”

family members; nearly 40 percent are committed by acquaintances of the victims.² Fatal assaults on younger children are usually perpetrated by family members. Violent crimes against adolescents often involve casual acquaintances of the same gender, race, and age. Of the homicides among 15- to 24-year-old males for whom the relationship between victim and offender is known, 68 percent of the white victims and 76 percent of the African American victims were murdered by someone they knew.⁶ Interventions directed toward adolescents and young adults may thus benefit both victims and assailants.

Among persons between the ages of 15 and 59 years, homicides occur primarily in connection with arguments.² Improving conflict resolution skills and reducing the incidence of physical fighting may be very important approaches to breaking the sequence of events that result in homicide and assaultive injury.

Firearms Play an Important Role

Firearms are used in 68 percent of all homicides and in more than 80 percent of teenage homicides.^{7,8} One Massachusetts study showed that for every homicide, there were 534 emergency room visits and 33 hospital admissions.⁹ The ratio of deaths to injuries is roughly five times greater for shootings than for assaults with sharp instruments such as knives.¹⁰

Policy and Prevention

Few health departments are directly tackling the issue of limiting child and adolescent access to firearms in their communities or states. Public health professionals and pediatricians routinely see children from families that own firearms, including a worrisome number of families that keep loaded and inappropriately stored handguns,¹¹ yet discussions about the risks associated with firearms are rare. Training and protocols for health care providers need to include information about how to identify violence-related injuries, how to inquire about and engage patients in discussions of violence, and how to document the patient's history of violence (for both assailants and victims) through medical records.

Health departments need to join with law enforcement personnel, school officials, and other community partners to educate their communities about the magnitude of the risks associated with guns, and to support public policy initiatives that restrict child and adolescent access to firearms.

Other promising homicide prevention approaches also need to be explored. These include parenting training and support, conflict resolution training for both parents and children, peer mediation programs, and designated safe places for adolescents to gather where creative, stimulating activities are offered.

(For more information on homicide/assault injuries and their prevention, please see the *Alcohol, Firearms, and Family Violence* sections of this notebook.)

Notes

¹National Center for Health Statistics. (1994). Unpublished data prepared by L. A. Fingerhut.

²Baker, S., O'Neill, B., Ginsburg, M, and Li, G. (1992). *The Injury Fact Book*. (2nd ed.). New York: Oxford University Press.

³Curtis, L. A. (Ed.). (1985). *American Violence and Public Policy: An Update of the National Commission on the Causes and Prevention of Violence*. New Haven, CT: Yale University Press.

⁴Rosenberg, M. A., and Fenley, M. A. (1991). *Violence in America. A Public Health Approach*. New York: Oxford University Press.

⁵Griffith, E. E., Bell, C. C. (1989). Recent trends in suicide and homicide among blacks. *Journal of the American Medical Association* 262(16):2265-2269.

⁶Fingerhut, L. A., and Kleinman, J. C. (1990). International and interstate comparisons of homicide among young males. *Journal of the American Medical Association* 263(24):3292-3295.

⁷Fingerhut, L. A. (1993). Firearm mortality among children, youth, and young adults 1-34 years of age, trends and current status: United States, 1985-90. *Advance Data from Vital and Health Statistics* No. 231. Hyattsville, MD: National Center for Health Statistics.

⁸Federal Bureau of Investigation. (1993). *Crime in the United States, Uniform Crime Reports, 1992*. Washington, DC: U.S. Department of Justice.

⁹Guyer, B., Lescohier, I., Gallagher, S., Hausman, A., and Azzara, C. (1989). Intentional injuries among children and adolescents in Massachusetts. *New England Journal of Medicine*. 321(23):1584-1589.

¹⁰Teret, S. P., and Wintemute, G. J. (1983). Handgun injuries: The epidemiologic evidence for assessing legal responsibility. *Hamline Law Review* 6:341-350.

¹¹Senturia, Y. D., Christoffel, K. K., and Donovan, M. (1994). Children's household exposure to guns: A pediatric practice-based survey. *Pediatrics* 93(3):469-475.

Promising MCH Settings

There are many ways to incorporate homicide prevention into existing MCH services and programs. Following are some of the MCH programs that could play a part in preventing homicide and assaults.

Adolescent Health Clinics
Adolescent Pregnancy and Parenting Programs*
School-Based/Linked Health Clinics
Breast/Cervical Cancer Screenings*
Child Health Clinics
Children with Special Health Needs (CSHN) Service Sites*
Community and Migrant Health Centers*
EMS and EMSC Programs*
Family Planning Clinics
Health Care Services for Homeless Youth*
Health Fairs
Home Visiting Programs*
Mental Health Service Sites
Outreach Vans
Prenatal Clinics
Primary Care Clinics
Rape Crisis Centers
Sexually Transmitted Diseases (STD) Clinics
Substance Abuse Prevention/Treatment Programs
WIC Clinics and Classes*
Women's Health Programs*

Incorporating homicide and assault prevention into MCH services doesn't have to be difficult. First steps can be as simple as playing culturally competent videotapes about conflict resolution where adolescents can watch comfortably. But don't stop there!

If homicide and assault are problems in your area, you may want to bring together interested staff to brainstorm about additional ways to address the problem in your setting. Here are some questions you may want to ask:

- Do we need to collect more or different types of information from children, youth, and families if we are going to help prevent assaults?
- What kinds of resources or information do children, youth, and families need to prevent assaults?
- Can we educate children, youth, and families individually or in group settings about the risks associated with firearms? Can we teach basic conflict resolution skills, or other aspects of homicide and assault prevention?
- Can we assess, treat, or refer children and youth for assaultive injuries, or those who appear at risk for such injuries?

Training materials, manuals, and protocols already exist for many types of violence prevention. Check with your state health department, regional MCH office, or the Children's

Safety Network for more information on available prevention materials.

As you plan homicide prevention activities, think about possible changes in the following areas to strengthen your prevention efforts:

Medical records
Other data collection
Protocols for assessment, treatment, and referrals
Protocols for anticipatory guidance*
Educational materials available in waiting rooms in all settings
Educational materials to be handed to children, youth, and families with discussion
Educational forums
Referrals
Family follow-up
Training for staff
Linkage with other community resources

*See Glossary

Priority Partners in Prevention

Homicide/Assault

Local and State Government Agencies and Programs

City and county administrators; child welfare and social service agencies; child fatality review committees; local zoning boards; substance abuse prevention and treatment programs; mental health programs; Department of Criminal Justice; Department of Education; Healthy Start grantees;* and Community Integrated Service Systems (CISS) grantees.*

Local and State Legislators and Other Elected Officials

City and county councils; mayors and their staff; the governor and staff; the state attorney general and staff; and state representatives and senators on relevant committees.

Law Enforcement Agencies

Police chiefs; sheriffs; police unions; and police training programs.

Schools, Parent-Teacher, and Student Groups and Associations

Teachers, principals, superintendents and their associations; school boards; school health personnel, student government and clubs; college and university administrators and faculty.

Media

Editorial boards; Op-Ed page editors; and city desk reporters.

Health Care Providers

Pediatricians; family physicians; school-based clinic staff; nurses; trauma and emergency room physicians; emergency medical services for children and emergency medical services personnel; other health professionals; local hospitals and trauma centers; health maintenance organizations; rehabilitation facilities; coroners' and medical examiners' offices; state chapters of the American Academy of Pediatrics; local medical societies; and social workers.

Business Community

Insurance companies; employee assistance programs; firearms dealers; and chambers of commerce.

Civic Groups and Service Clubs

Kiwanis Clubs; League of Women Voters; Junior League; Rotary Clubs; Girl Scouts and Boy Scouts; Boys and Girls Clubs; and 4-H clubs.

Legal System

Courts; judges, the juvenile justice community; Neighborhood Legal Services Programs; legal aid programs; and public defenders.

Nonprofit Organizations

Domestic violence and sexual assault programs; tenant orga-

nizations; neighborhood food distribution programs; neighborhood programs and centers; neighborhood Early Childhood Family Education programs; community and neighborhood groups; and alternative youth services.

Child Care Centers and Family Child Care Homes

Administrators; staff; licensing and regulatory agencies; and Head Start.

Researchers

Centers for Disease Control and Prevention-funded Injury Control Research Centers; state and local universities; and community colleges.

Religious Communities and Places of Worship

Foundations

Survivors of Assault and Families of Homicide Victims

*See Glossary

Maternal and child health and other health department staff are in a unique position to prevent unintentional and violent injuries. For assistance in these efforts, please call or write Children's Safety Network, NCEMCH, 2000 15th Street North, Suite 701, Arlington, VA 22201-2617. Phone (703) 524-7802 / Fax (703) 524-9335.

Case Study

Building Violence Prevention Coalitions in New Mexico

- Lead Agency:** New Mexico Department of Health and Environment
- Start/End Dates:** July 1992–Ongoing
- Target Population:** District and local health departments, state health department programs, state agencies.
- Audience Reached:** District and local health departments, state health department programs, state agencies.

Program Description

Objectives

- Develop a well-coordinated state network of people and programs active in violence prevention.
- Foster primary prevention activities and programs at the local and state level to prevent a range of violent behavior including homicide, suicide, child abuse, domestic violence, and rape.

Program Components

Giving Voice to the Vision: New Mexico's Vision for Effective Violence Prevention

The state health department's violence prevention program encourages and promotes four priority approaches to violence prevention. Although the state health department sets the priorities for violence prevention, the specific activities and

approaches are determined by district and local health offices. Following are the current violence prevention priorities for local programs:

- Teach conflict resolution in schools;
- Empower adolescents to be advocates;
- Teach parenting skills to first-time parents of children assessed at high-risk for child abuse; and
- Establish mentoring programs.

The state violence prevention program is also committed to developing and supporting an accurate and thorough needs assessment to determine the magnitude of the domestic violence problem in New Mexico.

Promote Violence Prevention Activities at the District and Local Levels

Each quarter, the health promotion project managers from each of the four public health districts meet with the state health department's violence prevention program staff to learn about vio-

lence prevention approaches and share ideas and strategies. In addition, the state violence prevention program released requests for minigrant proposals in 1992 and 1993, and awarded seven grants (ranging from \$5,000 to \$15,000) to local and regional violence prevention programs.

The Southern District office now provides training and technical assistance in violence prevention to counties, towns, and cities within its borders. District health staff help match needs with local resources, and suggest useful materials, speakers, and other contacts. The goal of the Southern District office is to help local health departments and their partners assess and articulate the impact of violence on their community, identify existing resources that can help address the problem, and learn the necessary skills to become effective violence prevention advocates. The Southern District office is also working to establish teams in every school district; these teams will be trained in state-of-the-art violence prevention approaches and will form a core coalition locally on violence prevention.

Develop a Strong Violence Prevention Coalition within the State Health Department

As the largest department within the New Mexico state government, the health department contains numerous programs that touch violence prevention directly and indirectly. New Mexico's emergency medical services (EMS) program, for example, operates a trauma registry (see Glossary) and employs health educators and public relations staff who devote part of their time to violence prevention. With 5,000 emergency medical technicians in the field statewide, the EMS program plays an important role in New Mexico's violence data collection and prevention planning.

An internal advisory team on violence prevention helps educate other staff within the health department (working in programs that do not have violence prevention components) concerning the violence epidemic and the role their programs can play. For the many agencies within the department that address differing aspects of violence prevention and risk factor reduction, the internal advisory team meetings provide another forum to share informa-

tion about their activities and strategies and to work toward a consistent prioritized approach to ending violence in New Mexico.

Coordinate a High-Level Statewide Violence Prevention Coalition

The statewide violence prevention coalition includes the Department of Public Safety; the Department of Education; Children, Youth and Families; the Office of the Attorney General; and the Department of Health. Several universities also participate, often represented by a medical school, substance abuse prevention training programs, emergency medical services for children (EMSC) programs, or community health science departments or schools.

Although the director of each participating organization may not be able to participate in every meeting, organizations are asked to send a representative who can speak for and make decisions on behalf of their organization and see that the decisions are carried out.

