



U.S. Department of Justice
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Issues and Practices

1996–1997 Update: HIV/AIDS, STDs, and TB in Correctional Facilities



National Institute of Justice



Centers for Disease Control and Prevention



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1996–1997 Update: HIV/AIDS, STDs, and TB in Correctional Facilities

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July 1999
NCJ 176344

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.

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Prepared for the National Institute of Justice, U.S. Department of Justice by Abt Associates Inc., under contract No. OJP-94-C-007. Points of view or opinions stated in this document are those of the authors and do not necessarily represent the official position or policies of the U.S. Department of Justice.

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Foreword

HIV/AIDS, sexually transmitted diseases, and tuberculosis, as well as a range of other health problems disproportionately found among inmates and ex-offenders, pose serious challenges for corrections administrators, health service providers, and public health officials. These problems also present opportunities to intervene with effective prevention and treatment, thereby benefiting inmates and those close to them as well as the larger community.

To meet these challenges corrections and public health agencies must work closely together with community-based organizations.

The findings presented in this 1996–1997 Update report suggest that there have been substantial improvements in many aspects of the policy response to HIV/AIDS, STDs, and TB in correctional facilities. Much work is still needed in comprehensive prevention programs, discharge planning, community linkages, and continuity of treatment. The study also shows increasing collaboration among correctional, public health, and community-based agencies, but far more is needed.

The three agencies that have sponsored and conducted the research presented in this Update—the National Institute of Justice (NIJ), the Centers for Disease Control and Prevention (CDC), and the Bureau of Justice Statistics (BJS)—are committed to collaboration in research on HIV/AIDS, STDs,

and TB in correctional facilities and to collection and dissemination of information that will foster comprehensive and cooperative responses in policy and practice. This Update, for the first time, combines in one volume the latest statistics on the extent of HIV infection and AIDS among inmates from BJS surveys with the findings on policy and practice from the ongoing series of national surveys sponsored by NIJ and CDC.

We hope that the expanding collaboration in research and dissemination represented by this report presages further increases in operational collaborations for the development and implementation of model HIV/AIDS, STD, and TB prevention and treatment programs in correctional settings.

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Acknowledgments

It is a pleasure to acknowledge the many people who have been instrumental in the preparation of this 1996–1997 Update report. At Abt Associates, Tricia Harmon carried out all of the analyses of the survey with great skill and thoroughness, David Deal managed the ninth NIJ/CDC survey of correctional systems, Michael Gross reviewed and commented upon earlier drafts of Abt’s chapters, Mary Ellen Perry and Kim Kolosiej provided expert word processing services, and Wendy Sanderson did the camera-ready production.

At the Bureau of Justice Statistics, the statistical agency of the U.S. Department of Justice, Allen J. Beck supervised the preparation of chapter 1 of the report. Christopher J. Mumola and Lauren E. Glaze provided statistical review. Tom Hester and Yvonne Boston edited the chapter. Data collection and processing for the National Prisoner Statistics Program were carried out by Tammy Anderson under the supervision of Gertrude Odom and Kathleen Creighton, Demographic Surveys Division, U.S. Bureau of the Census.

Cheri Crawford was the National Institute of Justice project monitor for Abt’s portion of the project, participating in site visits and providing useful comments and support throughout the preparation of the report. Lori de Ravello and Mark Lobato of the Centers for Disease Control and Prevention provided useful comments on the draft report. Juarlyn Gaiter

of CDC participated in several site visits and provided very helpful input. John Miles was the CDC project monitor, participated in a number of the site visits, and has been a steadfast supporter of interventions for the prevention and treatment of infectious diseases and other health problems among correctional inmates.

Finally, we acknowledge the valuable contributions of many staff members in the agencies that participated in the site visits for this project: California Department of Corrections, Centerforce and Center for AIDS Prevention Studies at the University of California, San Francisco; Louisiana Department of Corrections and Office of Public Health; New York City Department of Corrections and Department of Health; San Francisco County Sheriff’s Department and Forensic AIDS Project, San Francisco Department of Public Health; Los Angeles County Juvenile Court Health Services and JWCH Institute; and Massachusetts Department of Youth Services.

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Table of Contents

	<i>Page</i>
Foreword	iii
Acknowledgments	v
Executive Summary	xiii
HIV/AIDS: Burden of Disease Among Inmates	xiii
Sexually Transmitted Diseases and Hepatitis: Burden of Disease Among Inmates	xiii
HIV and STD Education and Behavioral Interventions	xiii
HIV Transmission and Risk Factors, Precautionary and Preventive Measures	xiv
Counseling and Testing, Confidentiality, and Disclosure	xiv
Housing and Correctional Management	xiv
Medical Treatment and a Continuum of Care	xiv
Tuberculosis (TB)	xv
Legal and Legislative Issues	xv
Introduction	1
HIV/AIDS in the U.S. Population	1
The 1996–1997 Update: Contents and Sources	3
Endnotes	3
Chapter 1: HIV in Prisons and Jails, 1996	5
Key Findings	5
Trends in HIV Infection in U.S. Prisons	6
Confirmed AIDS Cases in U.S. Prisons	9
Comparison to the U.S. Resident Population	9
HIV Infection of Male and Female State Prison Inmates	10
AIDS-Related Deaths in State Prisons	11
HIV-Prevalence Rates and Testing Policies	13
HIV/AIDS Reported in Personal Interviews	13
HIV-Positive Prison Inmates, by Offense and Prior Drug Use	15
HIV Infection of Local Jail Inmates	16
HIV Test Results for Local Jail Inmates, by Inmate Characteristic	16
Percent HIV Positive Among Jail Inmates, by Offense and Prior Drug Use	16
Methodology	17

Chapter 2: Sexually Transmitted Diseases and Hepatitis: Burden of Disease Among Inmates	21
Key Findings	21
STDs Among Inmates	21
Hepatitis Among Inmates	22
Conclusion	22
Endnotes	22
Chapter 3: HIV and STD Education and Behavioral Interventions	25
Key Findings	25
Types of HIV/STD Education and Prevention Programs Provided	25
The Importance of Comprehensive HIV/STD Education and Prevention Programs	27
Instructor-Led Education and Educational Materials	28
Peer-Based Programs	33
Conclusion	44
Endnotes	45
Chapter 4: HIV Transmission and Risk Factors, Precautionary and Preventive Measures	47
Key Findings	47
HIV Transmission and Risk Behaviors in Correctional Facilities	47
Rape and Coerced Sexual Activity	48
“Universal Precautions” Versus Correctional Officers’ “Right to Know”	48
Condom Availability	49
Bleach Availability	49
Needle and Syringe Exchange	50
Methadone Maintenance	50
Reduction of Risk Associated With Tattooing	50
Conclusion	51
Endnotes	51
Chapter 5: Counseling and Testing, Confidentiality and Disclosure	53
Key Findings	53
HIV-Antibody Testing Policies	53
Confidentiality and Notification of HIV Test Results	58
Conclusion	60
Endnotes	60
Chapter 6: Housing and Correctional Management.....	63
Key Findings	63
Housing Policies for Inmates With HIV Disease	63
Work Assignments and Other Programming	65
Conjugal Visits	66
Compassionate Release and Medical Furlough	66
Conclusion	66
Endnote	67

	<i>Page</i>
Chapter 7: Medical Treatment and a Continuum of Care	69
Key Findings	69
Medical Treatment for HIV/AIDS	70
Guidelines for Antiretroviral Therapy	71
Selection and Initiation of Antiretroviral Therapy	72
The Patient-Clinician Relationship	72
A Continuum of Care for Inmates	73
Screening and Identification of Medical and Psychosocial Problems	73
Case Management	74
Psychosocial Support Services	74
Hospice Care	74
Substance Abuse Treatment	75
Discharge Planning	76
Continuity of Care and Community Linkages	77
Conclusion	82
Endnotes	82
 Chapter 8: Tuberculosis	 85
Key Findings	85
Tuberculosis Disease and Infection	85
The Role of Policy Change	87
Screening	88
Containment	89
Discharge Planning	90
Education	90
Conclusion	90
Endnotes	90
 Chapter 9: Legal and Legislative Issues	 93
Key Findings	93
Confidentiality	93
Segregation of HIV-Infected Inmates	93
Access to Programs	94
Alleged Exposure to HIV	94
Medical Treatment	95
Early Release	95
Tuberculosis Issues	95
Legislative Developments	96
Conclusion	96
Endnotes	96

List of Tables

Table 1: Estimated incidence of AIDS-Opportunistic Illnesses (AIDS-OIs) and AIDS-related deaths, 1995–96—United States	2
Table 2: Inmates in custody of State or Federal prison authorities and known to be positive for the human immunodeficiency virus, 1994–96	7
Table 3: Inmates in custody of State or Federal prison authorities, by type of HIV infection or confirmed AIDS, year-end 1996	8
Table 4: State prison inmates known to be positive for the human immunodeficiency virus, by sex, year-end 1996	10
Table 5: Number of inmate deaths in State prisons, by cause, 1994–96	11
Table 6: AIDS-related deaths of sentenced prisoners under State jurisdiction, 1996	12
Table 7: Inmates ever tested or tested since admission for the human immunodeficiency virus and test results	14
Table 8: Inmates ever tested for the human immunodeficiency virus and results, by selected characteristics	14
Table 9: Inmates ever tested for the human immunodeficiency virus and results, by offense and prior drug use	15
Table 10: Standard error estimates for the 1996 Survey of Inmates in Local Jails and the 1997 Surveys of State and Federal Correctional Facilities	18
Table 11: Results of mandatory and routine inmate syphilis screening, 1997	21
Table 12: Results of mandatory and routine gonorrhea screening, 1997	22
Table 13: Results of mandatory and routine chlamydia screening, 1997	22
Table 14: HIV/STD education and prevention programs for inmates, 1992–97	26
Table 15: HIV/STD education and prevention programs in adult correctional facilities, 1995–97	26
Table 16: HIV/STD education and prevention programs for inmates, 1997 results of the validation study (VS)	27
Table 17: Topics covered in HIV/STD education for inmates, 1997	28

