

U.S. Department of Justice
Office of Justice Programs
National Institute of Justice



Issues and Practices

1992 Update: HIV/AIDS in Correctional Facilities



National Institute of Justice





Centers for Disease Control and Prevention

HEALTH AND JUSTICE

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U.S. Department of Justice Office of Justice Programs National Institute of Justice

1992 Update: HIV/AIDS in Correctional Facilities

Issues and Options

by
Theodore M. Hammett, Ph.D.
Lynne Harrold
Michael Gross, Ph.D.
Joel Epstein, J.D.

with the assistance of Santiago Sifre Peter Jacobson

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Issues and Practices in Criminal Justice is a publication series of the National Institute of Justice. Each report presents the program options and management issues in a topic area, based on a review of research and evaluation findings, operational experience, and expert opinion on the subject. The intent is to provide information to make informed choices in planning, implementing, and improving programs and practice in criminal justice.

National Institute of Justice

Michael J. Russell Acting Director

Cheryl Crawford NIJ Program Monitor

National Center for Prevention Services Centers for Disease Control and Prevention

Alan R. Hinman, M.D. Director

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The National Institute of Justice is a component of the Office of Justice Programs, which also includes the Bureau of Justice Assistance, the Bureau of Justice Statistics, the Office of Juvenile Justice and Delinquency Prevention, and the Office for Victims of Crime.

Foreword

This update presents the results of the seventh national survey of HIV/AIDS in correctional facilities, conducted between November 1992 and March 1993. The Centers for Disease Control and Prevention (CDC) joined the National Institute of Justice (NIJ) in sponsoring this work.

It has been more than ten years since the first cases of AIDS were reported among correctional inmates. As of early 1993, there had been over 11,500 cases of the disease among inmates. Since 1985, when NIJ began sponsoring these national surveys, there have been some notable trends in the policy response to AIDS in correctional facilities. HIV/ AIDS education for inmates and staff became much more widespread, although there continue to be wide variations in the quantity and quality of such education. Reports indicate, for example, that the percentage of correctional systems providing face-to-face, instructor-led AIDS education actually declined between 1990 and 1992. After an initial increase, the number of systems with mandatory HIV screening of inmates has remained relatively stable since 1989. The number of systems segregating all inmates with HIV infection has dropped sharply. Although some improvements have been made in medical and psychosocial services provided to correctional inmates with HIV disease, reports indicate that more such services are needed.

In 1993, the World Health Organization (WHO) issued revised guidelines for addressing HIV/AIDS in correctional

facilities. Certain basic principles underlie WHO's specific recommendations, including equivalence between policies for prevention and care in correctional and community settings and close cooperation in policy development between public health and correctional authorities. In view of these principles, it is fitting that CDC joined NIJ as a sponsor of this report. Too often, public health and corrections professionals have not collaborated, often resulting in conflicting orientations and goals. A critical step in bridging this gap is constructive dialogue based on mutual understanding of the aims and constraints of public health and corrections. The cosponsorship of this report by NIJ and CDC—an agency with a criminal justice and corrections audience and an agency with a public health audiencerepresents an important first step in developing a dialogue and, ultimately, a shared approach which advances both correctional and public health objectives.

Michael J. Russell

Acting Director

National Institute of Justice

Alan R. Hinman, M.D.

Director

National Center for Prevention Services

Centers for Disease Control and Prevention

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Theodore M. Hammett, Ph.D. November 1993

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Introduction and Summary

HIV/AIDS presents not only serious challenges but also significant opportunities for correctional systems. In addition to the already daunting problems posed by severe crowding and fiscal stringency, today's correctional administrators and health care professionals must deal with an increasingly ill, troubled, and "graying" inmate population. HIV/AIDS is but one facet of a complex of health and psychosocial problems increasingly common among inmates-tuberculosis, sexually transmitted diseases, substance abuse, and mental illness. Administrators, health, and mental health workers in prisons and jails have a unique opportunity to assist inmates-literally a "captive audience"-with health care, prevention, education, and substance abuse treatment. By so doing, they can also promote the public health, since the vast majority of inmates return to the community.1

In the words of the medical director of the Federal Bureau of Prisons, the correctional response to this challenge and opportunity requires a "balancing of the dual missions of custody and care." Because of the often differing perspectives and priorities between correctional officials and health care workers, such a balance is, in itself, a challenge to achieve.³

With specific regard to HIV/AIDS, new guidelines from the Global Programme on AIDS, World Health Organization (WHO), call for programs of education, prevention, and treatment to apply "equally to prisoners and to the general community....[N]on-discriminatory and humane care" of inmates with HIV disease mean, according to the WHO guidelines, no mandatory testing, segregation, or programmatic restrictions based on HIV status. Rather, on-request testing, comprehensive prevention programs "based on risk behaviors actually occurring in prisons," and "health care equivalent to that in the community" should be provided.

In the view of many, correctional systems in the United States have fallen far short of these standards in addressing HIV/AIDS. In 1991, for example, the National Commission on AIDS released a report sharply critical of the correctional response in virtually all policy areas. Medical care, psychosocial services, drug treatment opportunities, education and prevention programs, counseling and testing services, confidentiality and notification procedures, and services.

vices specifically targeting women and adolescents are all seriously deficient in correctional institutions, according to the Commission. The report offers a series of recommendations to address these deficiencies, the first of which is a proposal that the U.S. Public Health Service take the lead in developing and promulgating guidelines for prevention and treatment of HIV disease in prisons and jails.⁵

This 1992 Update presents results of a seventh survey of HIV/AIDS in correctional facilities, sponsored this year by the National Institute of Justice (NIJ) and the U.S. Centers for Disease Control and Prevention (CDC). The previous six reports were sponsored by NIJ.

A mail survey was used this year, because the questionnaire was somewhat longer than in 1990. The reason for the increased length was the inclusion of more questions on tuberculosis. A separate report, *Tuberculosis in Correctional Facilities*, presents the TB data and describes TB control policies and procedures in correctional systems.⁶

Between November 1992 and March 1993, responses were received from all 50 State correctional departments and the Federal Bureau of Prisons. Thirty-seven questionnaires were sent to large city and county jail systems in the United States and 31 (84 percent) responded. These systems continue to represent a good sampling of the largest American jail systems. The District of Columbia system is included among city/county systems. Canadian systems were not included this year, as independent survey efforts are underway there.

The survey was supplemented with site visits to New York State, New York City, and Georgia. In New York we visited Rikers Island and the secure unit for State inmates at St. Clare's Hospital in Manhattan. In Georgia we interviewed central office staff, visited the Correctional Medical Institution (Augusta), and observed an AIDS education session at the Women's Diversion Center in Atlanta. In addition, we attended one session of an HIV/AIDS education course at Billerica House of Corrections in Billerica, Massachusetts, taught by Sara Dubik-Unruh, Director of AIDS Program at Lowell House, Inc.

The NIJ/CDC survey reveals a cumulative total of almost 11,500 AIDS cases among inmates and almost 3,500 deaths

attributed to AIDS. Incidence rates are higher among inmates than in the nonincarcerated population and are slightly higher for female than for male inmates, especially in city/county jail systems. There continues to be a wide range of HIV seroprevalence rates in correctional systems—from less than 1 percent to about 20 percent—but most are below 2 percent. In many jurisdictions, HIV seroprevalence is higher among female inmates than among male inmates. Where comparative data are available over time, however, HIV seroprevalence among inmates seems quite stable. Transmission of HIV among inmates has been documented, but at low rates. There have been no documented cases in the United States in which correctional staff have been infected with HIV through occupational exposure.

Most of the major policy trends identified in the past few years appear to be continuing. There was a slight decline noted in instructor-led ("live") HIV/AIDS education, but an increase, particularly among State/Federal systems, in peer education programs. There appears to be insufficient attention to the educational needs of non-English-speaking inmates. One correctional system has instituted condom availability for inmates since the last survey, bringing the total to six. There have been no changes to the list of 17 State/Federal systems with mandatory HIV testing of inmates, but more systems offer voluntary testing to inmates on request than in 1990. Most systems offer individual posttest counseling to seropositive inmates, but many do not provide individual pretest counseling or posttest counseling for seronegative persons. In housing, the trend continues away from blanket segregation policies and toward case-by-case or presumptive general population housing for inmates with HIV disease. Only two systems now segregate all known HIV-infected inmates, compared with eight in 1985. Most systems offer zidovudine and ddI, but few give access to experimental therapies or clinical trials. Psychosocial services continue to be greatly needed and often in limited supply due to staff shortages. Outside AIDS service organizations and peer programs are able to fill some of this need. Drug treatment capacity continues to fall far short of the need in prisons and jails.

Legal developments included an order by a Federal Court of Appeals that a case in which the District Court originally upheld Alabama's mandatory testing and segregation policy be remanded for partial rehearing in the District Court. In addition, the Arizona Department of Corrections' policy excluding HIV-infected inmates from food service work assignments was overturned as a violation of the Federal Rehabilitation Act.

The report includes the following chapters:

- (1) Biomedical and epidemiologic research developments.
- (2) Epidemiology of HIV disease in correctional facilities and the population at large.
- (3) HIV education and behavioral interventions.
- (4) HIV precautionary and preventive measures.
- (5) HIV testing, counseling, and disclosure policies.
- (6) Housing and correctional management of inmates with HIV disease.
- (7) Medical care and psychosocial services.
- (8) Legal issues.

Endnotes

- 1. For a good summary, see J.B. Glaser and R.B. Greifinger, "Correctional Health Care: A Public Health Opportunity," *Annals of Internal Medicine*, January 15, 1993; 118: 139–145.
- Dr. Kenneth Moritsugu, presentation at a conference on the Communicable Disease Crisis: Corrections and the Community, jointly sponsored by the American Correctional Health Services Association and the Centers for Disease Control and Prevention, Atlanta, March 13, 1993.
- See B. Jaye Anno, Prison Health Care: Guidelines for the Management of an Adequate Delivery System, Washington: National Institute of Corrections, March 1991, pp. 53-54.
- 4. Global Programme on AIDS, World Health Organization, "WHO Guidelines on HIV Infection and AIDS in Prisons," March 1993.
- 5. National Commission on AIDS, Report: HIV Disease in Correctional Facilities, March 1991.
- T.M. Hammett and L. Harrold, Tuberculosis in Correctional Facilities, Washington and Atlanta: National Institute of Justice and Centers for Disease Control and Prevention, 1993.

Chapter 1

Biomedical and Epidemiologic Research Developments

The most recent period in the biomedical and epidemiologic investigation of HIV infection witnessed a number of important developments:

- The first revision in the official case definition of AIDS since 1987.
- An acute surge, and more gradual resolution, of suspicion that a new virus was beginning to seed an additional epidemic of immune suppressive illness.
- Conclusion of a protracted debate on mandatory testing of health care workers who perform invasive procedures.
- The availability of more options among medications approved to combat HIV and more effective treatments to prevent and treat associated opportunistic infections.
- Concrete steps toward implementing large-scale efficacy trials of vaccines both to treat and prevent infection with HIV.

Revision of the Case Definition for AIDS Surveillance

Effective January 1, 1993, the Centers for Disease Control and Prevention (CDC) expanded the case definition used to track and count cases of AIDS among adults and adolescents. Previously the definition was based on a diagnosis with a specific group of unusual ("opportunistic") infections or cancers in the presence of HIV infection. For the first time CDC included in the case definition a nonclinical criterion based solely on a laboratory test. Persons with HIV

with a CD4+ (T4+ or T-Helper) lymphocyte count below 200 per cubic millimeter of blood are now considered to have AIDS. (To support expanded use of CD4+ lymphocyte counts, CDC had published recommended protocols for laboratory testing and interpretation in December 1992.¹) CDC added three new AIDS-defining clinical conditions (when accompanied by HIV infection): neoplasia of the cervix (cancer of the opening into the uterus), tuberculosis of the lungs, and recurrent pneumonia (not just *Pneumocystis carinii* pneumonia, as before).²

A revised case definition had first been proposed by CDC in mid-November 1991 and was to have included only the low CD4+ cell count as a new criterion.³ However, advocacy groups objected to the absence in the AIDS case definition of conditions that commonly afflict women with HIV infection.⁴ In announcing the revised definition, CDC cited the high prevalence rates of cervical dysplasia (abnormal and possibly precancerous cell types) among HIV-infected women and the importance of early diagnosis because HIV may accelerate progression from dysplasia to invasive neoplasia.

With regard to tuberculosis, CDC noted that persons with positive tuberculin skin tests are much more likely to develop active tuberculosis if they are HIV-infected. Although presence of tuberculosis lesions outside the lungs already was an AIDS-defining condition, active tuberculosis in the lungs was added because it may develop at about the same level of immune suppression (as measured by CD4+ lymphocyte counts). CDC added recurrent pneumonia (more than two episodes in 12 months) because of its importance as a cause of illness and death among persons with advanced HIV infection.

CD4+ (T-helper or T4+) Cell Depletion in the Absence of HIV Infection

In July 1992 a handful of case reports at the VIII International Conference on AIDS in Amsterdam prompted an eruption of media attention and a brief surge of popular alarm over the possibility that a hitherto undetected AIDS-like epidemic threatened the public. Those case reports described patients who had experienced severe declines in CD4+ lymphocytes but who had tested negative on various types of laboratory tests for HIV. One especially disturbing, albeit premature, interpretation, based on preliminary laboratory findings, was that these cases of immune suppression were caused by the undetected spread of a new and unknown virus.

Within weeks CDC and the National Institutes of Health (NIH) instituted a national surveillance system for the collection of similar case reports and organized a scientific meeting in mid-August to review the assembled reports collected under the new name CD4+ T-lymphocytopenia.⁶ By February 1993 sufficient evidence had been collected to suggest strongly that severe CD4+ lymphocyte depletion may occur without HIV infection, but only very infrequently, and with no epidemiological evidence for a common causal agent that is transmissible.⁷

One-third of about 50 identified cases occurred among persons with risk factors for HIV. However, most had been diagnosed by HIV specialists who are more likely to test for immunologic abnormalities and to see patients with such risk factors. Conversely, investigations specifically seeking evidence of the syndrome among tens of thousands of HIV-seronegative homosexual and bisexual men turned up only a single individual with a depressed CD4+lymphocyte count, and he was receiving immunosuppressive therapy for an unrelated condition.8 In contrast to the first several dozen people diagnosed with AIDS, these patients showed no indication of clustering or common characteristics that suggested a single causal agent. All of their close contacts and sexual partners were free of related symptoms. The cause or causes of this phenomenon have not been elucidated, and the patients continue to be studied.

Infection Control and Invasive Procedures

By 1987 CDC had developed and disseminated the infection-control principle of universal precautions—which

means treating blood and other body fluids and tissues as if they might be infectious whether or not labeled as hazardous or tested and shown to be contaminated. Three years later CDC published the first case report of transmission of HIV to patients in the practice of a dentist infected with the virus. Controversy ensued over whether to require HIV testing for all health care workers performing invasive procedures.

In July 1991 CDC issued revised infection control guidelines that refrained from advising mandatory HIV testing of health care workers, but recommended that health care workers "who perform exposure-prone procedures should know their HIV antibody status." CDC further advised health care workers who know they are infected to consult with an expert review panel regarding the circumstances, if any, under which they should continue to perform such procedures. CDC indicated that, prior to receiving treatment from HIV-infected health care workers, patients ought to be notified of the practitioner's status.⁹

The July 1991 guidelines were intended to be temporary. They included a definition and examples, but not a definitive list of "exposure-prone" dental and surgical procedures. 10 CDC called upon professional organizations in health care to specify such procedures. Legislation required that States produce such a list within a year or lose Federal health funds.11 New York and California demurred on the grounds that adequate data were unavailable and that available evidence indicated infinitesimal risk. Except for the American Medical Association, every professional organization consulted by CDC-including the Infectious Diseases Society of America and the American College of Surgeons—refused to develop such a list, and many criticized the agency's recommendation because of the likelihood that it would encourage calls for mandatory testing of health care workers or would lead to discrimination against HIV-infected health care workers.12

In June 1992 the agency completed its review of policies associated with HIV infection among health care workers performing invasive procedures and decided to stand behind the interim guidelines promulgated in July 1991.¹³ On July 12, 1992, CDC asked State health officers to indicate their compliance with the July 1991 guidelines or equivalents. In lieu of a list of "exposure-prone procedures," CDC indicated that determinations of whether a provider should be permitted to continue performing invasive procedures would be made on a "case-by-case basis, taking into consideration the specific procedure as well as the skill, technique, and possible impairment of the infected health-care worker."¹⁴

In the meantime, in May 1992 CDC reported on intensive investigations, begun two years earlier, of the dental practice that occasioned the reconsideration of health care worker testing in the first place. ¹⁵ Eventually, eight HIV-infected patients were identified, three of whom had an identified risk factor for HIV infection, and five of whom had no identifiable risk. CDC concluded that "the preponderance of data support direct dentist-to-patient transmission rather than a patient-to-patient route." ¹⁶

Treatment and Prophylaxis

Antiretroviral Medications

A summary of currently available antiretroviral medications for HIV is provided in table 1. Zidovudine (Retrovir, or AZT) remains the mainstay of therapy for AIDS and advanced HIV disease and the only drug approved for preemptive "early intervention" treatment among persons with HIV and CD4+ counts between 200 and 500.¹⁷ New drugs belonging to the same class (nucleoside analogues that inhibit reverse transcriptase) are entering the therapeutic armamentarium for persons who have ceased to benefit from zidovudine or have become intolerant to it: ddI

(dideoxyinosine, or didanosine, or Videx), ddC (dideoxycytidine, or zalcitabine, or HIVID) used in combination with zidovudine, and d4T (stavudine).

Evidence continued to accumulate that, among persons with AIDS and advanced HIV disease, zidovudine both reduces the frequency of opportunistic infections and prolongs survival. 18 Although several studies supported the utility of zidovudine in staving off opportunistic infections among persons with CD4+ counts between 200 and 500, there remains no definitive evidence that it prolongs survival.¹⁹ New doubts about the effectiveness of early intervention surfaced in reports of a British-French-Irish study (the "Concorde Study") of zidovudine versus placebo administered to 1,749 persons with HIV infection, which measured no benefit for the zidovudine group with respect to survival or a delayed AIDS diagnosis.20 A number of significant features distinguish this clinical trial from three prior studies. Data for the subgroup of subjects comparable to the earlier studies—with CD4+ counts between 500 and 200 —were not reported separately. Also, random assignment was not maintained once participants' CD4 counts fell below 500/mm³; at that point they were offered zidovudine, even if they had previously been assigned to placebo. Finally, the study used a higher dose of zidovudine (1,000

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Drug	Indication	Side Effects	Availability
złdovudine (AZT, Retrovir)	CD4+ counts below 500/mm³	low red blood cell and neutrophll count; nausea; lethargy	available by prescription
didanosine (ddl, Videx)	prolonged zidovudlne therapy; zidovudlne failure or Intolerance	neuropathy (pain in extremities), pancreatitis; rash; diarrhea	available by prescription
zalcitabine (HIVID)/ zidovudine (ddC/AZT)	CD4+ counts below 300/mm³; zidovudine monotherapy failure or intolerance	neuropathy; pancreatitis; rash	available by prescription
stavudine (d4T)	ineligible for clinical trial; fallure on or intolerance to other antiretrovirals	neuropathy; possible pancreatitis, abnormal ilver function	avallable free from manu- facturer (Bristol-Myers Squlbb) during clinical trial: random assignment to high or low dosage

mg/day) in contrast to the lower dose (600 mg/day) that became standard in 1990 when it was found to be more effective than higher doses.²¹

Delayed onset of disease without a corresponding increase in survival is not necessarily paradoxical: zidovudine may sustain better health for a period of time, followed by a faster decline once AIDS-defining infections begin to occur. Nevertheless, researchers and educators continue to assert the unproven claim that early intervention with antiretroviral drugs yields increased survival.²² There was continuing intense discussion of the Concorde Study results at the IX International AIDS Conference in Berlin in June 1993 but no consensus has yet emerged on the advisability of early treatment with zidovudine.

To resolve the question, the American Foundation for AIDS Research (AmFAR) has funded the pilot (feasibility) phase of a "large simple trial" that began in San Francisco in the spring of 1993 with the target of enrolling as many as 10,000 patients. This study asks a specific, straightforward ("simple") question—does earlier intervention prolong survival? It uses a large population to be able to detect relatively small effects—such as months, as opposed to years, of increased survival.²³

Didanosine (ddI, Videx) was approved in the fall of 1991 for treating persons who had become intolerant to, or ceased to benefit from, zidovudine. The following spring, a controlled trial showed that didanosine was more effective than zidovudine in forestalling disease progression and death among persons with HIV who had already received zidovudine therapy for at least 16 weeks (a median duration of almost 14 months).24 In September 1992 the Food and Drug Administration (FDA) approved a labeling change expanding the use of didanosine for adult patients who had received prolonged zidovudine therapy.²⁵ Final results of the clinical trial (ACTG protocol 116/117) may help determine optimum timing for transfer from zidovudine to didanosine among persons with HIV who have not demonstrated clinical evidence of zidovudine intolerance or ineffectiveness.26

In the first example of expedited approval under FDA's 1992 accelerated drug review policy, conditional approval was granted in August 1992 to zalcitabine (ddC, HIVID) in combination with zidovudine for use among adult patients with HIV who evidenced clinical or immunological deterioration on zidovudine alone.²⁷ In March 1993 adult patients with AIDS or advanced HIV disease were found to benefit more from an alternating (weekly or monthly) regimen of zidovudine and zalcitabine than from continuous or intermittent use of either drug as a single agent.²⁸

While controlled clinical trials of stavudine (d4T) continued, in November 1992 this compound became the first investigational drug to become available under the "parallel track" policy promulgated by the U.S. Public Health Service the previous April. Access to this drug under the parallel track mechanism is limited to persons with HIV who are ineligible for the controlled clinical trial and who have suffered serious side effects or deteriorating health while receiving other antiretroviral drugs. As with zalcitabine, the principal side effect of stavudine is peripheral neuropathy (disorders of nerves radiating out to the extremities—a common symptom is tingling in the feet) that can be reversed by reduction or cessation of drug administration.²⁹ In December 1992 HHS waived the requirement that local institutional review boards evaluate and approve the parallel track protocol, thereby expediting patient access to this investigational drug.30

Prophylaxis and Treatment of Opportunistic Infections

As strategies for delaying or preventing *Pneumocystis* carinii pneumonia (PCP) continue to be more widely used, other HIV-related opportunistic infections have attracted increasing attention with regard to both treatment and prophylaxis. Important infectious agents in the spectrum of HIV-related opportunistic infections have been addressed with increasing success, with regard both to prevention and acute treatment of:

- Toxoplasmosis.
- Mycobacterium avium and Mycobacterium intracellulare (MAI).
- Cytomegalovirus (CMV), especially CMV-associated retinitis.
- Cryptococcosis, especially as a cause of meningitis.

Increased attention to the clinical presentation of women with HIV has drawn attention to two gynecologic manifestations:

- Cervical dysplasia and invasive cervical neoplasia.
- Recurrent vaginitis associated with Candida albicans.

Pneumocystis carinii pneumonia. In April 1992 the U.S. Public Health Service Task Force on Antipneumocystis Prophylaxis revised the guidelines on the prevention of *Pneumocystis carinii* pneumonia that were first established in 1989.³¹ The new recommendations favor oral antibiotics—specifically trimethoprim-sulfamethoxazole (TMP-

SMX, distributed under the brand names of Bactrim, Septra, and others)—over aerosolized pentamidine, which is more costly and less convenient to administer. Atovaquone (formerly BW 566c80) has been approved for patients with *Pneumocystis carinii* pneumonia who cannot tolerate or who do not benefit from other therapies (namely TMP—SMX, pentamidine, and dapsone).

Toxoplasmosis. Because of frequent adverse reactions to the standard treatment for toxoplasmosis (combined pyrimethamine and sulfadiazine), studies have been designed to assess desensitization strategies and to identify alternatives. Clinical trials of azithromycin and of pyrimethamine supplemented with atovaquone are underway. Side effects have been the limiting factor in studies of pyrimethamine as a primary prophylactic agent.³²

Mycobacterium avium complex. Although no standard treatment is available (studies are underway of, principally, clarithromycin and azithromycin), rifabutin is recommended as primary prophylaxis for persons with CD4+ counts below 200/mm³.

Cytomegalovirus. Standard treatment for CMV-induced retinitis—which, untreated, causes blindness—has been daily intravenous ganciclovir, but the bone marrow toxicity of ganciclovir has required discontinuation of zidovudine. Ganciclovir must be administered intravenously and, following a diagnosis of retinitis, for life. Foscarnet, with a different toxicity profile (renal failure and peptic ulcers), also has been approved for treatment of CMV retinitis.

To eliminate the need for a permanent catheter for intravenous infusion, and the attendant increased risk of systemic infection, oral preparations of ganciclovir are under investigation for both treatment and primary prophylaxis. An implant inserted into the eyeball that delivers ganciclovir over a period of several months has proven effective in early trials and is now being evaluated in a controlled trial comparing a four-month and an eight-month implant.³³ By avoiding intravenous infusion, this method has the further advantage of reduced systemic toxicity.

Cryptococcosis. Fluconazole (Diflucan) has been approved as an alternative to amphotericin B, the highly toxic drug previously offered as a standard treatment for cryptococcal meningitis and pneumonitis. Fluconazole appears to be superior for prevention of relapse after an initial phase of acute illness; preliminary data also suggest it may be effective for primary prevention of disseminated cryptococcosis among HIV-infected persons with CD4+counts below 68/mm³.³⁴

Cervical cancer. Rates of detection of cervical dysplasia among HIV-infected women have been sufficiently elevated to lead CDC to include invasive cervical cancer as an AIDS-defining condition. The addition was made to encourage more thorough gynecologic care for HIV-infected women, including routine Pap smears and colposcopy of possible precancerous lesions.³⁵

Recurrent candidal vaginitis. Although candidal infections can be treated as they occur, community-based clinical trials are underway to determine whether fluconazole can prevent symptomatic outbreaks.

Vaccines

At the July 1992 VIII International Conference on AIDS, the Director of the Division of AIDS for the National Institute of Allergy and Infectious Diseases (NIAID) predicted that by 1995 at least two potential vaccines for primary prevention of HIV infection would be ready to enter large-scale prevention trials in the United States. At virtually the same time, Congress set aside \$20 million to fund a large-scale trial, under the auspices of the Department of Defense, of another product being evaluated as a therapeutic vaccine for persons already infected with HIV. (The Army had been investigating this candidate in phase I/II trials designed to test whether it is safe and whether it causes an immune response to develop.)

In the ensuing controversy about the propriety of setting research priorities in the context of a lobbying and legislative process rather than through peer review by impartial experts, the NIH, FDA, and Defense Department have been deliberating whether to test one product or to mount a large, simple trial of the therapeutic benefit of several candidate products.³⁷ The large, simple trial design is based on the expectation that a large study population would be needed in order to detect significant clinical benefits among patients whose HIV disease is so early that few are likely to develop symptoms.³⁸

Therapeutic Vaccines

Jonas Salk is credited with originating the concept of immunizing HIV-infected persons to prevent or reverse the progression of HIV disease, although a variety of vaccine products have entered preliminary trials in addition to the one Salk proposed.³⁹ An important basis for the vaccine approach to HIV treatment is the concept that early in the course of HIV infection the immune system seems able to

control the virus—hence the long incubation period before the onset of severe illness. As time passes, the immune system seems to become less competent in suppressing HIV. The two classes of immune defense—antibody production and cellular responses—both decline. The idea behind a therapeutic vaccine is that immunization will reactivate the immune system during periods when HIV is relatively quiescent, thereby maintaining immune defenses against the virus.

As possible HIV treatments, vaccines have been tested using a different strategy than used for other therapies. Ordinarily HIV treatments have been tested first among persons with severe disease and then, if they prove effective, offered to healthier persons with HIV as a possible means of early intervention. In contrast, vaccines initially have been given to patients with relatively high CD4+lymphocyte counts (usually 500/mm³ or above): researchers believe that, with less compromised immune systems, these patients will be more likely to benefit from the vaccine by responding to it with an enhanced anti-HIV immune response.

The results of pilot studies show neither definite benefit nor harm from vaccines used therapeutically. Because the persons enrolled in these trials are relatively healthy, differences in clinical outcomes, such as progression to AIDS, have not been measurable: few develop severe symptoms whether or not they receive treatment. Researchers instead have pointed to indirect evidence of effectiveness: First, enhanced immune responses to HIV have been measured. Second, CD4+ lymphocyte counts, which usually decline over a period of months or years, have remained stable or increased slightly among vaccine recipients.⁴⁰ Critics suggest that these intermediate outcomes may not have any significance in terms of ultimate clinical benefit.⁴¹ Various proposals are being considered for a large, simple trial that might show more definitive outcomes. The large, simple trial is based upon the idea that, with a very large study population (tens of thousands of patients), there will be enough instances of rare events—such as serious disease progression or death—to show whether the vaccine makes a statistically significant difference.

Prophylactic Immunization

The original motive for developing HIV vaccine products was, of course, to develop a vaccine that could be used to prevent HIV infection among people who were at risk of exposure but not yet infected. Almost two dozen different products have been developed and have entered either

animal trials or early human trials. Most of the products being developed and tested mimic the surface or "envelope" of the virus—the part of the virus that the immune system sees first. They do not contain any genetic information from the virus, so they cannot cause disease. Other strategies for vaccine development involve the creation of harmless virus hybrids that mimic some aspects of the shape of HIV but have none of its disease-causing properties.

Still other vaccine products employ whole, killed HIV that is unable to reproduce, or a weakened form of HIV that can reproduce but cannot cause disease. 42 Preparations based on killed or weakened viruses have been most successful for immunization against a variety of other viruses, and they have been the most effective approaches to immunization in animal trials conducted thus far. 43 However, because of safety concerns, they have less appeal for preventing HIV infection. The principal concern with killed virus is the risk of incomplete inactivation: inoculation with residual live virus might result in unintentional infection of the vaccine recipient.44 One danger of a weakened virus is that mutations may permit it to become disease-causing. Another possible harmful outcome would result if weakened virus remained capable of causing disease, but much more slowly than the epidemic form of HIV: the studies required to detect such outcomes would take decades.

Significant questions remain, therefore, with regard to large-scale human trials of preventive vaccines. The products furthest along in development in human trials have been the least effective of the approaches tested in animal studies, although even partial protection from a vaccine may have significant public health impact. Although animal models have been important for preliminary tests, there are significant differences between the responses of humans and chimpanzees or macaques, the predominant species used in animal trials. ⁴⁵ Consequently, human trials may be the only way to answer some questions about effectiveness. ⁴⁶

Human efficacy trials are likely to go forward with products that have been shown to be safe in early trials but that may well be less than 100 percent effective. This strategy is based on the assumption that a less than perfect vaccine still has the potential to spare hundreds of thousands of persons who would otherwise become infected with HIV during the years required to perfect a better candidate.⁴⁷

The NIAID has set aside funds to develop an infrastructure for the implementation of efficacy trials in the United States and in other countries. These are expected to involve as many as five vaccines introduced between 1994 and 1998

among as many as 30,000 HIV-uninfected volunteers in the United States and 12,500 in other countries who are at increased risk of infection.⁴⁸

The advent of large-scale efficacy trials for a preventive vaccine may mark a watershed in the history of the AIDS pandemic, throughout which prevention strategies have had to rely on the promotion of behavioral change. As June Osborn of the National AIDS Commission has pointed out, premature optimism about unproven vaccines must not derail continuing efforts to encourage the adoption of harm-reducing behaviors among those at risk for HIV infection.⁴⁹

Endnotes

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- CDC, "Revised Classification System for HIV Infection and Expanded Surveillance Case Definition for AIDS Among Adolescents and Adults," Morbidity and Mortality Weekly Report, 41, no. RR-17 (1993): 1-19.
- 3. Federal Register (56 FR 58059).
- 4. AIDS Policy and Law, October 30, 1992, p. 7.
- 5. CDC, "Unexplained CD4+ T-lymphocyte Depletion in Persons without Evident HIV Infection—United States," *Morbidity and Mortality Weekly Report*, 41, no. 30 (July 31, 1992): 541–545.
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- CDC, "Recommendations for Preventing Transmission of Human Immunodeficiency Virus and Hepatitis B to Patients during Exposure-prone Invasive Procedures," Morbidity and Mortality Weekly Report, 40, no. RR-8 (July 12, 1991): 1-9.
- 10. CDC (ibid.) characterized such procedures as involving "digital palpation of a needle tip in a body cavity or the simultaneous presence of the HCW's fingers and a needle or other sharp instrument or object in a poorly visualized or highly confined anatomic site" and cited "certain oral, cardiothoracic, colorectal, and obstetric/ gynecologic procedures," together with "operative procedures on the general surgery, gynecology, orthopedic, cardiac, and trauma services."
- "CDC Issues Recommendations on Procedures: Senate Passes Two Conflicting Amendments," AIDS Policy and Law, July 24, 1991, pp. 1, 7, 8.
- 12. "CDC Reported to Have Dropped Its Proposal to List Exposure-prone Surgical Procedures," *AIDS Policy and Law*, November 28, 1991, pp. 1, 8.
- 13. "PHS, After Nearly a Year of Controversy, Won't Revise Infected Worker Guidelines," *AIDS Policy and Law*, June 26, 1992, pp. 1, 8.
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- 15. C. Ciesielski, D. Marianos, C.-Y. Ou, et al., "Transmission of Human Immunodeficiency Virus in a Dental Practice," *Annals of Internal Medicine*, 116 (1992): 798–805.
- 16. Laboratory analyses of the genetic sequence of variable regions of the viral genome indicated essential similarity between the strain in the dentist and that found among the patients with no identifiable risk, but little resemblance between the strain found in the dentist and the three patients with known risk factors. Examination of appointment schedules for shared visits showed some clustering and some overlap but no more than would be expected by chance, and no indication that the same instrument was used on more than one of the infected patients on the same day. Office staff reported compliance with sterilization procedures that would have been sufficient to inactivate HIV.
- 17. G.X. McLeod and S.M Hammer, "Zidovudine: Five Years Later," *Annals of Internal Medicine*, 117 (1992): 487–501.
- 18. Ibid.