One of the interagency team's first tasks was to develop a matrix of all agencies involved, the violence prevention projects in which they were already participating, the resources they brought to the table, and the gaps they identified in preventive and treatment services.

Summary of MCH Role

The maternal and child health (MCH) medical director serves on the management team for the violence prevention program at the New Mexico health department. The medical director also compiled and edited two editions of a state report on violence in New Mexico, which includes county-by-county data and general action recommendations.

Evaluation

The New Mexico health department hired an evaluator to work closely with the recipients of violence prevention minigrants on quantitative and qualitative evaluation.

Coalition Partners in Prevention

Partners within the state health department include the following programs: Emergency Medical Services, Health Promotion, Adolescent Health, Maternal and Child Health, Epidemiology, Mental Health, and Substance Abuse. Additional partners include the Department of Public Safety; Department of Education; Children, Youth and Families, (including the Risk Reduction Services Division); Indian Health Service; Department of Labor; Corrections Department; Office of the Attorney General; universities (schools of medicine, substance abuse programs, EMSC departments, community health sciences departments, special education departments); the New Mexico Center for Dispute Resolution; and New Mexico Cease Fire.

Sustaining the Program

As a result of building coalitions at many levels within and outside the health department, the New Mexico violence prevention program has developed a network of knowledgeable professionals and community members committed to working on violence prevention.

Years ago, the state health department mandated that all public health division offices spend 5 percent of their time on motor vehicle injury prevention. This meant that 5 percent of staff could be assigned full-time to this issue or that all staff members could allocate 5 percent of their time to the issue. The state health department may, in future, require a similar allocation of time to violence prevention, in conjunction with continued training and support.

Adapting the Program to Community Needs

In New Mexico, all local and district health offices are extensions of the state health department. This violence prevention program, administered by a state health department, would work particularly well in states with centralized structures that can consistently apply priorities and approaches statewide.

Even in states with less close ties between state and local public health, the New Mexico health

department's violence prevention activities are a very useful model, particularly its work to develop reports on state violence data, to create a dialogue about violence priorities in the state, to begin a state violence prevention coalition, and to promote local violence prevention activities.

Resources Needed

Staffing Requirements

The violence prevention program at the New Mexico State Health Department is staffed by one full-time health program manager (who directs the program), one full-time health educator, and secretarial support.

Fiscal Requirements

Although the New Mexico violence prevention program was originally funded at approximately \$100,000 per year, the budget has been increased to \$208,000. The Preventive Health Services Block Grant and Maternal and Child Health Block Grant funds support the violence prevention program. Additional support is possible through a general state fund established this year to finance efforts to build self-esteem among youth.

Lessons Learned

Clarify State and Local Roles in Violence Prevention as Early as Possible

District health offices were asked to advise the state health department violence prevention program staff so they could better address district and local needs. Decisions on priorities and funding were made at the state level by the manager of the violence prevention program and the other two members of the program's management team (the MCH medical director and the manager of the adolescent program). Local and district programs had a lot of flexibility in choosing programs and approaches within the state's violence prevention guidelines.

Both the bureau chief and the section head at the state health department supported this division

of labor. The violence prevention program manager feels that clearly defining roles from the start has made it easier to take into account the differing points of view about the health department's role in violence prevention.

A Facilitator Can Improve Interagency Violence Prevention Coalition Meetings

In a high-profile statewide coalition that includes prominent state leaders with diverse perspectives on violence prevention, tempers and egos can hamper productive work. An outside facilitator can ensure that no individual person or agency dominates, and can help control the power dynamics between agencies and individuals. In New Mexico, the neutral facilitator enabled health department leaders to participate equally with other coalition members. The facilitator enabled leaders of state agencies to participate more fully than would have been possible if one agency were running the meetings.

A Year May Be Too Short for Minigrants

The state health department changed its minigrant program awards from one-year to two-year grants because it seemed unrealistic to expect programs to accomplish a lot in their first and only year of funding. The state decided that worthwhile projects deserved a two-year investment in order to utilize their small grants wisely.

Build Strong Coalitions by Listening to the Community's Priorities

One way to develop strong local community coalitions is by bringing people together to identify their health priorities—and to be flexible and resourceful enough to help solve problems that may take precedence over violence prevention. When the state health department's Southern District staff began bringing people together in small New Mexico school districts to talk about their health priorities, the staff knew that residents might not view violence prevention as their most pressing health issue. For example, residents from a very poor rural town on the U.S. border spoke of their desperate need for running water and a sewage system. Health depart-

ment staff were able to find separate state funds to work on bringing fresh water to more members of the community and extending the sewer system. Town residents, who included legal Mexican immigrants, undocumented workers, wealthy white ranchers, and retired military personnel, had lived side by side for years but rarely communicated. All of these people were able to see how the improved services benefited the entire community, and this fostered a can-do spirit in the local coalition.

The next health issue tackled eagerly by the coalition concerned the drug traffic and violence flowing north from the Mexican border through the town. Drug dealers were recruiting children younger than 16 years of age (who were relatively free from police prosecution) to transport drugs, and this was having a destructive impact on the community's children and families. The coalition scheduled a meeting in August 1994 to assess strategies for preventing violence in their community and for providing training in advocacy skills.

Products/Publications Developed/Used

Let Peace Begin With Us: The Problem of Violence in New Mexico, Volume I (1990) and Volume II (1993). Created and edited by Victor LaCerva, M.D., Maternal and Child Health Medical Director, New Mexico Department of Health. Volume II includes a self-assessment listing of 14 questions, to help communities or counties rate their violence prevention efforts. Also included are three pages of action recommendations on general violence prevention, firearms, mental health, child abuse prevention, and domestic violence prevention. For copies, call 505-827-2350.

Matrix of resources (developed by the Interagency Group on Violence Prevention to facilitate interagency communication and collaboration).

New Mexico 1993 Injury. (1993). This report describes the leading causes of injury (1991) and death (1990) among New Mexico residents, and lists injury rates by county.

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Case Study

Granting Power: Using Grant Requirements To Promote Violence Prevention Activities in Colorado

- Lead Agency:** Adolescent Health Program, Colorado Department of Public Health
- Start/End Dates:** 1989–Ongoing
- Target Population:** Adolescent health programs and projects in Colorado that apply for and receive maternal and child health (MCH) funding from the state health department.
- Audience Reached:** Adolescent health programs and projects in Colorado that apply for and receive maternal and child health (MCH) funding from the state health department.

Program Description

Objectives

- Increase violence prevention programming in ongoing adolescent health projects.
- Develop violence prevention expertise within diverse adolescent health projects.
- Reach youth at high risk for intentional injuries, using effective violence prevention interventions.
- Raise awareness, among adolescent health care programs, providers, and the public health community, that violence is a critical health issue for adolescents and their families.

Program Components

Require All MCH Adolescent Health Grantees to include a Violence Prevention Objective in Their Work Plans

The Colorado Department of Health's Adolescent Health Program has required that all adolescent health programs applying for MCH funding since 1989 include at least one objective on violence prevention. The requirement is part of the Adolescent Health Program's annual request for proposals (RFP) guidance.

Many programs serving adolescents in Colorado in the late 1980's had become increasingly interested in violence prevention and were beginning to incorporate violence prevention into their programs at the time the health department instituted its requirement. Seven grants were funded during the first year violence prevention activities were required. Pregnant and parenting teen programs, teacher training, school-based health services, and a self-esteem program are among the projects that have

been funded under the requirement and continue to work with the state health department to help prevent adolescent violence

Pregnant and parenting teen programs: Programs for pregnant and parenting teens use the following approaches to incorporate violence prevention initiatives.

- Violence prevention is included in educational programs for teens. Topics include partner violence, incest, rape, and risk factors for violence (such as depression, firearms, and substance abuse).
- Intake protocols have been modified to identify youth at risk for various types of violence, as well as youth who had suffered abuse or assault in the past.
- Support services are offered in-house or staff referred clients to other programs.
- Child abuse prevention is also a primary focus for the pregnant and parenting teen programs, which already included parenting skills training and support in the programs.

School-based health services: The health department also funds Denver school-based clinics (in four high schools, one middle school, and four elementary schools) and the Valley Wide Adolescent Health Program, which provides school health clinic services and health education in rural communities. In the four target high schools, violence prevention is addressed through a multiagency collaborative effort. A local nonprofit group called AMEND (Abusive Men Exploring New Directions) works closely with students on partner-violence issues, both in the classroom setting and individually.

(The teacher training component of this program is fully described in another case study. Please see *Teacher Training in Violence Prevention*, also in the Homicide/Assault section of this notebook.)

Summary of MCH Role

The state health department required that violence prevention activities be incorporated into a

range of adolescent programs by adding language to the RFP guidance. MCH monitors progress toward meeting those objectives and the health department provides adolescent health grantees with technical assistance such as state violence data and information about prevention materials and resources.

Evaluation

The Adolescent Health Program reviews six-month progress reports and annual reports and makes site visits every other year to assess the grantees' progress on all stated objectives, including those on violence prevention.

One of the teen parenting programs has shown a decrease in the risk of young parents abusing their children.

In one year, the Denver school-based health program reported 800 educational classroom contacts on nonviolent problem solving; in addition, 60 individual students had 263 visits with clinic or nonprofit personnel on-site regarding violence issues.

Coalition Partners in Prevention

Local coalition partners include AMEND (Abusive Men Exploring New Directions), which provides counseling to adolescents in abusive relationships through the Denver school-based clinics; and the Gay, Lesbian and Bisexual Community Services Center of Colorado, which set up and oversees support groups for lesbian, bisexual and gay youth through the Denver school-based clinics.

Sustaining the Program

Language requiring violence prevention objectives has been included in the RFP guidance since 1989.

Adapting the Program to Community Needs

Many state and local health departments could require grantees or contractors to address violence

prevention in diverse settings. Health departments could increase the effectiveness of the violence prevention work by sharing local violence data, promising approaches, and evaluation strategies with grantees or contractors.

Resources Needed

Staffing Requirements

Adding the violence prevention requirement to the RFP guidance did not require additional staff. Writing the requirement was part of the normal guidance process and monitoring its implementation was part of the ongoing project evaluation.

State health department staff wanted to bring all adolescent health grantees together to share ideas and learn from each others' experiences in violence prevention, but were unable to do so because of lack of funds.

Fiscal Requirements

This project did not involve additional costs for the state health department.

Lessons Learned

The More School Personnel Who Can Refer Students to School-Based Violence Prevention Services the Better

Initially, only high-level school administrators in the Denver schools (typically, the assistant principals), could make mandatory referrals to the school-based clinic for counseling on violence prevention. The clinics were able to reach far more students when academic counselors as well as administrators were permitted to refer students to the clinics for services.

School-Based Clinics Can Bring in Local Domestic Violence Counselors To Help Students Facing Partner Violence

The director of Colorado's school-based clinic program believes that the most common violence problem in the four clinic-based high schools is partner violence, followed closely by acquaintance violence. School-based clinic staff in Denver feel that bringing in a counselor from a nonprofit domestic violence prevention organization with well-trained, clinically experienced staff has been very effective for their students. The counselor spends most of the time with individual students, but also provides classroom education on domestic violence prevention.

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Case Study

Training Teachers in Violence Prevention

Lead Agency: Rocky Mountain Center for Health Education and Promotion, Colorado

Start/End Dates: 1988–Ongoing

Target Population: High school health educators.

Audience Reached: Approximately 500 high school health educators.

Program Description

Objective

- Train 500 high school health educators to use comprehensive health promotion curricula.

Program Components

Selected high school teachers in Colorado receive three to five days of training in the use of a comprehensive health education curriculum, *Teenage Health Teaching Modules*. Training is provided by the Rocky Mountain Center for Health Promotion and Education, with funds from the Colorado Department of Health. The program focuses on training health educators to help adolescents develop self-assessment, communication, decision making, health advocacy, and self-management health skills.