	<i>Page</i>
Table 18: Topics covered in HIV/STD education for inmates, 1997 results of the validation study (VS)	29
Table 19: Providers of HIV/STD education and prevention services, 1997	29
Table 20: Availability of condoms and bleach, 1997	49
Table 21: Testing policies for antibodies to the human immunodeficiency virus, by jurisdiction, 1995	55
Table 22: Summary of HIV-antibody testing policies	56
Table 23: Mutually exclusive categorization of HIV-antibody testing policies for incoming inmates, 1997	56
Table 24: HIV-antibody testing policies, 1997: Results of the validation study (VS)	56
Table 25: Pregnancy testing for female inmates, 1997	57
Table 26: HIV-antibody testing for pregnant female inmates, 1997	57
Table 27: Policies regarding notification of inmates' HIV-antibody test results, 1997	59
Table 28: Notification of HIV-antibody test results, 1997: Results of the validation study (VS)	59
Table 29: Mandatory and routine testing of incoming inmates for STDs, 1997	60
Table 30: Decline of segregation policies in State/Federal systems (n = 51) 1985–97	63
Table 31: State/Federal prison systems' housing policies for inmates with AIDS and asymptomatic HIV infection, 1994 and 1997	64
Table 32: City/county jail systems' housing policies for inmates with AIDS and asymptomatic HIV infection, 1994 and 1997	65
Table 33: Housing of inmates with asymptomatic HIV infection and AIDS: Results of the validation study (VS)	65
Table 34: Compassionate release and medical furlough, 1997	66
Table 35: Inmates receiving compassionate release and medical furlough, 1996	67
Table 36: The availability of HIV therapies and monitoring, 1997	70

	<i>Page</i>
Table 37: The availability of HIV therapies and monitoring: Results of the validation study (VS).....	71
Table 38: Psychosocial and supportive services for inmates with HIV/AIDS, 1997	75
Table 39: Discharge planning services, 1997	76
Table 40: Active TB disease among inmates, 1997	87
Table 41: TB infection among inmates, 1997	87
Table 42: Screening inmates for TB, 1997	88

List of Figures

Figure 1: Tuberculosis Cases and Rates Among New York State Inmates	86
(Exclusive of New York City), 1986–97	

Executive Summary

At midyear 1998, more than 1.8 million people were in prisons and jails in the United States, and 6 million were under some form of criminal justice supervision. Inmates have disproportionately high rates of infectious disease, substance abuse, high-risk sexual activity, and other health problems. Thousands of former correctional inmates return to the community each month. Because prisoners are part of the community and because correctional health and public health are increasingly intertwined, health care and disease prevention in correctional facilities should be based on the collaborative efforts of correctional, public health, and community-based health care and social service organizations.

This 1996–1997 Update reports on the extent of HIV/AIDS, STDs, and TB among correctional inmates and on the policies and practices being implemented to prevent and control these diseases in correctional settings. In this report, statistics on the prevalence of HIV infection and AIDS in correctional populations are derived primarily from surveys conducted by the Bureau of Justice Statistics (BJS) in 1996 and 1997. Findings regarding policies and practices and legal and legislative issues are based primarily on the ninth national survey of HIV/AIDS, STDs, and TB in correctional facilities, sponsored by the National Institute of Justice (NIJ) and the Centers for Disease Control and Prevention (CDC) and conducted between December 1996 and August 1997.

Findings on HIV-testing policies presented in chapter 5 of this report are from BJS' 1996 National Prisoner Statistics and the 1997 NIJ/CDC survey. Statistics on other policies are based primarily on the NIJ/CDC ninth national survey and associated site visits. Although the report focuses on adult correctional systems, several examples of HIV prevention programs in chapter 3 were drawn from site visits to juvenile facilities. Key findings presented in this report are summarized below.

HIV/AIDS: Burden of Disease Among Inmates

- The overall prevalence of HIV infection and AIDS among inmates has been quite stable since 1991, but some systems have experienced declines in HIV seroprevalence.

- There have been some declines in AIDS deaths among inmates since 1995.
- Nevertheless, HIV infection and AIDS continue to be far more prevalent among inmates than in the total U.S. population.
- The Northeast region has the largest number and percentage of inmates with HIV infection and AIDS.
- The prevalence of HIV and AIDS is higher among Hispanic and black inmates than among white inmates.
- The prevalence of HIV and AIDS is higher among female inmates than among male ones.

Sexually Transmitted Diseases and Hepatitis: Burden of Disease Among Inmates

- Available data on STDs and hepatitis B and C among inmates are very incomplete, reflecting the relative rarity of routine screening for these conditions in correctional facilities.
- However, behavioral profiles and anecdotal evidence suggest that inmates are disproportionately affected by STDs and hepatitis.

HIV and STD Education and Behavioral Interventions

- HIV and STD education programs are becoming more widespread in correctional facilities.
- However, few correctional systems have implemented comprehensive and intensive HIV prevention programs in all of their facilities.
- Peer-based education and prevention programs offer important advantages, such as cost-effectiveness, credibility, flexibility, and benefits to peers themselves.

- Although few HIV/STD prevention programs in correctional settings have been rigorously evaluated, anecdotal evidence suggests that programs can be successful in reaching this extremely high-risk population with practical risk-reduction messages.

HIV Transmission and Risk Factors, Precautionary and Preventive Measures

- High-risk behaviors for HIV transmission—sex, drug use, sharing of injection materials, and tattooing—occur in correctional facilities.
- HIV transmission among correctional inmates has been shown to occur.
- Comprehensive and intensive education and prevention programs represent the best response to these facts, although the precise content of such programs is controversial.
- Rape and coerced sexual activity also occur in correctional facilities but require a different response, one based on inmate classification, housing, and supervision.
- The implementation of “universal precautions” represents the heart of a correctional infection-control program and the first line of defense against the occupational transmission of HIV.
- Condom distribution and other harm-reduction strategies have not been widely adopted in American correctional systems.
- Experience with harm reduction in correctional facilities in Europe and elsewhere may warrant the attention of U.S. correctional administrators.

Counseling and Testing, Confidentiality, and Disclosure

- Most correctional systems provide HIV antibody testing, although testing policies differ widely.

- Seventeen State correctional systems and the Federal Bureau of Prisons had policies for mandatory HIV-antibody testing of inmates at intake and/or release.
- Few correctional systems have mandatory or routine pregnancy testing of female inmates.
- Ongoing assessment of HIV-antibody and pregnancy-testing policies is warranted in light of changing community standards for treatment of HIV/AIDS.
- Very few correctional systems have policies for notification of correctional officers regarding inmates’ HIV status.
- Few correctional systems routinely screen inmates for STDs.

Housing and Correctional Management

- Only a small number of correctional systems segregate inmates with HIV disease, and the number of systems with segregation policies has declined sharply since the late 1980s.
- Some correctional systems still limit the work assignments for which inmates with HIV are eligible.
- Few correctional systems permit conjugal visits for any inmates, and even fewer allow such visits for inmates with HIV.
- Policies for the early or compassionate release of inmates with terminal illness, including end-stage AIDS, are quite common, but relatively few inmates are actually being released under such policies.

Medical Treatment and a Continuum of Care

- Protease inhibitors and combination therapies have brought dramatic improvements in the medical condition and survival of people with HIV, at least over the relatively short term that has been available for study to date.

-
- The new therapeutic combinations pose challenges for patient adherence, and failure to adhere consistently to the regimens may have serious public health consequences if drug-resistant strains are transmitted to others.
 - New drugs and reduced dosing currently under study offer hope of more “patient-friendly regimens.”
 - Clinicians must work closely with patients to make the best therapeutic decisions.
 - A continuum of services including early identification, timely and effective treatment, case management, discharge planning, and community linkages will make for optimal clinical and psychosocial outcomes for inmates with HIV disease.
 - Continuity of care and bridging to community services also contribute to positive patient outcomes.
 - Existing program models have not been rigorously evaluated but probably warrant replication based on anecdotal evidence.
 - Most State/Federal prison systems appear to be following CDC guidelines regarding TB screening, isolation and treatment, and preventive therapy, whereas adherence is lower among city/county jail systems.
 - Better collection and reporting of screening data would help to document the burden of TB infection and disease among inmates.
 - Improvements are also needed in the use of directly observed therapy, as well as in postrelease adherence to treatment for TB disease and TB infection.

Legal and Legislative Issues

- The U.S. Supreme Court has ruled that HIV and HIV-related discrimination are covered under the Americans With Disabilities Act.
 - There were few other major legal developments affecting HIV/AIDS in correctional facilities during the period covered by this Update report, although courts generally continued to uphold correctional systems’ policy responses to HIV/AIDS.
 - Some State legislatures have attempted to expand the requirements for HIV antibody testing of inmates and disclosure of inmates’ HIV status, but these efforts generally have been unsuccessful.
- ## Tuberculosis (TB)
- In recent years the incidence of TB has declined both in the overall U.S. population and among correctional inmates, although it remains much higher among inmates.

Introduction

In 1996 the Joint United Nations Programme on HIV/AIDS (UNAIDS) cogently summarized the importance of health care and disease prevention in correctional facilities: “Prisoners are the community. They come from the community, they return to it. Protection of prisoners is protection of our communities.”¹ In the United States, the case is made particularly compelling by the following facts: the continuing surge in incarceration, with more than 1.8 million people in prisons and jails and 6 million under some form of criminal justice supervision at midyear 1998; the continuing disproportionate rates of infectious disease, substance abuse, high-risk sexual activity, and other health problems among correctional inmates; and the return of thousands of former correctional inmates to the community each month. The 1996 UNAIDS statement also declared that “failure to provide [prisoners] the basic measures, such as information, education, and the means of [HIV] prevention available on the outside, violates [their] rights to health, security of person, and equality before the law.” Because prisoners are part of the community and because correctional health and public health are increasingly intertwined, health care and disease prevention in correctional facilities should be based on the collaborative efforts of correctional, public health, and community-based health care and social service organizations. A public health model of correctional health care is needed. Such an approach is particularly urgent given the recent dramatic advances in antiretroviral therapy and the attendant importance of continuity of treatment, adherence to regimens, and minimizing the potential for development of drug resistance.

HIV/AIDS in the U.S. Population

As context for the main contents of this Update, it is important to understand the overall trends and patterns of HIV disease in the U.S. population.

Between 1995 and 1996, the HIV/AIDS epidemic in the United States appeared to be lessening in intensity, at least in some sectors of the population. However, the face of the epidemic continued to change, with increasing concentration among the poor and people of color, the populations from which the majority of inmates are drawn.

Table 1, adapted from CDC’s *Morbidity and Mortality Weekly Report*, reveals the dramatic changes in the epidemic that occurred between 1995 and 1996. Calendar year 1996 was the first year in which the incidence of AIDS-opportunistic illnesses (AIDS-OIs) actually declined in the United States.² AIDS-OIs is a measure designed to adjust for the 1993 change in the AIDS case definition, thus permitting valid comparisons in incidence over that time. It is calculated from the sum of cases reported with an AIDS-OI and cases with estimated dates of diagnosis of an AIDS-OI that were reported based only on the immunologic criteria added in the 1993 revised case definition. (In this report, the AIDS-OI measure is used only with regard to the total U.S. population and not with regard to the situation in correctional facilities.)