- 19. P.A. Volberding, S.W. Lagakos, M.A. Koch, et al., "Zidovudine in Asymptomatic Human Immunodeficiency Virus Infection: A Controlled Trial in Persons with Fewer Than 500 CD4-Positive Cells per Cubic Millimeter," New England Journal of Medicine, 322 (1990): 941-949; J.D. Hamilton, P.M. Hartigan, M.S. Simberkoff, et al., "A Controlled Trial of Early Versus Late Treatment with Zidovudine in Symptomatic Human Immunodeficiency Virus Infection: Results of the Veterans Affairs Cooperative Study," New England Journal of Medicine, 326 (1992): 437-443. On the other hand, a survival benefit for early intervention with AZT was reported in N.M. Graham, S.L. Zeger, L.P. Park, et al., "The Effects on Survival of Early Treatment of Human Immunodeficiency Virus Infection," New England Journal of Medicine, 326 (1992): 1037-1042. However, the latter study was faulted for methodological problems, particularly survival bias (P.M. Hartigan, J.D. Hamilton, M.S. Simberkoff, et al., "Early Zidovudine and Survival in HIV Infection" [letter] New England Journal of Medicine, 327 (1992): 814-815).
- J.P. Aboulker and A.M. Swart, "Preliminary Analysis of the Concorde Trial," [letter] Lancet, 341, 8849 (April 3, 1993): 889–890. L.K. Altman, "New Study Questions Use of AZT in Early Treatment of AIDS Virus," New York Times, April 2, 1993, pp. A1, A12.
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This is not to say that reduced need for hospitalization or treatment during the disease-free period is without benefit, but there may be a trade-off between delayed hospitalization and adverse side effects of the medication. A study of the impact of zidovudine on quality of life among mildly symptomatic HIV patients could find no definitive benefit for zidovudine unless greater distress was attributed to the onset of a condition

- diagnostic of AIDS or advanced ARC than to severe constitutional symptoms or laboratory abnormalities (R.D. Gelber, W.R. Lenderking, D.J. Cotton, et al., "Quality of Life Evaluation in a Clinical Trial of Zidovudine Therapy in Patients with Mildly Symptomatic HIV Infection," *Annals of Internal Medicine*, 116 (1992): 961–966.)
- 23. Study volunteers would be assigned at random either to early antiretroviral treatment (any monotherapy or combination therapy they and their provider elected) or to delay therapy until they or their provider felt it was necessary, with the presumption that in practice the two groups would differ by as much as a year or more in the point at which therapy was initiated (T. Mitchell, "When Should Persons with Asymptomatic HIV Disease Begin Anti-HIV Therapy? A Large Simple Trial Could Provide the Answer," BETA, March 1993: 20–22.)
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- 34. S. Nightingale, et al., "Primary Prophylaxis with Fluconazole against Systemic Fungal Infections in HIV-Positive Patients," AIDS, 6 (1992): 191–194.
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- 39. AIDS Medicines in Development, Pharmaceutical Manufacturers Association, October 1992, p. 7.
- 40. See, for example, R.R. Redfield, et al., "A Phase I Evaluation of the Safety and Immunogenicity of Vaccination with Recombinant gp160 in Patients with Early Human Immunodeficiency Virus Infection," New England Journal of Medicine, 324 (1991): 1677–1684.
- 41. CD4+ lymphocyte counts have been used successfully as surrogate markers for antiretroviral drugs because this laboratory measure has correlated well with clinical outcomes indicative of disease progression. However, a therapeutic vaccine may artificially inflate CD4+ lymphocyte counts because it activates the immune system. With HIV disease observed to progress in the presence of immune responses such as detectable antibody and cytotoxic responses to HIV-infected cells, immunological markers such as new skin test responses or induction of new antibodies ultimately may have no clinical significance.
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- 43. For killed-virus approaches, see M. Murphey-Corb, L.N. Martin, B. Davison-Fairburn, et al., "A Formalininactivated Whole SIV Vaccine Confers Protection in Macaques," Science, 246 (1989): 1293–1297; R.C. Desrosiers, M.S. Wyand, T. Kodama, et al., "Vaccine Protection against Simian Immunodeficiency Virus Infection," Proceedings of the National Academy of Sciences (USA), 86 (1989): 6353–6357. For weakened virus studies, see R.C. Desrosiers, "HIV with Multiple Gene Deletions as a Live Attenuated Vaccine for AIDS," AIDS Research and Human Retroviruses, 8 (1992): 411–421; R.C. Desrosiers, et al., Science, 258 (1992): 1938.
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- 45. HIV does not cause disease in primates, so animal trials of HIV vaccines cannot provide evidence that they prevent clinical disease. Instead, researchers have turned to a similar virus that both infects and causes AIDS-like disease in primates, simian immunodeficiency virus (SIV). Researchers believe the primate immune response to SIV vaccines may be a good predictor of human responses to an HIV vaccine developed using a successful SIV strategy. However, the similarity is far from complete. Because SIV is genetically different from HIV, it may not show the same rate and amount of variation found with HIV. But the ability to protect against a rapidly mutating virus with many different strains will be critical for an HIV vaccine. Also, human infections can be transmitted via mucosal (sexual) exposure, perinatally (during pregnancy or at delivery), and by intravenous or intramuscular injection. Animal trials of SIV vaccines have tested immunity only against the injection route, not against mucosal or perinatal exposure. Even if such tests were successful, they might not be significant since SIV is not ordinarily transmitted sexually or perinatally among primates (A.M. Schultz and W.C. Koff, "Prospects for an AIDS Vaccine," Seminars in Immunology, 2 (1990): 351-359). Because HIV occurs in natural infection not only as free particles but also inside infected cells, fully effective host defense is likely to require one or more forms of cellmediated immunity (A.B. Sabin, "Effectiveness of AIDS Vaccines," [letter] Science, 251 (1991): 1161). But animal experiments have tested the effectiveness of vaccines only against exposures to free viral particles ("Federal Researcher Predicts HIV Vaccine Will Be Ready to Test within Three Years," AIDS Policy and Law, July 24, 1992, pp. 4-5).

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Chapter 2

Epidemiology of HIV Disease in Correctional Facilities and the Population at Large

Patterns of HIV Disease in the Population at Large

This section describes the patterns of HIV disease in the U.S. population. Topics include the continued heightened interest in HIV disease among women, the shifting proportions of AIDS cases attributed to diverse exposure categories, the continued overrepresentation of minority group members among persons with HIV/AIDS, and estimates of the prevalence of HIV infection in the total population.

Growth in AIDS Cases

The number of AIDS cases continues to grow in the United States although, as CDC had predicted, at a slower rate than in previous years. More than 47,000 new U.S. AIDS cases were reported to the Centers for Disease Control and Prevention during the year ending December 31, 1992. Although CDC calculations indicate that the rate of increase in overall AIDS incidence began to slow during the middle of 1987, the agency estimates that the number of new cases diagnosed each year will continue to increase until about 1995.1

Cumulatively, almost 250,000 adult/adolescent and more than 4,200 pediatric AIDS cases were reported in the United States through December 1992. These figures include more than 8,300 adult/adolescent and more than 160 pediatric cases from Puerto Rico, where the cumulative incidence almost doubled in two years.² Reflecting the slowing in the overall pace of epidemic growth, however, the increase in cumulative total cases during 1992 was 23 percent compared to 28 percent in 1991, 38 percent in 1990, and 50 percent in 1989.

Although all States and metropolitan areas and many rural areas have been touched by the HIV epidemic, a small number of States still account for the majority of AIDS cases in the United States. Almost two-thirds of adult/adolescent cases have been reported from five States: New York (20 percent), California (19 percent), Florida (10 percent), Texas (7 percent), and New Jersey (6 percent). Over half of the pediatric cases reported have been in three States—New York (27 percent), Florida (15 percent), New Jersey (9 percent)—and Puerto Rico (5 percent). Thus, the epidemic among children is even more geographically concentrated. Pediatric AIDS is most common where HIV infection associated with injection drug use is most prevalent.

Through the end of 1992 more than 170,000 deaths due to HIV disease had been reported in the United States, representing two-thirds of all diagnosed cases. Eighteen percent of total AIDS deaths occurred during 1992, down from 1990, a year in which almost one-third of the cumulative total deaths to that time occurred. The total U.S. mortality rate continued to rise 68 percent in 1992, as opposed to 63 percent in 1990.3 AIDS emerged as a leading cause of death among American young adults in the 1980's. By 1989 it was the second leading cause of death among males 25–44 years of age, surpassing heart disease, cancer, homicide, and suicide. Although most AIDS deaths have occurred among whites, death rates for blacks and Hispanics have been higher relative to their shares of the population.⁴ The availability of therapeutic drugs such as zidovudine, ddI, and ddC does not seem to have affected these numbers very much, if at all. These medications are likely to increase survival time marginally rather than to keep patients alive indefinitely.

Women and HIV Disease

The Centers for Disease Control and Prevention report that the HIV epidemic is increasing faster among women than men. Women accounted for 13 percent of all AIDS cases reported during 1992, up from 11 percent in 1990. From 1991 to 1992 AIDS cases reported among women increased by 9 percent, as opposed to 2 percent among men. In response to rising concerns about HIV-related conditions in women, CDC included uterine cervical dysplasia in the revision of the AIDS case definition that became effective January 1, 1993. This should result in more female AIDS cases reported this year.

The HIV epidemic among women, as among men, disproportionately affects blacks and Hispanics. About 20 percent of all women in the United States are black or Hispanic, but 74 percent of female AIDS cases occurred in these groups. The epidemic among women has always been concentrated

among people of low socioeconomic status. As HIV infection increases among injection drug users, it increasingly affects their sexual partners and children.

AIDS Cases by Exposure Categories

Table 2 shows the breakdown of cumulative total AIDS cases reported to the CDC by exposure categories and gender. Although the overall growth of the epidemic may be slowing, principally because of slower growth of cases among men who have sex with men, at least in some parts of the country, it continues to increase among injection drug users and their sexual partners.

Fifty-seven percent of cumulative cases reported through 1992 were among men who have sex with men, while 23 percent were attributed to injection drug use. Since the end of 1987, the percentage of cumulative AIDS cases in men

Table 2

CUMULATIVE TOTAL OF ADULT/ADOLESCENT AIDS CASES IN THE UNITED STATES
BY EXPOSURE CATEGORY, THROUGH DECEMBER 1992

	Male	s	Fema	les	Tota	<u>ıl</u>			
Exposure Category	Number	%	Number	%	Number	%			
Men who have sex with men	142,626	64%			142,626	57%			
Injection drug use	43,786	20	13,626	50%	57,412	23			
Men who have sex with men and inject drugs	15,899	7			15,899	6			
Hemophilla/Coagulation disorder	1,983	1	43	0	2,026	1			
Heterosexual contact	6,419	3	9,835	36	16,254	7			
Receipt of transfusion	3,036	1	1,944	7	4,980	2			
Other ^b /Undetermined ^c	7,965	4	2,037	7	10,002	4			
Total	221,714	100%	27,485	100%	249,199	100%			

^aThis table lists AIDS cases by *exposure* category, that is, by the behavior or circumstance to which HIV transmission is attributed.

Source: Centers for Disease Control and Prevention (CDC), HIV/AIDS Surveillance Report, February 1993 (cases reported through 1992).

b"Other" refers to nine health care workers who developed AIDS after documented occupational exposure to HIV.

c"Undetermined" refers to individuals thought to have had established risk factors, but information on these factors was not available for various reasons—for example, they died before they could be interviewed, they refused to be interviewed, or they had forgotten or failed to admit high-risk behaviors.

who have sex with men dropped from 65 to 57, while the percentage of cases in injection drug users (IDU) rose from 17 to 23. In New York State 43 percent of cumulative cases reported through 1992 were among injection drug users, while 41 percent were in men who have sex with men.⁶

Some interesting patterns have emerged in the last few years. The number of new AIDS cases among men who have sex with men actually declined from 24,216 in 1991 to 23,936 in 1992. The number of new cases among injection drug users only increased by 1 percent from 1991 to 1992. The categories that increased more dramatically were heterosexual contact (up 17 percent, 26 percent among men and 11 percent among women) and perinatal cases (up 14 percent). These categories are closely related to drug use—i.e., infection through sex with an IDU or vertical transmission from a mother who is an IDU or sexual partner of an IDU.

Table 2 underscores the differences in the epidemic among males and females. Half of all female cases have been among IDUs and another 36 percent have been attributed to heterosexual contact. Overall, a larger number of heterosexual contact cases have been reported among women than among men (probably because HIV is more easily transmitted from male to female than female to male) although there was a sharper increase in heterosexual cases among men than among women from 1991 to 1992. Since the majority of heterosexual cases were acquired through sex with IDUs, the epidemic among women is closely associated with drug use. This includes an increasing number of cases among female crack addicts whose habit drives them to increase their sexual activity, both as prostitutes and otherwise, thereby increasing their risk for acquiring HIV infection.⁷

HIV Disease by Racial/Ethnic Groups

Blacks and Hispanics continue to be overrepresented among AIDS cases reported in the United States. Through 1987, 60 percent of total AIDS cases were among whites, 25 percent among blacks, and 14 percent among Hispanics. By the end of 1992 the percentages had shifted to 52, 30, and 17, respectively. This 8 percent shift in cumulative cases from whites to minorities in five years reflects the more rapid growth of cases among blacks and Hispanics than among whites.

Estimates of HIV Infection in the U.S. Population

The HIV infection rate in the total U.S. population remains unknown. A household seroprevalence survey was pilot-

tested in two cities, but CDC decided not to implement it nationwide because the pilot tests appeared to yield suspiciously low estimates of seroprevalence compared to rates back-calculated from known numbers of AIDS cases.8 Thirty-eight states require some form of reporting of HIV infection. These data help in the development of national population estimates of HIV infection. Indeed, national estimates rely on a composite of seroprevalence data, including those from State reporting and screening of newborns, blood donors, armed forces recruits, Job Corps participants, persons attending alternative testing sites and sexually transmitted disease clinics, and various other "sentinel" populations. Based on these calculations, the Public Health Service continues to estimate that a minimum of 1 million persons in the United States are infected with HIV. At least 40,000 new infections occur each year among adults and adolescents, as well as 1,500-2,000 perinatal infections among infants.9

Patterns of HIV Disease in Correctional Facilities

No Job-Related Cases of HIV Disease Among U.S. Correctional Officers

As in all previous NIJ surveys, no confirmed cases of jobrelated HIV infection or AIDS were reported among U.S. correctional officers. The CDC monitors occupational exposure and seroconversion to HIV among health care and emergency workers. As of the end of 1992, 33 documented occupational HIV transmissions had occurred among health care workers, including 12 nurses, 12 laboratory technicians, and four nonsurgical physicians. Seven of these individuals had developed AIDS. CDC also listed 69 "possible" transmissions to health care workers, including 14 nurses, 12 laboratory technicians, and seven emergency medical technicians (EMTs). These represented cases of reported exposure to HIV but no documented seroconversion.¹⁰ CDC has documented no cases of occupationally acquired HIV infection or AIDS in correctional officers, police officers, or any persons not employed in health care positions.11

As part of its Sentinel Event Notification System for Occupational Risks (SENSOR), CDC funded programs in seven health departments to monitor incidents in which correctional officers, police officers, EMTs, and other first respondents could have been exposed to HIV. Incidents included needlesticks, human bites, exposures of blood to nonintact skin and mucous membranes. Preliminary data

from four of these health departments reported 870 possible exposure incidents, but no HIV transmissions. One of the health departments focused on monitoring a correctional system. It identified 166 potential exposure incidents involving 149 staff members—61 correctional officers and 88 medical/dental staff. No HIV transmissions occurred.¹²

The first case of an occupational infection of a correctional officer was reported from Australia in 1990. This did not result from the kind of exposure about which correctional officers in the United States have generally expressed concern—that is, blood exposure during a fight or assault, a human bite, or a spitting incident. It was an extreme situation that is unlikely to recur with any frequency. An HIV-infected inmate with a history of mental instability and erratic behavior became angry, filled a syringe with his own blood, and injected it into an officer's buttocks. This was the equivalent of a small blood transfusion and, almost inevitably, the officer seroconverted to HIV.

Although this incident caused much concern among correctional officers and administrators, within six months of its occurrence, and only three months after the officer seroconverted to HIV, an Australian national conference on HIV in prisons recommended strict confidentiality of all HIV-related information, immediate widespread availability of bleach to inmates, and pilot programs for condom distribution.¹³ The conference that produced these recommendations was attended by correctional officers and managers, correctional medical staff, AIDS educators, inmates, government officials, academics, AIDS advocates, and others. Its recommendations suggest that an incident of occupational infection need not preclude consensus on rational prevention measures and other policy issues.

AIDS Cases Among Correctional Inmates

Cumulative total AIDS cases. A total of 11,565 AIDS cases had been reported among inmates in U.S. Federal, State, and larger city/county correctional systems as of November 1992–March 1993, the period in which the survey was completed. These represent cumulative totals since the beginning of the epidemic. Of these cases, 8,525 occurred among inmates of 48 State prison systems (two State systems reported no cases) and the Federal Bureau of Prisons. Three thousand forty (3,040) cases were reported by 31 city/county jail systems.

These figures require some qualification. The NIJ/CDC survey is not exhaustive of city/county jail systems and the participating jail systems have varied slightly from year to year. Some components of the data necessary to calculate

cumulative totals (i.e., current cases, cases among released individuals, and deaths while in custody) have not been available from every jurisdiction for each year of the survey. Therefore, we have had to estimate some figures based on prior years' reports. These estimates have always been made conservatively. Together with the inexhaustive scope of the survey and undercounting in some correctional systems that has come to light over time, this suggests that our figures be considered minimum estimates of the cumulative incidence of AIDS among U.S. inmates. Based on this minimum estimate, 4.6 percent of the U.S. cases of AIDS have occurred among inmates.

Table 3 shows that the rate of increase in cumulative total correctional cases over the two years since the previous survey is 66 percent. Assuming the growth was spread evenly over the two years, the annual rate of increase was about 33 percent for each of the last three years. The rate of increase in correctional cases between 1990 and 1992/1993 (66 percent) was slightly above that in the total U.S. population (64 percent) for the same period.

Correctional systems participating in the survey reported that a cumulative total of 3,474 inmates had died of AIDS while in custody. This represents 2 percent of all AIDS deaths among adults and adolescents in the United States. Forty-four State and Federal prison systems report a cumulative total of 2,858 inmate deaths from AIDS. Ten State/Federal systems have had more than 50 deaths and five have had more than 100 deaths. Thirteen responding city and county jail systems reported 616 inmate AIDS deaths. One jail system reported more than 100 deaths. Thirty-nine percent of U.S. inmate AIDS deaths have occurred since the 1990 survey.

Table 4 shows that the distribution of cumulative total AIDS cases across correctional systems is still quite uneven, although in some respects less so than in 1985. Three State correctional systems reported their first inmate AIDS cases since the 1990 survey. The only two State correctional systems that have yet to report an inmate AIDS case are those in South Dakota and West Virginia. Twenty-two percent of State/Federal prison systems and 29 percent of responding city/county systems have had 10 or fewer cases, while 48 percent of State/Federal and 45 percent of city/ county systems have reported fewer than 26 inmate AIDS cases. At the other extreme, 20 State/Federal systems (39 percent) and nine responding city/county systems (29 percent) have had more than 50 cases. Fifteen State/Federal systems (29 percent) account for 90 percent of the cases in this jurisdictional category, while six responding city/ county systems (19 percent) report 78 percent of the cases in this category of systems.

Table 3

CUMULATIVE TOTAL AIDS CASES AMONG CORRECTIONAL INMATES AND THE POPULATION AT LARGE, U.S., 1985-1992/1993

	Corre	ctional Cases ^a	Cases in Total U.S. Population			
	Number of Cases	% increase from Preceding Survey°	Number of Cases	% Increase from Preceding Survey ^d		
November 1985	766	N/A	14,519	N/A		
October 1986	1,232	61%	26,002	79%		
October 1987	1,964	59	41,770	61		
October 1988°	3,136	60	73,621	76		
October 1989 ^r	5,411	72	1.10,333	50		
October 1990°	6,985	29	152,231	38		
November 1992-March 1993h	11,565	66	249,199	64		

^oThe figures in this and other tables represent inmate AIDS cases in the federal prison system, all 50 state prison systems, and a *sample* of 28–37 city and county jail systems (depending on the year of the NIJ Survey).

Sources: CDC, AIDS Weekly Surveillance Reports—U.S., November 4, 1985, October 5, 1986, October 5, 1987, October 3, 1988; CDC, HIV/AIDS Surveillance Report, November 1990, February 1993 (cases reported through 1992); NIJ/CDC Questionnaire Responses.

As shown in table 5, the regional distribution of cumulative total cases remains uneven as well, although, as with the distribution across systems, less skewed than in 1985. Among State prison systems, half of the cases have occurred in the Middle Atlantic region (principally in New York and New Jersey), although this region's share has fallen steadily from the initial 75 percent in 1985. All other regions have increased their shares since 1985. A dissimilar pattern in some respects is revealed among the reporting city/county

systems, where the share tradeoff has been predominantly between the Middle Atlantic and Pacific regions, although all regions have increased their shares since 1985. In general, the spreading regional distribution reflects the dispersion of the epidemic nationwide.

Current AIDS cases. Table 6 displays the distribution of current inmate AIDS cases across reporting correctional systems. Forty-five State and Federal prison systems re-

^bAdult/adolescent cases only. Pediatric cases excluded.

^cIn most cases, the column presents the difference between the number of cases in the given year and the number in the prior year. The exception is November 1992–March 1993.

^dAs with the correctional cases, the percent increase reflects the change from the preceding survey. In most cases, this is a one-year interval. However, the percent increase for November 1992 through March 1993 reflects a two-year interval.

[°]Figures for 1988 include 28 city/county jail systems.

^f Figures for 1989 include 32 city/county jail systems.

⁹Figures for 1990 include 27 city/county jail systems.

^hFigures for 1992/1993 include 31 city/county jail systems.

Table 4

DISTRIBUTION OF CUMULATIVE TOTAL INMATE AIDS CASES, U.S., NOVEMBER 1985 AND NOVEMBER 1992-MARCH 1993°

		<u></u>	State/F	ederal	Prison Sys	tems	· · · · · · · · · · · · · · · · · · ·			
	N	November 1985 November 1992–Marc (N=51) (N=51)						rch 1993		
 Range of Total AIDS Cases	Number of Systems	%	Number of AIDS Cases	%	Number of Systems	%	Number of AIDS Cases			
0 1–3 4–10	26 15 5	51% 29 10	0 24 30	0% 5 7	2 5 4	4% 10 8	0 8 31	0% 0.1 0.4		
11-25 26-50 51-100 > 100	2 1 1	4 2 2 2	42 33 95 231	9 7 21 51	13 7 5 15	26 14 10 29	223 253 371 7,639	3 3 4 90		
Total	51	100%	455	100%	51	101% ^b		101%		
			City/	County	/ Jail Syste	ms				
	N	ovemb (N=	oer 1985 33)		Novemb	er 1992 (N=3		1993		
Range of Total AIDS Cases	Number of Systems	%	Number of AIDS Cases	%	Number of Systems		Number of AIDS Cases		···	
0 1–3 4–10	13 10 7	39% 30 21	0 16 43	0% 5 14	0 4 5	0% 13 16	0 8 39	0% 0.3 1		
11-25 26-50 51-100	1 1 0	3 3 0	12 40 0	4 13 0	5 8 3	16 26 10	86 296 236	3 10 8		
> 100 Total	33	3 99%	200 311	64 100%	31	19 100%b	2,375 3,040	78 100%°		

^oThe figures in this table represent the *minimum* number of correctional AIDS cases to date, since the NIJ survey does *not* include every U.S. county jail system.

Source: NIJ/CDC Questionnaire Responses.

^bDue to rounding.

Table 5
REGIONAL DISTRIBUTION OF CUMULATIVE TOTAL INMATE AIDS CASES, U.S.
(Federal Prison System Excluded)^a

		State Pri	son Systems		City	//County	Jail Systems		
	November (N=50)		Novembe March (N=	1993	Novembe (N=28		November 1992 March 1993 (N=31)		
	Total AIDS		Total AIDS		Total AIDS		ĭotal AIDS		
Region	Cases	%	Cases	%	Cases	%	Cases	%	
New England ^b	16	4%	429	5%	0	0%	104	3%	
Middle Atlantic°	327	75	4,041	50	222	71	1,207	40	
E.N. Centrald	6	1	365	5	8	3	157	5	
W.N. Central®	0	0	83	1	1	0.3	8	0.3	
S. Atlantic ^f	49	11	1,596	20	24	8	148	. 5	
E.S. Central ^o	1	0.2	159	2	0	Ō	29	1	
W.S. Centralh	12	3	346	4	3	1	74	2	
Mountain ⁱ	2	0.5	289	4	1	0.3	43	1	
Pacific ^j	20	5	764	9	52	17	1,270	42	
Total	433	100%	8,072	100%	311	101% ^k	3,040	99%	

^aThe regional divisions used in this table are standard geographic divisions and are not based on numbers of AIDS cases. The figures in this table represent the *minimum* number of correctional AIDS cases to date, since the NIJ survey does not include every U.S. jail system. Recent tightening of case identification and recording may partially explain the large increases in correctional AIDS cases in certain regions since last year.

Source: NIJ/CDC Questionnaire Responses.

^bMaine, New Hampshire, Vermont, Massachusetts, Rhode Island, Connecticut.

^cNew York, New Jersey, Pennsylvania.

dOhio, Indiana, Illinois, Michigan, Wisconsin.

^eMinnesota, Iowa, Missouri, North Dakota, South Dakota, Nebraska, Kansas.

Delaware, Maryland, District of Columbia, Virginia, West Virginia, North Carolina, South Carolina, Georgia, Florida.

⁹Kentucky, Tennessee, Alabama, Mississippi.

^hArkansas, Louisiana, Oklahoma, Texas.

¹ Montana, Idaho, Wyoming, Colorado, New Mexico, Arizona, Utah, Nevada.

Washington, Oregon, California, Alaska, Hawaii.

^kDue to rounding.

Table 6

DISTRIBUTION OF CURRENT INMATE AIDS CASES, U.S., NOVEMBER 1992–MARCH1993

State/Federal Prison Systems November 1992–March 1993 (N=51) City/County Jail Systems November 1992–March 1993 (N=31)

Range of Current AIDS Cases	Number of Systems	%	Number of AIDS Cases	%	Number of Systems	%	Number of AIDS Cases	%
0	6	12%	0	0%	6	19%	C	0%
1–3	13	26	27	1	5	16	7	2
4–10	13	26	80	3	10	32	64	16
11-25	4	8	75	3	6	19	96	24
26-50	6	12	208	7	2	7	69	17
51-100	4	8	245	8	2	7	159	40
>100	5	10	2,400	79	0	0	0	0
Total	51	102%º	3,035	101%	31	101%	395	99%°

^oDue to rounding.

Source: NIJ/CDC Ouestionnaire Responses.

ported 3,035 AIDS cases among inmates. This represents an increase of 131 percent over the 1990 survey. Twenty-five responding city/county systems reported 395 current cases, down 29 percent from 1990. However, the turnover is so rapid in jails that figures on current AIDS cases are likely to fluctuate sharply even over short periods of time.

Table 6 also shows that six State systems (12 percent) and six city/county systems (19 percent of those responding) reported no cases of AIDS among current inmates. At the other extreme, five State/Federal systems (10 percent) accounted for 79 percent of current AIDS cases in that jurisdictional category, while four city/county systems (14 percent) contributed 57 percent of current cases in that category.

AIDS Incidence Rates

The AIDS incidence rate in the United States was 18 cases per 100,000 population in 1992, representing an increase of

only one case per 100,000 since 1990. Incidence rates for States ranged from less than one per 100,000 to 46 (New York), with most under 10. Rates in metropolitan areas with populations in excess of 500,000 ranged from four (Grand Rapids, Michigan) to 131 (San Francisco).¹⁴

AIDS incidence rates are predictably higher among correctional inmates, given the concentration in these populations of individuals with histories of high-risk behavior, particularly injection drug use. Moreover, incidence rates in correctional populations vary widely, reflecting the uneven distribution of cases across systems.

Among State and Federal prison systems in the United States, the median AIDS incidence rate for 1992–93 was 195 cases per 100,000 (range 0–2,413). Ten of these systems had AIDS incidence rates of less than 25 cases per 100,000, while 24 systems had rates over 100 cases. The aggregate incidence rate for State/Federal systems in 1992–93 was 362 cases per 100,000, up from 181 in 1990.

The median incidence rate in responding city/county jail systems was 176 cases per 100,000 (range 0–2,649), with six systems under 10 cases and 21 systems over 100 cases. The aggregate rate for responding jail systems was 297 cases per 100,000. However, rapid jail population turnover renders the incidence rates for city/county systems extremely suspect.

Characteristics of Inmates with HIV Disease: Gender, Racial/Ethnic Groups, and Exposure Categories

Gender. The vast majority of inmate AIDS cases and deaths have been among males. Among State/Federal systems, 94 percent of cumulative AIDS cases have been in men, 6 percent in women. In responding city/county jail systems, the gender breakdown was 79 percent men and 21 percent women, less heavily weighted toward men. The gender breakdowns did not vary significantly across geographic regions. The gender breakdown of total inmate AIDS deaths are similar, especially in the State/Federal prison systems where 93 percent of total deaths have been among men and 7 percent among women. In the responding city/county jail systems, 94 percent of inmate AIDS deaths were among men and 6 percent among women. These gender breakdowns in AIDS cases and deaths are roughly consonant with the gender breakdowns in the total inmate populations of State/Federal systems-94 percent men and 6 percent women. Indeed, the AIDS incidence rates among State/ Federal inmates are similar—340 cases per 100,000 among men and 408 among women. In responding city/county systems, with a gender breakdown of 90 percent men and 10 percent women, the incidence rate for women is much higher than that for men-591 cases to 264 cases per 100,000. However, incidence rate calculations in jail systems are suspect, due to high turnover among inmates.

HIV seroprevalence rates are also often higher in female inmates than in male inmates. Among incoming inmates in nine of 10 unidentified U.S. prison and jail systems, seroprevalence rates were higher for women than for men. Across the 10 systems, HIV seroprevalence for women under 25 years old was 5.2 percent, as opposed to 2.3 percent among men under 25. Seroprevalence rates for women and men 25 or older were 5.3 percent and 5.6 percent, respectively. A 1991 survey of inmates found that 3 percent of females reporting HIV test results were seropositive, as opposed to 2 percent of males. Higher seroprevalence rates for women than for men in a number of correctional systems are shown in tables 7 through 9.