Train High School Teachers To Use a Violence Prevention Curriculum

Each year, approximately 500 high school teachers receive two hours of training on the adolescent violence section in *Teenage Health Teaching Modules*. Developed by Dr. Deborah Prothrow-Stith, *Violence Prevention: Curriculum for Adolescents* addresses problems of fighting, violent behavior, and homicide, and offers students and teachers positive ways to deal with anger and arguments. Approximately 130 high school teachers each year choose to take an additional one-day training course in using the violence prevention curriculum effectively in their classrooms.

Provide Technical Assistance to Teachers

The Rocky Mountain Center for Health Promotion and Education also provides technical assistance to school districts (upon request) concerning implementing various aspects of the curriculum. Rocky Mountain Center staff help school

districts to update statistics in the curriculum, and serve as a link between school districts requesting additional information and materials and the sources of this information. Teachers or school districts may call the Rocky Mountain Center for advice when thinking of adding a new component to their health curriculum, such as a discussion of sexual harassment or rape.

The Rocky Mountain Center provides additional training to school districts as needed. The most frequently requested follow-up training involves making role playing an effective and compelling experience for high school students.

Summary of MCH Role

The Colorado State Health Department funds teacher training in how to use the violence prevention curriculum through a contract with the Rocky Mountain Center for Health Promotion and Education.

Evaluation

The Rocky Mountain Center tracks how many teachers implement the curricula for which they provide training, rather than attempting to measure changes in student behaviors. Most of the health curricula the Rocky Mountain Center uses have already been proven effective in changing adolescent health behaviors.

Seventy percent of Colorado school districts have been trained to use the *Teenage Health Teaching Modules*. In a recent Rocky Mountain Center survey, approximately 63 percent of those trained to use these modules have implemented the curricula. Each trained teacher reaches approximately 260 students a year.

Approximately 66,800 high school students receive health education each year from a teacher trained by the Rocky Mountain Center. Violence prevention training has been integrated into the Comprehensive Health Education Program in approximately 80 school districts in Colorado.

Sustaining the Program

The Colorado State Health Department provides ongoing funding for the Rocky Mountain Center to train high school teachers in using *Violence Prevention: Curriculum for Adolescents*. Violence prevention training has been integrated into the Comprehensive Health Education Program in approximately 80 school districts in Colorado.

Adapting the Program to Community Needs

Every state in the U.S. is part of the Comprehensive School Health Education Network, funded by the Centers for Disease Control and Prevention. Each state has a designated training center whose mission is to provide training or information about training sources in comprehensive school health education. Training centers are typically housed in the state department of education or department of health, but are occasionally based at nonprofit organizations or universities. Although states vary tremendously in the extent to which they include violence prevention in their health curricula, these training centers should be useful contacts to work with on providing training for teachers on violence prevention.

Conflict resolution skills are difficult to master, for teachers as well as for students. In-depth training for teachers, accompanied by ongoing training and problem-solving opportunities with experienced teachers who have used the curriculum in question, will greatly increase the chances that the teacher will feel motivated to use the curriculum, and will be able to use it well.

Resources Needed

Staffing Requirements

The training program has a staff of eight and a team of 43 consultant trainers.

Fiscal Requirements

Teacher training is funded by the Colorado Department of Health, Adolescent Health Program. Current funding levels are not available.

Lessons Learned

To Train Teachers, You Need Teachers

In the experience of the Rocky Mountain Center, even the best program will not work unless the person presenting the program and training the teachers has had extensive classroom experience. Teachers who have implemented the curriculum successfully will be able to motivate more teachers to attempt it.

Taking a Team Approach to Training

Health department staff can be valuable members of the training team by presenting scientific evidence about the violence epidemic and providing information about proven and promising approaches to prevention.

The ABC's of Successful Conflict Resolution Work with Students

In an article for the *Colorado School Health News*, Deborah Main of the Center for Studies in Family Medicine at the University of Colorado Health Sciences Center, and Mary Doyen of the Rocky Mountain Center for Health Promotion and Education, review the rationale for incorporating skills-based training into health education and provide tips for increasing the effectiveness of skills lessons.

To help students learn conflict resolution and other skills, Main and Doyen suggest that teachers must be able to facilitate four basics:

- Modeling the correct use of the skill
- Practice
- Positive, specific performance feedback
- Transfer of learning (using the skill in real-life situations)

Effective Role-Playing Mirrors Real Life Situations

Main and Doyen suggest that the single most important key to successful role playing is to select realistic situations for the students. The closer the situations are to real life, the more likely the students will be to use the skills successfully outside the classroom. The authors also suggest that students practice role playing in public rather than private (since public acts are more difficult to disown) and that students be given latitude to improvise during role play in order to "own" the experience. Reinforcement is critical to the success of skills-based education, including conflict resolution training.

Main and Doyen suggest four ways to "increase the likelihood that skills will be transferred to real life situations:

- Make role playing realistic—be sensitive to developmental and cultural differences among students
- Let students practice skills using a variety of situations and with a variety of models and co-actors
- Integrate reinforcement into teaching and learning of skills (reinforcers can be parents, teachers, peers, self)
- Use corrective feedback to ensure that practice mirrors real life experiences.

Making Conflict Resolution Part of Everyday Life

Main and Doyen also suggest an exercise to try with students to bridge classroom-taught skills and real-life situations. They suggest asking students to keep a daily log of all the situations that occur in which they could use conflict resolution skills outside the classroom. Students could log information about a specific situation; whether they tried to use conflict resolution skills in that situation, and, if so, how successful it was; what things they could improve; how they rewarded themselves if they used the skill successfully; and what barriers still need to be overcome.

Products/Publications Developed/Used

Violence Prevention: Curriculum for Adolescents, by Deborah Prothrow-Stith, M.D., Education Development Center, Inc., Newton, MA 02158-1060. Telephone (617) 969-7100.

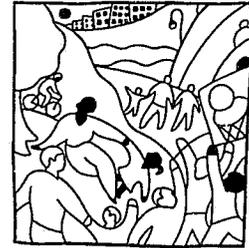
Teenage Health Teaching Modules, Education Development Center, Inc., Newton, MA 02158-1060. Telephone (617) 969-7100.

"Practice! Practice! Practice! Implementing Skills-Based Education," by Deborah S. Main, Ph.D., and Mary A. Doyen, M.A. Published in *Colorado School Health News*, Volume 9, No. 3, Spring 1994.

Curricular materials from Rocky Mountain Center for Health Education and Promotion are available only with training.

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Preventing Violence

Sexual Assault

An Overview

The United States Has the Highest Rate of Sexual Assault of Any Industrialized Country in the World¹

A recent study estimates that 683,000 women are raped every year.² This is equivalent to 78 women being raped every hour, 1,871 women raped every day, and 56,916 women raped every month.² It has been reported that as many as 44 percent of women have been victims of actual or attempted sexual assault at some time in their lives; as many as 50 percent of these women have been victimized more than once.³ The very young, the very old, and persons with mental and physical disabil-

ities are particularly at risk for sexual assault.⁴

Rape is believed to be the most underreported of all crimes. It is estimated that as many as 92 percent of all rapes are not reported to the police.³ Survivors are often reluctant to report sexual assault because of embarrassment, fear of retribution, or feelings of guilt. Female sexual assault survivors, however, are more likely than male survivors to speak with police about a sexual assault—nearly 20 times more likely, according to one study.⁵

Although rape is traditionally defined as a crime against women, reports of sexual victimization among males are gaining increased recognition.⁶ In a

“Twenty-nine percent of all rapes occur before the victim reaches 11 years of age, and 32 percent occur when the victim is between 11 and 17 years of age.”²

study of more than 3,000 adult residents of Los Angeles, nearly 17 percent of the women and approximately 10 percent of the men reported that they had been sexually assaulted at some point in their lives.⁷ The study found that only 2.9 percent of the women and none of the men contacted rape crisis centers.⁵

Young Children and Adolescents Are at High Risk for Sexual Assault

Twenty-nine percent of all rapes occur before the victim reaches 11 years of age, and 32 percent occur when the victim is between 11 and 17 years of age.² Approximately one in 10 high school students has experienced physical violence in dating relationships.⁸ Among college students, the figure rises to 22 percent (equivalent to the rate for adults).⁸ Date rape is frequently not reported because the victim may have feelings of guilt about her "role" in the rape.

Teens may feel more confusion than adults about appropriate behavior in intimate relationships because of their lack of experience and the confused messages they receive from society about sexual behavior and decision making. These factors may contribute to a girl's inability to judge whether her boyfriend's abusive behavior is normal or out of line. In addition, the victim is often unable to avoid her abuser because they both attend the same school, thus increasing her fear and

sense of entrapment. Many teens resist seeking help from their parents and other adults.

The Majority of Rapes Involve Two People Who Know Each Other

Often, the victim knows her assailant—a husband or ex-husband, father or stepfather, boyfriend or ex-boyfriend, another relative, friend, or neighbor.² One study of female rape survivors ages 13–17 years in Massachusetts found that, in most cases, these adolescents were raped by a friend, acquaintance, or relative.⁹

Policy and Prevention

Lack of sufficient data on the incidence of rape and on possible prevention strategies creates both a responsibility and an opportunity for state and county maternal and child health (MCH) departments to work with epidemiology, adolescent health, women's health, and other coalition partners to more fully understand and address the problem of rape.

The fact that approximately 40 percent of battered women are also sexually assaulted by their partners¹⁰ means that prevention strategies aimed at reducing domestic violence should also reduce the incidence of rape.

Given the high incidence of sexual assault of females by the time they reach adolescence,

providers in most public health settings should be trained to assess clients for previous sexual assault and should be knowledgeable about appropriate referrals and resources. Public health programs can also work more collaboratively with the mental health community, emergency medicine, hospitals, women's health centers, the domestic violence prevention community, and rape crisis centers.

School-based clinic staff in high schools might consider taking a lead in providing or arranging counseling for student survivors of sexual assault, providing support groups, and using classroom curriculums aimed at preventing dating violence among teens.

Rape prevention strategies also need to directly address males identified at risk for perpetrating sexual assault. Some colleges have developed rape prevention programs focused on male athletic teams.

Environmental modifications such as improved lighting around schools, campuses, and communities are also promising approaches to reducing the incidence of rape and sexual assault.

(For more information on sexual assault and its prevention, please see the Alcohol and Family Violence sections of this notebook.)

Notes

¹Reiss, A. J., and Roth, J. A. (Eds.). (1993). *Understanding and Preventing Violence*. Washington, DC: National Academy Press.

²Crime victims Research and Treatment Center of the National Victim Center. (1992). *Rape in America: At A Glance*. Arlington, VA: National Victim Center.

³Russell, D. E. H. (1982). The prevalence and incidence of forcible rape and attempted rape of females. *Victimology* 7:81-93.

⁴American College of Obstetrics and Gynecology. (1992). Sexual assault.

ACOG Technical Bulletin 172:1-5.

⁵Sorenson, S. B., and Siegel, J. M. (1992). Gender, ethnicity, and sexual assault: Findings from a Los Angeles study. *Journal of Social Issues* 48(1):93-104.

⁶Bolton, F. G., Morris, L. A., and MacEachron, A. A. (1989). *Males at Risk*. Newbury Park, CA: Sage.

⁷Sorenson, S. B., Stein, J. A., Siegel, J. M., Golding, J. M., and Burnam, M. A. (1987). The prevalence of adult sexual assault: The L. A. epidemiologic catchment area study. *American Journal of Epidemiology* 126:1154-1164.

⁸Gamache, D. (1991). In B. Levy (Ed.), *Dating Violence: Young Women in Danger*. Seattle: The Seal Press.

⁹*Shattering the Myths: Sexual Assault in Massachusetts 1985-87*. Publication No. 16,367-62-1000-6-90-CR. Boston: Women's Health Division, Bureau of Community Services.

¹⁰Freize, I. H., and Browne, A. (1989). Violence in Marriage. In L. Ohlin and M. Tonry (Eds.), *Family Violence: Crime and Justice, A Review of Research*. Chicago: University of Chicago Press, pp. 163-218.

Promising MCH Settings

There are many ways to incorporate rape prevention into existing MCH services and programs. Following are some of the MCH programs that could play a part in preventing sexual assault.