Although the incidence of AIDS-OIs continues to be high—an estimated 56,730 cases were reported in 1996—incidence declined in all geographic regions of the country, all 5-year age groups, and many other sectors of the population (table 1). Incidence declined between 1995 and 1996 among men (by 8 percent), non-Hispanic whites (by 13 percent), men who have sex with men (by 11 percent), and injection drug users (by 5 percent). Moreover, although HIV/AIDS remains a leading cause of death among Americans between 25 and 44 years of age, AIDS deaths actually declined for the first time between 1995 and 1996. The decline was substantial—23 percent. It was largest in the last three quarters of 1996 and affected all geographic regions, racial and ethnic groups, and exposure categories.

These temporal declines in AIDS-OI incidence are attributable to reductions in rates of new infection—due in turn to prevention efforts—a slowing in progression from infection to active disease, and AIDS-OI diagnosis. Reductions in the number of deaths are based on increased survival with AIDS-OIs, in turn the result of newly available antiretroviral therapies and prophylaxis for OIs.³ Increased survival and the relatively stable incidence of new HIV infections, however, have resulted in an increased prevalence of AIDS in the population: from 1995 to 1996 the number of people living with AIDS in the United States increased by 11 percent, from 211,000 to 235,000. This increasing AIDS prevalence indicates the need for more resources and services to treat and care for those who are ill.

Table 1. Estimated incidence of AIDS-Opportunistic Illnesses (AIDS-OIs) and AIDS-related deaths, 1995–96—United States^a

Characteristics	AIDS-OIs ^b			Deaths ^b		
	1995 n	1996 n	% Change From 1995 to 1996	1995 n	1996 n	% Change From 1995 to 1996
Sex						
Men	49,360	45,240	-8	42,000	31,440	-25
Women	11,260	11,490	2	8,140	7,340	-10
Race/Ethnicity ^c						
White, non-Hispanic	24,370	21,130	-13	21,700	14,670	-32
Black, non-Hispanic	24,090	24,030	0	18,840	16,460	-13
Hispanic	11,410	10,800	-5	9,010	7,220	-20
Exposure Category						
MSM ^d	28,640	25,530	-11	24,880	17,310	-30
MSM-IDU ^e	3,580	3,030	-15	3,310	2,490	-25
Male-IDU	12,880	12,140	-6	10,790	8,970	-17
Female-IDU	4,950	4,750	-4	3,830	3,440	-10
Heterosexual Contact						
Male	3,420	3,790	11	2,300	2,120	-8
Female	5,900	6,320	7	3,980	3,640	-8
Total ^f	60,620	56,730	-6	50,140	38,780	-23

^aEstimates are presented rounded to the nearest 10 because they do not represent exact counts of persons with AIDS-OIs but are estimates that are approximately $\pm 3\%$ of the true value.

^bFigures are for people ≥ 13 years old.

^cNumbers for races other than black and white were too small for meaningful analysis. Persons of Hispanic origin may be of any race.

^dMen who have sex with men.

^eInjection-drug user.

^fIncludes persons aged 13 years with hemophilia/coagulation disorders, transfusion recipients, or persons with other or no risks reported.

Source: Centers for Disease Control and Prevention, "Update: Trends in AIDS Incidence—United States, 1996." *Morbidity and Mortality Weekly Report* 46 (September 19, 1997): 863.

The incidence of AIDS-OIs did not decline among all segments of the U.S. population between 1995 and 1996. It remained stable among non-Hispanic blacks, and actually increased among women (by 2 percent) and persons who were infected through heterosexual contact (by 8 percent). In the United States, heterosexually transmitted HIV infection results primarily from sexual relations with drug users.

An examination of trends in the proportional distribution of new AIDS-OI cases across racial/ethnic groups, genders, and exposure categories reinforces the conclusions that the epidemic is becoming increasingly concentrated among people of color and that women are increasingly affected. Between 1992 and 1996, the proportion of new cases of AIDS that occurred among non-Hispanic whites declined from 48

percent to 38 percent, whereas it remained stable among Hispanics (18 percent to 19 percent), and increased from 33 percent to 41 percent among non-Hispanic blacks. Indeed, for the first time in 1996, the number of new cases of AIDS among blacks exceeded the number among whites. The proportion of new AIDS cases among women also increased from 14 percent in 1992 to 20 percent in 1996.⁴

The 1996–1997 Update: Contents and Sources

This Update reports on the extent of HIV/AIDS, STDs, and TB among correctional inmates and on the policies and practices being implemented to prevent and control these diseases in correctional settings. Statistics on the prevalence of HIV infection and AIDS in correctional populations presented in this report are primarily from the Bureau of Justice Statistics (BJS) 1997 Survey of State and Federal Correctional Facilities, 1996 National Prisoner Statistics, and 1996 Survey of Inmates in Local Jails. Statistics on the prevalence of STDs and TB among correctional inmates come primarily from the ninth national survey of HIV/AIDS, STDs, and TB in correctional facilities, sponsored by the National Institute of Justice (NIJ) and the Centers for Disease Control and Prevention conducted between December 1996 and August 1997 and the CDC's TB surveillance system.

Findings on HIV-testing policies presented in chapter 5 of this report are from BJS' 1996 National Prisoner Statistics and the 1997 NIJ/CDC survey. Statistics and discussion in all other chapters on policies and practices, as well as the chapter on legal and legislative issues, are based primarily on the NIJ/CDC ninth national survey.

As in all of the previous national surveys in this series, responses were received from all 50 State departments of correction and the Federal Bureau of Prisons. The sample selection for the city/county jail systems was modified in 1996–97 to target the 50 largest city/county jail systems by average daily inmate population. Responses were received from 41 of these, or 82 percent. Again in 1996–97, a validation survey was conducted. An abbreviated version of the questionnaire was sent to 50 individual facilities in 15 State correctional systems and the Federal Bureau of Prisons. The objective of the validation study was to compare responses on key policy issues from individual facilities and the central offices of their departments of corrections.

The survey was supplemented by site visits to the States of California and Louisiana and to New York City and San Francisco to observe HIV prevention programs and discharge planning/transitional programs. Site visits were also conducted to observe HIV/STD prevention programs in the juvenile systems of Massachusetts and Los Angeles County, California.

Although the report focuses on adult correctional systems, several examples of HIV prevention programs in chapter 3 were drawn from site visits to juvenile facilities.

How widespread are comprehensive and collaborative approaches to correctional and community health services? In general, the results of the 1997 NIJ/CDC survey suggest that HIV/AIDS education and prevention programs are on the increase in prisons and jails but, as was also demonstrated by the previous survey and by an extensive review of the literature, still fail to take full advantage of this important public health opportunity.⁵ A separate report based on the 1997 survey shows that public health-corrections collaborations are increasingly common but still rarely rise to the level of a comprehensive public health model.⁶

Endnotes

1. "HIV/AIDS in Prisons," Statement by the Joint United Nations Programme on HIV/AIDS (UNAIDS), April 1996.
2. Centers for Disease Control and Prevention, "Update: Trends in AIDS Incidence—United States, 1996," *Morbidity and Mortality Weekly Report* 46 (September 19, 1997): 861–867.
3. F.J. Palella, Jr., et al., "Declining Morbidity and Mortality Among Patients With Advanced HIV Infection," *New England Journal of Medicine* 338 (March 26, 1998): 853–860.
4. Centers for Disease Control and Prevention, "Update: Trends in AIDS Incidence, Deaths, and Prevalence—United States, 1996." *Morbidity and Mortality Weekly Report* 46 (February 28, 1997): 165–173.
5. T.M. Hammett and R. Widom, "HIV/AIDS Education and Prevention Programs for Adults in Prisons and Jails and Juveniles in Confinement Facilities—United States, 1994," *Morbidity and Mortality Weekly Report* 45 (April

5, 1996): 268–271; T.M. Hammett, R. Widom, and S. Kerr, “HIV Prevention in Prisons and Juvenile Facilities: A Missed ‘Public Health Opportunity,’ ” oral abstract We.D.351, presented at the 11th International Conference on AIDS, Vancouver, Canada, July 10, 1996; and T.M. Hammett, J.L. Gaiter, and C. Crawford, “Reaching Seriously At-Risk Populations: Health Interventions in Criminal Justice Settings,” *Health Education and Behavior* 25 (February 1998): 99–120.

6. T.M. Hammett, *Public Health/Corrections Collaborations: Prevention and Treatment of HIV/AIDS, STDs, and TB*, Research in Brief, Washington, DC: U.S. Department of Justice, National Institute of Justice, 1998 (NCJ 169590).

Chapter 1

HIV in Prisons and Jails, 1996

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Key Findings

HIV-positive State and Federal prison inmates

Year	Number	Percent of custody population
1991	17,551	2.2%
1992	20,651	2.5
1993	21,475	2.4
1994	22,747	2.4
1995	24,256	2.3
1996	24,881	2.3

- At year-end 1996, 3.5 percent of all female State prison inmates were HIV positive, compared to 2.3 percent of male State prisoners.

HIV-positive prison inmates

Jurisdiction	Number	Percent of custody population
New York	9,500	13.6%
Florida	2,152	3.4
Texas	1,876	1.4
California	1,136	.8

Based on jurisdictions with more than 1,000 HIV-positive inmates.

- New York held more than a third of all inmates (9,500 inmates) known to be HIV positive at year-end 1996.
- Of all HIV-positive prison inmates, 24 percent were confirmed AIDS cases. In State prisons, 23 percent of HIV-positive inmates had AIDS; in Federal prisons, 37 percent.

- The overall rate of confirmed AIDS among the Nation's prison population (0.54 percent) was about six times the rate in the U.S. population (0.09 percent).
- Inmates in State prisons and local jails who have been tested for HIV self-report similar HIV-infection rates:

Percent HIV positive among—

	Jail inmates	Prison inmates
All inmates	2.2%	2.2%
Male	2.1%	2.2%
Female	2.4	3.4
White	1.4%	1.4%
Black	2.6	2.8
Hispanic	3.2	2.5
Age 24 or younger	.7%	.5%
25-34	2.1	2.3
35-44	3.8	3.1
45 or older	3.0	2.7

From the 1996 Survey of Inmates in Local Jails and the 1997 Survey of Inmates in State Correctional Facilities.

- Jail officials in the last national Census of Jails (conducted in 1993) reported that 6,711 inmates were known to be HIV positive and 1,888 had confirmed AIDS. The infection rate was highest in the largest jail jurisdictions.