These probably reflect the fact that larger percentages of female than male inmates have histories of injection drug use. The Drug Use Forecasting (DUF) system has found a higher prevalence of self-reported injection drug use among women arrestees than among men in many cities. Women may also be at increased risk due to histories of multiple sexual partners (e.g., commercial sex workers and/or crack-addicted women who trade sex for drugs). In a sample of female drug-using inmates in New York City, 46 percent had traded sex for money or drugs, and 20 percent of those who were tested were HIV-positive. ¹⁹

The number of female inmates is rising even more rapidly in the United States than the number of incarcerated males. Females have often been more underserved in prisons and jails than men, largely due to their historically small share of the total correctional population. However, female and male inmates have different characteristics and different service needs. Women are overwhelmingly sentenced for nonviolent crimes, they are probably more likely than men to be injection drug users, their family responsibilities are generally greater, and a large percentage of them are either pregnant or postpartum. These factors suggest that specific attention should be given to services for women in correctional facilities, including those educational, medical, and psychosocial services related to HIV disease.²⁰ Particularly in view of the revised case definition of AIDS, female inmates ought to have more frequent Pap smears as well as direct or referral access to colposcopy and biopsy procedures.

Racial/Ethnic groups. Of cumulative cases reported to the NIJ/CDC survey for which racial/ethnic identification was possible (n=6,892, or 81 percent of the total), 44 percent were black, 42 percent Hispanic, and 14 percent white. The median percentage of cases in State/Federal systems was reported to be 36 percent black (range 0–100 percent), 0 percent Hispanic (range 0–53 percent), and 30 percent white (range 0–100 percent).

In responding city/county jail systems, of cumulative cases identifiable by racial/ethnic groups (n=1,877, or 62 percent of the total) 40 percent were black, 32 percent Hispanic, and 25 percent white. Median racial/ethnic percentages among cumulative total AIDS cases were 40 percent black (range 0–74 percent), 18 percent Hispanic (range 0–50 percent), and 19 percent white (range 0–100 percent).

Thus, even though increasing percentages of AIDS cases in the total U.S. population are among blacks and Hispanics (25 percent and 14 percent through 1992), these groups account for even higher percentages of correctional AIDS

Table 7

AVAILABLE SEROPREVALENCE DATA FROM MANDATORY MASS SCREENING OF INMATES

Inmates Tested	Correctional System	Dates	Number Tested	Number Seropositive	% Seropositive
All Incoming Inmates	Alabama	10/89–10/90 8/85–11/92	7,306 M+F 45,596 M+F	88 M+F 316 M 23 F	1.2% M+F 0.7 M+F
	Colorado	10/89-10/90	3093 M 358 F	20 M 1 F	0.6 M 0.3 F
		1/92-11/92	3,235 M 327 F	16 M 4 F	0.5 M 1.2 F
	Georgia	7/89–5/90 11/92–11/92	20,435 M+F 1,170 M 130 F	561 M+F 8 M 0 F	2.7 M+F 0.7 M 0.0 F
	Idaho	8/87-10/90 1987-10/89 1986-1992	3,000 M 50 F 13,010 M	10 M 0 F 43 M	0.3 M 0.0 F 0.3 M
	lowa	11/87–10/90	1,440 F 13,434 M+F	5 F 26 M+F	0.3 F 0.2 M+F
	Michigan	4/90-2/91 4/90-2/91 4/90-2/91	22,669 M° 5,510 Mb 1,895 F	378 M 18 M 42 F	1.7 M 0.3 M 2.2 F
	Missouri	1985-10/90	24,284 M+F	127 M+F	0.5 M+F
	Nebraska	3/87-10/90 3/87-12/92	6,426 M+F 10,756 M 448 F	21 M+F 35 M 8 F	0.3 M+F 0.3 M 1.8 F
	Nevada	1990-1992	7,100 M+F	167 M+F	2.4 M+F
	New Hampshire	1/87-9/89 10/89-10/90 1/92-9/92	1,760 M 92 F 838 M 382 F	9 M 6 F 11 M 12 F	0.5 M 6.5 F 1.3 M 3.1 F
	North Dakota	1/92-12/92	408 M 20 F	0 M 1 F	0.0 M 5.0 F
	Oklahoma	6/87-11/90	19,120 M 2,346 F	51 M 3 F	0.3 M 0.1 F
		4/87-12/92	31,221 M 4,103 F	184 M 12 F	0.6 M 0.3 F
	Rhode Island	11/91-12/92	8,225 M 775 F	227 M 62 F	2.8 M 8.0 F
	Utah	7/89–11/90	4,000 M 231 F	33 M 6 F	0.8 M 2.6 F
		1/92-12/92	3,000 M 500 F	15 M 0 F	0.5 M 0.0 F
	Wyoming	1/90-10/90	181 M 46 F	1 M 0 F	0.6 M 0.0 F
		11/87–12/92	N/A N/A	5 M 0 F	N/A N/A
All Current Inmates	Mississippi	7/89–10/89	7,743 M 310 F	78 M 7 F	1.0 M 2.3 F

Table 7 (continued)

AVAILABLE SEROPREVALENCE DATA FROM MANDATORY MASS SCREENING OF INMATES

Inmates Tested	Correctional System	Dates	Number Tested	Number Seropositive		% oositive
All Current Inmates	Oklahoma	6/87	7,811 M 403 F	34 M 0 F	0.4	M F
	Utah	8/89-10/89	2,579 M 136 F	19 M 5 F	0.7 3.7	M F
All Inmates at Release	Alabama	1987-1989	25,321 M+F	2 M 0 F	0.00	8M+F
	Missouri	1985-10/90	16,435 M+F	33 M+F	0.2	M+F
	Nevada	1/90-12/92	6,265 M+F	9 M 0 F	0.1	M+F
	Wyoming	7/90	34 M	0 M	0.0	М
All Incoming & All Current	North Dakota	1987-11/89	460 M 40 F	3 M 0 F	0.7 0.0	M F

^oMales 24 or more years old.

bMales 18-24 years old.

N/A: Not available.

Source: NIJ/CDC Questionnaire Responses.

cases. The 1991 Bureau of Justice Statistics survey of inmates found that 4 percent of Hispanics, 3 percent of blacks, and 1 percent of whites reporting HIV test results were seropositive.²¹

Data from individual correctional systems independent of the NIJ/CDC survey also suggest that, as in the total population, cases of HIV infection and AIDS among inmates occur disproportionately among blacks and Hispanics. Among New York State inmate cases reported through December 1992, 49 percent occurred in Hispanics, 39 percent in blacks, and 12 percent in whites.²²

Consistent with AIDS case rates, HIV seroprevalence was higher for nonwhites across the 10 systems (4.8 percent) than for whites (2.5 percent) in the NIJ/CDC study.²³ A study of incoming North Carolina inmates, of whom 57 percent were black, found that 88 percent of those HIV seropositive were black.²⁴

Exposure categories. Based on largely unsuccessful attempts to obtain data on inmate AIDS cases by exposure category in the past, this item was not included in the 1992/

1993 survey. However, scattered data from other sources suggest that injection drug use is the dominant exposure category in inmate cases of HIV infection and AIDS. In New York State, 95 percent of cumulative inmate AIDS cases reported through 1992 were attributed to injection drug use. Studies in New York City and Maryland have also found injection drug use to be the leading risk factor in HIV/AIDS among inmates. ²⁶

HIV Seroprevalence Among Correctional Inmates

Because of differences in testing policies and timing of survey responses, we have not attempted to develop from the NIJ/CDC survey data an overall estimate of HIV seroprevalence among inmates. The 10-jurisdiction blinded study of prison and jail intakes found seroprevalence rates ranging from 2.1 percent to 7.6 percent for men and 2.5 percent to 14.7 percent for women. The investigators were careful to include jurisdictions with both moderate and high AIDS incidence.²⁷ Based on 1991 National Prisoner Statistics reports, the Bureau of Justice Statistics concludes that

Table 8
SEROPREVALENCE DATA FROM HIV ANTIBODY TESTING OF INMATES IN BLINDED EPIDEMIOLOGIC STUDIES^a

Correctional System	Dates	Number Tested	Number Seropositive	% Seropositive
Arkansas	7/90	698 M	6 M	0.9% M
·	,,,,	23 F	0 F	0.0 F
	2/92-11/92	1,500 M	8 M	0.5 M
	2,72 11,72	300 F	3 F	1.0 F
California	4/88-5/88 ^b	5,372 M	137 M	2.6 M
	(All incoming)	807 F	25 F	3.1 F
Florida	1988	1,000 M+F	69 M+F	6.9 M+F
Hawaii	1/88-10/90	2,327 M	22 M	0.9 M
		142 F	O F	0.0 F
	3/88-3/92	3,010 M	33 M	1.1 M
		273 F	0 F	0.0 F
Illinoisc	1988	808 M	27 M	3.3 M
	4/89-6/89	501 M	20 M	4.0 M
	1/91-12/91	989 M	41 M	4.1 M
	- The state of the	880 F	50 F	5.7 F
Louislana	1/90-12/91	2,000 M	6 M	0.3 M
Massachusetts	1/92-6/92	1,890 M	137 M	7.2 M
		306 F	40 F	13.1 F
New Jersey	9/91-10/91	1,100 M	99 M	9.0 M
		100 F	15 F	15.0 F
New York (State)	12/87-1/88 ^d	494 M	84 M	17.0 M
	1990	563 M	84 M	15.0 M
	1992°	2,532 M	292 M	11.5 M
	9/88-12/88	480 F	90 F	18.8 F
	1992 - 93°	872 F	177 F	20.3 F
North Carolina	11/89-4/90	7,942 M	238 M	3.0 M
		784 F	36 F	4.6 F
Oregon	9/90-10/90	437 M	4 M	0.9 M
		76 F	0 F	0.0 F
	9/90-6/92	2,035 M	23 M	1.1 M
		853 F	<u>6 F</u>	0.7 F
South Carolina ^f	4/88-6/88	457 M	8 M	1.7 M
		3 F	0 F	0.0 F
Tennessee	7/88-8/90	4,461 M	52 M	1.2 M
The state of the s	· · · · · · · · · · · · · · · · · · ·	448 F	1 F	0.2 F
Texas	9/89-10/89	1,226 M+F	30 M+F	2.4 M+F
	10/90-12/90	986 M	26 M	2.6 M
	· · · · · · · · · · · · · · · · · · ·	279 F	11 F	3.9 F
Virginiaº	6/89-8/89	1,287 M	30 M	2.3 M

Table 8 (continued)

SEROPREVALENCE DATA FROM HIV ANTIBODY TESTING OF INMATES IN BLINDED EPIDEMIOLOGIC STUDIES*

Correctional System	Dates	Number Tested	Number Seropositive	% Seropositive
Washington	8/87 - 1/88	796 M	5 M	0.6 M
	3/91 - 5/91	500 M	1 M	0.2 M
Wisconsin ^h	1/88-8/88	1,621 M	9 M	0.6 M
Maricopa County (Pheonix), Arizona	6/89-11/89	813 M	28 M	3.4 M
Los Angeles County,	10/90	400 M	11 M	2.8 M
California		100 F	1 F	1.0 F
Santa Clara County, California	10/86-10/89	348 F	6 F	1.7 F
Quebec, Canada	12/87-10/90	520 M 248 F	44 M 19 F	8.5 M 7.7 F
Fulton County	7/88-12/88	160 M	11 M	6.9 M
(Atlanta), Georgia		40 F	3 F	7.5 F
Cook County,	11/89-12/89	372 M	23 M	6.2 M
Illinois		100 F	8 F	8.0 F
New York City,	9/89	1,690 M	272 M	16.1 M
New York		546 F	140 F	25.6 F
	1/91-2/91	2,061 M 519 F	262 M 116 F	12.7 M 22.4 F
King County	9/90-12/91	214 M	9 M	4.2 M
(Seattle), Washington		24 F	1 F	4.2 F

^oThese studies were anonymous (not identity-linked) and conducted to determine seroprevalence rates in a population. Several systems did not specify the inmate category (for example, all incoming) tested in their study.

^bJ.A. Singleton et al., "HIV Seroprevalence Among Prisoners Entering the California Correctional System," California Department of Health Services, January 1989.

^cIllinois Department of Corrections and Abt Associates Inc., unpublished data.

^dB.I. Truman et al., "HIV Seroprevalence and Risk Factors Among Prison Inmates Entering New York State Prisons," Presented at 4th International AIDS Conference, Stockholm, June 1988.

^eJ. Mikl, P.F. Smith, R.B. Greifinger, "HIV Seroprevalence Among New York State Prison Inmates Entering the Bedford Hills, Downstate, and Ulster Correctional Facilities, August 1992-February 1993," presented at IX International Conference on AIDS, Berlin, June 1993.

^f M.C. Monroe et al., "Studies of HIV Seroprevalence and AIDS Knowledge, Attitudes and Risk Behaviors in Inmates in the South Carolina Department of Corrections, 1988," December 1988.

⁹Commonwealth of Virginia, Department of Corrections, "HIV Seropositivity Study," October 1989.

hWisconsin AIDS/HIV Program, Wisconsin Department of Health and Social Services, "HIV Seroprevalence and the Acceptance of Voluntary HIV Testing Among Newly Incarcerated Male Prison Inmates in Wisconsin," May 1989.

Source (unless otherwise noted): NIJ/CDC Questionnaire Responses.

Table 9

AVAILABLE DATA FROM HIV ANTIBODY TESTING
OF OTHER INMATE CATEGORIES^a

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Inmates Tested	Correctional System	Dates	Number Tested	Number Seropositive	% Seropositive
Voluntary (Made Available to All)	Arkansas	1/92	125 M 10 F	1 M 0 F	0.8 M 0.0 F
	Colorado	1/92-11/92	1,580 M 122 F	1 M 0 F	0.0 M 0.0 F
	Florida	7/92-9/92	3,491 M 257 F	236 M 61 F	6.8 M 23.7 F
	Hawall	1988–12/92	2,194 M 505 F	20 M 5 F	0.9 M 1.0 F
	Idaho	1987–10/89	500 M 10 F	0 M 0 F	0.0 M 0.0 F
	Indiana	1986-10/89	5,000 M 300 F	30 M 1 F	0.6 M 0.3 F
	Massachusetts (state prisons)	10/87-10/89	2,401 M 429 F	231 M 98 F	9.6 M. 22.8 F
		1/91–12/91	2,425 M 337 F	141 M 29 F	5.8 M 8.6 F
	Massachusetts (county jalls) ^b	1/89-6/89	1,878 M+F	278 M+F	14.8 M+F
	Minnesota	1/86-10/89	1,700 M 20 F	24 M 1 F	1.4 M 5.0 F
	grander grande	11/87-12/92	7,500 M 200 F	60 M 2 F	0.8 M 1.0 F
	Montana 	11/91-10/92	229 M 50 F	2 M 0 F	0.9 M 0.0 F
	New Mexico	10/88-10/89	1,818 M 145 F	9 M 0 F	0.5 M 0.0 F
		1/90-9/92	3,980 M 150 F	6 M 1 F	0.2 M 0.7 F
	Ohlo	1/90–12/90	4,409 M 198 F	68 M 2 F	1.5 M 1.0 F
	Oregon	11/88-10/89	354 M 76 F	3 M 2 F	0.8 M 2.6 F
	Rhode Island ^d	10/89–3/90	4,110 M 264 F	160 M 32 F	3.9 M 12.1 F
	Texas	1/91-12/91	5,684 M 1,712 F	418 M 67 F	7.4 M 3.9 F
	Washington	10/85–10/89	1,445 M 46 F	34 M 2 F	2.4 M 4.3 F

Table 9 (continued)

AVAILABLE DATA FROM HIV ANTIBODY TESTING OF OTHER INMATE CATEGORIES^a

Inmates Tested	Correctional System	Dates	Number Tested	Number Seropositive	% Seropositive
Voluntary (Made Available to All)	West Virginia	10/89-10/90	257 M 0 F	0 M 0 F	0.0 M 0.0 F
	Maricopa County (Pheonix), Arizona	6/89-11/89	357 M 121 F	19 M 7 F	5.3 M 5.8 F
	Orange County, California	1983-10/89	1,024 M 1,784 F	40 M 55 F	3,9 M 3.1 F
	Santa Clara County, California	10/85-10/89	47 M 24 F	8 M 3 F	17.0 M 12.5 F
	Ventura County, California	1/88-10/89	300 M 50 F	3 M 0 F	1.0 M 0.0 F
	Broward County, Florida	1/89-10/89	137 M 120 F	42 M 25 F	30.7 M 20.8 F
	Suffolk County (Boston), Massachusetts	11/88-11/89 1/92-11/92	364 M 149 M 14 F	59 M 7 M 2 F	16.2 M 4.7 M 14.3 F
	Harris County (Houston), Texas	7/87-10/89 1/92 - 9/92	1,048 M 1,070 F 1,941 M 1,118 F	163 M 48 F 187 M 71 F	15.6 M 4.5 F 9.6 M 6.4 F
Request or Court Orders	Marion County (Indianapolis), Indiana	1/92-12/92	63 M 4 F	5 M 1 F	7.9 M 25.0 F
Clinical Indications	Fulton County (Atlanta), Georgia	7/88-12/88	142 M 26 F	46 M 10 F	32.4 M 38.5 F
	South Carolina ^{e,f}	1988	1,034 M 185 F	25 M 2 F	2.4 M 1.1 F
All High-Risk Behaviors	Oklahoma	6/87	7,811 M 403 F	34 M 0 F	0.4 M 0.0 F
High-Risk Behavior or Symptomatic	s South Carolina	11/91-11/92	2,834 M 149 F	177 M 11 F	6.2 M 7.4 F
IDUs	Montana	1/89-11/89	67 M	2 M	3.0 M
	King County (Seattle), Washington	11/87-9/89	786 M 324 F	22 M 4 F	2,8 M 1,2 F
	Orange County, Callfornia	1/88-12/88	766 F	12 F	1.6 F

Table 9 (continued)

AVAILABLE DATA FROM HIV ANTIBODY TESTING OF OTHER INMATE CATEGORIES®

Inmates Tested	Correctional System	Dates	Number Tested	Number Seropositive	% Seropositive
Court Orders	Sacramento County, California	1987-1988	422 M+F	15 M+F	3,6 M+F
Unknown Criteria	Los Angeles County, California	10/92	37 M 126 F	13 M 3 F	35.1 M 2.4 F
	Philadelphia, Pennsylvania	1/92-9/92	1,855 M 217 F	236 M 22 F	12.7 M 10.1 F
Inmate Requests, Court Orders,	King County, (Seattle), Washington	6/85-9/92	2,629 M 914 F	92 M 24 F	3.5 M 2.6 F
Corrections Orders and Prior Positive Tests	Washington (State prisons)	1/85-9/92	6,262 M 310 F	108 M 6 F	1.7 M 1.9 F

^aThis table does *not* present overall seroprevalence rates. Except for the "court orders" category, the figures in this table represent self- or clinically-selected inmates. The direction of the bias is uncertain, although in many cases the rates reflected may overstate real seroprevalence in the total inmate population.

For all seropositivity figures presented in this report (except for blinded epidemiologic studies, which are normally short-term and controlled), there exists the possibility of double counting or *recidivist* offenders.

^bMassachusetts Sheriffs Association Task Force on AIDS, "AIDS: The Current Situation in the County Corrections: An Update," October 1989.

^cOhio Department of Rehabilitation and Correction, unpublished data.

^dP.S. Dixon et al., "Rhode Island's Cooperative HIV Management Program for Prison Inmates," (draft submitted for publication), Table 2, p. 16.

^eM.C. Monroe et al., "Studies of HIV Seroprevalence and AIDS Knowledge, Attitudes and Risk Behaviors in Inmates in the South Carolina Department of Corrections, 1988," December 1988.

^f All Inmates Presenting at Sick Call.

⁹"Coordinated Community Programs for HIV Prevention Among IVDUs — California, Massachusetts," *MMWR*, June 2, 1989; 38: 370.

Source (unless otherwise noted): NIJ/CDC Questionnaire Responses.

2.3 percent of State and Federal inmates in the United States are HIV-infected.²⁸ However, because testing policies differ sharply across correctional systems, the numbers reported by some systems contributing to this national seroprevalence estimate may be suspect. For example, those systems with mandatory testing policies (the minority) are likely to have much more accurate estimates of HIV

seroprevalence than those with purely voluntary testing policies.

Because mandatory screening (mandatory, identity-linked testing of all incoming, current, or about-to-be released inmates) and blinded studies capture populations largely uninfluenced by selection biases, these two approaches

probably produce the most reliable HIV seroprevalence data on correctional inmates. Although two earlier studies in Wisconsin and Oregon found similar HIV seroprevalence rates in blinded studies of all intakes and identity-linked studies of inmates presenting for voluntary testing, ²⁹ a more recent study in New York State found a much lower seroprevalence rate among voluntarily tested inmates (7.5 percent) than those in a blinded study (15 percent). The authors suggest that fear of discrimination and stigmatization may inhibit inmates who believe they are HIV-infected from coming forward for voluntary testing.³⁰

Available HIV seroprevalence data from mandatory screening programs are shown in table 7. Most of these rates are still 1 percent or lower. The most recent rates are higher than 1 percent in Michigan, Nebraska (females only), Mississippi, New Hampshire, Utah (females only), and Nevada (males and females). In most States with more than one period of observation, the seroprevalence rates have remained stable or changed only slightly. There are no cases of dramatic increase. The intake seroprevalence rate in the Federal Bureau of Prisons, based on an approximately 10 percent sample, has been stable for five years at about 1-1.5 percent.31 The seroprevalence rate in Maryland also remained essentially stable—7 to 9 percent, a statistically insignificant difference—over the period 1985-90.32 The stability of HIV seroprevalence rates among inmates may reflect the equilibrium reached in HIV infection rates among injection drug users in cities like New York.33 There is always the possibility, however, that infection rates will take off among IDUs, as they did in New York City in the early 1980's.

It should be noted that the States with the largest numbers of AIDS cases have not instituted mandatory screening in their prison systems. Some of them have undertaken blinded HIV seroprevalence studies, with the results shown in table 8. Most of these are quite low, with notable exceptions. As reflected in tables 7 and 8 and discussed earlier, HIV seroprevalence rates are commonly higher among female inmates than among male inmates.

Table 8 shows that the New York State and New York City correctional systems appear to have the highest overall HIV seroprevalence rates. In 1990 New York State correctional officials estimated that there were 8,000 HIV-infected inmates in their system, of whom about 3,200 knew their status. ³⁴ New Jersey and Massachusetts also have quite high seroprevalence rates. In New York State, as in other jurisdictions from which comparative statistics are available, seroprevalence rates appear to be stable or even declining. Indeed, HIV seroprevalence among *males* entering New

York State prisons dropped from 17 percent in 1987–88 to 15 percent in 1990 to 11.5 percent in 1992 (p=.01 for the changes between 1987–88 and 1992 and between 1990 and 1992). On the other hand, HIV seroprevalence among *female* New York State prison entrants increased from 19 percent in 1988 to 20 percent in 1992–93, but the change was not statistically significant.

In addition to the data presented in tables 7 and 8, there are higher estimates of HIV seroprevalence from several other jurisdictions. A blinded study of Philadelphia jail intakes in 1989 found an HIV seroprevalence rate of 5 percent.³⁵ A study of jail intakes in Washington, D.C., suggests that 14 percent of male inmates and 16 percent of female inmates are HIV-seropositive.³⁶

Table 9 brings together results from a range of other types of tests: voluntary/on-request tests, tests in the presence of clinical indications, and tests of persons with histories of high-risk behavior. As discussed earlier, these data cover subsets of inmates affected by some form of selection bias. These biases are difficult to interpret but probably make the results inapplicable to the total correctional population in that system.

Results of voluntary/on-request testing are difficult to interpret because it is unclear whether individuals who perceive themselves to be at high risk or low risk, or some combination of the two, are likely to come forward for testing. If the mix reflected the actual distribution of highand low-risk individuals in the total population of the system, the results might be representative, but there is no way to know this. In any case, the results of voluntary testing are quite disparate, with some systems showing rather high seroprevalence rates among volunteers. Testing in the presence of clinical indications for HIV disease ought to overstate the HIV infection rate in the entire correctional population, as should testing of persons with histories of high-risk behaviors. Seroprevalence rates among incarcerated injection drug users (IDUs) might indicate the infection rates among IDUs on the street in those jurisdictions. If so, the results shown in table 9 from California, Montana, and Washington suggest that HIV infection rates among IDUs in those places are still quite low.

HIV Transmission Among Correctional Inmates

HIV transmission among inmates is of serious concern. The available data on this subject are fragmentary. They suggest that transmission does occur in correctional facilities, but at quite low rates. In the only controlled study to date, Castro

and colleagues found that 0.3 percent of a sample of over 2,300 initially seronegative male Illinois inmates had seroconverted after spending one year in prison.³⁷ Several other U.S. studies have found annual seroconversion rates of less than 0.5 percent. A Nevada study found an annual seroconversion rate of 0.2 percent.³⁸ In the Federal Bureau of Prisons, which has been conducting intake and followup testing since 1981, 52 cases of "seroconversion" have been identified. However, all but four of these occurred during the first six months following intake testing, suggesting that at least some of the individuals had been infected, but in the "window period," when they entered the prison system.³⁹

Brewer and colleagues found a 0.4 percent annual seroconversion rate among Maryland inmates in 1987.⁴⁰ Nevertheless, applying the HIV transmission rate found in this Maryland study to the total prison population of that State in that year yields the not insignificant estimate of 60 transmissions per year. However, the Maryland study was methodologically flawed in that participation was voluntary, which introduced uninterpretable selection bias.

Regardless of the rates of HIV seroconversion documented in studies, it is clear that sex and drug use continue to occur in prisons and jails and that they represent high-risk activities for transmission of HIV. A Louisiana inmate who tested positive for HIV in 1989 reported that he was infected through sexual intercourse and/or needlesharing with a cellmate during an eight month period in which they did "every unsafe thing you could do." Another Louisiana inmate, who knew at the time he was HIV-infected but continued to have sex with other inmates, described his attitude: "Maybe I shouldn't do it no more... but if the guy I'm doing it with [is] willing to take a chance I have AIDS, and he knows it, then he's willing to go for it. You know, one guy in St. Tammany said he didn't care if I had AIDS or not, we'll just both go. We all have to die sooner or later." 42

Endnotes

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- 2. CDC, HIV/AIDS Surveillance Report, February 1993, Table 1.

- 3. CDC, HIV/AIDS Surveillance Report, February 1993; CDC, "Mortality Attributable to HIV Infection/AIDS—United States, 1981–1990," Morbidity and Mortality Weekly Report, 40 (January 25, 1991): 41–44.
- 4. Ibid.
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 S.Y. Chu et al., "Impact of the HIV Epidemic on Mortality in Women of Reproductive Age, United States," Journal of the American Medical Association, 264 (1990): 225-229.
- 6. Bureau of Communicable Disease Control, New York State Department of Health, AIDS Surveillance Monthly Update for Cases Reported Through December 1992, n.d., Table 2A, p. 16.
- 7. Gloria Weissman et al., "The Relationship Between Crack Cocaine Use and Other Risk Factors Among Women in a National AIDS Prevention Program— U.S., Puerto Rico, and Mexico," Abstract No. S.D. 124, Sixth International Conference on AIDS, San Francisco, June 23, 1990.
- 8. CDC, "Pilot Study of a Household Survey to Determine HIV Seroprevalence," *Morbidity and Mortality Weekly Report*, 40 (January 11, 1991): 1–5.
- CDC, "HIV Prevalence Estimates and AIDS Case Projections for the United States," Morbidity and Mortality Weekly Report, 39, no. RR-16 (November 30, 1990).
- 10. CDC, *HIV/AIDS Surveillance Report*, February 1993: Table 15, p.19.
- 11. While no cases of occupational transmission or acquisition of HIV have been documented, there have been a number of allegations, several resulting in lawsuits. However, none of these have presented clear documentation of transmission that would require establishment of four key facts: (1) an incident involving a known mode of transmission-e.g., blood to blood contactoccurred; (2) at the time of the incident the alleged "transmitter" was HIV-infected; (3) at the time of the incident the alleged "receptor" was HIV-negativethis could be established by means of a baseline negative test at the time of the incident (except, of course, that the individual could have been infected, but in the "window period" at the time of such a negative test); and (4) evidence of seroconversion in a time frame making it possible that infection occurred as a result of the

incident. In 1992 a San Francisco police officer was granted an administrative determination that his HIV infection was job-related. This determination was subsequently upheld by the San Francisco Retirement Board. In the Matter of . . . Thomas Cady. Calif Office of Admin Hrgs, No. N 39099, May 28, 1992. However, the judge noted that "absolute proof of industrial causation [was] not required" to reach this decision. Indeed, the established facts in the case failed three of the four factual tests. There was a documented incident involving a possible mode of transmission, but it occurred in 1984 when the officer was bitten and exposed to the blood of an individual during an arrest. However, the arrestee was not immediately tested-indeed the incident occurred before testing was even available. The arrestee did not test positive for HIV until 1990. The officer received no baseline test (since none existed) and did not first test positive for HIV until 1988, four years after the incident.

- 12. Centers for Disease Control and Prevention, unpublished data; Dr. Linda Martin, HIV Activity, National Institute on Occupational Safety and Health, CDC, personal communication, April 4, 1993.
- 13. Communique, AIDS/HIV and Prisons Conference, Melbourne, Australia, November 21, 1990.
- 14. The incidence rate per 100,000 population is a standard measure used to facilitate comparisons. The incidence rates for the total population were calculated by CDC as follows: Incidence rate = Total number of AIDS cases reported during the year ended October 31, 1990×100,000/Total U.S. population. CDC, HIV/AIDS Surveillance Report, November 1990, Figure 1, p. 3 and Table 2, p. 7.
- 15. Incidence rates for correctional inmates were calculated as follows: Incidence rate = Current AIDS cases in system×100,000 / Current inmate population of system. The reported number of current AIDS cases may underestimate the total number of new cases reported in the last year, but most correctional systems do not keep statistics on AIDS cases by year reported. Using the current case figure may thus slightly underestimate the real annual incidence rate in a correctional system.
- D. Vlahov et al., "Prevalence of Antibody to HIV-1 Among Entrants to U.S. Correctional Facilities," *Journal of the American Medical Association*, 265 (March 6, 1991): 1129–1132.

- 17. Caroline Wolf Harlow, "HIV in U.S. Prisons and Jails," Bureau of Justice Statistics Special Report, September 1993, Table 5, p.5.
- 18. "1988 Drug Use Forecasting Annual Report," NIJ Research in Action, March 1990, p. 9.
- D. Borne et al., "Sexual Risk Behavior Among Sentenced Female Drug Using Inmates in a New York City Jail," Poster Abstract No. PoD 5053, VIII International Conference on AIDS, Amsterdam, July 19–24, 1992.
- 20. Brenda V. Smith, "Women in Prison and HIV Infection: Perspectives and Recommendations," Testimony before the National Commission on AIDS, New York, August 17, 1990; National Institute of Justice, "1988 Drug Use Forecasting Annual Report," NIJ Research in Action, March 1990, p. 9.
- 21. Harlow, "HIV in U.S. Prisons and Jails," Table 5, p. 5.
- 22. Bureau of Communicable Disease Control, New York State Department of Health, AIDS Surveillance Monthly Update for Cases Reported through December 1992, n.d., Table 2 D, p. 19.
- 23. Vlahov et al., "Prevalence of Antibody to HIV-1 Among Entrants to U.S. Correctional Facilities," 1129–1132.
- Parker Eales, "The Seroprevalence of HIV Infection in All Incoming Inmates Admitted to the North Carolina Department of Correction, November 1989

 —April 1990," May 1990.
- 25. Bureau of Communicable Disease Control, New York State Department of Health, AIDS Surveillance Monthly Update for Cases Reported through December 1992, n.d., Table 2D, p. 19.
- 26. D.F. Vlahov et al., "Temporal Trends of HIV-1 Infection Among Inmates Entering a Statewide Prison System 1985–1987," Journal of the Acquired Immune Deficiency Syndromes, 2 (1989): 283–290; I.B. Weisfuse et al., "HIV-1 Infection Among New York City Inmates," AIDS, 5 (1991): 1133–1138; see also T.F. Brewer and J. Derrickson, "AIDS in Prison: A Review of Epidemiology and Preventive Policy," AIDS, 6 (1992): 623–628.
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- 28. Harlow, "HIV in U.S. Prisons and Jails."