Adolescent Health Clinics
Adolescent Pregnancy and Parenting Programs*
School-Based/Linked Health Clinics
Breast/Cervical Cancer Screenings*
Child Health Clinics
Children with Special Health Needs (CSHN) Service Sites*
Community and Migrant Health Centers*
EMS and EMSC Programs*
Family Planning Clinics
Health Care Services for Homeless Youth*
Health Fairs
Home Visiting Programs*
Mental Health Service Sites
Outreach Vans
Prenatal Clinics
Primary Care Clinics
Rape Crisis Centers
Sexually Transmitted Diseases (STD) Clinics
Substance Abuse Prevention/Treatment Programs
WIC Clinics and Classes*
Women's Health Programs*

Incorporating sexual assault prevention into MCH services doesn't have to be difficult. First steps can be as simple as talking to adolescent females about the high correlation between alcohol use and date rape, and providing appropriate Rape Crisis Center referrals. But don't stop there!

If sexual assault is a problem in your area, you may want to bring together interested staff to brainstorm about additional ways to address the problem in your setting. Here are some questions you may want to ask:

- Do we need to collect more or different types of information from adolescents and families if we are going to help prevent sexual assault?
- What kinds of resources or information do adolescents and families need to prevent these injuries?
- Can we educate adolescents and families individually or in group settings about preventing sexual assault?
- Can we assess, treat, or refer adolescents for this type of injury?

Training materials, manuals, and protocols already exist for many types of injuries. Check with your state health department, regional MCH office, or the Children's Safety Network for more information on available prevention materials.

As you plan activities to prevent sexual assault, think about possible changes in the following

areas to strengthen your prevention efforts:

Medical records
Other data collection
Protocols for assessment, treatment, and referrals
Protocols for anticipatory guidance*
Educational materials available in waiting rooms in all settings
Educational materials to be handed to consumers with discussion
Educational forums
Referrals
Adolescent follow-up
Training for staff
Linkage with other community resources

*See Glossary

Priority Partners in Prevention

Sexual Assault

Local and State Government Agencies and Programs

City and county administrators; child welfare and social service agencies; mental health programs; substance abuse prevention and treatment programs; Healthy Start grantees;* and Community Integrated Service Systems (CISS) grantees.*

Local and State Legislators and Other Elected Officials

City and county councils; mayors and their staff; the governor and staff; the state attorney general and staff; and state representatives and senators on relevant committees.

Law Enforcement Agencies

Police chiefs; sheriffs; police unions; and police training programs.

Schools, Parent-Teacher, and Student Groups and Associations

Teachers, principals, superintendents and their associations; school boards; college and university administrators and faculty; women's groups at colleges and universities; and school health and mental health personnel.

Media

Editorial boards; Op-Ed page editors; city desk reporters; and consumer reporters.

Health Care Providers

Pediatricians; family physicians; school-based clinic staff; nurses; trauma and emergency room physicians; emergency medical services for children and emergency medical services personnel; other health professionals; local hospitals and trauma centers; health maintenance organizations; rehabilitation facilities; coroners' and medical examiners' offices; and local medical societies.

Business Community

Insurance companies; employee assistance programs; firearms dealers; and chambers of commerce.

Civic Groups and Service Clubs

Kiwanis Clubs; League of Women Voters; Junior League; Rotary Clubs; Girl Scouts and Boy Scouts; Boys and Girls Clubs; and 4-H clubs.

Legal System

Courts; judges; juvenile justice community; Neighborhood Legal Services Programs; and legal aid programs.

Nonprofit Organizations

Sexual assault and domestic violence programs; crisis hotlines; tenant organizations;

neighborhood food distribution programs; neighborhood programs and centers; and alternative youth services.

Child Care Centers and Family Child Care Homes

Administrators; staff; licensing and regulatory agencies; and Head Start.

Researchers

Centers for Disease Control and Prevention-funded Injury Control Research Centers; state and local universities; and community colleges.

Religious Communities and Places of Worship

Foundations

Survivors of Sexual Assault

*See Glossary

Maternal and child health and other health department staff are in a unique position to prevent unintentional and violent injuries. For assistance in these efforts, please call or write Children's Safety Network, NCEMCH, 2000 15th Street North, Suite 701, Arlington, VA 22201-2617. Phone (703) 524-7802 / Fax (703) 524-9335.

Case Study

Ohio's Statewide Protocol on Sexual Assault: Meeting Prevention and Treatment Needs in Culturally Diverse Communities

Lead Agency: Bureau of Maternal and Child Health, Ohio Department of Health

Start/End Dates: 1990–Ongoing

Target Population: Medical, law enforcement, public health, and all other sexual assault service providers; Ohio's population of women.

Audience Reached: The program reached 1,500 medical, law enforcement, public health, and other sexual assault service providers during 1993. In addition, the program served 21,832 people through direct rape crisis intervention and/or prevention programs.

Program Description

Objectives

- Assess the extent of sexual assault in Ohio and the number and adequacy of preventive and supportive services currently available.
- Support development and implementation of effective approaches to prevention of rape.
- Support development of services for rape victims in areas where such services do not currently exist, and support development of new rape prevention components for existing services.
- Ensure that rape survivors have access to quality emergency medical care, crisis support, advocacy, and counseling services.

Program Components

Perform a Statewide Sexual Assault Needs Assessment

In 1988, the Ohio Department of Health funded a private research firm to conduct a statewide Sexual Assault Needs Assessment. Survey responses came from 56 counties representing two-thirds of the state (one-third urban, one-third rural). The needs assessment documented problem areas in Ohio and indicated directions for future program and service development.

The needs assessment indicated that, overall, only a very small percentage of sexual assault prevention and treatment programs were staffed by personnel trained in cultural competence, or were located in areas primarily serving people of color. The need for more education and services in these communities was evident. In addition, rural residents, people with disabilities, and older citizens were greatly underserved. The needs assessment also confirmed that in 75 percent of the cases, the persons

who were sexually assaulted knew their assailants. Assaults by relatives were the most common, followed by assaults by acquaintances.

Lack of awareness of existing services was the number one reason given by survivors for not seeking health care services after a rape or sexual assault. Distance and lack of transportation to services were also major barriers.

Develop a Sexual Assault Protocol for Hospitals, Community-Based Health Care, and Emergency Medical Services Providers

As a result of the needs assessment, the Bureau of Maternal and Child Health at the Ohio Health Department contracted with the Ohio Coalition on Sexual Assault to develop the publication, *Sexual Assault: A Hospital/Community Protocol for Forensic and Medical Examination: Recommended Guidelines*. The protocol sets forth clear guidelines that make it easier to provide consistent, comprehensive health care treatment that includes emotional, social, and crisis intervention services and provides information about the follow-up services available in the community. The protocol lists specific steps for appropriate treatment and support, such as: outlining first steps to take when the person who has been sexually assaulted arrives at the care setting, ensuring that the person is emotionally supported, documenting the medical record, collecting evidence, and examining and releasing the survivor.

The protocol emphasizes that persons who have been sexually assaulted should be viewed as a priority and treated within 15 minutes of arrival, and suggests that the hospital designate a staff person as a "sexual assault specialist" responsible for coordinating and assuring care for the survivor. The protocol also includes three handouts that should be given to the survivor at different points during the treatment: "Information You Should Know as A Survivor of Sexual Assault," "After-Care Information for the Sexual Assault Survivor," and "Common Reactions and Follow-up Services for the Sexual Assault Survivor."

The Emergency Medical Services (EMS) portion of the protocol addresses forensic and medical treat-

ment issues and interacting with the survivor in a supportive and non-threatening manner. EMS providers are reminded that if the survivor changed clothes after the attack, the original clothing must be brought along to the hospital in a paper bag, since plastic bags trap moisture and promote mildew that destroys vital evidence. EMS providers are also asked to limit the physical examination to any evidence that can be obtained visually without causing further emotional distress to the survivor.

The protocol underscores the critical importance of ensuring that rape survivors feel acceptance and support, regardless of their emotional response. The protocol guidelines stress that service providers must not evaluate or judge the credibility of the circumstances of the assault, and that rape laws in Ohio apply equally to all assailants (regardless of whether the assailant is a partner or acquaintance of the survivor, or is a stranger).

The purpose of the protocol is to improve cooperation and communication among organizations providing services to rape survivors. Good communication between providers and clear agreement on procedures allows survivors to use the available support services while minimizing the need to repeat their traumatic story to service providers.

Provide Training in Using the Protocol

Regional training sessions have been held across the state for emergency department providers, law enforcement officials, rape crisis professionals, social workers, victim assistance program staff, and forensic specialists.

Training workshops are four-and-a-half hours in length. The first two hours focus on the nature and elements of the crime of sexual assault, rape trauma syndrome, crisis intervention, and service provider roles. The last two hours center on the medical examination and the collection of evidence. Trainers for the first part of the session are staff from Ohio's rape crisis centers. Trainers for the second part of the session are either staff from an Ohio forensic laboratory or independent forensic consultants. Training sites always have a physician or nurse available as a clinical resource and/or trainer.

Expanded training for emergency department providers is scheduled for June 1994. During this session, two providers from each hospital in Ohio will be trained in sexual assault identification and examination.

Establish an Advisory Committee To Address Sexual Assault Prevention and Treatment Needs in Culturally Diverse Communities

The Advisory Committee for Sexual Assault and its Impact on Culturally Diverse Communities made recommendations to the Ohio Department of Health on how best to meet the needs of diverse communities in their rape prevention grant program. The committee suggested new wording in the guidance for the grant applications and the grant review. Their suggestions included the following: emphasize the importance of the cultural and ethnic composition of program staff and volunteers; ask programs to include a chart on the ethnic and cultural composition of employees; and add a section on cultural competency for the committee to use in evaluating proposals.

The Advisory Committee also helped the Ohio Coalition on Sexual Assault to develop the manual, *Guidelines for Providing Culturally Appropriate Crisis Intervention*. Several issues around cultural competence arose during this process. First, the advisory committee felt that it was important to remove all stereotypes from the guidelines. Committee members stressed the importance of learning to be sensitive to each person and urged service providers to begin by becoming aware of their own stereotypes and cultural biases.

Summary of MCH Role

The Bureau of Maternal and Child Health, Ohio Department of Health, funds this project and organized and directed the development of the sexual assault protocol. The Bureau established the Advisory Committee on Sexual Assault and its Impact on Culturally Diverse Communities, incorporated the committee's suggestions into the guidance for rape prevention grants, and funded the development of guidelines for providing culturally appropri-

ate crisis intervention. Bureau personnel continue to plan, conduct, and staff quarterly meetings of the advisory committee.

Evaluation

The *Sexual Assault Protocol* was evaluated through a pilot project before being distributed at the training sessions. *Guidelines for Providing Culturally Appropriate Crisis Intervention* were reviewed by numerous service providers prior to implementation.

The program trained 1,500 medical, law enforcement, public health, and other sexual assault service providers to use the *Sexual Assault Protocol*. The advisory committee's suggestions on cultural competence were incorporated into the *FY '93 Ohio Rape Prevention Program—Request for Proposals*.

Coalition Partners in Prevention

Many diverse partners participated in developing and implementing the sexual assault protocol. Many of these programs also endorsed or assisted in developing the training program. Participants included: hospitals; coroners' offices; child advocacy groups; rape crisis centers; prosecutors' offices; the Ohio Chapter of the American College of Emergency Physicians; community colleges; Ohio Emergency Nurses; crime laboratories; universities (departments of emergency medicine, student affairs, women's programs, and public safety); police departments (personal assault units, crime laboratories, Officer Training Academy); and community mental health centers. In addition, the Ohio Industries for the Handicapped produced a *Sexual Assault Kit*, which has been approved by the Forensic Medicine Advisory Committee and is purchased by state hospitals.