At year-end 1996, 2.3 percent of all State and Federal prison inmates were known to be infected with the human immunodeficiency virus (HIV). A total of 24,881 prison inmates were HIV positive (947 Federal and 23,934 State). HIV-positive inmates made up 1.0 percent of Federal prison inmates and 2.4 percent of State prison inmates. Of

those known to be HIV positive in all U.S. prisons, 5,874 were confirmed AIDS cases, while the remaining 17,656 either showed symptoms of HIV infection or were asymptomatic.

In 1996, there were a total of 907 AIDS-related deaths in State prisons, down from 1,010 in 1995. For every 100,000 State prison inmates in 1996, 90 died of AIDS-related causes. Between 1991 and 1996, about 1 in 3 State prison inmate deaths were attributed to AIDS-related causes.

Data based on personal interviews from the 1997 Survey of Inmates in State Correctional Facilities show that 75 percent of State inmates were ever tested for HIV. Of those who were ever tested and reported results, 2.2 percent were HIV positive—2.2 percent of males and 3.4 percent of females. As reported level of involvement in prior drug use increased, so did the percent of HIV-positive inmates—2.3 percent of those who said they had ever used drugs, 2.7 percent of those who used drugs in the month before the current offense, 4.6 percent of those who injected drugs, and 7.7 percent of those who ever shared a needle were HIV positive.

Data on HIV/AIDS in jails have been collected in the 1993 Census of Jails and the 1996 Survey of Inmates in Local Jails. According to the 1993 Census of Jails, 1.8 percent of local jail inmates were known to be HIV positive. The larger the size of the jail jurisdiction, the greater the percentage of inmates with HIV/AIDS.

Based on personal interviews conducted from October 1995 through March 1996 in the Survey of Inmates in Local Jails, almost 6 in 10 inmates reported ever being tested for HIV. Of those who were tested and reported results, 2.2 percent reported being HIV positive. Among female inmates, 2.4 percent said they were HIV positive; among male inmates, 2.1 percent. An estimated 2.3 percent of tested jail inmates who said they had ever used drugs were HIV positive, as were 2.9 percent who used drugs in the month before arrest, 4.0 percent who used a needle to inject drugs, and 6.3 percent who ever shared needles.

Trends in HIV Infection in U.S. Prisons

At year-end 1996, 24,881 inmates in State and Federal prisons were known to be infected with the human immunodeficiency virus (HIV), up from 24,256 at year-end 1995 (table 2). In State prisons, 23,934 inmates were known to be HIV positive, and in Federal prisons, 947 inmates were HIV positive. Although the number of HIV cases increased after 1991, the percent of the total custody population with HIV remained relatively stable. Between 1991 and 1996 the number of HIV-positive inmates grew

at about the same rate as the overall prison population (both increased by about 42 percent).

HIV-positive inmates comprised 2.3 percent of the State prison population in 1991 and 2.4 percent in 1996. In Federal prisons, HIV-positive inmates comprised 1.0 percent in 1996, unchanged from 1991.

Year	Percent of custody population known to be HIV positive	
	State	Federal
1991	2.3%	1.0%
1992	2.6	1.2
1993	2.6	1.2
1994	2.5	1.1
1995	2.4	0.9
1996	2.4	1.0

Source: BJS, National Prisoner Statistics.

HIV-infected inmates were concentrated in a small number of States. New York and Florida housed the largest number of HIV-positive inmates (9,500 and 2,152, respectively). In 1996, these two States housed nearly half of all HIV-infected inmates in State prisons.

More than half of the State prison inmates known to be HIV positive were found in the Northeast. Within the Northeast, 7.5 percent of the prison population were HIV positive, followed by 2.0 percent in the South, 1.1 percent in the Midwest, and 0.8 percent in the West. New York had the highest percentage of inmates known to be HIV positive (13.6 percent), followed by Connecticut (4.6 percent), and Rhode Island (3.9 percent). These three States had the highest percentage of HIV-positive inmates after 1994.

Of the 48 States that reported information on the number of HIV-positive inmates in 1996, each reported having at least one. Eight States (Alaska, Maine, Montana, North Dakota, South Dakota, Vermont, West Virginia, and Wyoming) reported 10 or fewer cases of HIV-positive inmates in their prisons. Eleven States reported that fewer than 0.5 percent of their inmate population were HIV positive. Between 1995 and 1996 the largest growth of HIV-positive inmates was reported in Virginia—383 in 1996, up from 134 in 1995. Other notable increases during 1996 were reported in Michigan (up 149) and Maryland (up 108).

Table 2. Inmates in custody of State or Federal prison authorities and known to be positive for the human immunodeficiency virus, 1994-96

Jurisdiction	Total known to be HIV positive			HIV/AIDS cases as a percent of total custody population ^a		
	1994	1995	1996	1994	1995	1996
U.S. total^b	22,747	24,256	24,881	2.4%	2.3%	2.3%
Federal	964	822	947	1.1	0.9	1.0
State	21,783	23,434	23,934	2.5	2.4	2.4
Northeast	11,001	12,262	12,090	7.4%	7.8%	7.5%
Connecticut	940	755	690	6.6	5.1	4.6
Maine	8	4	4	0.5	0.3	0.3
Massachusetts	388	409	393	3.4	3.9	3.6
New Hampshire	26	31	18	1.3	1.5	0.9
New Jersey	770	847	705	3.6	3.7	3.0
New York	8,295	9,500	9,500	12.4	13.9	13.6
Pennsylvania	461	590	652	1.6	1.8	1.9
Rhode Island	113	126	125	3.8	4.4	3.9
Vermont	0	0	3	0	0	0.3
Midwest	1,750	1,667	1,874	1.1%	0.9%	1.0%
Illinois	600	583	634	1.6	1.5	1.6
Indiana	--	--	--	--	--	--
Iowa	25	20	24	0.5	0.3	0.4
Kansas	20	24	16	0.3	0.3	0.2
Michigan	384	379	528	0.9	0.9	1.2
Minnesota	35	46	24	0.8	1.0	0.5
Missouri	146	173	190	0.8	0.9	0.9
Nebraska	16	19	17	0.6	0.6	0.5
North Dakota	3	2	3	0.5	0.3	0.4
Ohio	454	346	343	1.1	0.8	0.7
South Dakota	2	3	4	0.1	0.2	0.2
Wisconsin	65	72	91	0.6	0.6	0.7
South	7,440	7,870	8,162	2.0%	1.9%	1.9%
Alabama	210	222	234	1.1	1.1	1.1
Arkansas	81	83	77	1.0	1.0	0.9
Delaware	34	122	--	0.8	2.5	--
District of Columbia	--	--	--	--	--	--
Florida	1,986	2,193	2,152	3.5	3.4	3.4
Georgia	884	858	814	2.6	2.5	2.3
Kentucky	44	41	55	0.5	0.4	0.5
Louisiana	285	314	347	1.8	1.8	2.0
Maryland	774	724	832	3.7	3.4	3.8
Mississippi	119	138	135	1.2	1.4	1.3
North Carolina	521	526	589	2.2	1.9	2.0
Oklahoma	102	115	108	0.8	0.8	0.7
South Carolina	434	380	422	2.5	2.0	2.1
Tennessee	89	120	131	0.7	0.9	1.0
Texas	1,584	1,890	1,876	1.6	1.5	1.4
Virginia	285	134	383	1.4	0.6	1.5
West Virginia	8	10	7	0.4	0.4	0.3
West	1,592	1,635	1,808	0.8%	0.8%	0.8%
Alaska	--	5	10	--	0.2	0.3
Arizona	143	140	205	0.7	0.7	0.9
California	1,055	1,042	1,136	0.8	0.8	0.8
Colorado	79	93	94	0.9	1.0	0.9
Hawaii	14	12	23	0.5	0.4	0.7
Idaho	20	11	17	0.8	0.4	0.5
Montana	7	4	6	0.4	0.2	0.4
Nevada	122	147	133	1.8	1.9	1.6
New Mexico	19	24	11	0.5	0.6	0.2
Oregon	24	29	39	0.3	0.4	0.5
Utah	48	31	31	1.5	0.8	0.7
Washington	55	92	99	0.5	0.8	0.8
Wyoming	6	5	4	0.6	0.4	0.3

--Not reported.

^aThe custody population includes only those inmates housed in a jurisdiction's facilities.

^bTotals exclude those inmates in jurisdictions that did not report data on HIV/AIDS.

Counts may differ from previous reports. Percentages for all years are based on year-end custody counts.

Source: BJS, National Prisoner Statistics.

Table 3. Inmates in custody of State or Federal prison authorities, by type of HIV infection or confirmed AIDS, year-end 1996

Jurisdiction	Cases of HIV or confirmed AIDS				Confirmed AIDS cases as a percent of —	
	Total ^a	Asymptomatic ^b	Symptomatic ^c	Confirmed AIDS	Total HIV cases	Custody population
U.S. total	24,881	15,697	1,959	5,874	23.6%	0.5%
Federal	947	549	45	353	37.3	0.4
State	23,934	15,148	1,914	5,521	23.1	0.6
Northeast	12,090	9,109	846	2,135	17.7%	1.3%
Connecticut	690	199	252	239	34.6	1.6
Maine	4	4	0	0	**	0
Massachusetts	393	79	148	166	42.2	1.5
New Hampshire	18	0	18	0	0	0
New Jersey	705	445	--	260	36.9	1.1
New York	9,500	8,005	287	1,208	12.7	1.7
Pennsylvania	652	318	112	222	34	0.6
Rhode Island	125	56	29	40	32	1.2
Vermont	3	3	0	0	**	0
Midwest	1,874	1,017	83	584	31.2%	0.3%
Illinois	634	394	42	198	31.2	0.5
Indiana	--	--	--	--	--	--
Iowa	24	16	--	8	33.3	0.1
Kansas	16	9	--	7	43.8	0.1
Michigan	528	255	--	273	51.7	0.6
Minnesota	24	9	7	8	33.3	0.2
Missouri	190	--	--	--	--	--
Nebraska	17	9	4	4	23.5	0.1
North Dakota	3	3	0	0	**	0
Ohio	343	279	--	64	18.7	0.1
South Dakota	4	0	0	4	**	0.2
Wisconsin	91	43	30	18	19.8	0.1
South	8,162	3,960	820	2,221	27.2%	0.5%
Alabama	234	176	0	58	24.8	0.3
Arkansas	77	20	37	20	26	0.2
Delaware	--	--	--	--	--	--
District of Columbia	--	--	--	--	--	--
Florida	2,152	1,279	--	873	40.6	1.4
Georgia	814	--	--	--	--	--
Kentucky	55	36	13	6	10.9	0.1
Louisiana	347	--	--	--	--	--
Maryland	832	521	37	274	32.9	1.3
Mississippi	135	111	--	24	17.8	0.2
North Carolina	589	--	390	199	33.8	0.7
Oklahoma	108	99	--	9	8.3	0.1
South Carolina	422	309	--	113	26.8	0.6
Tennessee	131	--	94	37	28.2	0.3
Texas	1,876	1,128	249	499	26.6	0.4
Virginia	383	275	0	108	28.2	0.4
West Virginia	7	6	0	1	**	‡
West	1,808	1,062	165	581	32.1%	0.3%
Alaska	10	4	6	--	**	--
Arizona	205	171	--	34	16.6	0.2
California	1,136	585	122	429	37.8	0.3
Colorado	94	77	--	17	18.1	0.2
Hawaii	23	17	4	2	8.7	0.1
Idaho	17	13	0	4	23.5	0.1
Montana	6	2	0	4	**	0.3
Nevada	133	94	--	39	29.3	0.5
New Mexico	11	9	0	2	18.2	‡
Oregon	39	23	12	4	10.3	‡
Utah	31	17	0	14	45.2	0.3
Washington	99	46	21	32	32.3	0.3
Wyoming	4	4	0	0	**	0

Note: Totals and percentages exclude inmates in jurisdictions that did not report data on type of HIV/AIDS infection. The custody population includes only inmates housed at the end of 1996.