- N.J. Hoxie et al., "HIV Seroprevalence and the Acceptance of Voluntary HIV Testing Among Newly Incarcerated Male Prison Inmates in Wisconsin," American Journal of Public Health, 80 (September 1990): 1129–1131; J. Andros et al., "HIV Testing in Prisoners: Is Mandatory Testing Mandatory?" American Journal of Public Health, 79 (July 1989): 840–842.
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- 31. Dr. Kenneth Moritsugu, Medical Director, Federal Bureau of Prisons, presentation at conference, Communicable Disease Crisis: Corrections and the Community, co-sponsored by the American Correctional Health Services Association and CDC, Atlanta, March 12, 1993.
- 32. D. Vlahov, Johns Hopkins University, personal communication, July 1992.
- 33. D. DesJarlais, S. Friedman, et al., "HIV-1 Infection Among Intravenous Drug Users in Manhattan, New York City, from 1977 through 1987," *Journal of the* American Medical Association, 261 (1989): 1008– 1012.
- 34. Interview with Dr. Robert Greifinger, Deputy Commissioner/Chief Medical Officer, New York State Depart-

- ment of Correctional Services, Fishkill Correctional Facility, New York, October 24, 1990.
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- 36. Smith, "Women in Prison and HIV Infection," p. 6.
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- 42. R. Wikberg and W. Rideau, "The AIDS Menace," *The Angolite*, 12 (July/August 1987): 41–43.

Chapter 3

HIV Education and Behavioral Interventions

Correctional settings provide a unique opportunity to prevent the spread of HIV through implementation of a variety of education and intervention strategies, as many inmates are at a high risk of HIV infection due to injection drug use, sexual activity with multiple partners, and other risky behaviors. Further, the risk of HIV transmission may be higher in a correctional environment than in the community. As a literally "captive audience," however, inmates are more available for education and intervention programs than individuals in the outside community whose behavior places them at high risk for HIV infection. Such programs may benefit not only the inmates and their sexual partners, but also the public health, as most inmates return to the community.

Education and behavior change must be the primary preventive response to the HIV/AIDS epidemic in the absence of a vaccine or cure for the disease. An effective HIV prevention program should be comprehensive. Information and traditional educational sessions are not enough to induce individuals to make and maintain changes in high-risk behaviors that may be addictive and deeply ingrained. Peer education programs, individual counseling, support groups, and expanded drug treatment opportunities represent other key components of a comprehensive HIV prevention strategy for correctional facilities.

Education and intervention should be provided for both inmates and staff. For inmates, programs should be provided at intake, during incarceration, and just prior to release. A recent national survey by Martin and colleagues of HIV/AIDS education programs in correctional systems found that 94 percent had programs for inmates at intake, while about three quarters had during-incarceration programs, but less than half had prerelease programs.² Initial and inservice sessions should be provided for staff.

The Continuing Need for Education

The vast majority of correctional systems provide at least some form of HIV/AIDS educational sessions or informational materials. This has been the case in most systems for a number of years. The near hysteria surrounding AIDS in correctional facilities has dissipated since the mid-1980's. However, there is still evidence of misinformation among inmates and staff, clearly demonstrating the need for more and better HIV/AIDS education and intervention in correctional facilities.

A study of Pennsylvania prisons revealed, for example, that despite a fairly extensive educational program, many inmates were still seriously misinformed about the means of HIV transmission. Forty-six percent of inmates surveyed believed that they could be infected by eating food prepared by an HIV-infected person, 44 percent said that transmission could occur through coughing or sneezing, and more than two-thirds stated that mosquitoes and other insects transmit the virus. Furthermore, many of the Pennsylvania inmates did not understand how to prevent sexual transmission of HIV.³

Sara Dubik-Unruh, Director of AIDS Program at Lowell House, Inc., who has developed peer training programs in Massachusetts prisons and jails, has found a continued "alarming lack of knowledge" about HIV transmission among inmates, especially Latino males. She reported having commonly heard such statements from inmates as "You have to be gay to get it," "You can't get it from a woman," and "You can kill the virus in you by injecting bleach into a vein."

Inmates at the Louisiana State Penitentiary, Angola, expressed the following concerns: "I'm afraid of contracting it in a way they haven't told us about, like drinking after

someone or getting scratched in a fight"; "Some guys urinate and spit in the shower. When I touch the faucets with my hands is when I really worry"; "What really bothers me are the homosexuals assigned to the kitchen, cooking and baking our food, and cleaning our eating utensils."

Staff at Angola seemed somewhat less misinformed. Several said that "AIDS is now a basic part of our lives. I respect AIDS and will do all I can to avoid it," or "I do not fear it at all because I don't do those things that cause it." However, a few correctional officers still made statements such as "My fear of HIV/AIDS is whether we're being told everything about it we need to know, and if there is a possibility that this virus, or some other mutated virus, can be transferred like the common cold."

A recurrent theme in these statements is the mistrust of officially provided information. Perhaps opening facilities to programs conducted by outside entities, such as public health agencies and AIDS service organizations, would help to allay this mistrust.

The Centers for Disease Control and Prevention address the continuing need for HIV/AIDS education in prisons and jails by funding programs in health departments in 20 States and the District of Columbia that provide HIV/AIDS education/risk-reduction services in correctional facilities. These programs may be offered by the health departments themselves or by community-based organizations. Indeed, CDC requires all health departments applying for fiscal year 1993 health education/risk-reduction cooperative agreements (CDC's basic HIV/AIDS-prevention funding vehicle) to include programs for persons in correctional facilities and those otherwise involved with the criminal justice system.⁶

Live Education and Training Sessions

Instructor-led (or "live") sessions represent the cornerstone of HIV/AIDS education programs for inmates and staff. Beyond simply showing a videotape or distributing a pamphlet, live sessions afford the opportunity to discuss issues and concerns, to ask questions and receive answers.

There was a slight decline between 1990 and 1992–93 in the number of correctional systems offering instructor-led education sessions to inmates. Eighty-six percent of State/Federal systems reported instructor-led HIV/AIDS education in 1992–93, down from 96 percent in 1992. The 1992–93 statistics are shown in table 10. The percentage of State/

Federal systems providing instructor-led education in all institutions decreased as well: from 80 percent in 1990 to 57 percent in 1992–93. Sixty-three percent of State/Federal systems reported having at least some mandatory HIV education for inmates (up from 51 percent in 1990). Among State/Federal systems, a median 80 percent (range 0–100 percent) of inmates were reported to have received at least one hour of instructor- or peer-led HIV education in the past year. Fifty-three percent of systems reported that more than half of their inmates had received one hour of education in the last year.

Among responding city/county systems, 58 percent offer instructor-led education to inmates, down from 74 percent in 1990 (table 10). Over half (55 percent) of city/county systems provide instructor-led education in all institutions, almost the same percentage as in 1990. In only 13 percent of responding jail systems is there any mandatory HIV education for inmates, a figure comparable to that found in 1990. Among city/county systems, the median percentage of inmates who had received one hour of HIV education in the past year was only five (range 0–95 percent). In only 19 percent of systems had more than half of the inmates received this amount of HIV education. Thus, HIV education seems to be reaching far fewer jail inmates than prison inmates.

It is often more logistically complicated for city/county jail systems to offer mandatory, instructor-led education due to the high turnover rate of inmates and short lengths of stay. Yet, arguably, the risks of transmission may be greater in high-turnover facilities, because inmates may be exposed to larger numbers of individuals over a shorter period of time. Moreover, these institutions offer opportunities to reach a large number of individuals who are quickly circulating back to the community.

The apparent decline in HIV education sessions provided by responding correctional systems may be a manifestation of budget restraints or shifting programmatic emphases. Despite the persistence of misinformation and high-risk behaviors, AIDS is an "old story" to many correctional officials, one that people may be tired of hearing. Thus, HIV/AIDS may be losing out to other issues in priority lists for attention. If so, this is a troubling development. On the other hand, an encouraging sign is the increase in the number of State/Federal systems offering peer education programs. These are discussed in detail later.

Educational sessions for inmates are most commonly administered by correctional health services staff or by outside professionals and groups. Among State/Federal sys-

Table 10

INSTRUCTOR-LED AIDS EDUCATION FOR INMATES, OCTOBER 1990 AND NOVEMBER 1992-MARCH 1993°

	U.S. SIGIE/I	eder	al Prison Syst	91112	U.S. City/	Coun	ty Jail Syster	115	
	October 1 (N=51)	990	November 1 March 19 (N=51)		October 19 (N=27)		November 1 March 19 (N=31)	93	
Instructor-led Education	Number of Systems	%	Number of Systems	%	Number of Systems	%	Number of Systems	%	
Provided ^b	49	96%	44	86%	20	74%	18	58%	
In All Institutions	41	80	29	57	15	56	17	55	
Mandatory ^c	26	51	. 32	63	3	11	4	13	
Peer Education Programs	11	22	17	33	4	15	3	10	

[&]quot;Instructor-led education involves the participation of a trained leader in some substantial part of a session.

Source: NIJ/CDC Questionnaire Responses.

tems, 96 percent report that correctional medical staff conduct HIV education, while 67 percent list public health departments, 55 percent use educators from community based organizations, 35 percent employ inmate peer educators, and a surprising 35 percent reported that security staff conducted HIV/AIDS sessions. Eighty-seven percent of responding city/county systems have correctional medical staff providing HIV education, while 65 percent use public health departments, and 42 percent use community-based organizations. Only 10 percent of jail systems employ inmate peer educators, and 3 percent report security staff conducting AIDS education.

Endemic staff shortages and budget constraints experienced by correctional systems may account for the increased use of outside providers of HIV education. In any event, this seems a promising development. Too often in the past correctional facilities have been closed to groups from the "free world" who can often provide a fresh perspective

and perhaps gain more trust and credibility with inmates. In New York City, Life Force, an AIDS service organization, provides weekly educational and support groups for female inmates in the Bayview Correctional Facility.⁷ Other programs implemented by community-based organizations are referred to in this chapter.

Despite their apparently increased access, AIDS service organizations and other community-based groups still encounter resistance from many correctional administrators. A recent study of HIV/AIDS in Pennsylvania prisons found that while "[a]ll across the State, there are organizations... ready and willing to help, over and over again [they] report serious problems gaining access to prisons." Frequent "bureaucratic hassles [have] very effectively discouraged busy AIDS service people from trying to work with the system: they have more than enough work to do outside the prisons."

bIncludes programs in operation and under development.

^cThe 1990 numbers reflect systems where inmate attendance at live education was always mandatory. In 1992 systems were asked whether they had any mandatory instructor- or peer-led HIV education for inmates.

Education for Staff

As shown in table 11, the vast majority of correctional systems (98 percent of State/Federal systems and 90 percent of responding city/county jail systems) provide some instructor-led HIV education for their staff. Typically, HIV education is part of orientation for new correctional employees. However, inservice educational updates are crucial for reinforcing basic messages about transmission and prevention and for informing staff about recent advances in HIV knowledge.

As with inmate HIV education, the percentage of systems providing programs for staff in *all* institutions was down from 82 percent of State/Federal systems in 1990 to 71 percent in 1992–93. Among city/county jail systems, 61 percent reported staff education in all facilities down from 89 percent in 1990. In 76 percent of the State/Federal systems that offer HIV education, at least some is mandatory for staff, an increase over 1990. On the other hand, the percentage of city/county jail systems with at least some mandatory staff training dropped from 56 in 1990 to 45 in 1992–93.

HIV education reaches more staff than inmates. Among State/Federal systems, a median 94 percent of staff (range 0–100 percent) were reported to have received at least one hour of instructor-led HIV education in the past year. Fifty-seven percent of systems reported that more than half of their staff received one hour of education in the previous year. In responding jail systems, a median of 83 percent of staff (range 0–100 percent) reportedly received one hour of HIV education in the past year. In 61 percent of systems, more than half of the staff had received this amount of HIV education.

In correctional institutions, there may be danger of violence or transmission of infectious diseases. Correctional staff are and must continue to be aware of the potential threat of infection. However, it is equally important that staff vigilance and awareness of danger not become unreasoning fear. In this context, education and re-education regarding HIV transmission and infection control are essential. The level and frequency of HIV/AIDS education should be based on job assignments and degree of contact with inmates. The Sacramento (California) chapter of the American Red Cross has developed (and updated) an infection

Table 11
INSTRUCTOR-LED AIDS EDUCATION FOR CORRECTIONAL STAFF,
OCTOBER 1990 AND NOVEMBER 1992-MARCH 1993°

	U.S. State/F	eder	al Prison Syst	ems	U.S. City/County Jail Systems			
	October 1990 (N=51)		November 1992– March 1993 (N=51)		October 1 (N=27)	990	November 1992 March 1993 (N=31)	
Instructor-led Education	Number of Systems	%	Number of Systems	%	Number of Systems	%	Number of Systems	%
Provided ^b	50	98%	50	98%	26	96%	28	909
In All Institutions	42	82	36	71	24	89	19	61
Mandatory ^c	30	59	39	76	15	56	14	45

[&]quot;Instructor-led education involves the participation of a trained leader in some substantial part of a session.

Source: NIJ/CDC Questionnaire Responses.

bIncludes programs in operation and under development.

^cThe 1990 numbers reflect systems where staff attendance at live education was always mandatory. In 1992 systems were asked whether they had any mandatory instructor- or peer-led HIV education for staff.

control training manual for emergency workers, including correctional staff. This can form the basis of a solid staff training program on HIV/AIDS and other infectious diseases.⁹

Content of Educational Sessions

Experience has shown that HIV/AIDS education based on "scare tactics" is often counterproductive, leading to denial. Rather, education should be frank, truthful, and unvarnished but should stress the possibility of change and improvement rather than the inevitability of suffering and death if change is not achieved. Successful education programs in correctional settings and elsewhere have enabled participants to identify and realistically assess their risks and assume responsibility for their decision making.¹⁰

The content of staff and inmate HIV educational sessions should be as closely equivalent as possible as to topics covered and identical as to information provided on HIV transmission and prevention. Giving different information to inmates and staff is a recipe for confusion and mistrust. Tables 12 and 13 show that there is general consonance in topics covered in inmate and staff education. It is important that staff education not focus solely on occupational infection control and neglect off-the-job risk-reduction topics such as safer sex practices and negotiation skills. The latter information not only is useful in staff members' private lives but also helps them to answer inmates' questions accurately. Conversely, inmate education should cover infection control procedures as well as sex- and drug-related issues.

Correctional officials have often been apprehensive about discussing safer sex and safer drug injection in inmate education programs, since sex and drug use are prohibited within correctional institutions. However, if the content of educational sessions is an accurate indicator, more officials seem to have accepted the rationality of acknowledging that sex and drug use occurs in prisons and jails, as well as after inmates leave the facilities, and of providing relevant riskreduction information. Table 12 shows that 96 percent of State/Federal systems (up from 86 percent in 1990) and 87 percent of city/county systems (about the same as the 85 percent in 1990) provide information on safer sex practices, and more than 70 percent of both prison and jail systems cover cleaning of drug-injection equipment (up from 61 percent of State/Federal and 67 percent of city/county in 1990). The willingness of correctional systems to adapt and change is corroborated in a recent national survey indicating that more than 80 percent of State systems had modified their HIV/AIDS education programs since they were initiated.¹¹

Providing clear and accurate information about HIV transmission and risk reduction is the first, but by no means the only, step in facilitating behavior change. Providing clear and accurate information may also help dissipate fear and misinformation. As will be discussed in a later chapter, the decision to offer more frank and complete educational messages on HIV/AIDS has not as yet been reflected in any significant increase in systems making condoms available to inmates while incarcerated.

Programs for Women

In the past several years increasing attention has been paid to the particular HIV-related problems faced by women. Accordingly, as shown in table 12, most inmate education programs in correctional facilities cover HIV-prevention concerns of women, including negotiation of safer sex, sexually transmitted diseases, and perinatal transmission of HIV. However, table 13 shows that fewer staff training programs address these subjects. Finally, fewer than half of correctional systems cover pregnancy choices in HIV education programs for inmates or staff.

There are notable examples of HIV education programs for female inmates. Several of these involve outside agencies, while others are peer-based. Peer-based programs in New York State, Arkansas, Illinois, and Delaware are discussed later in this chapter.

At the Massachusetts women's prison at Framingham, Social Justice for Women (SJW) and several other community-based organizations provide HIV education sessions, workshops, and individual counseling. SJW has been working in the prison since 1988 and provides educational services to about 2,000 women per year. About 60 Framingham women each week attend a seven-session AIDS course. Topics include modes of HIV transmission, cleaning drug injection material, and safer sex practices such as use of condoms and dental dams.¹²

In 1989 the Center for Community Action to Prevent AIDS initiated an education program for female inmates at Rikers Island, New York City. The program is run by a medical student and a social worker who spend up to four days each week at the jail holding informal sessions with women in Spanish and English, as needed. The goal is to empower women to educate themselves and reduce their risk of acquiring HIV infection by taking control of their own lives. A key theme of the educational sessions and small-group

Table 12

HIV/AIDS EDUCATION FOR INMATES,
NOVEMBER 1992-MARCH 1993

	U.S. State/Fe Prison Syst (N=51)	ems	U.S. City/Co Jail Syste (N=31)	ms
Procedures	Number of Systems	%	Number of Systems	%
Distribute Written Materials	49	96%	28	90%
Use Audiovisual Materials	49	96	22	71
Provide Spanish Language Education	13	25	-11	35
Provide Education in Other Non-English Language(s)	5	10	2	6
Distribute Spanish Written Materials	33	65	18	58
Distribute Written Materials in Other Non-English Language(s)	7	14	7	23
Provide Education for Individuals with Special Needs (e.g., hearing- or visually-impaired)	14	27	5	16
Topics Covered in Education Programs				
Safer sex practices	49	96	27	87
Cleaning of drug injection equipment	36	71	23	74
Protection against HIV infection (e.g., negotiation skills)	41	80	24	77
Sexually transmitted diseases	43	84	24	77
Perinatal transmission of HIV	42	82	23	74
Pregnancy choices	21	41	13	42

Source: NIJ/CDC Questionnaire Responses.

discussions is "Say no to men who say no" to condoms. In addition to negotiation of safer sex, discussions cover issues of STDs, pregnancy, and birth control.¹³

In 1990 the Whitman-Walker Clinic in Washington, D.C., began an AIDS education program for women in the D.C. jail. Established by two ex-offenders who are also recovering addicts, the program includes weekly education sessions, individual counseling, and support groups. The leaders of the program quickly discovered that there was much misinformation to be corrected and much stigmatization of HIV-infected people to be overcome.¹⁴

HIV Education Programs Provided by Public Health Departments

Examples from Georgia and New York well illustrate the possibilities for productive collaboration between public health departments and correctional authorities to provide HIV/AIDS education in prisons and jails.

An extensive health awareness course is provided in facilities of the Georgia Department of Corrections by the State's Division of Public Health. Some instructors are trained

Table 13
HIV/AIDS EDUCATION FOR STAFF,
NOVEMBER 1992-MARCH 1993

	U.S. State/Fe Prison Syst (N=51)	ems	U.S. City/Co Jail Syste (N=31)	ms
Procedures	Number of Systems	%	Number of Systems	%
Distribute Written Materials	48	94%	28	90%
Use Audiovisual Materials	45	88	23	74
Provide Spanish Language Education	4	8	2	6
Provide Education in Other Non-English Language(s)	2	4	1	3
Distribute Spanish Written Materials	23	45	11 .	35
Distribute Written Materials In Other Non-English Language(s)	6	12	4	13
Topics Covered in Education Programs				
Safer sex practices	46	90	26	84
Cleaning of drug injection equipment	28	55	17	55
Protection against HIV infection (e.g., negotiation skills)	34	67	14	45
Sexually transmitted diseases	35	69	21	68
Perinatal transmission of HIV	32	63	21	68
Pregnancy choices	10	20	.10	32

health care workers, while others are outreach workers from the community. Some of the outreach workers are recovering addicts. The program consists of four sessions lasting two-and-a-half hours each. Participants are urged to attend all four sessions, but attendance is voluntary. The course is currently offered at more than 20 institutions. Despite continuing resistance from some wardens, the Public Health Division's goal is to provide the program in all 35 State correctional facilities. Public health staff are working with the wardens in an effort to convince them of the value of the program.

The four sessions of the Georgia program cover:

(1) Overview of AIDS and HIV.

- (2) Psychosocial issues, in which participants are encouraged to discuss their feelings of anger, stress, and depression and learn methods to handle anger, feel more relaxed, set and achieve life goals, and develop healthier lifestyles.
- (3) Substance abuse, addiction, and HIV, which includes a demonstration on cleaning injection equipment.
- (4) Methods to reduce risk of sexual transmission of HIV and other STDs, including negotiation skills for safer sex.

At the conclusion of the course, each participant receives a certificate. 15 In a session observed during a site visit to the

Women's Diversion Unit in Atlanta, the leader had achieved a warm rapport with the inmate participants and was able to engage them in an open discussion of feelings, as well as to convey the possibility that they could improve their lives through manageable psychosocial changes.

In New York State the AIDS Institute of the State Department of Health joined with the Department of Correctional Services in 1990 to establish the Criminal Justice Initiative, a program to improve education and other HIV-related services in State prisons. Under the Initiative, three regional teams—located in Albany, Buffalo, and New York City—have provided HIV education and other services to 18,000 inmates and 5,000 staff at 13 facilities. Criminal Justice Initiative staff spend 4–6 months at each facility to provide all necessary services. ¹⁶

Peer Education and Support Groups

In 1990, 22 percent of State/Federal systems and 15 percent of responding city/county systems offered peer HIV education for inmates. In the 1992–93 survey, one-third of State/Federal systems reported having such programs. However, only 10 percent of city/county jail systems have peer education programs for inmates.

Strong anecdotal evidence indicates that peer education is an invaluable tool to reach inmates with information about HIV/AIDS. Peer educators speak the same language as their audience and are available to answer questions and provide support 24 hours a day. They can develop a degree of trust and credibility with the inmates that outsiders may never achieve. Peer educators may also have high levels of awareness regarding risky activities occurring in the facility and be able to respond to them with accurate and clear information. Inmates can discuss their concerns about prohibited activities with peer educators without fear of reprisal or disclosure. Peer educators can also dispel fears about HIV-infected inmates by explaining modes of transmission and promoting compassionate behavior toward inmates with HIV disease.

The cost-effectiveness of peer education programs should also appeal to correctional administrators. Peer education programs are less costly to establish and maintain than traditional education programs that employ outside professionals. Thus, peer-based programs offer unique advantages for institutions and inmates. Following are descriptions of promising peer education programs for women in New York State, Arkansas, Illinois, and Delaware, and a program for men in Massachusetts.

ACE: An Exemplary Peer Education and Support Program for Women

Female inmates at New York's Bedford Hills Correctional Facility initiated the ACE (AIDS Counseling and Education) program in 1989 as a result of fears about HIV transmission and concerns about HIV-infected inmates being stigmatized. Some women in the facility saw a need for AIDS counseling and education. Inmates manage the program, which offers inmate-to-inmate education, support groups, advocacy, and counseling. ACE counselors are certified by the State education department and two civilians act as liaisons between the inmates and outside sources of funding and materials. However, the inmates themselves provide the HIV education and training inside the facility. This includes training correctional staff, which has been well received. Indeed, after meeting with some initial resistance from the facility administration, ACE now enjoys the full support of the administration and the State Department of Correctional Services. 17

The ACE program has its own office in the prison. The office is open Monday through Friday and every other Saturday and maintains an extensive resource library for inmates. There are 25 to 30 ACE members and two nonprisoners associated with the program.¹⁸

As the ACE program has evolved, some of its original goals have been achieved. One of the initial goals was improvement of housing and environmental conditions for women with HIV disease. As a result of ACE's efforts, the infirmary is clean and brightened by murals that inmates and ACE workers have painted. ACE workers also organize recreational activities and AIDS education sessions within the infirmary.

The ACE program began in response to fear and misinformation about HIV transmission. Now every inmate has heard about AIDS from ACE members. The ACE program has educated hundreds of inmates. ACE members informally greet all new inmates. They introduce new inmates to ACE and invite them to an orientation. ACE's services are available to all inmates regardless of HIV status.

Various bilingual programs are offered by ACE, including medical advocacy, individual counseling, peer support and counseling, support groups for people with AIDS, seminars for those interested in becoming ACE members, and video discussion groups. ACE groups include spontaneous discussions and scheduled groups. Support groups meet daily with 2–25 participants, reflecting the diversity of the inmate

population. Topics discussed include living with AIDS, family issues, and relationships. Any topic that interests group participants is explored. An ACE curriculum and manual are available, along with brochures and other information.¹⁹

Medical advocacy is an important service, especially for Spanish-speaking clients. Bilingual ACE counselors accompany the inmates to medical appointments to ensure that they understand prescription information, HIV test results, and other medical issues. Like many of ACE's services, medical advocacy was initiated in response to inmates' stated needs.

ACE also works with the Women's Prison Association to help inmates after release. They help place women in safe environments. ACE also helps women obtain social services, provides them with referrals, and updates their medical forms. They provide former inmates with intensive case management.

Currently, the ACE program is reevaluating its role within the prison. Members believe that there will always be a need for ACE and are in the process of creating a new, diversified curriculum. Yet, they have succeeded in providing HIV education to such a large percentage of the prison population that they are approaching the saturation point. As a result, staff are focusing on ways for inmates to express their concerns and knowledge about HIV/AIDS. They are exploring new avenues of expression for inmates and have organized poetry readings and performances of a live soap opera that uses inmate actors to talk about HIV infection and AIDS.

The Arkansas Women's Project

In 1989 the Women's Project of Little Rock, Arkansas, began developing a peer-based HIV/AIDS education and support program at the State women's prison at Pine Bluff. The program was designed to develop prisoner leadership by training inmate peer educators. The Women's Project developed a 19-hour peer trainers' course certified by the Centers for Disease Control and Prevention. Seventeen inmates took part in the initial session. From this experience, course developers learned much about the concerns of female inmates and made necessary modifications to the curriculum. Between 1989 and 1992, 38 women completed the training and became peer educators in the prison. A peer trainer's guide is available.²⁰

The peer educators conduct semimonthly workshops for 10-15 inmates. These four-hour workshops cover basic

AIDS information, high-risk behaviors, prevention methods, and female and male reproductive health. The sessions are held on weeknights when no other activities are offered. Readily understandable terms, including prison slang, are used. Seating is informal and class discussion and participation are encouraged. All supplementary written materials are tailored to the reading levels of participants. More than 200 inmates have completed these workshops. Certificates are given to all participants.

Other Women's Peer Education Programs

In September 1990 the Illinois Department of Public Health and Illinois Department of Corrections initiated a peer-based prerelease education program for female inmates. An ex-offender and AIDS educator work together to present a three-hour session to female inmates 1–2 months before their release. The session emphasizes HIV prevention and risk reduction, reproductive health, and avoidance of STDs. Referrals are made to provider agencies in the community, and experience-based guidance on stress management in the community is provided by the ex-offender. This program has been well received by female inmates.²¹

The Delaware Council on Crime and Justice has established a peer education program in the State women's prison. Three peer trainers are providing weekly and monthly HIV/AIDS education sessions. Topics include negotiating safer sex. Written materials appropriate to the literacy levels of the participants are used. One of the peer educators has developed a comic coloring book on HIV/AIDS for female inmates.²²

A Peer Education Program for Men in Massachusetts Jails and Prisons

Sara Dubik-Unruh, Director of AIDS Program at Lowell House, Inc., has developed a successful peer education program now in use in several Massachusetts county jails and one State prison. Dubik-Unruh offers an 18-hour training course for inmate peer educators and HIV counsellors that is designed to qualify for accreditation through local community colleges or four-year colleges. Dubik-Unruh expects and encourages the students to tell fellow inmates, friends, and significant others about what they have learned. Inmates say that spontaneous conversations about HIV and AIDS arise as a result: "[s]uddenly, they know that you know what you're talking about and a discussion starts."²³

The course covers HIV transmission, symptoms, testing procedures, high-risk behaviors, and sexually transmitted

diseases, among other topics. Originally sexually transmitted diseases were not covered in detail, but the subject was expanded based on inmate suggestions. The course consists of six weekly three-hour classes and is offered in both English and Spanish every semester. Dubik-Unruh wrote the curriculum and conducts the English version of the class, while an inmate leads the Spanish-language classes. A course manual is available.²⁴

The sessions include ample opportunity for class participation through questions, discussion, role playing, debate, games, and other activities. There are weekly quizzes and students write five-page papers, design panels for the memorial AIDS quilt, or complete other projects to obtain college credit. Although the course is designed to be offered in six weekly sessions, it is flexible so it can be collapsed into fewer but longer sessions for use in facilities with shorter lengths of stay.

The first session covers the etiology of AIDS and the course of the disease, as well as the modes of transmission and risk-reduction behaviors. The second session focuses on the HIV antibody test and the difficult decision about whether or not to be tested. The third class discusses the social implications of HIV antibody testing. Safer sex practices are presented in the fourth session, and sexually transmitted diseases are discussed in the fifth class. The final class involves a review of the previous sessions and an opportunity to return to issues that warrant further attention.

One of the remarkable aspects of this course is the rapport observed between the inmates and the educators. Inmates raise a wide range of questions, some sophisticated and some less so. No question is considered inappropriate. Dubik-Unruh and the inmate educator answer every question honestly and respectfully. The complexities and subtleties of HIV infection and AIDS are discussed in plain, frank language, using visual aids, and careful explanation. In this way, the complexities of the subject are made accessible.

A Program Originated by a Correctional Officer

Mike Aboussleman, a corrections officer at New York's Arthur Kill Correctional Facility, has formed the Committee on Prevention and Education For AIDS (COPE) to offer HIV/AIDS education to inmates and staff. COPE provides one-on-one counseling, prerelease referrals, and legal information, among other services.²⁵

Educational Materials and Videos

As table 12 shows, virtually all State/Federal correctional systems provide written and audiovisual materials as part of their HIV education programs. Ninety percent of responding city/county jail systems distribute written materials, and 71 percent make use of audiovisual materials. Although written materials provide information that inmates can refer to after education sessions have ended, they often fail to deliver facts in a clear and accessible manner. Written materials should be sensitive to the literacy levels and cultural diversity of the target audience.

Peer-generated materials are more likely to be sensitive to literacy and comprehension levels. One example is "Inmate to Inmate," a brochure written by an HIV-infected former inmate of New York's Fishkill Correctional Facility. 26 This is particularly helpful because it covers issues specific to HIV-infected inmates in language understandable to them.

AIDS Project Los Angeles recently published a self-care manual for inmates living with HIV.²⁷ This manual was designed in view of the constraints facing inmates—especially limited access to experimental and alternative therapies—and the particular stresses of life in prisons and jails. It includes sections on acupressure, stress reduction techniques, exercise, massage, and nutritional supplements and includes information on safer sexual practices as well.

Audiovisual materials avoid the difficulties of varying literacy levels and are good vehicles for disseminating information about AIDS. Videos are particularly useful for introducing topics or spawning discussion, but they should not be made the centerpiece of education programs to the exclusion of instructor-led, interactive sessions.

One recent video that specifically and sensitively addresses the concerns of inmates is "A Will to Live." It was developed by Billy Jones, an ex-offender and longtime AIDS advocate, along with a group of medical and television professionals. It offers a very different message from earlier videos for inmates, such as "AIDS: A Bad Way to Die" that focused on dying from AIDS in an effort to scare inmates out of engaging in risk behaviors. "A Will to Live" uses a positive wellness approach to help inmates cope with HIV infection. It portrays an unrehearsed support group and delivers information in a positive light. Topics include the difference between HIV and AIDS, the benefits from safer sex and cleaning drug injection equipment, prenatal and pregnancy issues, and coping strategies. Female and male versions are available. Local "tags," providing contacts for more information and assistance, can be added.28

Another video of potential interest to correctional systems is "Drugs and AIDS-Reaching for Help," produced by Derek Lamb in connection with a project funded by NIJ and the National Institute on Drug Abuse to provide HIVrelated case management services to persons newly released from lockups and booking facilities and those awaiting trial. The 22-minute video, which is available in English and Spanish, contains brief narrative life stories of three persons who were able to make changes in drug use and sexual behavior with the support of professionals and others in the community. Through these narratives the video seeks to motivate individuals to make positive life changes regarding drug use and sexual behavior. The video is currently in use at Framingham Women's Prison in Massachusetts and a number of other correctional facilities including county jails in Oregon and California.²⁹ Local tags may be added to the video to make it usable in any locality.