Sustaining the Program

With the needs assessment as a foundation, the Ohio Bureau of Maternal and Child Health developed a strategy and plan for the rape prevention program. The Bureau of Maternal and Child Health: (1) funds 10–15 sexual assault prevention demonstration

grants each year, depending on available funding; (2) promotes information sharing and educational opportunities among sexual assault service providers; and (3) provides public information and education.

Adapting the Program to Community Needs

Ohio's protocol on sexual assault can be replicated in many settings and most geographic areas with relatively minor changes (to reflect local or state emergency medical services systems, laws, and police procedures). The training program is a very low cost model and could be implemented in any area that has rape prevention advocacy groups and forensic and medical staff willing to lead training sessions.

Resources Needed

Staffing Requirements

The coordinator of the Women's Health Program works approximately half-time on sexual assault issues, and a unit secretary spends about 40 percent of her time on this project.

Fiscal Requirements

The Maternal and Child Health Bureau at the Ohio Department of Health used Preventive Health Services Block Grant funds to finance the sexual assault needs assessment, 50 percent of the coordinator's salary, and approximately \$20,000 of the contractual costs for producing and printing *Sexual Assault: A Hospital/Community Protocol for Forensic and Medical Examination: Recommended Guidelines*. Participants in protocol training sessions were asked to pay \$15.

The remaining 50 percent of the coordinator's salary and \$8,000 in direct services for sexual assault are funded through the Maternal and Child Health Block Grant.

Lessons Learned

Bring Together Diverse Groups—Such as Law Enforcement and Sexual Assault Prevention and Treatment Providers—in an Organized, Strategic Way

The Ohio State Health Department worked with law enforcement officials on several different levels. Initially, sexual assault providers in rape crisis centers were contacted for names of people in local police departments (e.g., the chief of police) with whom they had developed a good working relationship. The health department organized a meeting to bring the two teams together to share ideas and work on common goals. The state health department also held planning sessions at the police academy, during which law enforcement officials discussed strategies for fighting sexual assault in their own work environment.

A health department that has never approached law enforcement officials can begin by serving as a facilitator (through mailings, networking, an advisory committee), and by coordinating joint meetings.

Recognize Natural Allies, Including Groups Working on Alcohol and Other Drug Abuse and Poverty Issues

In addition to rape crisis centers, the Ohio Department of Health and the sexual assault prevention coalition worked with agencies concerned about alcohol and other drug abuse, women's issues, and issues of cultural competence. Because of the high correlation between substance abuse and sexual assault, groups focusing on those issues came together to enhance their own education and to better serve their target populations. To reinforce this partnership, topics concerning alcohol and other drug abuse were often included at statewide sexual assault meetings and conferences.

Products/Publications Developed/Used

Sexual Assault: A Hospital/Community Protocol for Forensic and Medical Examination: Recommended Guidelines.

Regional Training for the Implementation of the Ohio Protocol for the Treatment of Sexual Assault Survivors (brochure).

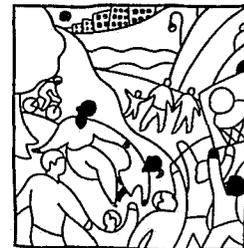
Guidelines for Providing Culturally Appropriate Crisis Intervention.

Sexual Assault and its Impact on Culturally Diverse Communities.

Rape Prevention Program, Advisory Committee, Sexual Assault and Its Impact on Culturally Diverse Communities, Summary of Activities.

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Preventing Violence

Suicide

An Overview

Youth Suicide Rates Have Soared Dramatically

The crisis of suicide among young people in the United States continues to worsen dramatically—unveiling a persistent pattern of growth for more than 30 years. Between 1957 and 1987, overall suicide rates for young people 15–24 years of age jumped by 222 percent; among youth ages 15–19 years, the suicide rate increased by a record 312 percent.¹ Tragically, in 1991 alone, 1,899 youth ages 15–19 years and 2,852 young people ages 20–24 years took their own lives. The suicide mortality rates (per 100,000) among these two

groups of young people were 11.0 and 14.9, respectively.²

The death of nearly 5,000 youth in just one year, however chilling, is only part of this tragedy. How many of the car crashes or firearm deaths among youth during this same year were, in reality, completed suicides? How many undocumented suicide attempts occurred during the same period? It is imperative to look beyond the numbing statistics to the human tragedy of children who feel so much despair and hopelessness, and to the wrenching effect of suicide on their parents, siblings, friends, extended families, teachers, classmates, and the entire community. The human costs are immeasurable; however,

“... An estimated 70 percent of children who need treatment for mental and emotional problems are not able to receive it.”

some expenditures due to suicide are calculable. In 1992, suicide and hospitalizations resulting from suicide attempts cost a staggering \$3 billion.³

Firearms Play a Major Role

The increased rate of youth suicide is associated with the rise in firearm-related suicides; guns are used in approximately 60 percent of all teen suicides.⁴ Persons who live in homes where guns are present are at much higher risk of suicide than those living in homes without guns.⁴ In geographical areas that allow easier legal access to guns, suicide rates are higher than in areas where guns are less available.⁵

There are some gender differences in suicides and suicide attempts. For example, the rate of completed suicides is 4–5 times greater among males than females; however, females attempt suicide 3–9 times more often than males.⁵ Again, firearms are a factor, since adolescent males use firearms more often than females.⁵

Prevention and Policy

In order to effectively promote prevention, health departments must be able to identify major risk factors for suicide. These include significant psychiatric problems such as past suicide threats and attempts; major depression and other affective disorders; conduct disorders; family history of suicide and

affective disorder; bipolar disorder and psychosis; history of child abuse; alcohol and other drug abuse; lack of treatment for mental health problems; and access to firearms.

Research indicates that as many as half of the adolescents who attempt suicide visited a medical doctor within six months of the attempt and that few physicians are trained or motivated to assess adolescents for depression and suicidal intent.⁶ It is conceivable that this lack of motivation results partly from a dearth of available mental health treatment for young people—an estimated 70 percent of children who need treatment for mental and emotional problems are not able to receive it.⁷ In addition to training staff to identify risk factors for suicide and to assess clients thoroughly, it is critical to establish and formalize relationships with other systems serving youth, such as mental health, emergency medical services for children (EMSC), education, child welfare, juvenile justice, and others, in order to meet the comprehensive needs of youth in high-risk situations.

Health departments in many parts of the country recognize the current crisis and are organizing at local, county, state, and regional levels to spearhead efforts to combat youth suicide. Some states are collecting data and implementing school-based programs for prevention, education, and treatment. Counties in one state, after identifying access to firearms as a major contribut-

ing factor in youth suicide, organized to limit this access.

Regional approaches, including conferences and newsletters, are emphasizing the importance of linkages between health, mental health, and school systems.

(For more information on youth suicide and its prevention, please see the Alcohol, Firearms, and Family Violence sections of this notebook.)

Notes

¹Berman, A. L., and Jobes, D. A. (1991). *Adolescent Suicide Assessment and Intervention*. Washington, DC: American Psychological Association.

²National Center for Health Statistics. (1994). Unpublished data prepared by L. A. Fingerhut.

³Miller, T. (1993). *Medical Care Costs of Injury and Violence, and the Savings Achievable Through Prevention*.

Testimony presented at Senate Finance Committee Hearing, October 19, 1993.

⁴Children's Safety Network. (1994).

Youth suicide and guns. *Firearm Facts: Information on Gun Violence and Its Prevention*. Arlington, VA: National Center for Education in Maternal and Child Health, Children's Safety Network.

⁵Kirk, W. (1993). *Adolescent Suicide: A School-Based Approach to Assessment and Intervention*. Champaign, IL: Research Press.

⁶Slap, G. B., Vorters, D. F., Khalid, N., Margulies, S. R., and Forke, C. M. (1992). Adolescent suicide attempters: Do physicians recognize them? *Journal of Adolescent Health* 13:286–292.

⁷National Commission on Children. (1993). *Just The Facts: A Summary of Recent Information on America's Children and Their Families*.

Washington, DC: National Commission on Children.

Promising MCH Settings

There are many ways to incorporate suicide prevention into existing MCH services and programs. Following are some of the MCH programs that could play a part in preventing suicide.

Adolescent Health Clinics
Adolescent Pregnancy and Parenting Programs*
School-Based/Linked Health Clinics
Children with Special Health Needs (CSHN) Service Sites*
Community and Migrant Health Centers*
EMS and EMSC Programs*
Family Planning Clinics*
Health Care Services for Homeless Youth*
Health Fairs
Home Visiting Programs*
Mental Health Service Sites
Outreach Vans
Prenatal Clinics
Primary Care Clinics
Rape Crisis Centers
Sexually Transmitted Diseases (STD) Clinics
Substance Abuse Prevention/Treatment Programs
Women's Health Programs*

Incorporating youth suicide prevention into MCH services doesn't have to be difficult. First steps can be as simple as learning more about adolescent mental health services in your area, or talking to parents of seriously depressed youth about the dangers of keeping a gun in the home. But don't stop there!

If youth suicide is a problem in your area, you may want to bring together interested staff to brainstorm about additional ways to address the problem in your setting. Here are some questions you may want to ask:

- Do we need to collect more or different types of information from youth and their families if we are going to help prevent suicide?
- What kinds of resources or information do youth and their families need to prevent suicide?
- Can we educate youth and families individually or in group settings about preventing suicide?
- Can we assess, treat, or refer youth for this type of injury?

Training materials, manuals, and protocols already exist for many types of injuries. Check with your state health department, regional MCH office, or the Children's Safety Network for more information on available prevention materials.

As you plan suicide prevention activities, think about possible changes to make in the following areas to strengthen your prevention efforts:

Medical records
Other data collection
Protocols for assessment, treatment, and referrals
Protocols for anticipatory guidance*
Educational materials available in waiting rooms in all settings
Educational materials to be handed to youth with discussion
Educational forums
Referrals
Youth and family follow-up
Training for staff
Linkage with other community resources

*See Glossary

Priority Partners in Prevention

Suicide

Local and State Government Agencies and Programs

City and county administrators; mental health programs; substance abuse prevention and treatment programs; domestic violence and sexual assault programs; child abuse prevention and treatment programs; child welfare and social service agencies; child fatality review committees; Healthy Start grantees;* and Community Integrated Service Systems (CISS) grantees.*

Local and State Legislators and Other Elected Officials

City and county councils; mayors and their staff; the governor and staff; the state attorney general and staff; and state representatives and senators on relevant committees.

Law Enforcement Agencies

Police chiefs; sheriffs; and police unions.

Schools, Parent-Teacher, and Student Groups and Associations

Teachers, principals, superintendents and their associations; school boards; college and university administrators and faculty; athletic trainers and directors and coaches; school-based peer counseling programs;

and school health and mental health personnel

Media

Editorial boards; Op-Ed page editors; city desk reporters; and consumer reporters.

Health Care Providers

Pediatricians; family physicians; school-based clinic staff; nurses; trauma and emergency room physicians; emergency medical services for children and emergency medical services personnel; other health professionals; local hospitals and trauma centers; health maintenance organizations; coroners' and medical examiners' offices; local medical societies; social workers, psychologists and psychiatrists and their professional associations; and health care providers to incarcerated youth.

Business Community

Insurance companies; employee assistance programs; and chambers of commerce.

Civic Groups and Service Clubs

Kiwanis Clubs; League of Women Voters; Junior League; Rotary Clubs; Girl Scouts and Boy Scouts; Boys and Girls Clubs; and 4-H clubs.

Legal System

Juvenile justice community.

Nonprofit Organizations

Homeless and runaway youth programs; community

comprehensive care centers; tenant organizations; neighborhood food distribution programs; neighborhood programs and centers; alternative youth services; and peer counseling programs.

Researchers

Centers for Disease Control and Prevention-funded Injury Control Research Centers; state and local universities; and community colleges.

Religious Communities and Places of Worship

Foundations

Families and Friends of Suicide Victims

*See Glossary

Maternal and child health and other health department staff are in a unique position to prevent unintentional and violent injuries. For assistance in these efforts, please call or write Children's Safety Network, NCEMCH, 2000 15th Street North, Suite 701, Arlington, VA 22201-2617. Phone (703) 524-7802 / Fax (703) 524-9335.