**Not calculated for 10 or fewer cases.

--Not reported.

‡Less than .05%.

^aGeorgia, Louisiana, and Missouri reported the total of HIV-positive cases but not the type of HIV.

^bIncludes all inmates who had tested positive for the HIV antibody but had no HIV-related symptoms.

^cIncludes inmates with symptoms of HIV infection but without a confirmed AIDS diagnosis.

Source: BJS, National Prisoner Statistics.

Confirmed AIDS Cases in U.S. Prisons

At the end of 1996, 5,874 inmates in U.S. prisons had confirmed AIDS: 5,521 were State inmates and 353 were Federal inmates (table 3). Of the remaining HIV-positive inmates, 1,959 showed symptoms of AIDS (symptomatic), while 15,697 were HIV positive but showed no symptoms of AIDS (asymptomatic).

Confirmed AIDS cases made up 0.5 percent of all inmates in State and Federal prisons. Of those inmates known to be HIV positive, nearly a quarter had confirmed AIDS.

During 1996 the number of confirmed AIDS cases increased by 748. Overall, after 1991 the number of confirmed AIDS cases increased by 4,165—an average annual increase of 28.3 percent. The number of inmates with lesser or no symptoms of HIV infection actually decreased in 1996, and the number was below the numbers reported in every year from 1992 to 1995.

Year	HIV-positive State and Federal inmates	
	Confirmed AIDS cases	Other than confirmed AIDS cases
1991	1,682	15,797
1992	2,644	18,087
1993	3,765	17,773
1994	4,849	17,864
1995	5,099	18,165
1996	5,847	17,656

Note: Care should be exercised when comparing the number of reported cases over time. In January 1993 the Centers for Disease Control and Prevention revised the HIV classification system and expanded the surveillance case definition for AIDS to include specific CD4+ T-lymphocyte criteria and three additional clinical conditions—pulmonary tuberculosis, recurrent pneumonia, and invasive cervical cancer. This expansion resulted in a substantial increase in the number of reported AIDS cases during 1993. See *Methodology*, pp. 17-19.

The States with the largest number of confirmed AIDS cases were New York (1,208), Florida (873), Texas (499), and California (429). Combined, these States made up 55 percent of all confirmed AIDS cases in State prisons. Eighteen States reported having fewer than 10 confirmed AIDS cases in their prisons.

The highest percentage of the State prison population having confirmed AIDS was in New York (1.7 percent), followed by Connecticut (1.6 percent), Massachusetts (1.5 percent), Florida (1.4 percent), and Maryland (1.3 percent). In 17 States confirmed AIDS cases comprised 0.1 percent or fewer of State inmates.

Comparison to the U.S. Resident Population

At the end of 1996, the rate of confirmed AIDS in State and Federal prisons was six times higher than in the total U.S. population. About 54 in 10,000 prison inmates had confirmed AIDS, compared to 9 in 10,000 persons in the U.S. population.

In every year from 1991 to 1996, the rate of confirmed AIDS was higher among prison inmates than in the general population. In 1992 the rate of AIDS was 11 times higher for prisoners than the general population. In 1993, following a revision of the HIV classification system and an expansion of the case definition for AIDS, the rate of confirmed AIDS increased 1½ times among prisoners and doubled in the general population. After the adoption of these new measures, the incidence of AIDS grew somewhat faster in the general population. At year-end 1996 the rate of confirmed AIDS was six times higher in prisons than in the general population.

Year	Percent of population with confirmed AIDS	
	U.S. general population	Inmates in State and Federal prisons
1991	0.03%	0.21%
1992	0.03	0.33
1993	0.06	0.50
1994	0.07	0.52
1995	0.08	0.51
1996	0.09	0.54

Note: The percent of the general population with confirmed AIDS in each year may be overestimated due to delays in death reports. Care should be exercised when comparing percents over time, because of changes in the case definition for AIDS. See *Methodology*, pp. 17-19.

Table 4. State prison inmates known to be positive for the human immunodeficiency virus, by sex, year-end 1996

Jurisdiction	Male HIV cases		Female HIV cases	
	Number	Percent of population	Number	Percent of population
Total	21,799	2.3%	2,135	3.5%
Northeast	10,985	7.2%	1,105	13.0%
Connecticut	581	4.2	109	9.7
Maine	4	0.3	0	0
Massachusetts	327	3.2	66	9.1
New Hampshire	15	0.8	3	2.1
New Jersey	614	2.8	91	9.0
New York	8,736	13.2	764	20.5
Pennsylvania	605	1.8	47	3.2
Rhode Island	100	3.3	25	11.7
Vermont	3	0.3	0	0
Midwest	1,741	1.0%	133	1.3%
Illinois	583	1.6	51	2.3
Indiana	--	--	--	--
Iowa	21	0.4	3	0.6
Kansas	15	0.2	1	0.2
Michigan	498	1.2	30	1.6
Minnesota	23	0.5	1	0.4
Missouri	178	0.9	12	0.8
Nebraska	17	0.6	0	0
North Dakota	2	0.3	1	1.8
Ohio	317	0.7	26	0.9
South Dakota	4	0.2	0	0
Wisconsin	83	0.7	8	1.3
South	7,375	1.8%	787	3.0%
Alabama	217	1.1	17	1.3
Arkansas	72	0.9	5	0.9
Delaware	--	--	--	--
District of Columbia	--	--	--	--
Florida	1,929	3.2	223	6.8
Georgia	734	2.2	80	3.6
Kentucky	52	0.5	3	0.6
Louisiana	329	1.9	18	2.3
Maryland	763	3.7	69	6.6
Mississippi	130	1.4	5	0.7
North Carolina	517	1.9	72	4.0
Oklahoma	98	0.7	10	0.8
South Carolina	398	2.1	24	2.1
Tennessee	129	1.0	2	0.5
Texas	1,645	1.3	231	2.3
Virginia	355	1.5	28	2.1
West Virginia	7	0.3	0	0
West	1,698	0.8%	110	0.7%
Alaska	8	0.3	2	1.1
Arizona	200	1.0	5	0.3
California	1,096	0.8	40	0.4
Colorado	86	0.9	8	1.0
Hawaii	23	0.8	0	0
Idaho	15	0.5	2	0.9
Montana	6	0.4	0	0
Nevada	103	1.4	30	5.2
New Mexico	10	0.2	1	0.3
Oregon	35	0.4	4	0.7
Utah	28	0.7	3	1.1
Washington	85	0.7	14	1.5
Wyoming	3	0.2	1	1.1

--Not reported.

Source: BJS, National Prisoner Statistics.

HIV Infection of Male and Female State Prison Inmates

At year-end 1996 there were 21,799 male inmates and 2,135 female inmates known to be HIV positive (table 4). Overall, 2.3 percent of male inmates and 3.5 percent of all female inmates were known to be HIV positive. The rate of HIV infection in females was higher than male infection rates in all regions except the West and in most States.

Between 1995 and 1996 the number of infected female inmates decreased 2.2 percent from 2,182 to 2,135; the number of infected male inmates increased 5.4 percent from 20,690 in 1995 to 21,799 in 1996. Overall, among State prisoners, the number of males infected with HIV increased 35 percent, and the number of females infected increased 84 percent between 1991 and 1996.

Year	State prison inmates	
	Number of HIV-positive inmates	Percent HIV positive in custody population of reporting States
Males		
1991	16,150	2.2%
1992	18,266	2.6
1993	18,218	2.5
1994	19,762	2.4
1995	20,690	2.3
1996	21,799	2.3
Average annual change, 1991-96*	6.2%	
Females		
1991	1,159	3.0%
1992	1,598	4.0
1993	1,796	4.2
1994	1,953	3.9
1995	2,182	4.0
1996	2,135	3.5
Average annual change, 1991-96*	13.0%	

*In 1991 North Carolina, South Dakota, and the District of Columbia did not report data by gender. In 1995 Delaware, Indiana, South Carolina, and the District of Columbia did not report data by gender.

Source: BJS, National Prisoner Statistics.

States in the Northeast reported the largest number of HIV-positive male and female inmates (10,985 and 1,105, respectively). In eight States, more than 5 percent of all female inmates were known to be HIV positive. In two States over 10 percent of all female inmates were known to be HIV positive—New York (20.5 percent) and Rhode Island (11.7 percent). New York (13.2 percent) was the only State in which more than 10 percent of all male inmates were HIV positive.

Among all States, New York reported the largest number of male and female HIV-positive inmates (8,736 and 764, respectively). The second largest number of HIV-positive male inmates were in Florida (1,929), followed by Texas (1,645). The second largest number of HIV-positive female inmates were in Texas (231), followed by Florida (223). Seven States reported no female HIV-positive inmates, and every State reported at least one male HIV-positive inmate.

AIDS-Related Deaths in State Prisons

The number of State inmates who died of *Pneumocystis carinii* pneumonia, Kaposi's sarcoma, or other AIDS-related diseases decreased from 1,010 in 1995 to 907 in 1996 (table 5). These AIDS deaths accounted for 29 percent of all deaths among State prisoners, down from 34 percent in 1995. Beginning in 1991 AIDS-related causes were the second leading cause of death in State prisons, behind natural causes other than AIDS.