Table 12 shows that HIV education programs and materials for inmates in languages other than English are not widely available in correctional systems. Education programs in Spanish are available in about one-third of systems (down slightly from 1990) and programs in other non-English languages are rarely available. More than half the correctional systems provide Spanish-language written materials, but only a handful have written materials in other non-English languages. Finally, less than 30 percent of systems offer educational programs for persons with hearing or visual impairments.

As the numbers of inmates whose first language is other than English and those with special needs increase, it becomes more important for correctional systems to provide HIV education and materials for these inmates.

Evaluation of HIV Education and Intervention Programs



This chapter has described a number of promising approaches to HIV education and prevention, including peerbased education and collaborations between public health departments and correctional systems. Although this view is not based on quantitative findings of controlled studies, some believe that education/prevention programs conducted by peers have a better chance of success than those offered by persons employed by the correctional system or even a public health department.³⁰

Even where educational programs have succeeded in raising levels of HIV-related knowledge, it has consistently been found that information alone is insufficient to produce

lasting change in risk behaviors, which often reflect deeply ingrained social norms and power relationships, or otherwise addictive and/or pathogenic behaviors.³¹ Social skills development, as well as behavior modification and relapse prevention techniques within AIDS-prevention interventions are critical.³² However, a methodologically sound research base is only now beginning to support development and evaluation of theoretically derived HIV/AIDS educational interventions.³³

There is an almost complete absence of evaluations of HIV education programs among prisoners. A national survey conducted by Martin and colleagues found that only 20 percent of State correctional systems had evaluated their HIV education programs.³⁴ It is unclear how many, if any, of these included pre/post intervention interviews with a long enough followup period to assess ability to make and sustain behavior change. Two of the States that had evaluated their programs reported that they were not satisfied with them and had made modifications.³⁵

Well-designed evaluations can help systems improve their own programs as well as provide data that might help others develop more effective interventions in correctional settings and elsewhere. Key evaluation issues include effectiveness of peer versus professional educators, duration and format, and specific topics covered in education programs. Although this is somewhat complicated and costly, the most useful and informative design for evaluation of HIV prevention programs in prison would follow inmates after they are released to determine the extent to which they are able to maintain salutary behavior change once they are back in the community.

Few controlled evaluation studies of HIV education/prevention programs have been conducted in any setting.³⁶ The existing evaluations often suffer from serious methodological problems, including unreliable data from poorly designed instruments and failure to take account of differential selection into participation in the intervention and into the evaluation research itself.³⁷

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Chapter 4

HIV Precautionary and Preventive Measures

An effective response to HIV/AIDS within correctional facilities requires instituting reasonable procedures for the protection of inmates and staff from HIV infection. An important part of this task is balancing conflicting demands and avoiding irrational and unreasonable responses. A key principle in this effort is that precautionary and preventive measures instituted be consistent with educational messages provided to inmates and staff about HIV/AIDS. Policies or procedures that conflict with or go beyond educational messages may cause unnecessary fear and increased mistrust of correctional authorities. This chapter discusses HIV preventive measures and some of the issues involved in implementing them in prisons and jails.

Infection Control Based on Universal Precautions

As detailed in chapter 5, few correctional systems officially notify correctional officers of inmates' HIV status. This has not stilled the debate on the point, however. Many correctional officers and their unions believe that they need, and should have access to, this information in order to protect themselves on the job.

Opponents of disclosure policies generally point to two problems. The first is that no practicable testing program could ensure that *all* HIV-infected inmates are known. However, programs of mandatory testing and notification might create the illusion that all infected people had been identified which, in turn, could foster a false sense of security. Second, particularly in systems with many HIV-infected persons, it would be easy to forget or confuse who is HIV positive.

The best alternative to a disclosure policy is the principle of "universal precautions." This principle should be applied by both staff and inmates in correctional facilities. It

represents a sound approach to prevention of all bloodborne infectious diseases including hepatitis B.

Universal precautions have long been recommended by CDC for health care settings and the approach applies equally well to correctional and law enforcement settings. Universal precautions treat all people as if they are infected. This means avoiding unprotected contact with certain bodily fluids that are considered potentially infective, especially blood and semen. Revised guidelines from CDC state that universal precautions are not necessary for contact with saliva, tears, sweat, vomitus, urine, or feces, unless they contain visible blood.¹

CDC issued extensive guidelines regarding HIV transmission and prevention for health care and emergency workers in 1989. These include recommendations for use of protective equipment, such as gloves and CPR masks, and for disposal of needles and other "sharps," body and cell searches, handling of infectious materials, and cleaning up spills. Procedures to follow once an exposure has occurred are also specified; these include medical protocols and procedures for documenting the incident.²

There is evidence that, despite strong recommendations and their embodiment in written policy, universal precautions are not well implemented in at least some corrections settings. A CDC-funded surveillance of possible occupational exposures to HIV in a State correctional system identified 166 incidents, including needlesticks, nonintact skin exposures, and mucous membrane exposures. Although no HIV infections occurred as a result of these incidents, CDC concluded that over half of the exposures could have been prevented had personal protective equipment been used.³

Regulations issued by the Occupational Safety and Health Administration (OSHA) in December 1991 gave full legal

force to universal precautions in health care, correctional, and other work settings. Under these regulations, employers are required to establish written exposure-control plans, identify and train workers with potential for exposure to blood-borne pathogens, provide necessary infection control equipment, offer free hepatitis B vaccinations, and provide evaluation and followup services to any employees who have had potential exposures.⁴

Detailed infection-control policies and procedures have been adopted by many correctional systems, many of which are based on CDC's guidelines and universal precautions. Systems must ensure that their policies and procedures comport with the OSHA regulations as well.

Although CDC guidelines and OSHA regulations call for the implementation of universal precautions, no set of written policies or procedures can cover all contingencies, particularly in unpredictable environments such as prisons and jails. Situations faced by law enforcement and correctional personnel often require an immediate response. In exigent situations, officers and other staff must use their judgment in the application of universal precautions. However, infection-control policies can provide general guidance and inform decisions made by correctional staff. Training is also essential, so staff have a clear understanding of high-risk incidents and the opportunity to discuss possible situations and appropriate responses.

Other Precautionary Measures

As knowledge about HIV transmission and prevention has increased, correctional systems and staff have employed extreme and inappropriate precautionary measures less frequently. However, a few such policies remain. These include exclusion of HIV-infected inmates from work assignments in food service and requirements that HIV-infected inmates use disposable plates and utensils. Although no link between HIV transmission and food or food service work has been established, some inmates continue to express concern about such transmission. Some correctional facilities continue to bar HIV-infected inmates from food service jobs, fearing that failure to do so would threaten order and security in the facility.

Such policies contradict and undermine educational messages. If educational programs stress that HIV is not contracted through casual contact, including food and utensils, then inmates will question the necessity of excluding HIV-infected persons from food service jobs. Likewise, they may wonder why disposable plates and utensils are used.

Such concerns may lead to mistrust of the correct educational messages and breed increased fear about casual transmission of HIV.

Exclusionary policies may also breach the confidentiality of HIV-infected inmates. Inmates can quickly deduce that anyone refused a food service job or forced to use disposable utensils is HIV-infected.⁵

Finally, policies excluding inmates from food service or other programs and assignments, solely on the basis of HIV status or other medical condition bearing no relevance to their ability to perform the assignment, may constitute illegal discrimination. This was the ruling of the court in overturning the Arizona Department of Corrections' policy barring HIV-infected inmates from food service work assignments. The policy was held to violate Section 504 of the Federal Rehabilitation Act.⁶

Availability of Condoms, Bleach, and Needles

As noted in chapter 3, many correctional systems now include discussions of safer sex practices and procedures for cleaning drug injection material in their HIV educational programs. In the vast majority of correctional systems, however, the means to carry these messages into practice are not officially available. Since sex and drug use are prohibited in prisons and may be illegal even in the outside community, most correctional administrators have reasoned that providing condoms or bleach would condone proscribed activities.

An alternative perspective is to acknowledge that sex and drug use occur, whether it is prohibited or not, and to make available materials that might prevent HIV transmission from occurring. One Louisiana inmate reported that he sells condoms to other inmates in the institution on the black market. "There's always going to be some kind of sex here," the inmate stated, "so it [might] just as well be safe. . . . I guess you could say I am in the business of selling safe sex."

Since the 1990 NIJ survey, only the District of Columbia has begun to make condoms available to inmates. Five systems continue previously adopted condom availability policies: Mississippi, Vermont, New York City, San Francisco, and Philadelphia. In addition, condom availability has recently been instituted in all Canadian federal prisons and some Provincial prisons in Canada.⁸

Distribution of condoms varies by correctional system. In New York City and Vermont, inmates can receive only one condom per medical visit. Mississippi inmates can buy unlimited supplies of condoms at the canteen for 25 cents each. Two systems have tied condom distribution to services: condoms are available at HIV/AIDS educational programs in San Francisco and at HIV antibody-test counseling sessions or during sick call in Philadelphia. Condoms are available in the infirmary and available at counseling and education sessions in District of Columbia prisons.

Although most correctional officials disagree with this approach, a small number of systems make condoms available in the context of continuing prohibitions against sexual activity and punishment of inmates found to engage in these activities. This has been the approach taken in the Vermont correctional department, one of two State correctional systems to make condoms available to inmates while incarcerated.

In the systems with condom availability, few if any problems have occurred with condoms being used as weapons or for smuggling contraband, despite suggestions by opponents that this would occur. A hospital administrator at the Mississippi State prison in Parchman recalled only one incident when a condom was used for smuggling contraband.¹¹

Of the systems that distribute condoms, only the San Francisco and District of Columbia jail systems specifically address HIV prevention for women by making dental dams available. These are squares of latex that can be used as barrier protection for women having sex with women.

A number of correctional systems (65 percent of State/Federal and 39 percent of city/county) have held discussions or considered proposals regarding condom availability. However, no additional systems reported definite plans to institute condom availability in the future.

In the debates that occur, correctional medical staff often advocate condom availability while correctional administrators and security staff oppose it. This ideological divide reflects different perspectives. Health care workers view corrections from the public health model, which acknowledges that sex takes place in prison and stresses the need to prevent HIV transmission. On the other hand, correctional officials tend to emphasize security and adherence to regulations. They worry that condom distribution would signal their acceptance of sex within the institution.

A distinguished panel examining the response to HIV in the New York State prison system suggested that the conflict between health care and security was "inevitable." The panel stated that "[d]elivering decent and appropriate health care in prison requires knowledgeable medical professionals to set rules that define medical responsibility and to negotiate the realistic implementation of those rules in the correctional setting." Indeed, some correctional medical staff have implemented what they consider appropriate public health measures, such as distribution of condoms, even when this was prohibited by the correctional system. ¹³

Some of those opposed to condom availability in prisons and jails use a "slippery slope" argument. They suggest that if condoms are permitted within correctional institutions, then bleach and clean needles must be permitted as well. However, bleach and needles may pose greater security and safety risks than condoms.

Some correctional systems (20 percent of State/Federal and 10 percent of city/county systems) have discussed or received proposals regarding bleach availability and many address needle-cleaning procedures within their educational programs. However, no systems currently make bleach available explicitly for cleaning drug injection material, and no systems plan to do so in the future. Several systems did, however, report that bleach is readily available within their institutions without strict controls on its use. Therefore, inmates in these institutions may have *de facto* access to bleach for needle cleaning even in the absence of policies explicitly permitting this.

For obvious security and safety reasons, no correctional systems have made clean needles available to inmates. Needles are present in many facilities, however. Their scarcity tends to foster sharing and other risky practices. Indeed, a British study found that, although needle use was rarer in prisons than on the street, it tended to be riskier when it did occur.¹⁴

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Chapter 5

HIV Testing, Counseling, Confidentiality, and Disclosure Policies

In the world beyond the prison walls, the discussion of HIV antibody testing seems to have shifted completely in the past few years from a debate over testing as a tool for preventing the spread of infection to a widespread acceptance of voluntary counseling and testing as an integral part of medical intervention. This shift was primarily a result of several clinical trials in which treatment with zidovudine appeared to slow the progression to symptomatic HIV disease. Recently, results from a large European study involving a somewhat different experimental design failed to reproduce the earlier finding that zidovudine slows progression to symptomatic HIV disease. Until further analyses are conducted or additional data are collected however, U.S. experts continue to affirm that early intervention is important and useful. Other clinical arguments, some involving tuberculosis control, have also been adduced in favor of mandatory HIV testing. In corrections, in any case, the shift from arguments for testing based on prevention to arguments based on medical intervention has been less thorough. Indeed, in some systems, there is persistent support for mandatory testing as part of an infection-control strategy. This chapter discusses correctional systems' policies and procedures for HIV antibody testing and counseling as well as disclosure of HIV status.

State and local departments of public health nationwide provide HIV counseling and testing services in more than 400 correctional facilities. Indeed, counseling and testing services for correctional facilities must be included in all health departments' applications for fiscal year 1993 health education/risk reduction cooperative agreements, CDC's primary mechanism for funding HIV prevention programs. Many correctional systems face severe funding and staff shortages and might wish to contact the appropriate public health department regarding CDC support for counseling and testing in their facilities.

HIV Antibody Testing Policies

Mandatory Screening

As table 14 shows, 16 State prison systems and the Federal Bureau of Prisons report having mandatory mass screening for HIV among their inmates. (We define mandatory screening as any one or more of the following: mandatory, identitylinked testing of all incoming inmates, all current inmates, or all inmates about to be released.) The 16 State systems screen all intakes (and may screen current and about-to-be-released inmates, as well), while the Federal Bureau of Prisons screens all releasees and all inmates received during November of each year, and carries out a 10-percent stratified random sample of all inmates in the system each August. In one State, screening of all inmates at intake was legislatively mandated, but medical staff in the institutions disagreed with the policy and have failed to implement it. HIV antibody testing in this State occurs only with inmate consent. No responding city/county jail systems have mass mandatory screening policies.

There have been no changes to the list of systems with mandatory screening policies since the 1990 survey. Although there has been no return to the sharp increase in mandatory screening jurisdictions seen between 1986 and 1987 (when the number jumped from 3 to 13), there has been a relatively stable group of systems with mandatory testing policies. While mandatory screening remains relatively stable, segregation of HIV-infected inmates continues to decline in favor (see chapter 6). The result is that although 16 States have policies requiring all inmates to be screened for HIV antibody, only two of these States segregate all those found to be HIV positive.

From the standpoint of prevention, the logic of mandatory screening without segregation is elusive. However, some

Table 14

CORRECTIONAL SYSTEMS CONDUCTING MANDATORY SCREENING OF INMATES, NOVEMBER 1992-MARCH 1993°

 U.S. State/Federal Prison Systems (N=51)	U.S. City/County Jail Systems (N=31)	
Federal Bureau of Prisons	None	
Alabama		
Colorado		
Georgia		
Idaho		
lowa		
Michigan		
Mississippi		
Missouri		
Nebraska		
Nevada		
New Hampshire		
North Dakota		
Oklahoma		
Rhode Island		
Utah		

^oDefined as mandatory HIV antibody testing, generally identity-linked, of all new inmates, all releasees, and/or all current inmates, regardless of whether they show clinical indications of HIV infection. In terms of correctional policy, this type of testing differs in purpose and method from blinded epidemiological studies. Blinded studies are anonymous (not identity-linked) screenings intended to assess scroprevalence rates in a particular population.

Source: NIJ/CDC Questionnaire Responses.

Wyoming

systems believe that mandatory testing is necessary to identify inmates for early medical intervention and ongoing monitoring of their condition. This can be accomplished without segregation.

Mass screening was ordered in Colorado by the Governor, a policy that is strongly supported by top correctional officials, including the Executive Director and Director of Clinical Services. Although two studies have shown that the majority of HIV-infected inmates and those at high risk for infection will come forward for voluntary testing, as discussed in chapter 2, a more recent study in New York State found much lower HIV seroprevalence rates among voluntarily tested inmates than among those in blinded studies of serial intakes. Colorado officials believe that a voluntary testing policy would not enable them to identify all (or even

most) of the HIV-infected inmates for medical intervention and intensive monitoring. Indeed their own seroprevalence data presented in tables 7 and 9 in chapter 2 confirm this, although the rates for mandatorily and voluntarily tested inmates are both very low. The Colorado system's position is based both on the conviction that a correctional system has a moral obligation to identify inmates with a need for medical treatment on a timely basis and on the fear that failure to identify and treat such inmates could lead to later lawsuits.²

The Medical Director of the Georgia Department of Corrections, the only large State correctional system with mandatory HIV testing, while not a strong advocate of the policy, does see some medical benefits in it. He believes that mandatory HIV testing assists in tuberculosis control be-

cause many HIV-infected persons have false negative results on TB skin tests. In addition, he argues, many inmates who could benefit from early medication for HIV disease will not submit to voluntary testing due to mental impairments or other factors. Mandatory testing enables the correctional system to identify the vast majority of infected people so that they can be afforded appropriate medical intervention.³

Risk-Group Screening

Some correctional systems still have policies of attempting to identify and screen those inmates with histories of highrisk behavior. As shown in table 15, nine State/Federal systems (up from five in 1990) and one responding city/county system (down from two in 1990) have such policies. Implementation of risk-group screening has been fraught with problems from the beginning, largely because of the difficulty of identifying all members of these groups. Reliance on self-reports is notoriously inadequate and most compulsory methods of identifying persons with risk factors are also problematic.

Routine Testing

In guidelines issued in August 1987, the Public Health Service recommended routine counseling and testing for persons with histories of high-risk behavior. Many inmates fall into this category. Routine testing represents an intermediate point between testing only on the request of the individual and mandatory testing. It means that individuals will be tested unless they decline. A critical point, of course, is whether they are *told* that they will be tested unless they decline.

The August 1987 PHS recommendations urged correctional authorities to determine the best means for counseling and testing inmates at entry and discharge. At least one correctional system has now proposed adopting routine HIV antibody testing of inmates. In a management plan for addressing HIV among North Carolina prison inmates, the Chief of Health Services for the State correctional department recommended routine testing of admissions. Inmates would be informed of the policy and "given clear opportunity to refuse." This opportunity would include informed consent. If consent was not obtained in writing, the test would not be performed. Whether inmates would feel pressured to consent to testing under such a policy would depend upon the specifics of its implementation and how the options were presented.

Voluntary/On-Request Testing

Access to early medical intervention in HIV disease is a major reason for offering inmates voluntary testing on request. Inmates who meet current guidelines for treatment with zidovudine should be offered it, as well as PCP prophylaxis, as their status warrants. Still others may elect counseling and testing after attending in-prison AIDS/HIV education and are apt to benefit most from the process when they have initiated it.

Such a policy depends upon the availability of testing and counseling to all inmates on request. In New York State, inmates may obtain testing on demand—that is, without having to convince medical staff that they have risk factors. Anonymous testing, through public health departments, is also available to New York State inmates, but inmates learning of their HIV infection through anonymous testing must notify health care staff of this in order to obtain treatment.

It would seem that inmates with histories of high-risk behavior would seek testing once they become aware of beneficial medical interventions for persons with HIV. However, this supposition depends on having reasonable assurances that confidentiality will be maintained and that early intervention will be available. Recent research in New York State suggests that inmates who believe that they are HIV-infected are dissuaded from coming forward for testing out of a belief that they will suffer mistreatment or discrimination should their HIV status become known. 8 On the other hand, studies in Wisconsin and Oregon have shown that most HIV-infected inmates and those with risk factors for HIV will take advantage of voluntary testing programs. 9

The number of correctional systems providing for voluntary/on-request testing has increased since the 1990 survey. Table 15 shows that 77 percent of State/Federal systems (up from 65 percent in 1990) and 87 percent of responding city/county systems (up from 63 percent in 1990) make HIV testing available to all inmates on request. Another 14 percent of State/Federal systems and 10 percent of city/county systems offer testing on request to some categories of inmates. Sixty-one percent of State/Federal systems and 90 percent of city/county systems require written consent of all inmates who receive HIV testing.

As table 16 shows, a number of State/Federal systems have both mandatory and voluntary/on-request testing. In city/county systems, none of which have mandatory testing, those without on-request policies leave it to medical staff to advise testing in the presence of clinical indications. Such

Table 15
SUMMARY OF CORRECTIONAL POLICIES ON HIV ANTIBODY TESTING OF INMATES,
NOVEMBER 1992-MARCH 1993^a

	U.S State/Fed Prison System (N=51)		U.S. City/Cou Jail System (N=31)		
Testing Policies	Number of Systems	%	Number of Systems	%	
Mandatory Screening of: All Incoming/New Inmates All Current Inmates All Releasees	16 8 4	31% 16 8	0 0 0	0% 0 0	
Screening of "High Risk Groups"b	9	18	1	3	
Voluntary/Inmate Request Testing Available to All Inmates	39	77	27	. 87	
Voluntary/Inmate Request Testirig Available to Some Inmates	7 .	14	3	10	
Testing if Clinical Indications ^c	45	88	29	94	
Testing if Involvement in Incident	46	90	27	87	

^oThis table includes actual and planned policies. The categorization is *not* mutually exclusive.

Source: NIJ/CDC Questionnaire Responses.

indications may appear months or years after an inmate would have met criteria for antiviral therapy or prophylaxis for PCP. It would appear better to offer inmates testing on their own initiative if they know they have risk factors.

Pre- and Posttest Counseling

Face-to-face, individual pre- and posttest counseling—the preferred approach—is available to many correctional inmates. However, particularly where testing is mandatory or where large numbers of inmates voluntarily seek testing, it may not be feasible to conduct individual pretest counseling, which is desirable to protect confidentiality and to facilitate

open discussion. Pretest counseling offers an important opportunity to present HIV risk reduction messages when inmates are not preoccupied with receiving their test results. Ninety percent of State/Federal and 87 percent of responding city/county systems report that they provide some type of pretest counseling. In State/Federal systems, 80 percent conduct pretest counseling on an individual face-to-face basis, 39 percent provide pretest counseling in groups, and 37 percent use videos. Among responding city/county systems, 100 percent report that they provide individual face-to-face pretest counseling, 30 percent offer group counseling, and 30 percent use a video. The fact that these percentages total more than 100 indicates that systems use different pretest counseling formats for different inmates.

^bTesting inmates with identifiable histories of high-risk behavior (e.g., homosexuals and IDUs), regardless of whether they show clinical indications of HIV infection or AIDS.

[°]Clinical signs or symptoms of HIV infection or AIDS.

^dIncident involving possibility of exposure to blood or certain body fluids.

Table 16

HIV ANTIBODY TESTING OF INMATES, HIERARCHICAL CATEGORIZATION,
NOVEMBER 1992-MARCH 1993°

	U.S. State/F Prison Sys (N=5)	stems	U.S. City/C Jail Syste (N=31	ems	
Procedure	Number of Systems	%	Number of Systems	%	· · · · · · · · · · · · · · · · · · ·
Mandatory Mass Screening (all incoming inmates, current inmates, and/ or inmates at release)	17	33%	0	0%	
Voluntary/Inmate Request Testing	27	53	27	87	
Testing if Clinical Indications ^b	7	14	4	13	
Total	51	100%	31	100%	

^aIncludes actual and planned policies. This is a *hierarchical* categorization: jurisdictions that do mass screening are placed in the uppermost category, regardless of whether they also test for other purposes; jurisdictions that offer voluntary or on-request screening, but do no mass screening, are placed in the voluntary category regardless of whether they also test when clinically indicated.

^bIn this table, clinical indications include lowered CD4 (T4) counts, opportunistic infections, and TB positivity or active TB. *Source*: NIJ/CDC Questionnaire Responses.

Individual posttest counseling is essential, especially for those with positive results. Three-fourths of State/Federal systems and 94 percent of city/county systems report that they provide individual, face-to-face posttest counseling to all tested inmates. In 29 percent of State/Federal systems, the average posttest counseling session for an HIV-positive inmate was 5–20 minutes, in 50 percent the average session was 21–45 minutes, and in 21 percent it was more than 45 minutes. Among responding city/county systems, the distribution of average session lengths was 31 percent, 45 percent, and 24 percent, respectively.

Despite efforts to improve their methods of notifying seropositive inmates of their test results, there are still reported instances of highly insensitive notification by correctional officers and others. HIV-infected inmates have reported being casually told by an officer in a hallway or other common area: "By the way, you have AIDS." There have also been allegations of correctional systems failing to inform inmates of positive test results for long periods of time. 11

Posttest counseling is as important for seronegatives as for seropositives. Those with negative tests, particularly if they have histories of risk behavior, must be clearly informed that their results do not represent a license to continue those behaviors with impunity. Not surprisingly, posttest sessions are generally shorter for seronegatives than for seropositives. Among State/Federal systems providing individual posttest counseling for seronegatives, 68 percent reported providing an average of 5–20 minutes of posttest counseling to HIV-negative inmates, 11 percent reported an average session length of 21–45 minutes, and 3 percent said the average

session for seronegatives was longer than 45 minutes. In city/county systems providing individual counseling for seronegatives, 90 percent average 5–20 minute sessions, while one system each averaged 21–45 minutes and 46–90 minutes. The Georgia Department of Corrections, to which a site visit was conducted for this study, understands the importance of posttest counseling for seronegatives, but admits that it simply has insufficient staff and resources to provide individual posttest counseling to all inmates with negative results.

Confidentiality and Disclosure of HIV Status

Preservation of confidentiality is important to prevent discrimination (and perhaps worse) against HIV-infected persons. Yet, perfect confidentiality is probably impossible to maintain in correctional settings with their prolific "rumor mills." The situation is further complicated by other factors:

- The commonly strong desire of correctional officers and others in prisons and jails to know the HIV status of inmates.
- (2) The belief of some correctional officials that they have an affirmative obligation to notify the sexual partners of HIV-infected inmates.

Disclosure Within the Correctional System

Table 17 shows that very few correctional systems have official policies for notifying line correctional officers of inmates' HIV status. Indeed, less than 50 percent of systems officially notify *any* correctional administrators at the central-office or institutional level. These numbers are down from those reported in 1990 when 65 percent of State/Federal systems reported policies for notifying institutional management of inmates' HIV status; in 1992–93, this figure had fallen to 45 percent.

Policy does not necessarily translate into practice, however. Staff and inmates in many institutions report that the identities of HIV-infected inmates are widely known. In some cases, this is because the infected inmates themselves divulge their condition. In others, confidentiality is breached when unauthorized personnel gain access to records, conversations are overheard and passed along, and so forth.

To preserve confidentiality and prevent unauthorized disclosure, a key first step is to have sound and detailed confidentiality policies regarding HIV-related information. These should not be based on vague "need-to-know" formulations, because in prisons and jails virtually everyone thinks they have a need to know. Rather, policies should spell out who has such a need and in what specific circumstances.

Several States have passed laws regarding confidentiality/ disclosure of inmates' HIV test results. Some of these are extremely vague—for example, providing that correctional "personnel" (otherwise undefined) be notified if any inmate is diagnosed with a contagious infectious disease. Other State laws continue to rely on less-than-fully defined applications of the "need-to-know" concept.¹²

By contrast, the New York State correctional system's policy on release of HIV/AIDS information is quite well defined. It begins with the premise, required by State law, that there is to be no disclosure of HIV status other than to the patient, without his or her written authorization. The policy then makes some specific exceptions to this premise for inmates. First, it provides that information can be released pursuant to a court order, but not pursuant to a subpoena. Second, it lists individuals who may receive information without a written release from the inmate. These include the inmate's health care provider, certain officials in the department's divisions of health services and mental health, attorneys for the correctional department, the Assistant Commissioner for Population Management "as necessary," parole officers "via the Health Discharge Summary Sheet," "authorized" employees of the State Commission of Correction (a watchdog agency), and funeral directors taking charge of the remains of deceased inmates. In addition, a small number of individuals at the institutional level are authorized access, and this is carefully limited by the policy. The medical director and superintendent of the inmate's facility may be informed. However, superintendents can only receive the information if they need it to make a decision regarding the specific inmate. Such decisions are to be made by the superintendent "personally." Notably, line correctional officers and other institutional security staff are absent from this list.13

Thus, the New York policy is quite precise in its enumeration of permitted disclosures. Moreover, practical arrangements for testing and record keeping help to preserve confidentiality. According to the system's Chief Medical Officer, all HIV testing of inmates is performed by the State health department, rather than the correctional department. No one outside of the correctional department's health services division is even informed as to the number of inmate tests done. No reference is made to HIV in inmates' program files, and access to medical files is strictly limited to medical and dental staff.¹⁴

Table 17
POLICIES REGARDING DISCLOSURE/NOTIFICATION OF INMATES' HIV ANTIBODY TEST RESULTS,
NOVEMBER 1992-MARCH 1993°

	U,S. State/Fe Prison Syst (N=51)	ems	U.S. City/Co Jail Syste (N=31)	ms	
Parties to be notified during incarceration and/or at release according to policy ^a	Number of Systems	%	Number of Systems	%	
inmate/Patient	50	98%	31	100%	
Attending Physician or Health Care Worker	49	96	27	87	
Other Medical Staff (community or correctional)	39	77	18	58	
Correctional Management— Central Office	26	51	4	13	
Correctional Management— Institution	23	45	10	32	
Correctional Officers (security)	6	12	6	19	
Public Health Department	42	82	17	55	
Spouse/Sexual Partner(s)	14	28	6	19	
Needle-sharing Partner(s)	9	18	5	16	
Victims of Inmate (in community and/or in prison/jail)	17	33	16	52	
Parole Agency	11	22	3	10	
Residential Placement ^b	9	18	2	7	
Work Placement ^b	3	6	0	0	
Other ^c	11	22	12	39	

^aFigures include systems that specified the conditions under which disclosure/notification to certain parties could be made (e.g., only with inmate consent and/or on a "need-to-know" basis) and systems that did not specify these conditions.

Source: NIJ/CDC Questionnaire Responses.

bMost systems view notification of residential or work placements as falling in the domain of parole agencies/divisions.

[&]quot;This category includes public agencies, courts, and other parties unspecified by responding systems.

California's Proposition 96, passed in 1988, requires disclosure of the names of inmates with, or suspected of having, communicable diseases to the correctional officials charged with their supervision. Most county jails in California have implemented the provision, but the American Civil Liberties Union is seeking to halt implementation of reporting in San Francisco on the ground that it violates the privacy clause of the State constitution, the Fourth Amendment's protection against unlawful searches and seizures, and the Federal Rehabilitation Act's ban on discrimination against persons with disabilities. The case is awaiting trial on the ACLU's application for a permanent injunction. 15

Partner Notification

Table 17 shows that 28 percent of State/Federal systems and 19 percent of responding city/county systems have policies providing for reporting inmates' HIV status to spouses or sexual partners. Even fewer (nine State/Federal systems and five city/county systems) attempt to notify needle-sharing partners of inmates' HIV status. Among State/Federal systems that notify sexual partners and/or needle-sharing partners, in only one do correctional officers carry out the notification; in 71 percent information is provided to public health departments for followup action. In two of the prison systems, the health department notifies the partner only at the request of the inmate. In one city/county system, correctional officers make notifications, while in 50 percent of these systems the information is provided to the health department. In 50 percent of jail systems, the health department makes notification at the request of the inmate. In 51 percent of State/Federal systems and 84 percent of city/ county systems, written consent of the inmate is required before any such notification can be made.

Notification of sexual partners raises complex issues for correctional officials. On the one hand, confidentiality is important, and in many jurisdictions unauthorized disclosures of HIV status are prohibited by law. On the other, a number of correctional officials conscientiously believe that inmates will not be responsible about informing their sexual partners and that authorities who are in possession of the information should ensure that notification occurs. Officials are also clearly concerned about possible litigation should they fail to inform a sexual partner who is later infected by a released inmate, although it is highly questionable whether such litigation would succeed.