Case Study

Working in School-Based Clinics to Prevent Adolescent Suicide

- Lead Agency:** Maternal and Child Health Agency within the Kentucky Department of Human Resources
- Start/End Dates:** 1988–Ongoing
- Target Population:** Adolescents in the state of Kentucky who are at risk for suicide.
- Audience Reached:** Thirty-five adolescent health clinics currently offer suicide prevention services to approximately 15,000 adolescents.

Program Description

Objectives

- Assess, counsel, and refer (as needed) adolescents at high risk for suicide.
- Reduce adolescent suicide in Kentucky.

Program Components

The Maternal and Child Health (MCH) Division of the Kentucky Department of Human Resources works to prevent adolescent suicide through its school-based clinics and through community assistance in conducting broad needs assessments to identify mental health issues, current services, and local needs.

Identify Adolescents At Risk for Suicide

Thirty-five adolescent health clinics in the state have suicide interventions in place. Adolescents at

risk are identified through a comprehensive health history which all adolescents must complete during their first visit to an adolescent health clinic. This health history covers a variety of topics and includes questions on depression, extracurricular activities, family issues, relationships with peers, sexual identity, and access to firearms. Care providers review the health history each time an adolescent is treated at the clinic for any reason other than first aid. (Note: This assessment is being replaced with the American Medical Association's *GAPS Guidelines for Adolescent Care*.)

Counsel At-Risk Students at Adolescent School-Based Health Clinics

Some of the school-based clinics have a clinical psychologist and/or social worker on staff. Specific counseling methods vary from clinic to clinic. At some clinics, staff ask teens additional questions about their access to guns once they have been identified as depressed or at risk for suicide. Individual clinics may also ask teens to pledge not to commit

suicide. The adolescent health clinics involve parents unless the teens request confidentiality. Clinics always involve parents if youth are considered a danger to themselves or others. Many clinics have expanded their focus beyond adolescent suicide to other mental health promotion activities such as grief counseling programs.

Refer At-Risk Students to Comprehensive Care Centers

The clinics follow a nurse-screening-and-referral model. Each adolescent health clinic has developed a relationship with local comprehensive care centers, part of a network of regional ambulatory mental health services across the state that provide outpatient mental health services.

Relationships between the adolescent health clinics and the comprehensive care centers vary. In half of the adolescent clinics, a staff member is trained to use the same mental health assessment tool used by comprehensive care centers to evaluate adolescents. Adolescent health clinics use this screening tool if their staff are qualified to do so.

Adolescent health clinic staff follow up with adolescents after they have been referred to medical or mental health services. Clinic staff encourage adolescents to keep their appointments and help work through solutions to barriers that prevent the youth from continuing treatment.

Information about access to firearms is collected by adolescent health clinics as part of the student's general health history, but this information is not always collected as part of the screening by the comprehensive care centers.

Require Adolescent Health Clinics To Promote Collaboration and Parent Involvement

The MCH agency requires that adolescent health clinics work as part of a community-based coalition and maintain a community-based advisory group. MCH also requires county health agencies to collaborate with other agencies in developing and implementing plans to meet needs identified through local needs assessments. In addition, each clinic has an

advisory group drawn from community service providers, parents, and representatives of community groups. Parent support is particularly important and parent involvement is emphasized.

Perform Needs Assessments

Community coalitions in two Kentucky towns learned from student surveys conducted in schools during early 1993 that adolescent suicide was a major issue in their communities. The MCH agency funds needs assessments as part of a systems development initiative.

Summary of MCH Role

The Kentucky MCH Agency provides funding, guidance in the form of standards, and technical assistance to individual school-based health clinics regarding adolescent suicide prevention. MCH also funds needs assessments and provides technical assistance and support to local communities during the needs assessment process.

Evaluation

MCH currently does not collect data on suicides and suicide attempts among the adolescent population served by the adolescent health clinics. MCH does collect information about services provided and the number of referrals to mental health services.

Neither the health history nor the comprehensive care center screening tool has been evaluated.

Coalition Partners in Prevention

Each adolescent health clinic has an advisory group drawn from community service providers, parents, and representatives from community groups.

Sustaining the Program

As Medicaid is expanded to cover school-age children, MCH anticipates using more MCH Block Grant funds for initiatives such as school-based clin-

ics, even for younger children. MCH plans to include a strong mental health component in all new school-based services.

Adapting the Program to Community Needs

Not all MCH agencies that provide health care through school-based clinics can afford to staff these clinics with mental health professionals; however, school-based clinics can incorporate mental health guidelines into their protocols. School-based clinics can establish links with other mental health services and can reach agreement about specific assessment tools to be used for adolescent mental health screening. Many nonprofit organizations are also available to offer student support services, preferably on high school grounds.

Resources Needed

Staffing Requirements

Each adolescent health clinic needs preventive health nurses on staff to work with teens in recording a complete health history and to use this tool as a basis for screening for depression and risk of suicide.

To develop future training programs, MCH has begun to survey public health nurses in adolescent health clinics and other settings throughout the state concerning their training needs. MCH is investigating the use of an interactive public television channel to provide training.

The state MCH agency also uses a two-day adolescent health curriculum to educate staff. The curriculum, developed by the University of Cincinnati's Department of Adolescent Medicine, focuses on how to talk with adolescents about critical health, mental health, and social issues.

Fiscal Requirements

Operating costs for Kentucky's 35 adolescent health clinics average \$65,000 each. These clinics are funded by the Kentucky state MCH agency.

Lessons Learned

MCH and Mental Health Need To Agree on Suicide Risk Assessment Tools

When adolescent health clinics do not use the same assessment tool as the comprehensive care centers to whom they refer clients, staff at the comprehensive care centers are sometimes reluctant to accept the referrals. Until a strong working relationship is developed, comprehensive care center staff may be skeptical of the clinic's ability to adequately assess adolescents for serious mental health problems. In cases where both the adolescent health clinic and the comprehensive care center have used the same assessment tool to evaluate adolescents, a better relationship has developed between the clinic and the local center, and referrals are not a source of tension for either group.

Taking Confidential, Comprehensive Health Histories in Adolescent Health Clinics Is a First Step Toward Prevention

The health history is a useful tool for assessing the health status of adolescents because it is usually the first time that adolescents are asked to complete their own health history without the presence of their parents. It is an opportunity to assess adolescents on a range of issues, from eating habits to risk-taking behaviors, and the adolescents usually find the process thought-provoking. MCH, however, lacks the financial, staff, and computer resources to make full use of the data.

Needs Assessments Can Be a Useful Vehicle for Building Community Support for Adolescent Health Clinics

Residents need to recognize the extent of unmet health and mental health needs within their community in order to gain the motivation to support additional services. MCH needs assessments identified school-based adolescent health clinics as a clear need in many Kentucky communities, and provided specific data and examples to support that view.

Products/Publications Developed/Used

Comprehensive health history tool.

Evaluation tool used by the comprehensive care centers.

APEX needs assessment tool, adapted to focus on child and adolescent needs.

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Case Study

Bilingual Emergency Room Intervention for Adolescent Women Who Attempt Suicide

- Lead Agency:** Columbia University and the New York State Psychiatric Institute
- Start/End Dates:** August 1992–Ongoing
- Target Population:** 200 female adolescents (predominately African American and Hispanic) who have attempted suicide, and their families.
- Audience Reached:** In the emergency room of Columbia Presbyterian Medical Center, approximately 100 persons of both sexes and all ages are treated for attempted suicide each year. Approximately 350–400 training manuals have been distributed to emergency department administrators and staff, child psychiatrists, psychologists, social workers, and other mental health personnel from the United States, Central and South America, Italy, and Israel.

Program Description

Objectives

- Increase adherence to follow-up mental health treatment among adolescents who attempt suicide and among their family members by (1) improving staff attitudes toward the families, and (2) educating families within the emergency room setting about the importance of follow-up mental health treatment.
- Ensure that all staff interactions with these adolescents and their families have the explicit objective of emphasizing adherence to follow-up mental health treatment.
- Increase rapport between the emergency room staff and the families.

Program Components

The New York Psychiatric Institute, a state agency operated by the Office of Mental Health, established this suicide prevention program because few adolescents who have attempted suicide and received treatment at the Adolescent Suicide Disorders Clinic (and at other facilities nationwide) return for follow-up treatment.

Conduct Focus Groups with Adolescents Who Have Attempted Suicide, Their Families, and with Health and Mental Health Providers

The program includes three primary components: specialized training for emergency room staff and those in related disciplines, a videotaped presentation, and a bilingual crisis social worker who is on call 24-hours a day. These program components were developed through focus groups with adolescents who had attempted suicide, with their families, and with providers from each discipline involved with clients in the emergency room setting (i.e., child psychiatry fellows, residents in adult medicine,

residents in pediatric medicine, emergency room nurses, emergency room patient representatives, and security officers).

Train Emergency Room, Child Psychiatry, and Adult Psychiatry Staff

The concerns and interests of each discipline were specifically addressed in focus groups prior to developing specialized training modules or workshops. Individual workshops, based on a manual written by the study authors, were developed for each discipline whose providers interact with adolescents and their families in the emergency room. The workshops were designed to provide a general overview of the course of treatment of suicidal adolescents in the emergency room.

Develop and Use a Videotape Explaining Emergency Room and Follow-Up Treatment to Suicide Attempters and Their Families

A 20-minute videotape created by the study authors follows two adolescents through the emergency room and provides information about what to expect and the rationale for treatment.

The videotape was developed to encourage both adolescents and their parents to participate in specialized outpatient treatment following their initial visit to the emergency room. The videotape depicts the initial emergency room treatment session, and explains that a course of treatment will follow the emergency room visit. The need for follow-up treatment is reinforced by the emergency room case manager (the crisis social worker) during the session immediately following presentation of the videotape.

Initially filmed in Spanish, then dubbed in English for use with non-Spanish-speaking adolescents, the videotape follows the format of a Spanish soap opera. Although the characters retain Spanish names, the content of the videotape is sufficiently culturally neutral as to be useful with non-Hispanic clients. The actors are of various cultural backgrounds, thus minimizing specific national or cultural colloquialisms and idioms.

Make Available a Bilingual Crisis Social Worker

A crisis social worker fluent in both English and Spanish is on call 24 hours a day. As soon as an adolescent who has attempted suicide is brought to the emergency room, the social worker acts as a liaison with the family, provides emotional support, conducts an initial treatment session, and works to reduce anxiety. The social worker views and discusses the videotape with the suicidal adolescent and the family, and serves as a link between the emergency room and the follow-up treatment clinic.

Possible MCH Roles

Although there has been no collaboration to date between the New York Psychiatric Institute, which is administered by the Office of Mental Health, and the Department of Health, maternal and child health (MCH) programs can participate in this or similar programs in a number of ways:

- MCH can conduct a statewide needs assessment of the adolescent suicide problem, including an analysis of the training needs of those who interact with suicidal adolescents and suicide attempters.
- MCH departments or staffs can serve a coordinating function between diverse programs that touch the lives of suicidal adolescents, such as schools, parent-teacher associations, social service agencies, emergency medical services (EMS) programs and emergency medical services for children (EMSC) programs, hospitals, and mental health and public health services.
- MCH departments can incorporate a program of this type into the injury prevention plan in their states. Training materials may be particularly applicable for school-based adolescent health clinic staff who interact with students returning after attempting suicide, and with their families.
- MCH departments can reproduce and disseminate the training manual and videotape to other hospitals and medical centers and to adolescent clinics in the state.

Evaluation

Adolescents who attempted suicide were divided into two groups: a control group which did not receive the specialized emergency room intervention, and an intervention group which received care from specially trained staff, viewed the videotape, and talked for 90 minutes with the bilingual crisis social worker.

The relative impact of each treatment component (training for emergency room staff, videotape, social work services) has been assessed informally by questioning participants. Follow-up questionnaires have been developed for families.

Researchers are following the adolescents for 18 months after the suicide attempt and monitoring adherence to follow-up outpatient treatment among the control and intervention groups. They are also evaluating psychiatric status, family relations, and high-risk behaviors.