In 1996, for every 100,000 inmates, 90 died from AIDS-related causes. Between 1991 and 1995, the number of AIDS-related deaths in State prisons increased 94 percent; however, in 1996 the number decreased 10 percent from 1995. With the introduction of protease inhibitors and combination antiretroviral therapies, there was appreciable improvement in the effectiveness of HIV/AIDS care.

The rate of death because of AIDS is about three times higher in the prison population than in the total U.S. population age 15–54. Between 1991 and 1996, about 1 in every 3 prisoner deaths were attributable to AIDS-related causes, compared to about 1 in 10 deaths in the general population.

AIDS-related deaths accounted for more than half of all inmate deaths in Connecticut (65 percent), New York (55 percent), New Jersey (52 percent), and Florida (50 percent) (table 6). Seventeen States reported having no AIDS-related deaths, and five States reported one AIDS-related death.

Year	AIDS-related deaths as a percent of all deaths	
	U.S. general population age 15–54*	State prison inmates
1991	10.4%	28.0%
1992	11.7	35.2
1993	11.9	33.2
1994	12.7	35.1
1995	12.4	34.2
1996	--	29.3

-- Not available.

* See *Methodology*, p. 18, for source of data.

Table 5. Number of inmate deaths in State prisons, by cause, 1994–96

Cause of death	1994		1995		1996	
	Number	Rate of death per 100,000 inmates	Number	Rate of death per 100,000 inmates	Number	Rate of death per 100,000 inmates
Total	2,878	314	3,133	311	3,095	308
Natural causes other than AIDS	1,393	152	1,569	156	1,715	170
AIDS	955	104	1,010	100	907	90
Suicide	155	17	160	16	154	15
Accident	33	4	48	5	43	4
Execution	30	3	56	6	45	4
By another person	68	7	86	9	65	6
Other/unspecified	244	27	204	20	166	16

Note: In 1994 some States did not report complete data on cause of death. To calculate the rate of death, the number of inmates under State jurisdiction on June 30 of each year was used as an approximation of the average population exposed to the risk of death during the year. Inmates in States that did not report data on inmate deaths were excluded in 1994. All States reported data on inmate deaths in 1995 and 1996.

Source: BJS, National Prisoner Statistics.

Table 6. AIDS-related deaths of sentenced prisoners under State jurisdiction, 1996

Jurisdiction	Deaths from all causes in State prisons		AIDS-related deaths		
	Total	Rate per 100,000 inmates ^a	Total	Rate per 100,000 inmates ^a	As a percent of all deaths ^b
Total	3,095	308	907	90	29.3%
Northeast	691	437	329	208	47.6%
Connecticut	49	327	32	213	65.3
Maine	3	206	0	0	**
Massachusetts	30	262	7	61	23.3
New Hampshire	2	97	0	0	**
New Jersey	142	554	74	289	52.1
New York	330	482	182	266	55.2
Pennsylvania	128	429	33	111	25.8
Rhode Island	7	223	1	32	**
Vermont	0	0	0	0	**
Midwest	480	252	61	41	12.7%
Illinois	96	254	32	85	33.3
Indiana	39	248	2	13	5.1
Iowa	10	176	0	0	**
Kansas	20	289	2	29	10.0
Michigan	125	302	--	--	--
Minnesota	10	210	1	21	**
Missouri	37	195	0	0	0
Nebraska	8	286	0	0	**
North Dakota	0	0	0	0	**
Ohio	117	269	20	46	17.1
South Dakota	4	220	0	0	**
Wisconsin	14	132	4	38	28.6
South	1,461	327	447	109	30.6%
Alabama	89	443	13	65	14.6
Arkansas	23	253	2	22	8.7
Delaware	20	430	0	0	0
District of Columbia	29	277	--	--	--
Florida	247	398	124	200	50.2
Georgia	114	334	48	141	42.1
Kentucky	30	251	1	8	3.3
Louisiana	86	346	20	81	23.3
Maryland	48	224	16	75	33.3
Mississippi	32	257	5	40	15.6
North Carolina	74	276	26	97	35.1
Oklahoma	66	375	4	23	6.1
South Carolina	76	390	27	139	35.5
Tennessee	60	402	8	54	13.3
Texas	377	297	122	96	32.4
Virginia	84	308	31	114	36.9
West Virginia	6	246	0	0	**
West	463	220	70	33	15.1%
Alaska	3	93	0	0	**
Arizona	61	292	0	0	0
California	253	192	49	37	19.4
Colorado	22	205	0	0	0
Hawaii	4	112	0	0	**
Idaho	3	93	1	31	**
Montana	5	264	0	0	**
Nevada	35	467	8	107	22.9
New Mexico	4	97	0	0	**
Oregon	25	333	2	27	8.0
Utah	7	214	1	31	**
Washington	33	289	9	79	27.3
Wyoming	8	612	0	0	**

--Not reported.

**Not calculated for 10 or fewer deaths.

^aBased on the number of inmates under State jurisdiction on June 30, 1996.^bNational and regional totals exclude inmates in jurisdictions that did not report data on cause of death.

Source: BJS, National Prisoner Statistics.

HIV Prevalence Rates and Testing Policies

Data on HIV prevalence rates are reported in the National Prisoners Statistics series (NPS) by prison officials. The quality of the information reported varied by the testing policies that a particular State implemented. Testing policies ranged from testing all inmates to testing only upon inmate request. Although 19 States tested either all inmates in custody or a random selection, and 27 test targeted groups (high-risk individuals or upon indication or incidence), 5 tested solely upon inmate request. Official data represent the minimum number of individuals known to be HIV positive within a prison facility.

Testing policy	Number of jurisdictions
All inmates (incoming or in custody)	16
Random	3
High-risk groups/upon incident/ indication of need	27
Inmate request only	5

Note: Categories are mutually exclusive; therefore total adds to 51. Delaware did not report data on testing policies. See chapter 5 for more detailed data on testing policies. Source: BJS, National Prisoner Statistics.

Blinded or “unlinked” studies have been conducted as another means of determining the HIV prevalence in State prisons. These studies are blinded in that the identity of the inmate is not linked to the result of the HIV test. An inmate’s blood that has been drawn during a routine physical examination upon entering a facility is tested for HIV. The sample is sent to a lab with no information regarding the inmate.

Blinded studies may not accurately account for the prevalence rate of HIV in prisons. Often these studies are conducted in only a few facilities, and are snapshots, examined over one period solely on admission cohorts. Because of this, blinded studies are limited in that they may not be generalized to the overall prison population. Discrepancies are apparent between HIV prevalence rates reported in official records and those produced from blinded studies.

Data from a blinded study conducted in Massachusetts in 1995 suggest that 6.8 percent of incoming inmates are HIV positive, while official data from 1995 indicate 3.9 percent of all inmates in custody were HIV positive. Similarly, data from blinded studies conducted in Maryland (1991), California (1994), Illinois (1991), and New Jersey (1991)

suggest that official data underestimate the HIV prevalence rate.

Official data from New York in 1994 and 1995, however, revealed higher HIV prevalence rates than data from a 1994-1995 blinded study. The blinded study showed that 10 percent of all incoming inmates were HIV positive, while official data showed that of all inmates in custody, 12.4 percent in 1994 and 13.9 percent in 1995 were HIV positive. Similarly, National Prisoner Statistics (NPS) data from Arkansas (1992) and Washington (1991) suggest a higher prevalence rate among inmates than data from blinded studies (0.9 percent compared to 0.6 percent, and 0.5 percent compared to 0.2 percent).

States	Percent HIV positive	
	NPS	Blinded studies ^a
Massachusetts (1995)	3.9%	6.8%
Maryland (1991)	2.5	8.5
California (1994)	0.8	2.5
Illinois (1991)	1.0	4.9
New Jersey (1991)	4.0	9.5
New York (1994-95) ^b	13.2	10.0
Arkansas (1992)	0.9	0.6
Washington (1991) ^c	0.5	0.2

^aData from Illinois, New Jersey, Arkansas, and Washington came from the 1994 Update: HIV/AIDS and STDs in Correctional Facilities. Data for Massachusetts, Maryland, California, and New York came from other sources. (See *Methodology*, p. 19, for further detail.)

^bThe New York blinded study covered both 1994 and 1995. The NPS rate for New York represents an average of the reporting years.

^cNo women were tested in the blinded study.

HIV/AIDS Reported in Personal Interviews

Additional information on the prevalence of HIV/AIDS may also be obtained through personal interviews of prisoners. Though some inmates may be reluctant to report that they are HIV positive and others may not know, surveys provide a means to track HIV infection among demographic and “high-risk” groups not identified in official records or blinded studies.

The 1997 Surveys of State and Federal Correctional Facilities asked inmates if they had ever been tested, if they had been tested since admission, and whether they were HIV positive. Similar questions were asked in the 1996 Survey of Inmates in Local Jails. (See *Methodology* for further detail.)

Table 7. Inmates ever tested or tested since admission for the human immunodeficiency virus and test results

Characteristic	Percent of inmates		
	Local jails	State prisons	Federal prisons
All inmates			
HIV positive	1.2%	1.7%	0.5%
Ever tested	57.2%	74.6%	79.6%
HIV positive	2.2	2.2	0.6
Tested since admission	17.7%	59.1%	69.7%
HIV positive	3.9	2.6	0.7

Note: Data are from the 1996 Survey of Inmates in Local Jails and the 1997 Surveys of Inmates in State and Federal Correctional Facilities.

In 1997, 17,674 (1.7 percent) State prison inmates and 428 (0.5 percent) Federal prison inmates were known to be HIV positive (table 7). Of those inmates who reported being tested since admission to State prison, or to Federal prison, 2.6 percent and 0.7 percent, respectively, reported being HIV positive.

Among State prisoners, female inmates (3.4 percent) were more likely than male inmates (2.2 percent) to be HIV positive (table 8). Black non-Hispanic inmates (2.8 percent) were twice as likely as white non-Hispanic inmates (1.4 percent) to report being HIV positive.