Few systems have policies explicitly providing for disclosure by correctional officials to inmates' sexual partners, as table 17 shows. Most have adopted the CDC's recommendations for health care workers: that HIV-infected persons be

strongly counseled to notify their sexual partners, but that the health care provider only carry out the notification if the patient refuses to do so. 16

In the Federal Bureau of Prisons, all inmates are required to be tested for HIV antibodies prior to release—whether at the end of their sentence or prior to their transfer to a community-based early-release program. Until 1991 Bureau policy required a verified notification of an inmate's spouse or sexual partner before his or her acceptance into early-release or furlough programs. In 1991 this policy was changed to require only strong encouragement that an HIV-positive inmate notify his or her sexual partners. The Bureau also reports HIV-positive individuals to the U.S. Parole Commission and public health agencies in the State to which the inmate will be released, as required by applicable State laws and regulations, and leaves any partner notification to the State's agencies.¹⁷

Any policies providing for more extensive notification regarding the HIV status of prisoners than regarding the status of persons in the outside community raise serious questions. Clearly inmates forfeit certain rights by being incarcerated, but HIV infection is not a crime and is, in almost every case, unrelated to the crime for which the inmate was sentenced. The issue thus becomes whether correctional authorities, based on the fact that they possess information about HIV status and the belief that inmates as a group will not reliably inform their se.! partners of that status, should impose more stringent and intrusive notification policies on inmates. A countervailing issue is whether correctional authorities, in possession of information about prisoners' or releasees' HIV status, have a moral imperative to ensure that such individuals' sexual and/or drug-using partners are notified so as to reduce their risk of acquiring HIV infection.

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Chapter 6

Housing and Correctional Management of Inmates with HIV Disease

For several years correctional systems have been moving away from policies calling for blanket segregation, both residential and programmatic, of inmates with HIV disease. More and more these inmates are being housed in the general population and participating in the same programs and activities as general population inmates. This integration (or, where segregation had been the rule, reintegration) has taken place without serious incident. Meanwhile, issues of early release and discharge planning for inmates with HIV disease are confronting correctional systems and, in some cases, parole authorities and the courts, with complex challenges.

The Continuing Trend to Residential and Programmatic Integration

Tables 18 and 19 show the diminishing number of correctional systems with blanket segregation policies for HIV-infected inmates and the increasing number that manage such inmates on a case-by-case basis. In contrast to the general trend, this year's survey shows a slight drawing back from presumptive mainstreaming policies toward the slightly more conservative characterization of case-by-case decision making. In practice, however, it is likely that these policies mean the same thing. They both permit individual decisions on the basis of medical need or behavioral issues, and both are likely to result in most inmates with HIV disease being housed in the general population.

Table 18 shows that 28 percent of State/Federal prison systems mainstream inmates with AIDS diagnoses (down slightly from 29 percent in 1990) and 59 percent make housing decisions for them on a case-by-case basis (up from 47 percent in 1990). Only five State/Federal systems (10 percent) permanently segregate or separate inmates with AIDS, down from nine in 1990.

Fifty-nine percent of State/Federal systems mainstream inmates with asymptomatic HIV infection (down from 74 percent in 1990) and another 29 percent make decisions on a case-by-case basis (up from 14 percent in 1990). A similar policy shift from presumptive mainstreaming to case-by-case decision making is revealed for inmates with AIDS in city/county systems. However, in these jail systems the percentage mainstreaming asymptomatically infected persons continued to increase—from 63 percent in 1990 to 71 percent in 1992–93.

Table 18 shows that a small number of correctional systems impose restrictions on inmates with HIV disease who are housed in the general population. These restrictions may include single-celling, limitations on work assignments, or limited access to other types of programs. For example, seven of eight State/Federal systems that permit inmate conjugal visits exclude HIV-infected inmates from such visits. Another State system permits conjugal visits for male inmates regardless of HIV status; however, conjugal visits are not available to female inmates. Only one responding city/county jail system allows conjugal visits and in that system HIV-infected inmates may have visits. In 1991 New York State reversed such a policy and now permits HIVinfected inmates to have conjugal visits. As already noted, a court overturned the Arizona correctional system's exclusion of HIV-infected inmates from kitchen work assignments.

Only Alabama and Mississippi currently segregate all known HIV-infected inmates. Alabama maintains a strict segregation policy. At first HIV-infected inmates in Alabama were subjected to total isolation and had no access to any programs or activities. After a class-action lawsuit was filed against Alabama's policies, many of the worst aspects of the segregation policy were improved. However, the basic policy remains: all known HIV-infected inmates are

Table 18
HOUSING POLICIES FOR INMATES WITH AIDS, SYMPTOMATIC NON-AIDS, AND ASYMPTOMATIC HIV INFECTION,
NOVEMBER 1992-MARCH 1993a

	U.S. State/Federal Prison Systems (N=51)						U.S. City/County Jail Systems (N=31)					
	AIDS		ymptomatic Non-AIDS		symptomat IV Infectio		AIDS		ymptomati Non-AIDS		symptomati IV Infection	
Housing Policy	Number of Systems	%	Number of Systems	%	Number of Systems	%	Number of Systems	%	Number of Systems	_%	Number of Systems	%
All Remain in General Population with <i>No</i> Restriction	14	28%	22	43%	30	59%	4	13%	10	32%	22	71%
All Remain in General Population with Restrictions/ Precautionary Measures ^{b,c}	2	4	4	8	4	8	0	0	2	7	1	3
All Permanently Separated/ Segregated ^d	5	10	2	4	2	4	2	7	0	0	0	0
Case-by-Case Determination (based on medical and/or security or unspecified reasons)	30	59	23	45	15	29	25	81	19	61	8	26
Total	51	101%	51	100%	51	100%	31	101%	31	100%	31	100%

^oThese figures include hypothetical policies in jurisdictions that to date have no cases in a particular category. This categorization is mutually exclusive.

Source: NIJ/CDC Questionnaire Responses.

^bThe figures in this category *include* systems who hospitalize a patient during severe illness but upon improvement return the inmate to general population.

^cThis category includes single-celling.

^dThis category includes *presumptive* hospitalization, infirmary housing, and administrative separation in medical or nonmedical units.

^eDue to rounding.

Table 19.

COMBINATIONS OF HOUSING POLICIES FOR INMATES WITH AIDS, SYMPTOMATIC NON-AIDS, AND ASYMPTOMATIC HIV INFECTION, NOVEMBER 1985 AND NOVEMBER 1992-MARCH 1993°

	U.S. State/	i Prison Sys	U.S. City/County Jail Systems					
	November 1985 (N=51)		November 1992– March 1993 (N=51)		November 1985 (N=33)		Novembe March (N=3	1993
Housing Policy Combination	Number of Systems	%	Number of Systems	%	Number of Systems	%	Number of Systems	%
Separate/Segregate AIDS Cases: Symptomatic Non-AIDS Cases and Asymptomatics Maintained in General Population	3	6%	2	4%	3	9%	0	0%
Separate/Segregate AIDS and Symptomatic Non-AIDS Cases; Asymptomatics Maintained in General Population	10	20	0	0	3	9	0	0
Separate/Segregate All Three Categories	8	16	2	4	13	39	0	0
No Separation/Segregation of Any Category	2	4	16	31	0	0	4	13
Combinations Involving Case-by-Case Determination (for at least one category)	16	31	31	61	10	30	27	87
Other Policy Combinations, No Policy, or Policy Unknown	12	24	. O	0	4	12	0	0
Total	51	101% ^b	51	100%	33	99% ^b	31	100%

^oIn this categorization, "separate/segregate" means that the basic policy is to hospitalize or administratively segregate, regardless of whether clinically ill inmates are returned to general population when their symptoms subside. This categorization is mutually exclusive.

Source: NIJ/CDC Questionnaire Responses.

^bDue to rounding.

residentially and programmatically segregated for as long as they stay in the system. Alabama's policy of mandatory mass screening and segregation was upheld in Federal District Court, a decision that was affirmed in part by the Eleventh Circuit, and remanded in part for rehearing in the District Court. The case is discussed in detail in chapter 8. In the meantime, the policy remains in effect. Some of the segregated HIV-infected inmates in Alabama staged a hunger strike in June 1992, in part to call attention to the length of time required to obtain a resolution of their lawsuit. A reporter who visited the HIV unit at Limestone correctional facility at the time of the hunger strike wrote that "[t]he feeling of isolation that comes . . . with a diagnosis of AIDS is especially intense for these men. Still, they remain astoundingly, impossibly undefeated."

Pursuant to the settlement of a lawsuit, California has instituted and since augmented a pilot program for the programmatic integration of some HIV-infected inmates. The Chief of HIV Services at California's Vacaville medical facility has testified that "there is no medical,... rational or scientific basis for the segregation of inmates who are HIV positive."

Colorado has gradually adopted residential and programmatic integration. Missouri discontinued segregation of HIV-infected inmates. Correctional officials there decided that the policy had fostered a false sense of security among inmates and staff leading, in turn, to carelessness regarding high-risk practices and inattention to proper infection control guidelines. No responding U.S. city/county jail systems segregate all known HIV-infected inmates.

Table 19 depicts the dramatic housing policy changes that have occurred since the first NIJ survey was done in 1985. In 1985, 42 percent of State/Federal systems had policies calling for segregation of at least some HIV-infected inmates, while 35 percent had presumptive general population or case-by-case policies. By 1992–93 these percentages had changed to 8 percent and 92 percent respectively. Almost 60 percent of responding city/county systems had segregation policies in 1985, while only 30 percent had mainstreaming or case-by-case policies. As of 1992–93 this breakdown had shifted to 0 percent and 100 percent.

Case-by-case and presumptive general population housing policies generally make it possible for inmates with HIV to be placed in the least restrictive situation commensurate with their normal security classification. In most cases, this permits them to engage in a full range of programs and activities in the institution. If their medical condition warrants, they can be hospitalized or, if they present

behavioral or security problems, they can be administratively segregated. However, the vast majority of HIV-infected inmates do not require any continuous separate housing. Policies calling for segregation or other forms of discrimination, moreover, may dissuade inmates who believe they are HIV-infected from coming forward for voluntary testing. In such a way, persons who might benefit from medical intervention and monitoring may not receive it. For these reasons, among others, the National Commission on Correctional Health Care is on record in opposition to segregation of HIV-infected inmates.⁴

Colorado: A Case Study of Integration

Colorado offers an interesting case study of a State correctional system that gradually moved from a blanket segregation policy to programmatic and residential integration of HIV-infected inmates.⁵ Like Alabama, Colorado's policy of mandatory HIV screening and segregation was upheld in Federal court.⁶ Unlike Alabama, however, Colorado gradually implemented programmatic, and then residential, integration of inmates with HIV.

In Colorado, female HIV-infected inmates were never segregated. However, for male HIV-infected inmates, segregation was total—they had no access to programs or activities with general population inmates. Some programs were offered in the segregated unit at Territorial Prison, but these were quite limited. Officials came to believe that a policy of total segregation was unnecessary and legally unsupportable.

In 1989 Colorado began to allow inmates from the segregated unit to participate in certain programs in the general population. The department was careful to integrate HIV-infected inmates gradually to minimize the possibility that they would be intimidated or victimized. Indeed, officials reported some threats of violence, but no actual incidents.

The integration process in Colorado was accompanied by extensive HIV education for inmates and staff. Each type of program or activity was also integrated in a stepwise fashion. For example, HIV-infected inmates were permitted to use the general population's visiting room during normal visiting times, but at first they were required to use a special area in the room. The special area was subsequently phased out so that total integration of visiting became the practice. Similarly, when the HIV-infected inmates were first given access to the institution's gymnasium, they had to use a separate weight stack. After a fairly short time, the weights used by the HIV-infected inmates

and those used by the general population inmates became intermingled. Then, for a time, some of the general population inmates used a bleach solution to wipe down the equipment before they used it. Finally, this practice was phased out, so that all equipment was shared without unnecessary precautions being taken before its use. In the same way, inmates from the segregated unit were gradually introduced into sick call line, the line to receive medications, the library, the law library, educational programs, and work assignments. As of December 1990, there was total program integration.

About a year and half later, residential integration of HIV-infected inmates became the policy in Colorado. However, inmates with HIV disease are not dispersed throughout the correctional system. Instead, these inmates are mainstreamed at Territorial or other facilities in Canon City, depending on their security classification. The correctional officials believe that keeping all HIV-infected inmates in one institutional complex enables the department to provide better medical care by concentrating limited expert staff. Under current budget constraints it is not possible to have a medical team well-trained in the care of persons with HIV at every institution.

Although Colorado's presumptive policy is to mainstream all HIV-infected inmates, not all such inmates are in fact in the general population. Some preferred to remain in separate housing, and this desire was honored by the correctional department. Some inmates feel that there are advantages to being in a separate unit (e.g., shorter lines for the showers), while others fear mistreatment in the general population. However, most of the previously segregated inmates wanted to be in the general population. "You can't just sit in the cell house and stay sane," one said, "you need to be in population to progress" in terms of lowering one's security classification and accumulating "good time" as rapidly as possible.

In addition, HIV-infected inmates who are found to engage in high-risk behaviors are still segregated on a case-by-case basis. Officials argue that a correctional agency has a moral and legal obligation to minimize the occurrence of any behavior by which HIV may be transmitted. They reject the policy of segregating only predatory inmates and leaving consensual activity to education and assumption of risk—as it is addressed outside the walls. Colorado correctional officials believe that it is impossible to distinguish clearly between consensual and nonconsensual activity in a prison setting, and that education simply does not work as well with inmates as with people in the community.8

The arguments for integration and against blanket segregation of HIV-infected inmates are compelling. At the same time, Colorado's experience with gradual integration suggests that the serious anticipated outcomes did not materialize; that a stepwise process with concurrent HIV education probably helped minimize potential harm; that the way to handle extreme fears of casual transmission was to let them dissipate of their own accord and in their own time by inmates getting used to being around HIV-infected people. Moreover, it appears reasonable to offer separate housing if requested and to reserve the possibility of segregating particular inmates on the basis of behavior. Ultimately, correctional authorities must use their best judgment to resolve the difficult issues of segregation and integration and to settle on policies and implementation strategies that are fairest to all concerned.

Early and Compassionate Release of Inmates with HIV Disease

Inmates in the advanced stages of HIV disease are significantly less likely to pose a threat to the community. Most are seriously ill and unable to commit violent or other criminal acts, even if they wished to do so. Therefore, some would argue for granting such individuals early or compassionate release from prison. For example, Cathy Potler, director of the AIDS Prison project at the Correctional Association of New York, a private advocacy group, makes three major points in support of early release for inmates with AIDS and other terminal illnesses. First, these inmates should have time with their families before they die. Second, they may be able to receive better services in the community than in prison. Finally, their early release will save correctional departments significant expenditures for medical care.9 However, Potler also cautions that "no one should be released without an adequate discharge plan."10

Despite the strong case for early release and the fact that a substantial number of systems have policies permitting early release for inmates with HIV/AIDS, relatively few inmates have been granted such release. The 1992–93 NIJ survey reveals that 53 percent of State/Federal systems and 29 percent of responding city/county jail systems have early release policies. In addition, one-third of State/Federal systems and 13 percent of responding city/county systems have policies for medical furlough of inmates with HIV/AIDS. However, 16 State/Federal prison systems report having released or furloughed only 67 inmates under such programs (range 1–20). Responding city/county systems

have released or furloughed 221 inmates, but 189 of these (86 percent) were from one system, New York City.

After lengthy delay and several failed attempts, the New York legislature enacted a medical parole law in March 1992. However, as of January 1993, only six State inmates had been released under this law.11 According to Dr. Robert Greifinger, Deputy Commissioner/Chief Medical Officer of the New York Department of Correctional Services, one reason for the small number of inmates released under the law is that it requires him and an attending physician to certify in every case that the inmate is so debilitated as to render it impossible for him or her to pose any threat to society. Dr. Greifinger states that making such a certification is impossible in most cases, because it is totally outside his, or perhaps anyone's, area of expertise. Dr. Greifinger adds that the procedures for gaining release are also extremely cumbersome and time-consuming.¹² Even if the medical certification can be made, the prosecutor and judge must have an opportunity to comment on the recommendation before it even reaches the parole division.

In Colorado compassionate release has been granted to some inmates with AIDS deemed not to pose a danger to the community.13 In Massachusetts a medical parole bill for inmates with terminal illnesses has been filed in the legislature, but not yet acted upon. This law provides for the release of persons "so debilitated or incapacitated that there is a reasonable probability [of their not] presenting any threat to society." Notably, the bill would require that anyone released have an "approved care and treatment plan."14 The executive director of the Massachusetts Parole Board described the difficult position in which medical parole places his agency: "If we parole too many with the virus, we're accused of paroling people to get them out of prison [and save money for the correctional system]. If we don't, then we're accused of holding them back because of their status."15

Besides compassionate release and medical parole, there are several options for securing the release of inmates with AIDS that have rarely been used. A survey by the Correctional Association of New York found that executive clemency has been employed only in a small number of cases in New York, Texas, and New Jersey. In January 1991 New York Governor Mario Cuomo for the first time granted clemency to an inmate on the basis of AIDS. Virginia Governor Douglas Wilder granted conditional clemency to an inmate who was dying of AIDS. This was the first grant of clemency to an inmate with AIDS in that State. In New York State, numerous inmates with AIDS

have been quietly granted "temporary release," enabling them to be transferred from prisons to hospitals in the community.¹⁸

Statutory provisions allowing judges to resentence offenders have been used to release a few inmates with AIDS in California by reducing their sentences to time served. Colorado correctional officials state that they try not to let anyone die of AIDS in prison. Terminal inmates are typically transferred to a secure ward at the State hospital in Pueblo. 19 The Federal Bureau of Prisons offers hospice care for inmates with AIDS. 20

Discharge Planning

The significant cost savings available to correctional systems by releasing inmates with AIDS are no doubt seductive to administrators facing serious budgetary constraints. The problem is that releases motivated solely by the desire to cut costs either shift the cost burden to other government programs or result in patients receiving inadequate care in the community. Indeed, there is a real danger that inmates released without careful discharge planning will be unable to find adequate care and support in the community, particularly if they have no family or others to assist them.

In many areas of the country, medical services for the poor are strained to the breaking point. Moreover, many hospice and other programs in the community are not open to exinmates. Ironically, a person with AIDS can sometimes obtain better care in prison than in the community. It has been suggested that ex-inmates with HIV disease have deliberately recidivated in order to receive medical care. When New York correctional authorities have been unable to arrange adequate care in the community for an inmate with AIDS who was scheduled for parole, they have, with the inmate's consent, delayed his or her release. However, release cannot be delayed beyond the expiration of an inmate's maximum sentence.21 Similarly, Colorado correctional officials report that they will not permit inmates with AIDS to have early release unless they have someone to care for them in the community.22

NIJ/CDC survey results indicate that, in the case of persons released before they can be notified of their HIV test results, 15 percent of State/Federal systems and 15 percent of city/county systems do the followup themselves, while 68 percent of State/Federal systems and 62 percent of city/county systems notify the health department so they can followup with the releasee in the community.

For releasees known to have HIV disease, 92 percent of State/Federal systems and 84 percent of city/county systems report that they provide planning of post-discharge medical and social services. Discharge planning should include ensuring inmates' eligibility for relevant benefit programs and assistance with application procedures, as well as arranging the individual's acceptance for care at a specific hospital, hospice, or other appropriate facility. Survey results indicate that two-thirds to three-quarters of correctional systems refer releasees with HIV disease for services including CD4 monitoring, drug therapy, substance abuse treatment, ongoing HIV counseling, and other psychosocial services. However, only 25–44 percent of systems actually make appointments for releasees to receive these services in the community.

With intensive discharge planning by correctional systems apparently the exception, community programs may be important links for releasees. In Massachusetts, Social Justice for Women works with inmates about to be released from Framingham to link them with necessary services on the outside and to arrange continuity of medical care.²³

In New York City the Returnees Assistance Program (RAP) of the State Parole Division works intensively with parolees with HIV disease.24 Eight RAP parole officers work with 170 parolees with HIV/AIDS throughout the city, providing assistance and advocacy in the areas of housing, medical care, substance abuse treatment, social services (e.g., welfare). Obviously the RAP program cannot accommodate all parolees with HIV disease. However, the RAP officers act as resources for other parole officers who have clients with HIV disease. The RAP officers try to meet with their clients at the prison before release and arrange appointments for them with key agencies and providers on the outside. Once their clients are released, the parole officers provide an impressive variety of services: they offer HIV education, distribute free condoms, persuade parolees' families to take them back, and work with clients to overcome denial and shame so they can take better control of their lives and obtain the services they need.

Also in New York City, a case management unit from St. Clare's Hospital regularly visits three prisons to conduct prerelease clinics and educational sessions for inmates with HIV disease. This unit—which consists of a physician, physician's assistant, and case manager—provides information on services available and encourages inmates to attend the St. Clare's Parolees' Clinic.²⁵

Endnotes

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- 21. Interview with Chief Medical Officer Dr. Robert Greifinger, New York State Department of Correctional Services, Fishkill Correctional Facility, New York, October 24, 1990.
- 22. Interview with Director of Clinical Services Dennis Kleinsasser, Colorado Department of Corrections, Colorado Springs, December 13, 1990.
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Chapter 7

Medical Care and Psychosocial Services

The role of correctional institutions has changed with the needs and characteristics of their inmates. Prisons and jails are housing and caring for an increasing number of people who require significant medical care and psychosocial services. According to a leading New York State epidemiologist, "AIDS and other manifestations of HIV infection have surfaced as major health and social problems in local, State, Federal, and international penal systems." Tuberculosis, hepatitis, and other diseases common among the incarcerated, as well as medical problems associated with a "graying" inmate population, are adding to the strain the AIDS epidemic has already placed upon correctional medical services. The explosion of correctional populations in the 1980's, due largely to the "war against drugs," has led to serious crowding and difficulty in providing adequate medical and social services in the face of the cost of building and staffing more and more facilities.

These developments have posed serious problems for correctional health care in general, as has the need for correctional medical programs to respond to HIV/AIDS in particular. At the same time, the concentration in prisons and jails of persons at high risk for HIV/AIDS and other infectious diseases offers an opportunity to mount effective medical and psychosocial interventions that might help to improve the lives of a needy and troubled sector of our population.²

As will be detailed in chapter 8, courts have generally required correctional systems to meet community standards of medical care but not to provide state-of-the-art services. The definition of this standard in practice is the subject of continuing litigation on many fronts. The only legal certainty is, paradoxically, that inmates are virtually the only class of persons in the United States with a constitutional right to health care.

As the courts grapple with the details of what constitutes an adequate level of care for inmates, many correctional systems are striving to provide comprehensive, high-qual-

ity medical and psychosocial services. A comprehensive program includes medical monitoring, early prevention and treatment, provision of the best available medications, access to experimental therapies, specialist care, hospitalization, counseling, and other supportive services. Substance abuse prevention and treatment are also essential parts of comprehensive HIV/AIDS programs, as they encourage inmates to take control of their lives and protect themselves and others from infection.

Medical Care: Problems and Improvements

Many observers consider medical care for inmates in general, and HIV-infected inmates in particular, to be totally inadequate. A number of witnesses before the National Commission on AIDS in 1990 described serious impediments to proper care: inadequate facilities, poorly trained staff, high costs of medications and care, and severe budget constraints, among others. Among these witnesses, Dr. Robert Cohen, an expert on prison medical care, stated that "a dangerously inadequate prison health care system is being overwhelmed by two epidemics: one, the mass incarceration of poor black and Hispanic drug users, and the other, the extraordinary medical demands of the AIDS epidemic."

Based on its hearings and site visits to several New York State facilities, the National Commission issued a report in 1991 concluding that most inmates with HIV disease receive inadequate care and treatment. The report took correctional systems severely to task for these shortcomings.⁴

The quality of treatment for inmates with HIV disease and other conditions continues to come under scrutiny. Allegedly premature deaths among inmates with AIDS in Wisconsin (where one inmate died a few days after being jailed for a traffic violation) and Massachusetts (where a woman died of AIDS the day after being released from Framingham prison), and a hunger strike among inmates with HIV at the California Medical Facility, Vacaville, called further attention to the issue.

Following release of a scathing legislative report on conditions among HIV-infected inmates at Vacaville, the California State correctional department moved to renovate a housing unit, upgrade the medical staff to include more HIV specialists, institute hospice care, improve the diet and provide nutritional supplements, and begin sensitivity training for correctional officers. Dr. Jan Diamond, a well-respected infectious disease physician who had been working part-time at Vacaville, was hired to lead the medical care program for inmates with HIV. Dr. Diamond said that the changes had "opened a window of opportunity to get something good accomplished." However, the changes have begun only recently, so the results are not yet known.

Medical monitoring and diagnosis of women with HIV or at risk for HIV is often inadequate. A study of individuals seeking care in an inner city emergency room found women less likely to be correctly diagnosed with HIV infection than men. The authors of the study suggest that underrecognition of HIV in women is caused by the low seroprevalence among women, and they conclude that "[u]niversal HIV risk assessment, which includes heterosexual behaviors, may help increase recognition of HIV in women."6 According to an experienced HIV/AIDS physician in Boston, women at Framingham have "limited access to HIV specialists and no access to state-of-the-art HIV therapy." At least partially in response to the concerns regarding medical care at Framingham as well as at the men's prisons,8 the Massachusetts Executive Office of Public Safety has taken the unique step of convening an independent task force to review medical care for HIV-infected inmates throughout the State prison system. The task force includes physicians and others who have been extremely critical of the correctional department's health care programs.9 The first step has been to have a panel of physicians from the State department of public health and U.S. Public Health Service undertake a review of the medical charts of more than 100 HIV-infected inmates at several State correctional institutions. This panel will report the results of its chart review to the task force, and the group will then proceed with an indepth examination of medical care, as well as HIV prevention programs, in the system.

Before 1990 the New York State correctional system was heavily criticized for its medical treatment of HIV-infected

inmates, 10 and the department was sued by inmates with HIV disease. However, medical services to inmates have been improved. The administration and fiscal management of the Division of Health Services have been centralized, more thorough monitoring of institutions' health services has been initiated through regular visits, more and better qualified medical staff-especially infectious disease specialists-have been brought in at many institutions and at the central office, more aggressive surveillance and diagnostic programs for HIV and tuberculosis have been instituted, HIV education has been made mandatory for inmates, and review panels for performance of prison health care policies have been created. A wide range of drugs including zidovudine, ddI, and ddC is offered to all inmates with HIV disease. A strategic capital plan to open five longterm care facilities and upgrade or replace every health clinic has been implemented. There is still room to improve, but substantial progress has been made. Meanwhile, the lawsuit continues in the discovery phase.

The quality of medical care varies greatly among correctional systems. Concerns raised about some systems can obscure the fact that exemplary care is offered in many jurisdictions. For example, the Texas Department of Corrections provides inmates with the same medical services and therapeutic drugs available to noninmates through its hospital, which is affiliated with the University of Texas Medical Branch at Galveston. Inmates with HIV disease are transported to the outpatient clinic there for regular specialist consultation every three months. When HIV-positive inmates become increasingly sick, they are transferred to an institution closer to the outpatient clinic and seen by an HIV/AIDS specialist as often as every two weeks. Further, Texas inmates have equal access to nonplacebo clinical trials for HIV experimental drugs.

Various factors determine the extent and quality of medical care received by inmates. Budget and staffing levels certainly play an important role. Moreover, prison officials, officers, and even medical staff themselves may be hostile to HIV-infected inmates. One of the reasons California is instituting sensitivity training is the tendency of officers to treat inmates in the AIDS unit as "freaks, not people" and of some medical staff to question the value of treating inmates with AIDS, since "they are going to die anyway."

Commonly the quality of medical care in prisons and jails suffers in the conflict between correctional and health priorities. Generally the perspective of correctional officials prevails, since the primary function of correctional institutions is security. According to B. Jaye Anno of the National Commission on Correctional Health Care:

Care providers report that it requires constant vigilance, self-awareness, and periodic reexamination to avoid being co-opted by and developing an identification with correctional authorities, their goals, modes of thinking, conception of and relationship to inmates. This feeling of alliance with correctional authorities is problematic, because the medical model is often fundamentally at odds with the correctional model. This dissonance should be recognized and respected. Both points of view should be taken into account when making policy.¹²

Prophylactic and Therapeutic Drugs for Inmates with HIV Disease

The 1992-93 NIJ/CDC survey reveals that zidovudine is available to inmates in all but one of the participating correctional systems but that other antiretroviral therapies

are less available. Table 20 shows that 72 percent of State/Federal and 65 percent of city/county systems apply the FDA's eligibility criterion for zidovudine—individuals with a CD4 (T-4) cell count of 500 or below. This is similar to results from the 1990 survey.

The New York State correctional system has about 1,900 inmates on zidovudine and spends approximately \$4 million on the drug each year. Given the number of inmates involved, it is impossible to have staff directly monitor dosage compliance around-the-clock. Moreover, confidentiality could be breached if officers had to wake up selected inmates in the middle of the night. Therefore, the vast majority of inmates are dispensed supplies of medication and are responsible for taking it themselves. Only inmates with histories of noncompliance are directly monitored.

Table 21 summarizes survey results regarding availability of other drugs to inmates with HIV disease. A relatively new antiretroviral drug for HIV therapy—ddI—is offered by 80 percent of State/Federal systems and 74 percent of city/county systems. It is most commonly used for patients resistant to or intolerant of zidovudine.

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		OF ZIDOV BER 1992			_

	U.S. State/Fed Prison Syste (N=51)		U.S. City/Co Jail Syster (N=31)		
	Number of Systems	%	Number of Systems	%	
Zidovudine Offered	50	98%	31	100%	
Eligibility Criteria					
CD4 (T-4) count < 500	36.	72	20	65	
CD4 (T-4) coun* < 400	. 1	2	1	3	
CD4 (T-4) count < 300-250	0	0	1	. 3	
CD4 (T-4) count < 200	0	0	2	7	
All HIV-positive inmates	1	2	0	0	
Doctor's Orders	3	6	1	3	
Other/Unspecified	9	18	6	19	

^aIncludes systems with policies under revision.

Source: NIJ/CDC Questionnaire Responses.

Table 21
PROVISION OF SELECTED DRUGS FOR INMATES,
NOVEMBER 1992-MARCH 1993

	U.S. State/Fed Prison Syste (N=51)	U.S. City/County Jail Systems (N=31)		
	Number of Systems	%	Number of Systems	%
Zidovudine Offered	50	98%	31	100%
Bactrim/Septra Offered	43	84	30	97
Pentamidine Offered	38	75	22	71
ddC Offered	25	49	17	55
ddl Offered	41	80	23	74
Experimental Drugs Offered	9	18	4	13
Inmate Access to Clinical Trials	6	12	0	0

Source: NIJ/CDC Questionnaire Responses.

Another newer antiretroviral drug, ddC, received provisional FDA approval for use in combination with zidovudine against HIV infection in August 1992. Forty-nine percent of State/Federal systems and 55 percent of city/county systems make the drug available to inmates.

Since the 1990 survey, the number of State/Federal systems offering aerosolized pentamidine has decreased slightly from 80 percent to 75 percent in 1992. On the other hand, among responding city/county systems use of aerosolized pentamidine increased from 56 percent of systems in 1990 to 71 percent in 1992-93. New primary prophylaxis guidelines for Pneumocystis carinii pneumonia recommend Bactrim/Septra instead of aerosolized pentamidine, if tolerable by the patient. Intravenous pentamidine is recommended if oral medications, such as Bactrim/Septra, fail.¹³ Eighty-four percent of State/Federal systems offer Bactrim/ Septra and virtually all city/county systems do as well. In New York State aerosolized pentamidine is infrequently used because it must be administered using a nebulizer. Medical personnel there and elsewhere are concerned that such treatment could facilitate transmission of tuberculous infection and have, therefore, reduced its use in favor of Bactrim/Septra.

Access to Experimental Therapies and Clinical Trials

Inmates have been largely excluded from clinical trials by 1983 Federal regulations that were intended as safeguards against exploitation of inmates in medical research. Some have called for continued exclusion of inmates, contending that true informed consent and confidentiality are impossible within a correctional setting. However, advocates have increasingly called for liberalization of the regulations to allow enrollment of inmates in Phase II–III (efficacy) trials without placebo arms.

Although advocates of liberalization do not deny the difficulties of obtaining informed consent and preserving confidentiality in correctional facilities, they argue that inmates have the right to decide whether or not to participate in research. Moreover, their exclusion from trials and access to investigational new drugs deprives inmates of opportunities to improve the quality of their lives and perhaps to live longer.¹⁴

As an alternative to clinical trials, patients are now able to access experimental drugs through the so-called "parallel track," or compassionate use. However, as table 21 shows,

access to both clinical trials and experimental therapies, through the parallel track mechanism or otherwise, has been limited in prisons and jails. Only nine State/Federal systems (18 percent) and four responding city/county systems (13 percent) make experimental HIV therapies available to inmates. Six State/Federal systems (12 percent) report having inmates involved in clinical trials. These include Colorado, Maryland, New York, Texas, Utah, and the Federal Bureau of Prisons.