Preliminary analyses for the first 150 adolescents studied reveal that female attempters who were part of the intervention group were more likely to return to the clinic for at least one session, and, on average, attended more therapy sessions.

The intervention was associated with an approximate increase of 20 percent in the amount of treatment received. In the intervention group, the number of adolescents failing to return to the clinic for any treatment at all decreased by 60 percent. The decision to include family members, especially mothers, as primary targets of both the emergency room intervention and follow-up treatment may have played an important role in the success of the program.

Approximately 55 medical center staff have received training, using the staff training manual developed by project staff.

Both adolescents and family members report being significantly influenced and moved by viewing the videotape; both groups felt the tape made them realize the importance of follow-up care and made them more determined to comply with their health professional's suggested plan of treatment.

Sustaining the Program

The study authors hope to integrate this program as an ongoing component of the emergency room treatment for suicidal adolescents and their families, although they do not expect financial support from the hospital. Staff training and use of the videotape are expected to continue.

Adapting the Program to Community Needs

It is important to identify feelings and attitudes toward adolescents who attempt suicide and toward their families, and the impact of these attitudes on the treatment experience of the adolescents and their families. These issues are significant, and they transcend the emergency room setting. A unified approach toward engaging suicidal adolescents and their families in post-crisis outpatient treatment, from the initial emergency contact through discharge from the emergency room, is an important (and often ignored) step for any prevention program working with adolescents who attempt suicide.

This program could easily be adapted for EMS and EMSC training programs. It could also be adapted for nonemergency settings where suicide is addressed.

Resources Needed

Staffing Requirements

Central to the project was an experienced bilingual family crisis social worker who was on call 24 hours a day. The project also required a part-time trainer to conduct 10–12 staff training workshops per year.

Fiscal Requirements

Professional services (24-hour coverage) by the family crisis therapist cost between \$40,000 and \$60,000 per year. The videotape, produced by a professional media production company in New York City, cost \$50,000 to produce and \$6,000 to dub in

English. The study was funded by the National Institute of Mental Health.

Lessons Learned

Bilingual Services Are Integral to Multicultural Patient/ Staff Communications

In focus groups prior to this program, patients and family members often cited difficulties in communicating with staff as a barrier to seeking treatment or follow-up care after a suicide attempt. Difficulty in communicating effectively with adolescents who have attempted suicide and with their families was also a chief complaint of emergency room staff.

The bilingual ability of the case managers appears to be a great asset to the program. The focus groups, the discussions during training, and the questionnaire responses all underscore the need for bilingual professionals in crisis-related settings. For Spanish-speaking families, effective intervention in the family's native language is available immediately through this program.

Dramatic Videos Can Help Convey Difficult Messages in High-Stress Situations and Can Help Bridge Cultural and Linguistic Gaps

Several adolescents and their families have reported that the videotape is very effective in presenting the need for follow-up treatment after discharge from the emergency room. Several mothers and other family members have reported being unaware of the severity of their child's behavior until seeing high-risk behaviors portrayed through the videotape.

Minimize Demands on Emergency Room Staff

The program must be organized carefully to avoid placing additional demands on the busy emergency room staff. In New York, the program was presented as a service for staff (free training to make their work easier and to help lower the rate of adolescent repeaters) and as a plea from the study authors to help solve the problem of adherence in

follow-up treatment. Nursing and medical staff found the idea of reducing the number of patients' suicide-related emergency room visits through the intervention far more motivating than discussions about the need for a gentler approach to suicidal adolescents and their families. The study authors were available to answer the staff's questions.

Getting Staff Support for a New Approach to Suicide Attempters May Mean Talking Through Staff Frustrations and Concerns

Initially, there was some difficulty in getting staff to support the program. Each discipline favored a specific theory (usually focused on the shortcomings of another discipline) about why the emergency room experience was so difficult for adolescents and their families. Security officers frequently complained that the doctors and nurses were not sympathetic or courteous. Medical personnel complained of being interrupted by families and other staff while trying to provide medical treatment to the attempters. Nursing staff felt that the doctors were too abrupt, while the security officers were seen as too friendly.

Illustrating what the emergency room experience can be like for an adolescent who attempts suicide and for her family enabled each group to better understand the complaints of other disciplines and to respond constructively. Many staff members welcomed the opportunity to openly discuss their criticisms and appreciated the interest shown for their concerns. While some resistance was encountered at first, the overall response by all staff was positive.

Exploring Emotional Reactions of Staff to Suicide Attempters Helps Shift Attitudes

All groups were very responsive to the exercises exploring their emotional reactions to adolescents who had attempted suicide. After completing the training, many of the staff, particularly pediatricians and nurses, expressed a more accepting attitude toward the adolescents and their families. Pediatric residents exhibited the least interest and receptivity to the workshop and their views did not change following the workshop.

Include Security Guards, Records and Billing Clerks and Other Personnel in Trainings

Hospital security officers spent more time than any other hospital group with individual adolescents who had attempted suicide. The officers were among the most enthusiastic participants in the training program. They welcomed the opportunity not only to provide feedback and express their opinions and feelings, but also to acquire more effective strategies for dealing with adolescents and their families.

Parents of Adolescent Suicide Attempters Are a Key Audience for Suicide Prevention Programs

Including family members, especially mothers, as primary targets of both the emergency room intervention and the follow-up treatment may have played an important role in the success of the program. Positive parental attitudes toward treatment showed a significant positive relationship to the number of follow-up treatment sessions attended by the adolescents (in other words, the more positive the parents felt, the more often their children came for follow-up therapy).

Products/Publications Developed/Used

A New Beginning, a videotape for adolescents who attempted suicide and for their parents.

Successful Negotiations/Acting Positively, a manual focusing on cognitive and behavioral family therapy.

Training manual for staff.

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Case Study

Adolescent Suicide Prevention in Colorado

- Lead Agency:** Collaborating agencies include the Adolescent Health Program and the Alcohol and Drug Abuse Division within the Colorado Health Department; the Division of Mental Health within the Colorado Department of Institutions; and the Department of Education.
- Start/End Dates:** 1988–Ongoing
- Target Population:** All adolescents in the state of Colorado.
- Audience Reached:** Adolescents made more than 3,100 mental health visits to Denver school-based clinics during FY 1992–93. MCH-funded training for high school teachers on coping skills and relationship skills reaches 75 percent of all school districts in Colorado.

Program Description

Objectives

- Reduce the five-year average suicide rate for Colorado teens ages 15–19 years from 16.7 per 100,000 in 1990 to 15.0 per 100,000 by the year 2000.
- Increase the number of youth served by home-based intensive mental health services and day treatment from 934 in 1990 to 1,120 by the year 2000.

Program Components

Increase the Availability of School-Based Health Services, Including Mental Health Services

The maternal and child health (MCH) agency within the Colorado Health Department funds the development of school-based health services, including mental health services for adolescents. MCH pro-

motes a range of prevention, early identification, and intervention services at the clinics to address the mental health needs of adolescents.

The school-based clinics in Denver serve four urban high schools, one middle school, and five elementary schools by providing convenient, comprehensive, and confidential services on-site. The high school clinics are staffed by clinical social workers and substance abuse counselors under contract from community-based prevention and treatment programs who are specially trained to work with adolescents and their families.

Establish Student Assistance Programs

Student assistance programs provide a range of services to children and youth, including the following:

1. Information about risks, clarification of values, and skills-building in resisting peer pressure and in refusal and decision making;
2. Identification, screening, assessment, and referral;

3. On-site counseling or referral to an outside agency;
4. Support groups for gay and lesbian youth and children of alcoholics, and other support groups on a range of issues including suicide and grief and loss; and
5. Peer leadership activities such as tutoring and presentations by adolescents, for adolescents.

Increase Support for the Families of Teens With Serious Emotional Disturbances

"Families of seriously emotionally disturbed youth need additional assistance to be able to support their teenagers," states the Colorado Department of Health's Advisory Council on Adolescent Health. To provide this assistance, the Division of Mental Health and its partners in prevention have adopted numerous strategies.

1. Case management with wraparound services (see Glossary) offers assistance to families in coordinating an adolescent's treatment, and provides flexible funds to help families get specialized services, e.g., respite care.
2. The Denver school-based clinics publish a newsletter for parents, and several of the editions have focused on adolescent stress and depression and suggestions for helping parents to help their teens.
3. The Mental Health Association of Colorado has instituted a parent empowerment project. Parent support and advocacy groups have been established in many urban and rural counties in Colorado.

Improve the Delivery of Mental Health Services

The Mental Health Division funds six child and adolescent specialists to strengthen the capacity of mental health centers and communities to respond to child and adolescent mental health problems. For example, specialists may develop a transition program for youth graduating from foster care.

Two demonstration mobile mental health teams provide screening, assessment, case consultation,

short-term treatment, and case management for youth with serious emotional disturbances in foster homes, runaway shelters, hospitals, detention facilities, and special education classrooms.

Improve School Preparedness

The Crisis Prevention Advisory Council, through the Department of Education, developed guidelines on the appropriate school response in the event of a student suicide, in order to mitigate the impact of the tragedy on other students and reduce the chances of a suicide cluster. The advisory council has also sponsored training conferences and workshops for teachers.

Conduct a Suicide Surveillance Project

The Epidemiology Department of the Colorado Department of Health, in conjunction with the state's coroners, is conducting a suicide surveillance project that covers 60 percent of the state's population. In addition to the information listed on death certificates, researchers are collecting information on previous suicide attempts, hospitalizations for mental health problems, family history of suicide, and loss of significant relationships.

Create a Child Fatality Task Force To Identify Preventable Child and Adolescent Deaths and Formulate Strategies

An Ad Hoc Child Fatality Task Force was formed as the result of an ongoing dialogue between the director of Injury Prevention at the Colorado Department of Health and the administrator of Child Protection at the Department of Social Services. It had become clear that no single database adequately portrayed child and adolescent deaths, so both the Department of Health and the Department of Social Services were anxious to develop a detailed and descriptive database of childhood fatalities for use in identifying preventable deaths and formulating recommendations for prevention and intervention.

An interagency agreement between the state departments of health and social services provided the necessary authority for the death review program. The state Attorney General's Office deter-

mined that the health department had the statutory authority to investigate and determine the epidemiology of conditions that contribute to death and to use Vital Records for research conducted in the public interest. The group of 40 professionals included representatives from medicine, law, public health, social services, and coroners' offices.

All Colorado deaths among children under 17 years of age are reviewed. During 1991, the Child Fatality Review Program reviewed 753 deaths, of which 166 were injury-related. Of these injury-related deaths, 20 (12 percent) resulted from suicide, and 24 (14 percent) from homicide.

For each suicide death of a child under 17 years of age, the subcommittee reviews the death certificate and relevant records (including autopsy, medical, law enforcement, school, social service, District Attorney, and department of motor vehicle records). In addition, interviews are conducted with the family and friends of the deceased.

Selected cases are presented to the full Child Fatality Review Committee, including all cases of neglect or abuse; selected cases that highlight system failures (so the committee can recommend strategies to avoid such failures in the future); selected cases that suggest preventive strategies; and selected cases that suggest new death patterns.

One adolescent suicide case reviewed by the Child Fatality Task Force highlights the value of reviewing individual adolescent deaths. One adolescent who committed suicide was a small 13-year-old boy who was often picked on by other children at school. Teachers recommended that he be seen by a school counselor because of his noticeable needs in the areas of cleanliness, clothing, and food, and because he was the target of abuse by other kids. Friends reported that his mother and stepfather both worked long hours and that the boy had a habit of coming home after school and mixing himself a giant tumbler of vodka and coke. Records revealed extensive contact with the Department of Social Services, the Department of Health, and school staff prior to his suicide using his stepfather's gun. This case suggests many areas for further inquiry, all of which connote possible prevention strategies.

Prepare a State Report

In 1992, the Advisory Council on Adolescent Health issued a report on the status of adolescent health in Colorado. The report contains a chapter on mental health, including state and national data on adolescent suicide and other mental health issues and a discussion of prevention strategies.