Among male inmates, blacks (2.7 percent) were nearly twice as likely as whites to be HIV positive. The rates of

Table 8. Inmates ever tested for the human immunodeficiency virus and results, by selected characteristics

Characteristic	Inmates ever tested					
	Local jails		State prisons		Federal prisons	
	Number	Percent HIV positive	Number	Percent HIV positive	Number	Percent HIV positive
All inmates	289,991	2.2%	790,128	2.2%	70,902	0.6%
Sex						
Male	258,019	2.1%	734,327	2.2%	65,723	0.6%
Female	31,972	2.4	55,800	3.4	5,179	0.6
Race/Hispanic origin						
White non-Hispanic	110,023	1.4%	257,919	1.4%	21,128	0.3%
Male	98,745	1.3	239,687	1.4	19,565	0.3
Female	11,278	2.1	18,232	2.3	1,563	0.3
Black non-Hispanic	125,259	2.6	384,870	2.8	28,178	0.8
Male	110,453	2.5	357,736	2.7	26,387	0.8
Female	14,806	3.2	27,135	3.9	1,791	1.3
Hispanic	45,759	3.2	123,725	2.5	18,466	0.7
Male	40,985	3.5	115,344	2.4	16,892	0.7
Female	4,774	1.3	8,382	4.2	1,573	0
Age						
17-24	81,228	0.7%	154,181	0.5%	5,528	0.1%
25-34	116,532	2.1	310,161	2.3	26,262	0.5
35-44	70,776	3.8	232,835	3.1	22,228	0.4
45 or older	21,455	3.0	92,168	2.7	16,884	1.2
Marital status						
Married	45,890	1.4%	128,834	1.7%	21,545	0.5%
Widowed/divorced	48,695	3.0	161,468	2.0	16,331	0.4
Separated	25,929	2.1	45,435	2.9	3,884	0
Never married	169,270	2.1	453,664	2.4	29,045	0.8
Education						
Less than high school	121,589	2.3%	302,437	2.7%	17,226	0.8%
GED	45,431	1.3	231,714	1.4	16,389	0.6
High school or more	122,597	2.3	254,975	2.4	37,237	0.5

Note: Data are from the 1996 Survey of Inmates in Local Jails and the 1997 Surveys of Inmates in State and Federal Correctional Facilities.

Table 9. Inmates ever tested for the human immunodeficiency virus and results, by offense and prior drug use

Characteristic	Inmates ever tested					
	Local jails		State prisons		Federal prisons	
	Number	Percent HIV positive	Number	Percent HIV positive	Number	Percent HIV positive
Current offense						
Violent	72,846	1.5%	360,370	1.9%	10,681	1.0%
Property	79,936	2.2	178,601	2.4	4,660	1.0
Drug	65,780	3.3	164,256	2.9	43,815	0.4
Public-order	64,820	1.7	77,049	1.9	10,029	1.0
Prior drug use						
Never	42,242	1.6%	123,049	1.7%	18,917	0.3%
Ever	247,233	2.3	665,977	2.3	51,847	0.7
In the month before offense	106,907	2.9	460,685	2.7	32,113	0.3
Used needle to inject drugs	61,862	4.0	168,446	4.6	9,443	1.3
Ever shared a needle	25,476	6.3	74,393	7.7	4,022	2.1

Note: Data are from the 1996 Survey of Inmates in Local Jails and the 1997 Surveys of Inmates in State and Federal Correctional Facilities.

HIV infection among female inmates were not significantly different among whites (2.3 percent), blacks (3.9 percent), and Hispanics (4.2 percent).

In Federal prisons 0.6 percent of males and of females reported HIV infection. Non-Hispanic white inmates reported the lowest HIV-positive rates (0.3 percent). In both State and Federal prisons, inmates age 17 to 24 reported the lowest rate of being HIV positive (0.5 percent and 0.1 percent, respectively). In State prisons, inmates age 35 to 44 reported the highest HIV-positive rate (3.1 percent). Those State inmates in each age category over 24 were more likely to be HIV positive than those who were 24 or younger. In Federal prisons, inmates age 45 or older reported the highest rate of HIV infection (1.2 percent).

HIV-Positive Prison Inmates, by Offense and Prior Drug Use

Those inmates being held on a drug offense in State prisons reported the highest HIV positive rate (2.9 percent) (table 9). Of property offenders, 2.4 percent reported being HIV positive. Violent and public-order offenders reported slightly lower rates (1.9 percent each). Among Federal prison inmates, 1.0 percent of violent offenders, property offenders, and public-order offenders reported being HIV positive as did 0.4 percent of drug offenders.

The percentage of State and Federal prison inmates reporting that they were HIV positive varied by level of prior drug use. By type of drug use practice, the following percentages of State prison inmates reported being HIV positive: never using drugs, 1.7 percent HIV positive; ever used drugs, 2.3 percent; used drugs in the month before their current offense, 2.7 percent; used a needle to inject drugs, 4.6 percent; and shared a needle, 7.7 percent HIV positive. Like State inmates, Federal inmates who used a needle and shared a needle had a higher rate of HIV infection than those inmates who reported ever using drugs or using drugs in the month before their current offense (1.3 percent and 2.1 percent compared to 0.7 percent and 0.3 percent). Unlike State inmates, Federal inmates using drugs in the month prior to their current offense reported a lower rate of HIV infection (0.3 percent) than inmates who reported ever using drugs (0.7 percent).

HIV Infection of Local Jail Inmates

At midyear 1993, when the last national census of local jails was conducted, 1.8 percent of the inmates were known to be HIV positive. Among jails reporting data, a total of 6,711 inmates were HIV positive, and 1,888 had confirmed AIDS. The infection rate was highest in the largest jail jurisdictions. Almost 3 percent of the inmates in the Nation's largest jurisdictions were reported HIV positive. Among the remaining jurisdictions, the larger the size, the greater the percentage of inmates with HIV/AIDS. In jurisdictions with 500 or more inmates, 1.6 percent of the inmates were infected; in jurisdictions with 250 to 499 inmates, 1.2 percent; and in jurisdictions holding fewer than 250 inmates, 1 percent or less.

Size of jurisdiction ^a	1993 Census of Jails	
	Number HIV positive ^b	HIV/AIDS as a percent of jail inmates
Total	6,711	1.8%
50 largest	3,926	2.9
500 or more	1,374	1.6
250-499	490	1.2
100-249	470	1.0
Fewer than 100	451	0.8

^aBased on the average daily population between July 1, 1992, and June 30, 1993.

^bExcludes inmates in facilities that did not report data.

Source: *HIV in Prisons and Jails, 1993*.

HIV Test Results for Local Jail Inmates, by Inmate Characteristic

Detailed data, based on interviews of a national sample of inmates in local jails, are available from the 1996 Survey of Inmates in Local Jails. Conducted between October 1995 and March 1996, the survey provides national estimates of the number of jail inmates tested for HIV/AIDS and the percent HIV positive.

In 1996, 6,289 local jail inmates (1.2 percent of all inmates) were known to be HIV positive (table 7). An estimated 57 percent of all respondents in the survey said they had ever been tested for HIV. Of those who had been tested for HIV, 2.2 percent said they were HIV positive. Since admission, about 18 percent of inmates had been tested for HIV, and 3.9 percent reported HIV positive results.

Among jail inmates, 2.1 percent of males and 2.4 percent of females said they were HIV positive (table 8). An estimated 2.6 percent of black inmates, compared to 1.4 percent of white inmates, said they tested HIV positive. Among male inmates, blacks (2.5 percent) were nearly twice as likely as whites (1.3 percent) to report being HIV positive. Hispanic males had the highest HIV-positive rate (3.5 percent). Among female inmates, although the percentage who reported they were HIV positive was higher among blacks (3.2 percent) than whites (2.1 percent) and Hispanics (1.3 percent,) the differences were not statistically significant.

Inmates age 24 or younger had the lowest HIV-positive rates (0.7 percent), while those 35 to 44 had the highest rates (3.8 percent). Inmates 25-34 and 45 or older fell in the middle (2.1 percent and 3.0 percent, respectively). Inmates who had completed high school were as likely as those who had not completed high school to say they tested HIV positive (2.3 percent).

Percent HIV Positive among Jail Inmates, by Offense and Prior Drug Use

Among jail inmates who said they had been tested for HIV/AIDS, those held for drug offenses were the most likely to be HIV positive (3.3 percent) (table 9). Drug offenders were twice as likely as violent offenders (1.5 percent) to report that they tested positive for HIV. Property and public-order offenders reported somewhat lower rates—2.2 percent and 1.7 percent, respectively.

The percent of jail inmates reporting that they were HIV positive varied by level of prior drug use. An estimated 2.3 percent of inmates who had ever used drugs, 2.9 percent of inmates who used drugs in the month before their current offense, 4.0 percent of inmates who said they had used needles to inject drugs, and 6.3 percent of those who had shared a needle with someone else reported being HIV positive.

Methodology

National Prisoner Statistics

The National Prisoner Statistics series (NPS) includes an annual year-end count of prisoners by jurisdiction, sex, race, Hispanic origin, and admissions and releases during the year. The series consists of yearly reports to the Bureau of Justice Statistics from the departments of corrections of the 50 States and the District of Columbia and from the Federal Bureau of Prisons.

Since 1991 respondents have been asked to indicate their policies for testing for HIV and to provide the number of HIV-infected inmates in their custody on the last day of the calendar year.

Surveys of Inmates in State and Federal Correctional Facilities, 1997

The 1997 Surveys of Inmates in State and Federal Correctional Facilities were conducted for the Bureau of Justice Statistics by the U.S. Bureau of the Census. The Federal Bureau of Prisons co-sponsored the Survey of Inmates in Federal Correctional Facilities. Personal interviews were conducted from June 1997 through October 1997. Information was collected about individual characteristics of prison inmates, current and prior offenses and sentences, criminal histories, characteristics of the current offense, family background, prior drug and alcohol use and treatment, and conditions of confinement.

The sample for the Federal inmates survey was selected from a universe of 135 Federal prisons holding sentenced inmates. For State inmates the sample came from 1,453 State prisons counted in the 1995 Census of State Correctional Facilities performed on June 30, 1995, with prisons opening between the census and June 30, 1996, added. The overall response rate in the State survey was 92.5 percent. Similar surveys of State prison inmates were conducted in 1974, 1979, 1986, and 1991. The first survey of Federal inmates was done in 1991.

Census of Jails, 1993

The 1993 Census of Jails included all locally administered confinement facilities (3,287) that held inmates beyond arraignment and were staffed by municipal or county employees. The census also included 17 jails that were privately operated under contract for local governments.

Excluded from the census were temporary holding facilities, such as drunk tanks and police lockups, that do not hold persons after being formally charged in court (usually within 72 hours of arrest). Also excluded were State-operated facilities in Alaska, Connecticut, Delaware, Hawaii, Rhode Island, and Vermont, which have combined jail-prison systems.