A model program is the AIDS Clinical Trials Unit (ACTU), a collaborative effort of the University of Texas Medical Branch at Galveston and the Texas Department of Corrections. Texas inmates participate in clinical trials alongside noninmates. Inmates do not, however, participate in any trials with placebo arms. Otherwise, inmates are offered the same range of trials as nonincarcerated individuals. It can take almost twice as long to enroll inmates as noninmates due to unique administrative and transportation requirements. After enrollment in the trial, copies of the signed informed consent and treatment protocol are mailed to the inmate's institution for use in case of adverse reactions or complications and to alert staff that the inmate will be in possession of medications. Currently, one third of all participants in ACTU clinical trials are Texas State prison inmates.15

The Maryland Division of Correction has also implemented multicenter AIDS clinical trials in collaboration with Johns Hopkins University. The AIDS clinical trials unit of Johns Hopkins established a subunit within the correctional system and enrolled eligible inmates in (nonplacebo) Phase III clinical trials in an effort to expand inmates' treatment options. As in Texas, special procedures were implemented to facilitate inmate transport and administration of medication.¹⁶

In the Federal Bureau of Prisons, inmates have access to clinical trials being conducted in the community. It is Bureau policy, however, that there be no trials solely for inmates. This decision was made to avoid the appearance of any abuses, given the history of prison medical research.¹⁷

Rhode Island: A Cooperative Program with Continuity of Care

A major problem in the treatment of inmates with HIV disease has been the lack of continuity of care when the inmates are released into the community. A cooperative Rhode Island program has effectively tackled this problem. In conjunction with an aggressive HIV testing program,

inmates at the Rhode Island State prison are provided a comprehensive range of HIV-related services including peer education, HIV testing and counseling, complete onsite ambulatory care, and postrelease followup. This innovative program is staffed by professionals from a variety of disciplines: an attending physician and rotating infectious disease fellows from Brown University, four health education specialists (two of whom are social workers), two registered nurses, and two psychologists. ¹⁸

This program is remarkable for its degree of cooperation between the State health department, State department of corrections, and a private university, as well as the continuity of care provided from intake through postdischarge. Although inmates are seen at the prison, the team of professionals are viewed as a travelling AIDS clinic offering specialized consultative services.¹⁹

Inmates with HIV disease are provided with discharge planning including referrals to community-based agencies. Preparations begin three months before an inmate is released when the case manager is notified. Staff tailor a case management plan for the inmate based on psychosocial and medical evaluations. Physicians from Brown maintain periodic contact with former inmates and, in the case of noncompliant former inmates, staff attempt to reestablish the discharge plan. Often former inmates are treated on an outpatient basis by the same physicians who treated them while incarcerated. Compliance rates with postrelease medical appointments have been very high, due to the communication between the HIV-management team and inmates' families. This is impressive given that most former inmates have histories of serious drug use.

As a result of this program, care delivery has been enhanced and fewer expensive visits to off-site facilities have been necessary, resulting in substantial cost savings. The program has provided valuable training opportunities for the infectious disease fellows, and it is viewed by the health department as an important strategy for reducing the spread of HIV in the community at large. The Rhode Island program has shown itself to be worthy of replication in other correctional systems.

Medical schools and hospitals are working closely with correctional departments in several other promising programs to provide state-of-the-art care to inmates with HIV disease. These include programs with Johns Hopkins University (Maryland); Yale University (Connecticut); University of Texas Medical Branch (Galveston);²⁰ and St. Clare's Hospital (New York). St. Clare's, which maintains a secure unit for New York State inmates with HIV disease,

also operates a parolee clinic. Many of the inmates who were in the secure unit continue to be seen by the same medical staff in the Parolee Unit after they are released. Those requiring hospitalization may also be admitted to St. Clare's nonsecure units.²¹

Psychosocial and Supportive Services

The already serious psychological difficulties associated with HIV disease are magnified by the stresses of incarceration. This stress may be related to inmates' perceived lack of control over their treatment, fear of not receiving emergency care when needed (due to their necessary reliance on correctional officers to summon assistance), and watching their friends deteriorate and die in very close proximity.²²

Some of these stress-inducing factors can only be addressed by improved medical care and treatment. Some may also be improved through ongoing counseling and psychosocial support services. Moreover, counseling and supportive services can encourage noninfected inmates to practice HIV risk-reduction behaviors as well as help HIV-infected inmates cope with their illness.

Correctional health services staff and AIDS service organizations offer a variety of individual and group programs for HIV-infected inmates in some systems. Ninety percent of State/Federal systems and 65 percent of city/county systems report that they offer at least some supportive services for inmates with HIV. Staff of the correctional system provide counseling or support groups in two-thirds of State/Federal systems and 20 percent of city/county systems.

The number of systems offering supportive services may obscure the difficulty of providing the needed quantity and quality of services. Many counselors must juggle heavy caseloads so that inmates may not receive the attention they need. Few correctional systems have full-time professional counselors serving HIV-infected inmates. Moreover, bilingual counselors are often not available in facilities with Spanish- or other non-English-speaking inmates with HIV disease. With limited internal staff counseling resources, a number of correctional systems have turned to peer support programs and to external AIDS service organizations for assistance in providing supportive services.

Peer counseling or support groups are offered in 52 percent of State/Federal systems and 40 percent of city/county systems. These programs may face resistance from correctional authorities and problems resulting from regulations in facilities. For example, there may be prohibitions against

group meetings without an officer being present or the facility administration being notified of the purpose, which seriously threatens confidentiality. The lack of professional credentials among inmate peer counselors may also pose credibility problems with correctional staff. However, in some respects, inmates may be in the best position to offer support to their fellows. According to Sarah Dubik-Unruh, who has established a successful HIV peer education and support program in Massachusetts prisons and jails, "one of the greatest sources of support for HIV-infected inmates appears to be their own peers; many inmates have demonstrated great sensitivity and support to their infected friends and cellmates."²³

The ACE program at the women's prison at Bedford Hills, New York, was discussed in chapter 3. In addition to providing HIV educational programs, ACE also conducts peer support groups and provides medical advocacy to female inmates with HIV. ACE has established a "buddy" program within the prison as well.²⁴

External AIDS service organizations and other community groups provide supportive services in 52 percent of State/Federal systems and 55 percent of city/county systems. These organizations have also faced resistance from correctional administrators, but survey results reflect that many have been able to gain access. Social Justice for Women (at Framingham women's prison in Massachusetts) and the Arkansas Women's Project both provide extensive supportive services to female inmates with HIV in their States. These services include support groups, individual counseling, medical advocacy, and discharge planning. The Framingham program provides counseling and other supportive services to 200–300 women per month and case management for about 350 HIV-infected women per year.

As discussed in chapter 3, AIDS Project Los Angeles, an AIDS service organization, has published a self-care manual for inmates with HIV.

Drug Treatment

Drug treatment is a critical component of a comprehensive HIV prevention and treatment strategy within correctional institutions. The number of inmates with histories of drug use has increased in recent years as a result of mandatory sentencing for drug offenders. In 1991 drug offenders accounted for 57 percent of inmates in the Federal Bureau of Prisons.²⁵ In 32 State/Federal systems providing responses, a median of 35 percent of male inmates (range 1–99 percent) and 30 percent of female inmates (range 0–99 percent) were estimated to have histories of injection drug

use. Among 19 city/county jail systems, the median estimates were 40 percent for men (range 5–90 percent) and 49 percent for women (range 10–90 percent). These estimates refer to injection drug use only and exclude use of crack and other drugs that are not normally injected. Alcohol abuse is also a widespread problem among inmates.

In any case, significant percentages of inmates have substance abuse problems and, as a result, correctional systems have a unique opportunity to offer treatment to a "captive" population. Various drug treatment modalities are found in correctional settings including intensive residential programs based on the therapeutic community model, ambulatory counseling, and 12-step and other self-help approaches such as Narcotics Anonymous.

All but two State/Federal systems and 77 percent of responding city/county systems report providing some form of drug treatment for inmates. However, a 1989–90 American Jail Association study found that three-quarters of all jails in the United States did not provide drug education, group therapy, discharge planning and referral to community drug treatment agencies. ²⁶ Due to high turnover and short lengths of stay, jails clearly have more difficulty providing drug treatment services.

Table 22 shows that more than 60,000 inmates in the correctional systems participating in the NIJ/CDC survey (7 percent of the inmates in these systems) are in some form of drug treatment, including more than 6,000 (10 percent) in therapeutic community-model residential programs, more than 20,000 (32 percent) in ambulatory substance abuse counseling, and more than 20,000 (32 percent) in 12-step programs.

Based on the systems' own estimates of the percentage of their inmates with histories of injection drug use, their inmate populations by gender, and their reports regarding numbers of inmates in residential treatment and ambulatory counseling, we can roughly estimate the extent to which drug treatment programs in prisons and jails are able to meet the need. The figures are provided in table 23. It is important to offer several qualifications: The estimates of need are understated, since they are based only on injection drug users. The estimate of supply is overstated, since it includes and gives equal weight to residential programs and ambulatory counseling, which includes a broad range of treatment intensities. Given these distortions—which together tend to inflate the percentages of inmates with a need for drug treatment who are able to receive treatment-table 23 indicates that actual participation in drug treatment in correctional facilities falls short of the need by more than 70 percent in State/Federal systems and more than 90 percent in city/county jail systems. The shortfall seems more severe for men than for women and, not surprisingly, appears more dramatic in city/county than in State/Federal systems.

The general conclusion regarding a shortfall in drug treatment services finds corroboration in a 1991 General Accounting Office (GAO) report. Based on a 1991 study of five States—New York, Louisiana, Michigan, Washington, and Wisconsin—GAO estimated that State correctional systems have the capacity to treat fewer than 20 percent of the estimated numbers of inmates with substance abuse problems.²⁷ An independent report suggests for example, that the Rikers Island drug treatment program is able to accommodate only 10 percent of New York City's inmates,²⁸ far short of the number estimated to have substance abuse problems.

The discrepancies between inmate; need for, and enrollment in, drug treatment no doubt reflect some combination of insufficient capacity and insufficient utilization. A Bureau of Justice Statistics report, based on a June 1990 census of State/Federal correctional facilities, shows that Federal inmates were using only 62 percent of drug treatment capacity, while State inmates were using 78 percent of capacity. A 1991 GAO report concluded that only about half of the slots in the Federal Bureau of Prisons' intensive drug treatment programs were filled, although the FEOP strongly disputed this conclusion.

The Illinois Department of Corrections has developed a comprehensive program of intake assessment, education, and treatment intended to reach all inmates with substance abuse problems. All adult facilities in Illinois have self-help programs, four male facilities and one female facility offer residential drug treatment, three facilities offer intensive ambulatory treatment, and two facilities provide special programs for dually diagnosed (substance abuse and mental illness) inmates.³²

It is important to note that even if capacity falls short of demand, some correctional systems do offer high-quality drug treatment. New York's Sing-Sing Correctional Facility, as well as facilities in Delaware and Oregon, have intensive residential programs. Yet these programs have enough beds to serve only a small fraction of the inmates in need.

An urgent priority for corrections remains expansion and diversification of drug treatment programs. Drug treatment ultimately saves money, since it costs far less than building more new prisons, and it can save lives lost to HIV/AIDS and other medical and mental conditions related to drug use.

Table 22
INMATÉS IN DRUG TREATMENT,
NOVEMBER 1992-MARCH 1993°

		U.S. State/Federal Prison Systems (N=51) U.S. City/County Jail Systems (N=31)						stems						
	Ма	les	Females		Total		Males		Females		Total		To	tal -
Type of Treatment	N	%	N	%	N	%	N	%	N	%	N	%	N	%
Therapeutic Community	5,523	10%	614	11%	6,137	11%	202	6%	90	6%	292	6%	6,429	10%
Other Residential Treatment	9,120	17	1,082	19	10,202	18	472	15	106	, 7 ,	578	13	10,780	17
Ambulatory Counseling	16,758	32	1,898	34	18,656	32	1,092	35	470	33	1,562	34	20,218	32
12-Step Programs	17,619	33	1,578	28	19,197	33	1,212	39	734	51	1,946	43	21,143	34
Other	3,688	7	388	7	4,076	7	150	5	30	2	180	4	4,256	7
Total	52,708	99%º	5,560	99%°	58,268	101%	3,128	100%	1,430	99%°	4,558	100%	62,826	100%

^oDue to rounding.

Source: NIJ/CDC Questionnaire Responses.

Table 23

CORRECTIONAL INMATES WITH HISTORIES OF INJECTION DRUG USE WHO ARE IN RESIDENTIAL DRUG TREATMENT OR AMBULATORY COUNSELING NOVEMBER 1992-MARCH 1993

	State/Fe	deral Prison ((N=29)°	Systems	City/County Jail Systems (N=19)°				
	Males	Females	Total	Males	Females	Total		
Estimated number of inmates with histories of injecting drug-abuse ^b	113,123	6,215	119,338	31,720	4,718	36,438		
Number in residential treatment or ambulatory counseling	31,401	3,594	34,995	1,766	666	2,432		
Percent in treatment	28%	58%	29%	6%	14%	7%		

^oSystems that did not report estimated percentages of inmates with injecting drug use histories have been excluded from this analysis.

Source: NIJ/CDC Questionnaire Responses.

It is worth noting, as well, that offenders with substance abuse problems may be diverted into treatment before they ever reach correctional facilities. An Arkansas program, for example, allows nonviolent offenders to enroll in drug treatment programs rather than be tried in Circuit Court. By offering drug treatment prior to imprisonment, State officials hope to prevent recidivism. A large percentage of criminal cases in the State are believed to be drug related. Individuals appearing before the court are assessed by drug treatment specialists. Drug treatment recommendations may inform orders, sentences, or, if the offender goes to prison, conditions for parole. The Center for Substance Abuse Treatment, CDC, and the State Justice Institute have collaborated with State officials to support this effort in Arkansas.³³

Endnotes

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- 8. See M.E. Malone and Elizabeth Neuffer, "AIDS on Rise in Prisons," *Boston Globe*, March 29, 1992, pp. 1, 18.
- 9. Efrain Hernandez, "State to Study AIDS in Prisons," Boston Globe, December 9, 1992, pp. 31, 34; Hernandez, "Prison Care Debated," Boston Globe, December 22, 1992, pp. 25, 30. See also DeGroot, "Inmates and AIDS," p. 5. Dr. DeGroot's letter is extremely critical of medical care for Massachusetts prisoners with HIV. She was appointed to the correctional AIDS Task Force.
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- 13. CDC, "Recommendations for prophylaxis against *Pneumocystis carinii* pneumonia for adults and adolescents infected with human immunodeficiency virus," *Morbidity and Mortality Weekly Report*, 41, no. RR4 (1991): 1–11.
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Chapter 8

Legal Issues

There continues to be a great deal of litigation related to HIV/AIDS in correctional facilities. Cases involve inmate challenges to correctional systems' policies and practices regarding HIV testing, housing, and correctional management of inmates with HIV, disclosure of HIV-related information, and medical and psychosocial services. In most, but not all, instances, courts have upheld established correctional policies, although these are often quite different in intent and effect. There have also been criminal cases filed for alleged HIV transmission and sentencing decisions in which HIV symptoms played a role or in which defendants asked that their HIV status be considered. This chapter presents an update on legal developments. Cases related specifically to tuberculosis are discussed in a companion report, Tuberculosis in Correctional Facilities.

Issues Raised by Inmates

Challenges to Mandatory Testing

In Walker v. Sumner, 917 F.2d 382 (9th Cir. 1990), the Federal Appeals Court for the Minth Circuit declared that prison officials must provide evidence of the purpose of a policy and how it furthers a legitimate penological interest.² The court reversed a District Court's summary judgment concerning Nevada's mandatory HIV-testing policy, holding that the State had offered no evidence that its policy "was reasonably related to legitimate penological interests" as that principle was enunciated by the U.S. Supreme Court in Turner v. Safley, 482 U.S. 78, 107 S.Ct. 2254 (1987). No evidence had been offered in the affidavits or testimony concerning these issues, and at trial no evidence was presented regarding how the test results were to be used. The Appeals Court ruled that the State had offered only conclusory allegations that its mandatory HIV-testing policy furthered a legitimate penological interest.

In addition to Walker v. Sumner, a number of other cases have addressed the issue of HIV and STD testing. Several

recent cases have cited the Tenth Circuit's 1989 decision in Dunn v. White, 800 F.2d 1188 (10th Cir. 1989), cert. denied, 110 S.Ct. 871 (1990) in rejecting appellants' claims that they were unconstitutionally tested for HIV and segregated from the general prison population. In Ormond v. Mississippi, MS Sup.Ct., No. 89-KA-0221, the Mississippi Supreme Court, basing its decision on Dunn, ruled that Mississippi did not violate the rights of an inmate when it treated him for gonorrhea.4 The court in .Dunn affirmed the State's contention that its treatment of the inmate outweighed his privacy interests, in light of its duty to prohibit the spread of sexually transmittable diseases in the prison. In *Dunn*, noted the Mississippi Supreme Court, the appeals panel "balanced 'the scope of the particular intrusion, the manner in which it is conducted, the justification for initiating it, and the place in which it is conducted," and ultimately found "HIV testing permissible and not in violation of the Fourth Amendment or privacy interests." In declaring the related portion of Ormond's appeal without merit, the court ruled that his gonorrhea treatment had been provided by the health department in the normal course of its operation, in the legitimate interest of "protecting inmates at the jail from a communicable disease and in treating and providing for the health of inmates . . . The State's interests outweigh the privacy interests of the defendant, and the method chosen to administer the treatment for gonorrhea was a proper mechanism."6 Both cases may provide a precedent in favor of mandatory HIV testing and treatment.

Confidentiality

The confidentiality of HIV antibody test results has also been the subject of litigation. In *Doe* v. *Meachum*, 126 F.D.R. 444 (D. Conn. 1989), a Connecticut case challenging the correctional system's management of HIV-infected inmates, a Federal District Court, responding to a series of pretrial motions, recognized the privacy interests of inmates in their medical records. Through the use of protective orders, the court limited disclosure of those records to

those individuals involved in the litigation who had need for access to them. The court also allowed HIV-positive inmates to testify with their identities disguised and using fictitious names.

Discovery continues in Capaldini v. Sheriff of San Francisco, CA App.Ct. 1st Dist., No. A0525533, 1991, a California case that considers the constitutionality of the San Francisco County Sheriff's Department's plan to comply with California Proposition 96. Proposition 96 is a voterapproved 1988 law that requires medical workers in jails and prisons to disclose the names of inmates with communicable diseases to correctional workers responsible for supervising them.⁷ After a lengthy pretrial exchange of discoverable material in the case, plaintiff's counsel have concluded that, with some modifications, the County Sheriff's implementation plan, which places tight controls on distribution of the information, is acceptable. Counsel for the plaintiff expect to enter into a stipulation with the Sheriff's Department and to make a motion to dismiss the case without prejudice to the plaintiffs.8

Doe v. City of Cleveland, 788 F.Supp. 979 (N.D.Ohio 1991) involved an arrestee's civil rights action against the City of Cleveland alleging violation of his Fourth Amendment right to be free from unreasonable seizure, his Fourteenth Amendment right to privacy, and his Fourteenth Amendment right to due process. Following a dispute in which Doe allegedly stabbed another man, Cleveland police were summoned to the scene. The victim told police that Doe had stabbed him and that Doe was a homosexual who had AIDS. Doe was arrested and during booking at police headquarters the arresting officers advised the booking officer that Doe had AIDS.

In a judgment for the defendant the District Court held that the inmate had a constitutionally protected privacy interest in nondisclosure of his HIV status, but the city's policy with respect to recording that information was not unconstitutional. Relying in part on the reasoning of the court in *Doe* v. Borough of Barrington, 729 F.Supp. 376 (D.N.J. 1990), in which individual police officers and a city were found liable for the disclosure of the fact that a defendant actually had AIDS, thus violating his family members' right to privacy, the court in the Cleveland case unequivocally affirmed the privacy interest of an arrestee in nondisclosure of information about his HIV status, although in this case the disclosure was deemed to be constitutional. The case may have applicability to correctional settings.

In People v. Juan R., 589 N.Y.S.2d 256 (1992), a Bronx, New York, court held that a criminal defendant had a

constitutionally guaranteed right to claim his constitutionally guaranteed right to keep his HIV status private. However, the court also held that the defendant could not later argue that the 26 months it took the court to decide the privacy issue denied him the right to a speedy trial. The defendant, Juan R., was charged with biting an officer and telling the officer that he had AIDS. Concerning the attack, the State had sought and received two orders from the court. The first order had forced the defendant to submit to an HIV antibody test and the second had allowed the State to report the defendant's positive test results to the prosecution and a grand jury. The defendant was subsequently indicted for attempted murder.

Segregation

The trend in corrections is to mainstream HIV-infected inmates or to manage them on a case-by-case basis, but there has been no definitive case yet.12 Cases challenging segregation of HIV-infected inmates continue to be quite common, with court rulings generally upholding correctional policies. A notable exception is Nolley v. County of Erie, 776 F. Supp. 715 (W.D.NY 1991), which represents an important decision against segregation of HIV-infected inmates. It involved an action by a former inmate infected with HIV against a correctional facility and various facility administrators, alleging constitutional and statutory violations in connection with her housing and other treatment. During three separate periods of incarceration, Ms. Nolley was placed in a segregated unit for mentally disturbed and suicidal inmates and denied access to the law library and religious services. She never developed AIDS, and the decision to segregate Nolley was based solely on her HIVpositive status. Her housing assignment was never reviewed once she was assigned, and she was never afforded a hearing. The District Court found that her segregation effectively disclosed her medical condition, violating her constitutional right to privacy, and lacked a legitimate penological purpose as defined in Turner v. Safley, 482 U.S. 78, 107 S.Ct. 2254 (1987). 13 It reasoned that segregation is so remotely connected to the asserted goal of protecting general population inmates as to render the policy irrational and arbitrary.

Moreover, the District Court held that the facility's policy of placing a red sticker on the inmate's possessions, revealing her HIV-positive status, violated her privacy rights under New York's Public Health Law and under the Federal Constitution. The sticker system was also faulty because it only identified inmates known to be HIV positive and failed to protect staff or other inmates from those who, unbe-

knownst to correctional officials, were also infected with HIV.14

Further, the court held that the inmate's due process rights were violated when she was segregated, based solely on her HIV-positive status, in a ward known to house inmates who were suicidal and psychologically unstable. The segregation policy did not, however, violate equal protection, since the segregated inmates were HIV-infected and thus not similarly situated with other inmates.15 The District Court judge noted that a mental health wing was a strange place to house an HIV-positive inmate. He also reasoned that the law created a liberty interest for Ms. Nolley to be placed in the general population absent a proper finding that she needed to be segregated. No such finding was made that she was at risk in the general population or that her medical condition required segregation. Placement in a segregated unit was not contemplated as part of a normal prison sentence.

The decision in *Nolley* represents a rejection of segregation policies on a number of grounds. However, on September 3, 1992, the Federal District Court judge reversed his assessment of punitive damages against the superintendent of the county jail. In reversing the punitive damage award the court said, "Without question . . . [the superintendent] acted deliberately and over some period of time. I cannot find, however, that he acted maliciously or with callous indifference.¹⁷

In Harris v. Thigpen, 941 F.2d 1495 (11th Cir. 1991), the Federal Appeals Court for the 11th Circuit upheld the Alabama Corrections Department's regulations requiring the HIV antibody testing of inmates and the segregation of those found to be HIV positive. The Eleventh Circuit's decision held that the U.S. District Court for the Middle District of Alabama had correctly found that the Alabama prison system was not deliberately indifferent to the medical and psychiatric needs of seropositive inmates. The Appeals Court affirmed the District Court's ruling that HIV-positive inmates' constitutionally protected privacy rights were not violated by Alabama prison policy requiring mandatory HIV testing and segregation. "Mandatory testing and segregation still apparently lie within the perimeter of an important correctional policy debate," wrote the Appeals Court. 18 As such, it represents precisely the type of urgent problem of prison reform and prison administration with which we as a court are "ill equipped to deal," added the court.19

The Appeals Court ruled that even if Alabama is in the minority, its combined policy of testing and segregating is

connected to the legitimate goal of reducing HIV infection and reducing violence among inmates. Wrote the court, "It is inescapable that corrections systems should attempt to (1) prevent high risk behavior among inmates, (2) make reasonable efforts to protect all inmates from victimization, and (3) avoid any practices which could lead to unprotected blood exposure. The bounds of these duties as they relate to AIDS, and whether negligence or constitutional wrongs are involved, have not yet been clearly defined. At this early stage of the diagnosis and treatment of AIDS, these matters should be left in the hands of prison officials with the help of their medical staffs."²⁰

However, the Appeals Court in Harris v. Thigpen remanded to the District Court the question of whether HIV-infected inmates should be entitled, under Section 504 of the Rehabilitation Act of 1973, to participate in more prison activities.²¹ Under Section 504 of the Rehabilitation Act, courts have held that persons who are HIV-infected are handicapped persons²² and entitled to "reasonable accommodation" of their needs in employment and other areas if they are "otherwise" qualified to participate in such activities or hold such positions. In remanding to the District Court the issue of "whether the blanket exclusion of HIV-positive inmates from general prison population housing, educational, employment, community placement, and other programs violates Section 504 of the Rehabilitation Act," the 11th Circuit held that the District Court had erred in failing to determine the risk of transmission not merely with regard to prison in general, but with regard to each program from which the appellants had been automatically excluded. The District Court, the Appeals Court held, is obligated to determine whether reasonable accommodations by the Alabama Department of Corrections "could minimize such risk to an acceptable level" relying not on "general findings" but on a "particularized inquiry" with full findings of fact and conclusions of law as to each program and activity from which HIV-positive inmates are being excluded and a proper weighing of the dangers of transmission in each context.23

The Appeals Court also directed the District Court to reconsider whether the lack of adequate access to the prison library denies HIV-infected inmates the right of access to courts, thus violating the 1st and 14th Amendments. The parties continue to dispute the scope of the issues remanded to the District Court, and the case is not expected to come to trial for some time.²⁴

In *Moore* v. *Mabus*, 976 F.2d 268 (5th Cir. 1992), another case that considered the constitutionality of segregation of HIV-infected inmates, the Federal Appeals Court for the

Fifth Circuit partially reinstated a suit brought by two HIV-positive Mississippi prison inmates claiming their medical needs were treated with "deliberate indifference." The initial multicount suit maintained that the plaintiffs had been denied privacy and due process and had been placed unlawfully in a segregated area of the Mississippi State Penitentiary in Parchman, Mississippi, reserved for HIV-infected inmates. The inmates further alleged that the prison's operators were not responsive to their special medical needs and failed to provide medicine to treat their HIV-related illnesses. ²⁶

The decision by the Appeals Court came on appeal of a Federal District Court's dismissal as frivolous of the original *informa pauperis* action alleging mistreatment because of HIV-positive status.²⁷ Although the Appeals Court ruled that the privacy rights of the inmates had not been violated by their segregation, it remanded the case for rehearing on two important grounds: first, that the original claim had not been frivolous, and second, that the plaintiffs were entitled to court-appointed counsel because of the complexities and importance of the HIV-related issues involved.

At issue in *Diaz* v. *Romer*, 961 F.2d 1508 (10th Cir. 1992) was a proposed agreement between the Colorado Department of Corrections (CDOC) and inmate classes that would have ended CDOC's policies for mandatory HIV testing of inmates and segregating those who tested positive. In proceedings on the fairness of the policy changes, the District Court created two subclasses of inmates: those who were HIV-positive and those who were HIV-negative. The class of HIV-negative inmates then sought maintenance of the original testing and segregation policies, and the District Court ruled that these policies should be maintained. The Appeals Court ruled that the District Court acted properly in its decision upholding the State's original policies regarding mandatory testing and segregation of HIV-positive inmates. Ironically, the CDOC has since ended its segregation policy. The Appeals Court also dismissed the State's claim that the District Court had lacked jurisdiction over the Department of Corrections' HIV policy.²⁸

Writing for the court, the Chief Judge of the 10th Circuit declared, "The District Court's order which created the subclasses in this case included findings of fact and conclusions of law which explained the 'clear, obvious conflict of interest' between HIV-positives and HIV-negatives." 29

"Williams v. Orange County, Florida, 90-122-CV-ORL-19, (M.D. Florida) challenges the segregation of HIV-positive inmates in an Orlando County jail. The case,

currently in discovery, alleges that prison authorities violated plaintiff inmates' right to privacy by exposing their HIV-positive status to corrections workers and other inmates. The suit further alleges failure to provide adequate treatment, failure to perform T cell testing, failure to administer zidovudine (AZT) to those whose T cell counts have fallen below acceptable levels, failure to provide HIV education and prevention, and denial of access to courses, programs, and work opportunities available to other inmates.

In Paramo v. Smith and Paramo v. Matthews, Nos. 89-3011-R, 89-3018-R (D. Kansas), a Federal District Court dismissed an inmate's claims that he was segregated because he carried an infectious disease. At trial plaintiff Thomas Richard Paramo, an inmate at the U.S. Penitentiary in Levenworth, Kansas, alleged that his placement in segregated confinement was improperly based on his "medical condition" and that information regarding the condition had been "improperly secured and disseminated" by prison officials. Paramo also charged that he was not provided an impartial hearing officer during administrative reviews in the case.30 In rejecting the petitioner's appeal as without merit the court wrote, "The limited isolation of plaintiff upon his initial entry into the prison is supported by legitimate goals of diagnosis and institutional security, and his eventual placement in segregation for disciplinary reasons is supported by the obvious need for institutional order."31 The court also denied Paramo's request for relief based on the anxiety and duress he suffered as a result of the disclosure of his medical condition. "The court," wrote the judge, "accepts the gravity of his concerns and does not minimize the near-certainty that plaintiff has been identified both by staff and other inmates as HIV-positive. Such mental distress, however, does not entitle plaintiff to relief ,,,32

Consent decrees have, in some cases, resolved class actions over segregation. In March 1992, for example, attorneys for HIV-infected New Jersey inmates agreed on the terms of a consent decree to cease its segregation of inmates with AIDS from the general population.³³ The settlement in *Roe et al.* v. *Fauver et al.*, D.NJNo. 88–1225–AET also includes a promise by the New Jersey correctional department that ends a four-year dispute over treatment and education programs for HIV-infected inmates.

Access to Programs

In Farmer v. Moritsugu, 742 F. Supp. 525 (W.D.Wisc. 1990), a Federal District Court in Wisconsin upheld the policy of the Federal Bureau of Prisons that prohibits HIV

inmates from working in prison hospitals or food services as a necessary measure to maintain order and security. The judge dismissed the inmates' complaint, ruling that there was no equal protection violation.

Additional issues have arisen under the Federal Rehabilitation Act and the Americans With Disabilities Act.³⁴ Although a significant risk of transmission of HIV could justify exclusion of infected persons from jobs for which they are otherwise qualified,³⁵ the Ninth Circuit has found, based on reasonable medical judgments, that there is no significant risk of transmitting HIV disease except through "(1) intimate sexual contact with an infected person; (2) invasive exposure to contaminated blood or certain other bodily fluids; or (3) perinatal exposure (i.e., from mother to infant)."³⁶

In Casey v. Lewis, 773 F. Supp. 1365 (D. Ariz. 1991), a district court in Arizona considered the Arizona Department of Corrections' prohibition against assignment of HIV-infected inmates to food service jobs. The court ruled that the policy violated Section 504 of the Rehabilitation Act. The Department of Corrections, wrote the court, can make an individualized determination but no blanket policy is allowed under Section 504. It must show that each HIV-positive inmate would present a significant risk of transmitting HIV if he or she worked in food services and that no reasonable level of accommodation would reduce the risk to an insignificant level. The court found that the Department of Corrections' argument about security concerns are only conclusory facts. The plaintiff inmate's motion for summary judgment was granted and the policy was enjoined.