Explore the Link Between Access to Firearms and Adolescent Suicide

The Epidemiology Department at the Colorado Department of Health is conducting a case/control study of adolescent suicides in the state to test the hypothesis that the presence of a gun in the home is a risk factor for suicide. Data collection was scheduled to begin in June 1994.

Initiate Community Suicide Prevention Projects

Two communities have received grants from the Centers for Disease Control and Prevention to initiate suicide prevention projects. One of the projects will focus on four high schools and middle schools.

Summary of MCH Role

The MCH section of the health department has a designated adolescent health coordinator who is responsible for the department's suicide prevention activities as part of its mandate to promote overall adolescent health. The coordinator monitors suicide prevention activities at the school-based clinics through the grants process and is a member of the Crisis Prevention Advisory Council. Health department staff played a pivotal role in establishing the Child Fatality Review Committee, which reviews adolescent suicides up to age 17 years. Health department staff now serve on the Fatality Review Committee.

Evaluation

School-based clinics collect information on the number of students served, the number of students

requiring mental health services, and the percentage of cases in which staff achieve some degree of family involvement.

Data are not available on suicides or suicide attempts among clients of the school-based clinics. School-based clinics report that almost 40 percent of their visits in 1989-90 involved mental health concerns. Even when the specific reason for the student's clinic visit was medical, almost 60 percent of students also evidenced an emotional or psychosocial problem.

There is family involvement in about 34 percent of the cases in which a student is using the clinic's mental health or substance abuse services.

A Child Fatality Review database has been established which (since 1989) contains basic information not available on either birth or death certificates for all completed adolescent suicides ages 17 years and under. Data elements include: prior involvement of public agencies such as social services, public health, law enforcement and domestic violence prevention; involvement of abuse and/or neglect in the death; adequacy in completion of the death certificate; adequacy of the investigation; and preventability.

Coalition Partners in Prevention

Partners include the Department of Education; the Division of Mental Health; the Mental Health Association; and the Alcohol and Drug Abuse Division, Epidemiology Department, and Adolescent Health Program within the Colorado Health Department.

In addition to the health and social service departments, the following agencies and organizations are represented on the Child Fatality Review Committee: Division of Criminal Justice; Department of Education; Colorado Medical Society; the Office of the Governor; Colorado General Assembly; University of Colorado Health Sciences Center; Children's Hospital; C. Henry Kempe National Center for the Prevention and Treatment of Child Abuse and Neglect; the Colorado Domestic

Violence Coalition; the District Attorneys Council; the Colorado Coroners' Association; coroners' offices; and local health departments, sheriffs' departments, police departments, and others.

Sustaining the Program

Data forms have been improved to collect more descriptive data on the circumstances surrounding preventable deaths, including suicides. Colorado's death certificates have been revised to provide more complete information.

A local Child Fatality Review Committee was established in one of Colorado's highly populated counties. Other counties are expressing interest in developing local fatality review teams.

Adapting the Program to Community Needs

Many areas of the country have child fatality review systems in place, which could be expanded to include review of adolescent deaths. Feedback loops from death review teams to local prevention programs and service agencies are essential but often inadequate.

In most states, school health and community mental health programs tend to function separately. As a first step, school health and mental health programs could better coordinate efforts on adolescent suicide prevention, assessment, treatment, and referral.

Resources Needed

Staffing Requirements

Suicide prevention efforts are incorporated into the adolescent health promotion activities of the Adolescent Health Program at the Colorado Health Department.

Fiscal Requirements

MCH provides approximately \$100,000 annually to school-based clinics to promote health services, including mental health and suicide prevention services and activities.

Lessons Learned

Don't Ignore Older Adolescents

Although Colorado reviews all deaths of youth under 17 years of age in its death review process, many suicides among older adolescents are missed. Expanding the age range to cover older youth would provide a clearer picture of the causes of adolescent suicides in Colorado as well as promising prevention strategies.

Understand the Different Risk Factors for Adolescents Who Commit Suicide and Those Who Attempt Suicide

Nationally, almost twice as many adolescent females as males report actually attempting to hurt themselves. Female adolescents, however, actually commit suicide in only one out of every 25 suicide attempts, while males commit suicide in one out of every 3 attempts.

Review Social Service and Health Department Records To Identify Suicide Prevention Opportunities

Reviewing relevant social service and health department records can help answer questions such as: What proportion of suicides are related to neglect or abuse? Is being bullied a risk factor for suicide? Were the adolescent's parents ever warned about the dangers of having a gun in their home? What kind of assessments, treatment and referrals did the adolescent and his or her family receive? Answers to these types of questions may be valuable in developing new suicide assessment and prevention approaches.

Child Death Review Committee members are particularly concerned about suicides among

younger children, when there has been a prior history of abuse or neglect. When an adolescent commits suicide, parents and other siblings should be automatically assessed and offered emotional support and other services they may need.

Local Death Reviews May Reveal More Answers

Data on the incidence of alcohol and other drug abuse, domestic violence, household characteristics, and information about the supervision of the child or adolescent would be far easier to collect at the local level. The Child Death Review Committee identified development of local child fatality review teams as a major goal.

Computerizing Records Is Important for Prevention

Computerizing public health and domestic violence service system records would greatly facilitate the comprehensive death reviews needed to plan future prevention strategies. In Colorado, the public health and domestic violence services are not on statewide databases, thus placing severe limitations on the information available to a fatality review committee trying to analyze and prevent suicide deaths.

Products/Publications Developed/Used

The Department of Education's Crisis Prevention Advisory Council has developed guidelines for suicide prevention-related activities in schools.

The Gay and Lesbian Community Center's support group model/protocol for working with gay and lesbian youth is used in the Denver high school-based clinics.

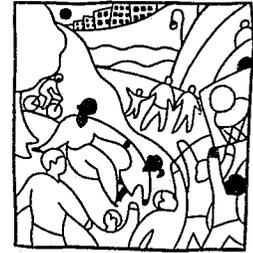
1992 Adolescent Health in Colorado, a report presenting data on the health status of adolescents in Colorado. The chapter on mental health includes national and state suicide data, objectives, and strategies for prevention. Available at no charge from National Maternal and Child Health Clearinghouse, 8201 Greensboro Drive, Suite 600, McLean, VA 22102. Phone (703) 821-8955. Fax (703) 821-2098.

*1993 Annual Report: Colorado Child Fatality
Review Committee. Colorado Department of Health
and the Colorado Department of Social Services, 1993.*

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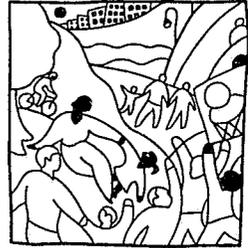
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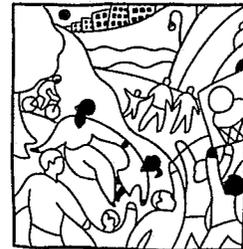
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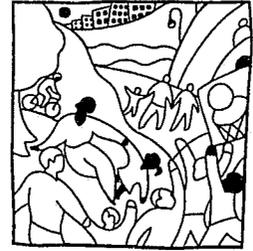
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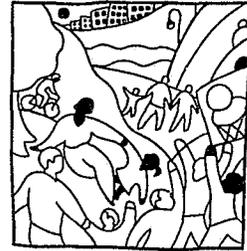
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Section VII

Nine Key Injury and Violence Prevention Activities for State Maternal and Child Health Agencies



1. Designate a full-time or part-time MCH injury prevention coordinator.

2. Dedicate Title V MCH funds to prevent injuries and violence—the leading cause of death among children ages 1–19 years.

3. Advocate for injury prevention efforts within your state health department, with other state agencies, and with state policy-makers.

4. Provide leadership for a thorough needs assessment process for injury and violence in your state, including:

- Analysis and dissemination of state and local mortality and morbidity rates;
- High-risk behaviors; and
- Available services.

5. Work to improve injury and violence data sources within your state.

6. Provide leadership in developing a statewide but health department-specific intervention plan that:

- Targets injuries and groups at high risk, based on a statewide needs assessment and the injury and violence prevention objectives outlined in *Healthy People 2000*;
- Uses proven and promising strategies and multiple methods; and
- Integrates injury prevention into existing MCH and other programs.

7. Provide support and guidance for local programs. Support might include developing, disseminating, or funding:

- Data reports with information on specific localities;
- Information and materials on injury and violence and on appropriate prevention strategies; and

- Training and technical assistance.

8. Evaluate both the process and outcomes of state injury prevention programs, and require and assist with the evaluation of local programs.

9. Collaborate at the state level, and foster collaboration at county and local levels between diverse public health programs (e.g., children with special health needs services, prenatal clinics), mental health, other health providers, law enforcement, schools, nonprofit organizations, juvenile justice, child welfare, and other agencies or programs needed to prevent child and adolescent injuries in your state.

Case Study

Sample

Lead Agency:

Start/End Dates:

Target Population:

Audience Reached:

Program Description

Objectives

Program Components

Possible MCH Roles

Coalition Partners in Prevention

Sustaining the Program

Evaluation

**Adapting the Program
to Community Needs**

Resources Needed

Staffing Requirements

Fiscal Requirements

Lessons Learned

**Products/Publications
Developed/Used**

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Building Safe Communities: State and Local Strategies for Preventing Injury and Violence

EVALUATION FORM

Your Name & Professional Area: _____

Your Agency: Professional Area & Type: _____

Your answers to these questions will help us to improve our service to our constituents.

	Completely			Not at all	
	<input type="radio"/> 5	<input type="radio"/> 4	<input type="radio"/> 3	<input type="radio"/> 2	<input type="radio"/> 1
Overall, how useful do you find this collection of strategies?	<input type="radio"/> 5	<input type="radio"/> 4	<input type="radio"/> 3	<input type="radio"/> 2	<input type="radio"/> 1
What sections of the case studies are most helpful to you?					
The Overview	<input type="radio"/> 5	<input type="radio"/> 4	<input type="radio"/> 3	<input type="radio"/> 2	<input type="radio"/> 1
Promising MCH Settings	<input type="radio"/> 5	<input type="radio"/> 4	<input type="radio"/> 3	<input type="radio"/> 2	<input type="radio"/> 1
Priority Partners in Prevention	<input type="radio"/> 5	<input type="radio"/> 4	<input type="radio"/> 3	<input type="radio"/> 2	<input type="radio"/> 1
Program Description (Components, Objectives, etc.)	<input type="radio"/> 5	<input type="radio"/> 4	<input type="radio"/> 3	<input type="radio"/> 2	<input type="radio"/> 1
Summary of MCH Role	<input type="radio"/> 5	<input type="radio"/> 4	<input type="radio"/> 3	<input type="radio"/> 2	<input type="radio"/> 1
Coalition Partners in Prevention	<input type="radio"/> 5	<input type="radio"/> 4	<input type="radio"/> 3	<input type="radio"/> 2	<input type="radio"/> 1
Sustaining the Program	<input type="radio"/> 5	<input type="radio"/> 4	<input type="radio"/> 3	<input type="radio"/> 2	<input type="radio"/> 1
Adapting to Community Needs	<input type="radio"/> 5	<input type="radio"/> 4	<input type="radio"/> 3	<input type="radio"/> 2	<input type="radio"/> 1
Lessons Learned	<input type="radio"/> 5	<input type="radio"/> 4	<input type="radio"/> 3	<input type="radio"/> 2	<input type="radio"/> 1
Resources Needed (Staff, Funding, etc.)	<input type="radio"/> 5	<input type="radio"/> 4	<input type="radio"/> 3	<input type="radio"/> 2	<input type="radio"/> 1
Products, Publications Developed/Used	<input type="radio"/> 5	<input type="radio"/> 4	<input type="radio"/> 3	<input type="radio"/> 2	<input type="radio"/> 1

(Over)

What injury and violence prevention case studies would you like included in the next round? (Specify topics and/or actual programs.)

Were there cases that you found particularly helpful? If so, please list titles.

Do you have suggestions for how we can improve this product?

Please return this form to:

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