Adequacy of Medical Care

Much of litigation focuses on the adequacy of medical care and associated services for inmates with HIV disease. It has been argued that medical care for inmates with HIV suffers from application of a double standard. In testimony before the National Commission on AIDS, Scott Burris of the Pennsylvania ACLU contrasted court findings in Harris v. Thispen and other prison cases to that of Weaver v. Reagan, the leading case regarding the availability of zidovudine to Medicaid patients. In the District Court case of Harris, as in most other prison cases, the court held that inmates are not entitled to state-of-the-art medical care and that reasonable care according to community standards meets the constitutional requirement. By contrast, Burris notes that in Weaver, neither the trial court nor the Court of Appeals was deterred by medical disagreement about the utility of

zidovudine and held that zidovudine must be provided under Medicaid coverage.³⁹

Discovery continues in Inmates of New York With Human Immune Deficiency Virus v. Cuomo, No. 90-CV-252, (U.S.D.C., N.D. New York), a large Federal class-action lawsuit, the outcome of which may have a profound impact on conditions of confinement for inmates with HIV disease in New York State. The plaintiffs are represented by four attorneys assisted by a number of medical experts on HIV.⁴⁰ Plaintiffs are in the process of receiving the medical records of more than 200 inmates and computer records for health care on the class. Attorneys are in direct contact with more than 700 HIV-positive inmates in the system and have received more than 17,000 AIDS surveillance forms (including multiple forms for some individuals). Early in the case the court refused to allow access to inmates' medical records without specific patient releases. Plaintiffs' counsel began deposing care providers during the spring of 1993, but trial is still some years away.

The recent case of Proctor v. Alameda County, Calif. Super.Ct., Alameda Cnty., No. 693983-8, filed 4/21/92, a lawsuit filed on behalf of a 35-year-old California man who died of AIDS, contends that the plaintiff's life was shortened by several years because of the poor medical care he received while serving a 77-day jail term in 1991. The State suit alleges that the former inmate's civil and constitutional rights were violated during his incarceration in Alameda County's Santa Rita jail. Alameda County and the jail's medical contractor, Prison Health Services Inc., are charged in the action with deliberate indifference to the plaintiff's deteriorating medical condition by failing to dispense the prescribed dosages of his medication. The case, expected to go to trial in fall 1993, alleges violation of Federal civil rights statutes, the Americans With Disabilities Act, and an Alameda County ordinance that prohibits the county jail and other facilities from discriminating on the basis of sexual orientation. The action alleges that the plaintiff received only half of his prescribed daily dose of zidovudine during his first 10 days in jail and on a number of other occasions. Jail authorities also allegedly refused to give the plaintiff medications that a doctor had prescribed for his PCP and mouth sores or any medication for a persistent cough and respiratory infection.

The civil suit contends that "such denial of medical attention was made in deliberate indifference" to the plaintiff's medical needs or "in retaliation for his exercising his constitutional rights to contest the criminal charges against him." Further allegations made by the plaintiff allege that the plaintiff's physician was denied access to his patient in

the spring of 1991 and that the jail then delayed the plaintiff's access to medical and dental care. On April 15, 1991, the plaintiff allegedly was transferred to a solitary confinement cell without any explanation, warning, or reprimands. The suit alleges that despite numerous written requests to ascertain the reason for his punishment, the plaintiff was given no answer until May 10 when a deputy sheriff informed him he was being segregated because he was a homosexual. According to the plaintiff's doctor, who before his incarceration had estimated the plaintiff's life expectancy at three to five years, the plaintiff's life could have been shortened by as much as three years as a result of missed medications and stress during his incarceration.⁴¹

In Fitzhugh v. Wyoming Board of Charities and Reform, No. 91–CV–0106–B, DC Wyoming (1991), the plaintiff alleged that AZT (zidovudine) was not administered in compliance with FDA guidelines. After the defendants learned that new FDA standards had been issued they began to administer the drug. The court ruled that the failure to determine new standards was not deliberate indifference on the part of the defendants and that there was no evidence of maliciousness, but only, at the very worst, negligence. Approximately two years had passed between the inmate's request for zidovudine and its administration.

Under the agreement in *Roe et al.* v. *Fauver et al.*, D. NJ, No. 88-1225-AET, the New Jersey Department of Corrections promised to provide HIV-infected inmates with comprehensive medical care and education, adhering to U.S. Public Health Service Guidelines; timely department responses to any inmate requests for health services; access to medical records for treating and consulting medical personnel only; and a system of quality assurance for medical care, including regular review of medical procedures and records by outside medical experts.

In response to the growing problem of AIDS in prison, the Texas Civil Rights Project (TCRP) has launched a program to monitor the needs of county jail inmates who are HIV-positive or who have AIDS but are not receiving sufficient or adequate medical treatment.⁴² Although county sheriffs are required by law to ensure that such inmates are provided with adequate and proper medical care, TCRP is receiving complaints to the contrary from inmates and attorneys across the State, particularly in rural areas. TCRP has sent letters to 1,500 defense attorneys representing clients in Texas jails asking for their help in compiling data on the number of inmates who are HIV-positive or have AIDS but are not receiving proper medical care. TCRP has also offered to provide legal backup assistance to attorneys with these types of cases.

Issues Raised by Inmates and Staff

Suits Seeking Mandatory Testing and/or Segregation

Over the last few years, lawsuits by inmates seeking segregation of fellow inmates they deem to be "high AIDS risks" have become quite common. In *Robbins* v. *Clarke*, C.A. 8, No. 90–2431, 10/8/91, a Federal Appeals Court affirmed the decision of the District Court in Nebraska that failure to segregate HIV inmates from the general population does not constitute "cruel and unusual punishment" for noninfected inmates. A Robbins involved three claims by non-HIV-infected inmates in the Medium Security Unit of the Nebraska State Penitentiary charging that corrections officials subjected them to cruel and unusual punishment and denied their rights to due process and equal protection of the law by:

- (1) Conspiring to conceal the identity of inmates testing positive for HIV.
- (2) Failing to take precautions to protect healthy inmates from exposure to HIV by segregating HIV-positive inmates.
- (3) Failing to take precautions to protect uninfected inmates from exposure to contagious hepatitis and TB.⁴⁴

The District Court had sent the inmates' complaint to the Federal magistrate for initial screening, and the magistrate found that only one of the complainants, a prison barber, had a proper claim before the court. However, because the claim "lacked an arguable basis in law" the magistrate and the District Court concluded that the claim should be dismissed as "frivolous," and the 8th Circuit agreed. The inmates' second claim posited that "even if the Constitution does not require prison officials to segregate HIV-positive inmates from the general population, it does require them to take reasonable measures to protect the general population from exposure to the virus, and that it was improper to dismiss the matter "so early in the proceedings." With reference to this claim the Appeals Court ruled that since the inmate had lost a 1989 Federal lawsuit alleging essentially the same issue, he was barred from relitigating it.45

Myers v. Maryland Div. of Correction, 782 F.Supp. 1095 (D.Md. 1992), involved defense motions for summary judgment in a Federal District Court suit originally brought against the Maryland Division of Correction (DOC) by inmates demanding, inter alia, mandatory segregation of HIV-positive inmates. The court appointed counsel to

represent, as intervening defendants, a group of HIV-positive inmates.

As a result of operational changes that the Division of Correction has implemented since the original actions were filed, the following are now provided:

- (1) Extensive education for inmates on AIDS-related issues.
- (2) HIV testing for all incoming inmates who request such testing.
- (3) Testing for all inmates in the standing population who ask to be tested if a physician has made a clinical judgment that testing is appropriate.
- (4) Involuntary testing for inmates who have been found guilty of the violation of an institutional regulation that causes potential exposure to the HIV virus.⁴⁶

In its ruling denying plaintiffs' claims under the cruel-andunusual-punishment clause of the Eighth Amendment, the District Court held that the Division of Corrections' programs and policies, including those adopted since the lawsuit was instituted, did not violate their plaintiffs' rights. The court acknowledged that a risk of HIV infection existed under the current policies, but held that plaintiffs had failed to present evidence that defendants had been deliberately indifferent to that risk in formulating their policies.⁴⁷ To the contrary, the court ruled, it is undisputed that the policies and programs instituted by the Maryland correctional system fall well within the norm of those instituted by other State prison systems. They also conform to applicable community standards outside of the prison context.⁴⁸

In April 1992 in the case of Muhammad v. Federal Bureau of Prisons, D.DC, No. 91-3244 [CRR], a U.S. District Judge in Washington, D.C., rejected a Federal inmate's request for a writ of mandamus compelling the Federal Bureau of Prisons (FBOP) to remove immediately all HIV-positive and HIV-infected inmates from the general prison population. In dismissing the complaint, the judge stated that his court did not have the power to grant the writ because the petitioner did not establish that he had a clear right to relief, that the FBOP had a duty to act, or that there was no other adequate remedy available in the situation. 49 "The remedy sought by plaintiff, that is, segregation of all inmates who test positive for HIV or have AIDS," wrote the judge, "is not a remedy available to the general public, and has not been found generally available to inmates in the courts."50 The court noted that FBOP maintains a policy under which HIVpositive inmates may be segregated "when there is reliable evidence that the inmate may engage in conduct posing a

health risk to another person . . . " and that the approach is "consistent with the general medical understanding that AIDS is not spread through casual contact." 51

In Flanagan v. Shively, 783 F.Supp. 922 (M.D.Pa. 1992), the court concluded that the plaintiff had failed to allege the facts necessary to state an Eighth Amendment violation or any harm flowing from his alleged confinement in segregation with persons he deems "high AIDS risks." 52

A group of non-HIV-infected Missouri inmates have sought an injunction against the integration of HIV-infected inmates. Inmates in protective custody at the Jefferson City facility also filed a lawsuit asking that the department be forbidden from transferring HIV-positive inmates under protective custody to their wing.⁵³

Cases Seeking Other Forms of Protection from HIV Infection

Several inmate petitions for writs of mandamus⁵⁴ have been rejected in unpublished per curiam opinions.⁵⁵ On November 18, 1992, in *In re George H. Van Wagner III*,⁵⁶ 4th Cir., No. 92–8062, the Court of Appeals for the Fourth Circuit refused to act on a writ of mandamus by a Federal prison inmate who claimed that he and other inmate orderlies at a prison in Butner, North Carolina, were improperly exposed to HIV because they were not given appropriate training or protective supplies.⁵⁷

Cases Involving HIV Transmission

Criminal Charges

In February 1993 the New Jersey Superior Court's Appellate Division upheld the attempted murder conviction and 25-year sentence of an HIV-infected inmate who bit a correctional officer. New Jersey v. Smith, NJ Super. Ct., App. Div., No. A-636389-T4.58 According to trial testimony, the incident occurred when Smith, after falling in his cell, was taken to a local hospital for an examination accompanied by two corrections officers who donned rubber gloves on being told the inmate was HIV-positive. The defendant reportedly became angry when hospital staff refused to take an x ray of his back, and when the guards sought to get him back into a patrol car for the return trip to jail, a scuffle ensued during which the guards' gloves came off. After biting one of the officers on the hand, Smith was reported to have said, "Now die, you pig! Die from what I have!"59

In its decision the Appellate Division said it did not matter whether HIV can actually be transmitted by biting as long as the inmate believed that it could. Its ruling included part of the jury instruction given by the trial court judge who said, "Impossibility is not a defense to the charge of attempted murder. That is because our law, our criminal statutes, punish conduct based on state of mind." 60

In oral argument of the appeal, attorneys for the inmate had asserted that the guilty verdict and 25-year prison sentence resulted from public hysteria regarding AIDS and would not have been applied to Smith were he not carrying the virus. At trial, the prosecution had consistently maintained that whether HIV could be transmitted by a bite was legally irrelevant; it was the defendant's intent that mattered. The appellants argued that Smith "was as likely to have caused the death of . . . [corrections officers] by biting them as he was to have caused their deaths by sticking pins in dolls bearing their likenesses" and that the Appellate Division "has the solemn obligation of declaring that in the 1990's ... no reasonable or ordinary person could possibly believe that the HIV virus can be transmitted by biting."61 Attorneys for the appellant argued that "[a] threat by a person with AIDS to kill another by biting should convey precisely the same fear of death to an ordinary person as would a threat to kill by fly swatter, feather pillow, or incantation."62 Since 1989 similar cases in Georgia, Texas, and Indiana have upheld attempted murder charges against infected defendants who bit or spit at people with the intent of transmitting HIV.63

In October 1992 Texas' highest criminal court denied review to a lower court decision upholding a life sentence imposed on an inmate with AIDS who had been convicted of attempted murder for spitting in the face of a corrections officer and stating that he was HIV-infected and "going to take somebody with him" when he went. In Weeks v. Texas. Texas Ct.Crim. App., No. 92-1154, 10/14/92, the Texas Court of Criminal Appeals declined to reconsider the case of Curtis Weeks, the inmate who had testified at trial that he was provoked to spit at the guard after being denied the use of bathroom facilities while being transported between two prisons. At trial in the District Court, two expert witnesses for the State testified that it was possible to infect someone with HIV by spitting on them, while an expert witness for the inmate testified that such transmission was "impossible," adding that there has never been a proven instance of infection by spitting.64 In a statement before the intermediate court, Weeks' attorneys had stated, "Prosecutions such as this one undermine public health efforts and erode government steps to eradicate handicap discrimination. Furthermore, this type of lawless prosecution imperils civil liberties in general."65

On March 31, 1992, the Pennsylvania Superior Court affirmed the conviction of an HIV- and hepatitis B-infected inmate on charges of aggravated and simple assault for throwing his feces into the face and mouth of a corrections officer. In its ruling in *Pennsylvania v. Brown*, PA Super.Ct., No. 165, Harrisburg 1991, the Superior Court rejected the appeal by Rockview Correctional Institution inmate William Brown, who argued that prosecutors failed to prove the intent necessary for an aggravated assault conviction. In his appeal, Brown alleged that the guard did not sustain serious bodily injury as the result of the November 1988 attack.⁶⁶ The guard has tested HIV-negative since the incident.

In rejecting appellant's appeal the Superior Court said the "... act of flinging fecal matter into the face of a prison guard, when appellant had knowledge that he was a chronic carrier of the aforementioned viruses, constitutes an assault by a means of force likely to produce serious bodily injury," and demonstrated a "conscious disregard of risk" to support a conviction for recklessly endangering another person. ⁶⁷ The Pennsylvania court noted that Brown had been counseled by both a physician and nurse on the danger of transmitting HIV through bodily fluids and that there was "sufficient evidence . . . to conclude that appellant indeed intended to inflict serious injury upon . . ." the officer. ⁶⁸

Civil Cases

In Doe v. State of New York, 588 N.Y.S.2d 698 (1992), the claimants, husband and wife, alleged that because corrections officers failed to restrain a hospital inmate, Mrs. Doe, a nurse, was pricked with a hypodermic needle and contracted HIV infection. In a ruling for the claimants, the husband and wife were awarded \$4.3 million in damages, the husband was given an additional \$1 million, and the judge indicated that after her death, the victim's survivors might bring a wrongful death suit for pecuniary injuries resulting from her death.⁶⁹

Indictment and Sentencing of Persons With HIV Disease

The question of whether and how the judicial system should consider HIV infection in its processing of persons accused and/or convicted of crimes has arisen with some regularity in the nation's criminal and appellate courts. In *New York* v. *Rios*, NY Sup.Ct., Kings Cnty., No. SCI 5626/92, 1/19/

93,70 a Kings County, New York Supreme Court judge ruled that a defendant in a drug case who plea-bargained for a reduced sentence and was later determined to be infected with HIV was not entitled to have his plea vacated or sentence set aside. In his decision the judge rejected the argument that the accused was physically or mentally ill as a result of his seropositivity and therefore "unable to actively participate and comprehend the plea-bargaining meeting." As to the defendant's argument that he was too ill to complete the 18-month to three-year sentence, the judge cited a State Supreme Court Appellate Division ruling that "It is well settled that affliction with [HIV] or with AIDS, standing alone, does not warrant a reduction in an otherwise appropriate sentence." Rather, wrote the judge, the defendant and his attorney should consult with the State corrections department concerning alternative programs, such as special housing or a medical parole if it is determined the defendant is terminally ill.71

A New York appeals court refused an HIV-positive appellant's request to reverse a 1988 drug trafficking guilty plea he alleges was entered illegally because he was unaware he was infected with the virus at the time. In rejecting the appeal in *People et al.* v. *Luis Perez, a/k/a Luis Velez*, NY Sup.Ct., App.Div., 2nd Jud.Dept., No. 90–09085, the Appeals Court said there was "nothing in the record which suggests that . . . [the appellant's] physical condition impaired his ability and mental competence . . . nor did the lack of knowledge of his illness at the time have any legal impact upon the priority and validity of the plea agreement." The court also held that the defendant's HIV status did not, by itself, warrant a sentence reduction.

On September 10, 1992, in *State of Washington v. Farmer*, WA Sup. Ct., No. 56583–0, the Washington Supreme Court rejected for the second time a request to reduce the 90-month prison term given an HIV-positive defendant following his conviction of having sex with teenage boys in 1987. At trial the appellant, Steven George Farmer, had been found guilty of two counts each of sexual exploitation of a minor and patronizing a juvenile prostitute.⁷⁴

In rejecting appellant's latest claim, which argued that his 90-month sentence was wrongfully based on crimes for which he was not charged, the Washington Supreme Court wrote, "Farmer's reckless disregard for the lives of juvenile prostitutes is an 'especially culpable mental state' and justifies an imposition of an exceptional sentence; this remains true even though the conduct also might be an element of additional crimes." During its earlier review of Farmer's appeal the court declared that the sentence was "not grossly disproportionate to the gravity of the offense,"

especially when compared with the 30-year maximum sentence he could have received.⁷⁶

On September 15, 1992, in Applewhite v. U.S., 614 A.2d 888 (D.C. Cir. 1992), a Federal Appeals Court for the District of Columbia ruled that a trial judge had not based her revocation of a convicted burglar's probation on the HIV-infected defendant's possible health threat to the community, adding that even if the court had considered the defendant's health status, "it is by no means clear that such reliance was or would be erroneous."77 In his pleadings the appellant, Edgar Applewhite, convicted on two counts of second-degree burglary, argued that in her 1991 decision revoking his probation the trial court judge had improperly concentrated on the fact that he was an HIV-positive drug user. In rejecting appellant's 2-gument, the D.C. Court of Appeals held that the revocation was fully warranted based solely on Applewhite's lengthy history of not complying with probation conditions and missing court hearings.⁷⁸ In relevant part the opinion reads:

the record reveals several factors relevant to the trial court's decision, and there is no reason for us to conclude that any one factor was given impermissibly great weight... But even if the trial court did rely principally on appellant's HIV-positive status in deciding to revoke his probation, it is by no means clear that such reliance was or would be erroneous. Appellant's medical history has a direct potential impact on the public health, especially in light of his history of intravenous drug use. The risk that he might pass the virus to another drug user or to a sexual partner is substantial, since the court obviously cannot guarantee that he will refrain from drug use or sexual activity outside of prison.⁷⁹

In *People v. Bigus*, __ A.D.2d __, 1992 WL 310475 (App. Div., 2nd Dept., 10/26/92), a New York State Appellate Court refused to accept appellant's argument that since he was HIV-positive his sentence should be reduced. The trial court had not considered the defendant's medical condition when sentencing him.

Endnotes

1. For a recent review of litigation on HIV, tuberculosis, and other infectious diseases in correctional facilities, see S. Burris, "Prisons, Law and Public Health: The Case for a Coordinated Response to Epidemic Disease Behind Bars," *University of Miami Law Review*, 47 (November 1992): 291–335.

- 2. Walker v. Sumner, 917 F.2d 382, 388 (9th Cir. 1990).
- 3. This is the legal test under which many systems' testing and segregation policies have been upheld. See B.A. Belbot and R. del Carmen, "AIDS in Prison: Legal Issues," *Crime and Delinquency*, 37 (January 1991): 135–153; *Turner* v. *Safley*, 482 U.S. 78, 107 S.Ct. 2254 (1987).
- "MS Court: Gonorrhea Treatment Didn't Violate Prisoner's Rights," AIDS Litigation Reporter (Westtown, PA: Andrews Publications, September 22, 1992), p. 8770, citing decision in Ormond v. Mississippi, MS Sup.Ct., No. 89-KA-0221.
- 5. Ibid.
- 6. Ibid.
- 7. Telephone interview with Jim Harrigan, Legal Counsel, San Francisco County Sheriff's Department, March 31, 1993.
- Telephone interview with Matt Coles, Staff Attorney, American Civil Liberties Union of Northern California, April 5, 1993.
 - See Johnetta v. Municipal Court, 218 Cal. App.3d 1255 (1990). In Johnetta v. Municipal Court a California Appellate Court upheld the California law requiring HIV antibody testing of persons alleged to have been involved in possible transmission incidents with peace officers or employees of custodial facilities. In the case, brought by a defendant accused of biting a court officer, the Appellate Court held that such a mandatory test did not constitute an unreasonable search and seizure. There is a possibility—albeit remote—that HIV can be transmitted through a bite, the court wrote, and therefore the assailant's test results "would be useful in treating the bitten officer and in easing the officer's anxiety."
- 9. Doe v. City of Cleveland, 788 F.Supp. 979 (N.D.Ohio 1991).
- 10. Ibid., p. 985.
- 11. PWA Support, (Poughkeepsie, NY: Prisoners' Legal Services of New York, Fall/Winter 1992) vol. 4, no. 3: p. 7.
- 12. "Failure to Segregate HIV-Positive Inmates Found Not Violating Federal Constitution," AIDS Policy & Law,

- October 31, 1991, p. 1, citing Judy Greenspan, the former AIDS Information Coordinator of the National Prison Project of the American Civil Liberties Union.
- 13. Under the controlling case of *Turner v. Safley*, 482 U.S. 78, 107 S.Ct. 2254 (1987), any infringement by prison administrators upon a prisoner's meaningful access to the courts must be reasonably related to legitimate penological interests. *Turner* identifies four factors to be considered in evaluating the reasonableness of a prison regulation:
 - (1) There must be a valid, rational connection between the regulation and the legitimate governmental interest put forward to justify it.
 - (2) Whether there are alternative means for the inmate to exercise his or her constitutional right.
 - (3) What impact the exercise of the constitutional right will have on the guards and other inmates and on the allocation of prison resources generally.
 - (4) The absence of ready alternatives is evidence of the reasonableness of a prison regulation. *Turner* v. *Safley*, 482 U.S. 78, 90; 107 S.Ct. 2254, 2262 (1987).
- "NY Woman Awarded \$135,000 for Discriminatory Treatment in Jail," AIDS Litigation Reporter (Westtown, PA: Andrews Publications, October 13, 1992), p. 8832.
- 15. U.S. Const. Amend. XIV.
- 16. "NY Woman Awarded \$135,000 for Discriminatory Treatment in Jail," AIDS Litigation Reporter (Westtown, PA: Andrews Publications, October 13, 1992), p. 8832, citing Nolley v. Erie County, New York et al., W.D.NY, No. CIV-88-1170C, 9/3/92.
- 17. Ibid., p. 8833.
- "Appeals Court Okays Prison HIV Segregation, Remands Reasonable Accommodation Question," AIDS Policy & Law, October 16, 1991, pp. 1, 9, citing Harris v. Thigpen, 941 F.2d 1495 (11th Cir. 1991).
- 19. Ibid.
- 20. "Appeals Court Okays Prison HIV Segregation, Remands Reasonable Accommodation Question," AIDS Policy & Law, October 16, 1991, pp. 1, 10, citing Harris v. Thigpen, 941 F.2d 1495 (11th Cir. 1991).

21. In relevant part § 504 of the Rehabilitation Act provides as follows:

No otherwise qualified individual with handicaps . . . shall, solely by reason of her or his handicap, be excluded from the participation in . . . or be subjected to discrimination under any program or activity receiving Federal financial assistance . . . 29 U.S.C. § 794.

A handicapped person is any person who:

- (1) Has a physical or mental impairment which substantially limits one or more of such person's major life activities.
- (2) Has a record of such impairment.
- (3) Is regarded as having such an impairment. 29 U.S.C. § 706(7)(B).

A person is "otherwise qualified" for purposes of § 504 if he or she:

is able to meet all of a program's requirements in spite of his handicap. In the employment context, an otherwise qualified person is someone who can perform the essential functions of the job in question. School Board of Nassau County v. Arline, 480 U.S. 272, 287 n. 17, 107 S.Ct. 1123, 1131 n. 17.

- 22. See Chalk v. U.S. Dist. Court Cent. Dist. of California, 840 F.2d 701 (9th Cir. 1988); Martinez v. School Board of Hillsborough County, 861 F.2d 1502, 1506 (11th Cir. 1988).
- 23. Ibid.
- 24. Telephone interview with Alexa Freeman, Staff Counsel, National Prison Project of the American Civil Liberties Union, March 30, 1993.
- 25. "5th Cir. Orders Trial Court to Appoint Counsel in Inmate Suit," AIDS Litigation Reporter (Westtown, PA: Andrews Publications, November 24, 1992), p. 9063, citing Moore v. Mabus, 976 F.2d 268 (5th Cir 1992).
- 26. Ibid.
- 27. In forma pauperis means "without payment of court fees."
- 28. "10th Cir. Affirms District Court's Order on Colorado Inmate Tests," AIDS Litigation Reporter (Westtown,

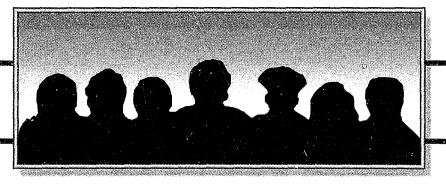
- PA: Andrews Publications, August 11, 1992), p. 8547, citing *Diaz* v. *Romer*, Nos. 90–1100, 90–1302, previously titled *Ramos* v. *Lamm*, 713 F.2d 546 (1989).
- 29. Diaz v. Romer, Nos. 90-1100, 90-1302.
- 30. "Kansas Court Rejects Inmate's Unlawful Segregation Suit," AIDS Litigation Reporter (Westtown, PA: Andrews Publications, May 22, 1992), p. 8168, citing decision in Paramo v. Smith; Paramo v. Matthews, D.KS, Nos. 89–3011-R, 89–3018-R.
- 31. Ibid.
- 32. Ibid, pp. 8168–8169. The judge added that Paramo had apparently advised some inmates of his HIV-positive status "to avoid unwanted contact."
- 33. "Consent Decree Resolves Class Action Over NJ Inmate Segregation," AIDS Litigation Reporter (Westtown, PA: Andrews Publications, March 13, 1992), p. 7759, discussing settlement in Roe et al. v. Fauver et al., D. NJ, No. 88-1225-AET.
- 34. The Americans With Disabilities Act (ADA) of 1990, P.L. 101–336, 104 Stat. 327, provides a strong weapon in the fight against discrimination by prohibiting the adverse treatment of qualified persons with disabilities including those who test positive for HIV. While the act does not guarantee access to health care, it requires that refusal to provide equal access cannot be based on a person's disability. A provider's health care decisions may be based in part on cost. See Gostin, L.O., "The Americans With Disabilities Act and the U.S. Health Care System." Health Affairs, 11, no. 3 (Fall 1992): 248–257.
- 35. School Board of Nassau County v. Arline, 480 U.S. 272, 287 n. 16.
- 36. Chalk v. U.S. Dist. Court Cent. Dist. of California, 840 F.2d 701, 706 (9th Cir. 1988).
- Harris v. Thigpen, 727 F.Supp. 1564 (M.D. Alabama, 1990); Harris v. Casey, E.D. Pennsylvania, No. 87–4220, January 25, 1987; Weaver v. Reagan, 8th Cir., No. 88–2560, Slip opinion, September 25, 1989; affirming, W.D.Mo., No. 87–4314–CV–C–5, September 29, 1988.
- 38. *Harris* v. *Thigpen*, 727 F.Supp. 1564 (M.D. Alabama, 1990); also see *Harris* v. *Casey*, E.D. Pennsylvania, No. 87–4220, January 25, 1987.

- 39. Weaver v. Reagan, 8th Cir., No. 88–2560, Slip opinion, September 25, 1989; affirming, W.D.Mo., No. 87–4314–CV–C–5, September 29, 1988.
- 40. Telephone interview with John Beck of the Prisoners' Rights Project of the Legal Aid Society of New York, February 11, 1993. Mr. Beck is one of the attorneys for the plaintiff class.
- "Poor Medical Treatment of Inmate Shortened His Life, Suit Charges," AIDS Policy & Law, February 19, 1993, pp. 5, 7; citing Proctor v. Alameda County, Calif. Super.Ct., Alameda Cnty., No. 693983-8, filed April 21, 1992.
- 42. "Texas Civil Rights Group Looking at Quality of Prisoners' HIV Care," AIDS Policy & Law, January 22, 1993, p. 5. For more information on the Texas Civil Rights Project's prisoners with HIV initiative, contact Jim Harrington, Texas Civil Rights Project, 227 Congress Ave., Suite 340, Austin, TX 78701 (512) 474–5073.
- 43. "Failure to Segregate HIV-Positive Inmates Found Not Violating Federal Constitution," *AIDS Policy & Law*, October 31, 1991, p. 1, citing *Robbins* v. *Clarke*, 8th Cir., No. 90–2431, 10/8/91.
- 44. Ibid., p. 2.
- 45. Ibid. A third claim by the prisoner was ruled invalid for the same reason.
- 46. The policies and programs now in effect are discussed in the District Court's decision in *Myers* v. *Maryland Div. of Correction*, 782 F.Supp. 1095, 1096 (D.Md. 1992).
- 47. Myers v. Maryland Div. of Correction, 782 F.Supp. 1095, 1096 (D.Md. 1992) citing Wilson v. Seiter, ___ U.S. __, 111 S.Ct. 2321 (1991); Estelle v. Gamble, 429 U.S. 97, 97 S.Ct. 285 (1976); Glick v. Henderson, 855 F.2d 536 (8th Cir. 1988).
- 48. Ibid.
- 49. "D.C. Ct.: Inmate Lacks Standing to Request HIV-Based Segregation," AIDS Litigation Reporter (Westtown, PA: Andrews Publications, June 12, 1992), p. 8244.
- 50. Ibid.
- 51. Ibid.

- Flanagan v. Shively, 783 F.Supp. 922, 932 (M.D.Pa. 1992).
- 53. *Czajka* v. *Moore*, No. 91–4543–CV–C–5 (Filed September 16, 1991, D.C. W.Mo.)
- 54. A writ of mandamus is a court order directing a public official to do that which the law requires the public official to do.
- 55. Per curiam opinions are opinions "by the court."
- 56. Czajka v. Moore, No. 91-4543-CV-C-5 (Filed September 16, 1991, D.C. W.Mo.)
- 57. "4th Cir. Refuses to Disturb Dismissal of NC Inmate's Suit," *AIDS Litigation Reporter* (Westtown, PA: Andrews Publications, December 8, 1992), p. 9139, citing opinion in *In re George H. Van Wagner III*, 4th Cir., No. 92–8062.
- 58. J.F. Sullivan, "Inmate With HIV Who Bit Guard Loses Appeal," *New York Times*, February 18, 1993, p. B7.
- 59. Ibid.
- 60. Ibid.
- 61. "NJ Inmate Argues for Reversal of 25-year AIDS Bite Jail Sentence," AIDS Litigation Reporter (Westtown, PA: Andrews Publications, December 22, 1992), p. 9229, citing oral argument in an appeal to the New Jersey Supreme Court's Appellate Division in New Jersey v. Smith, NJ Super. Ct., App. Div., No. A-636389-T4.
- 62. Ibid.
- 63. J.F. Sullivan, "Inmate With HIV Who Bit Guard Loses Appeal," *New York Times*, February 18, 1993, p. B7.
- 64. "Texas Court Lets Stand Life Sentence of Inmate Convicted of Spitting on Guard," *AIDS Policy & Law*, October 16, 1992, p. 1, citing *Weeks v. Texas*, Texas Ct.Crim.App., No. 92–1154, October 14, 1992.
- 65. Ibid., p. 2.
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- 79. Ibid.



The National Institute of Justice responds to issues linking health and justice.

The National Institute of Justice (NIJ) supports a broad range of research and programs to prevent and reduce crime and to improve the criminal justice system. Recognizing the link between health and justice issues, the Institute is intensifying its efforts to combine the insight and experience of several disciplines to solve critical problems affecting health and public safety. Partnerships have been formed and research agendas have been set to address issues of:

- Violence prevention
- Substance abuse treatment
- Family violence and child abuse
- Victimization
- Human development and criminal behavior
- Treatment of mentally-ill offenders
- Health care fraud
- Correctional health care.

For example, with cooperation from the Centers for Disease Control and Prevention, the Institute continued its annual survey on the impact of HIV/AIDS in correctional systems and collected, for the first time, information on tuberculosis in prisons and jails.

For specific information on HIV/AIDS and tuberculosis in correctional systems, or on other NIJ health/justice partnerships and initiatives, call the National Criminal Justice Reference Service at 800-851-3420.