Survey of Inmates in Local Jails, 1996

The 1996 Survey of Inmates in Local Jails was conducted for BJS by the U.S. Bureau of the Census. Through personal interviews conducted from October 1995 through March 1996, data were collected on individual characteristics of jail inmates, current offenses, sentences and time served, criminal histories, jail activities, conditions and programs, prior drug and alcohol use and treatment, and health care services provided while in jail. The sample for the 1996 survey was selected from a universe of 3,328 jails that were enumerated from the 1993 Census of Jails. The total nonresponse was 13.7 percent. Similar surveys of jail inmates were conducted in 1972, 1978, 1983, and 1989.

Accuracy of the Survey Estimates

The accuracy of the estimates from the 1996 Survey of Inmates in Local Jails and the 1997 Surveys of Inmates in State and Federal Correctional Facilities depends on two types of error: sampling and nonsampling. Sampling error is variation that may occur by chance because a sample rather than a complete enumeration of the population was conducted. Nonsampling error can be attributed to many sources, such as nonresponse, differences in the interpretation of questions among inmates, recall difficulties, and processing errors. In any survey the full extent of the nonsampling error is never known.

The sampling error, as measured by an estimated standard error, varies by the size of the estimate and the size of the base population. Estimates for the percentage of inmates ever tested for HIV and the percentage who tested HIV positive have been calculated (see table 10). These standard errors may be used to construct confidence intervals around percentages. For example, the 95-percent confidence interval around the percentage of males in local jails who were HIV positive is approximately 2.1 percent plus or minus 1.96 times 0.33 percent (or 1.5 percent to 2.7 percent).

These standard errors may also be used to test the statistical significance of the difference between two sample estimates by pooling the standard errors of the estimates (that is, by taking the square root of the sum of the squared standard errors for each sample estimate). All comparisons discussed in this report were statistically significant at the 95-percent confidence level.

AIDS in the U.S. Resident Population

The number of persons with confirmed AIDS in the U.S. general population (age 13 and over) was derived from the Centers for Disease Control and Prevention (CDC), *HIV/AIDS Surveillance Report*, year-end editions 1991–1996. For each year the number of active AIDS cases in the United States was calculated by subtracting the number of cumulative AIDS deaths for people age 15 and older at year-end from the cumulative number of total AIDS cases for people age 13 and older at year-end as listed in the *HIV/AIDS Surveillance Report*.

The data for the U.S. general population, excluding persons under age 13, from 1991 to 1996 were taken from the U.S. Population Estimates, by Age, Sex, Race, and Hispanic Origin: 1990 to 1995, PPL-41, and the update for 1996.

The rate of confirmed AIDS cases in the U.S. resident population was calculated by dividing the annual totals for individuals with AIDS by the population estimates for the U.S. resident population of individuals 13 and older.

The classification system for HIV infection and the case definition for AIDS were expanded in 1993. This expansion improved estimates of the number and the characteristics of persons with HIV disease, but complicated interpretation of AIDS trends. The increase in reported AIDS cases in 1993 was largely the consequence of the added surveillance criteria. (See CDC, *Morbidity and Mortality Weekly Report*, Vol. 43, No. 45, November 18, 1994.)

AIDS-Related Deaths in the United States

The number of AIDS-related deaths for persons age 15–54 was derived from the CDC, *HIV/AIDS Surveillance Report*, year-end editions. Deaths in the U.S. population for persons age 15–54 were taken from the CDC, *Monthly Vital Statistics Report*, Vol. 42, No. 2(S); Vol. 43, No. 12; Vol. 43, No. 6(S); Vol. 45, No. 3(S); and Vol. 45, No. 11(S).

Table 10. Standard error estimates for the 1996 Survey of Inmates in Local Jails and the 1997 Surveys of State and Federal Correctional Facilities

Characteristics	Local jails	State prisons	Federal prisons
Sex			
Male	0.33%	0.20%	0.19%
Female	0.44	0.44	0.35
Race/Hispanic origin			
White non-Hispanic	0.38%	0.29%	0.31%
Male	0.41	0.31	0.33
Female	0.68	0.80	0.63
Black non-Hispanic	0.47	0.37	0.48
Male	0.53	0.38	0.51
Female	0.74	0.72	1.15
Hispanic	0.98	0.58	0.52
Male	1.09	0.61	0.56
Female	0.76	1.67	0.00
Age			
Under 24	0.30%	0.20%	0.27%
25–34	0.42	0.30	0.27
35–44	0.85	0.40	0.26
45 or older	1.13	0.60	0.52
Marital Status			
Married	0.58%	0.40%	0.30%
Widowed/divorced	0.88	0.39	0.31
Separated	0.97	0.88	0.00
Never married	0.38	0.25	0.33
Education			
Less than high school	0.47%	0.33%	0.42%
GED	0.46	0.27	0.38
High school graduate or more	0.49	0.34	0.23
Current Offense			
Violent	0.49%	0.25%	0.60%
Property	0.52	0.40	0.91
Drug	0.79	0.46	0.19
Public-order	0.66	0.55	0.62
Prior drug use			
Never used	0.62%	0.41%	0.25%
Ever used	0.33	0.21	0.23
Used month before offense	0.58	0.27	0.19
Used needle to inject drugs	0.85	0.57	0.73
Shared a needle	1.71	1.09	1.41

AIDS-related deaths as a percentage of all deaths in the U.S. population were calculated by dividing the national estimate of AIDS deaths of persons age 15–54 by the national mortality estimates of persons age 15–54 in a given year.

HIV Prevalence Rates from Blinded Studies

Data from blinded studies on HIV prevalence rates in Massachusetts, Maryland, California, and New York were gathered from several sources:

B. Werner et al., "Drop in HIV Seroprevalence among Men and Women Entering Massachusetts Prisons," Abstract No. 115, presented at the Third Conference on Retroviruses and Opportunistic Infections, Washington, D.C., January 28–February 1, 1996.

C. Behrendt et al., "Voluntary Testing for HIV in a Prison Population with a High Prevalence of HIV." *American Journal of Epidemiology*, 139 (1994) pp. 918-26.

J. Ruiz and J. Mikanda, *Seroprevalence of HIV, Hepatitis B, Hepatitis C, and Risk Behaviors among Inmates Entering the California Correctional System* (Sacramento: California Department of Health Services, Office of AIDS, HIV/AIDS Epidemiology Branch, March 1996).

J. Mikl et al., "Trends in HIV Infection Rates among New York State Prison Inmates, 1987–1997," Poster abstract Number 23516, presented at the 12th World Congress on AIDS, Geneva, June 30, 1997.

Chapter 2

Sexually Transmitted Diseases and Hepatitis:

Burden of Disease Among Inmates

Theodore M. Hammett and Patricia Harmon—Abt Associates Inc.

Key Findings

- Available data on STDs and hepatitis B and C among inmates are very incomplete, reflecting the relative rarity of routine screening for these conditions in correctional facilities.
- However, behavioral profiles and anecdotal evidence suggest that inmates are disproportionately affected by STDs and hepatitis.

STDs Among Inmates

According to the 1997 NIH/CDC survey, 88 percent of State/Federal prison systems and 41 percent of city/county jail systems have policies for mandatory or routine syphilis screening of incoming inmates (table 11). However, 64 percent of State/Federal systems and 29 percent of city/county systems with mandatory or routine syphilis screening did not report or were unable to report the results of such screening on the survey. Of those systems that did report, most had syphilis positivity rates of less than 5 percent (table 11), but these are very incomplete data. Even fewer correctional systems have mandatory or routine screening for gonorrhea or chlamydia, and the few systems reporting results had positivity rates of less than 5 percent for incoming inmates (tables 12–13). Indeed, the most striking point about these survey findings is the rarity of screening and the paucity of screening data. Since gonorrhea is likely to be symptomatic among men, however, it is probable that most cases will be detected without mass screening programs.

Table 11. Results of mandatory and routine inmate syphilis screening, 1997

% Positive	State/Federal Prison Systems		City/County Prison Systems	
	n	%	n	%
<5	13	25	5	12
5–9.99	1	2	4	10
10–20	2	4	3	7
>20	0	—	0	—
Did not report	29	57	5	12
No mandatory or routine screening	6	12	24	59
Total	51	100	41	100

Source: NIH/CDC survey.

Table 12. Results of mandatory and routine gonorrhea screening, 1997

% Positive	State/Federal Prison Systems		City/County Prison Systems	
	n	%	n	%
<5	3	6	2	5
≥5	0	—	0	—
Did not report	11	22	1	2
No mandatory or routine screening	37	73	38	93
Total	51	101*	41	100

*Due to rounding.

Source: NIJ/CDC survey.

Table 13. Results of mandatory and routine chlamydia screening, 1997

% Positive	State/Federal Prison Systems		City/County Prison Systems	
	n	%	n	%
<5	5	4	1	2
≥5	0	—	0	—
Did not report	5	16	1	2
No mandatory or routine screening	41	80	39	95
Total	51	100	41	99*

*Due to rounding.

Source: NIJ/CDC survey.

Most available behavioral profiles of correctional inmates suggest that they are at high risk for, and disproportionately infected with, STDs. Anecdotal reports confirm this—for example, 24 percent of all of Chicago’s incident syphilis cases in 1996 were diagnosed in Cook County Jail, and 13 percent of Florida’s syphilis morbidity was identified in correctional facilities (site visit interviews, Chicago and Florida, March–April 1997). Better estimates of the burden of STD morbidity among inmates may help support increased resources for STD prevention and treatment programs in correctional facilities.

Hepatitis Among Inmates

Hepatitis B vaccine is increasingly available to correctional inmates and staff, and thus this infection, which is transmitted by the same routes as HIV, can and should be brought under better control in correctional facilities. The Occupational Safety and Health Administration (OSHA) requires that correctional staff who have direct contact with inmates be offered hepatitis B vaccination.

By contrast, there is not yet a vaccine or proven effective treatment for hepatitis C, and this disease is an increasingly serious problem, particularly among injection-drug users (IDUs) and persons infected with HIV.¹ In a 1994 blinded study, 41 percent of incoming California inmates (39 percent of men and 55 percent of women) were antibody positive for hepatitis C virus (HCV). In the same study, 61 percent of HIV-seropositive men and 85 percent of HIV-seropositive women were also HCV positive.² A study of female entrants to the Connecticut prison system found adjusted odds ratios for HCV infection of 10 and 7, respectively, among HIV-positive women and IDU women. More than 70 percent of IDU women in the study were HCV positive, and 36 percent of sexual partners of IDUs were HCV positive.³ A voluntary study of 192 inmates at a medium-security facility in Springhill, Nova Scotia, found that 28 percent were HCV positive, but the rates were sharply higher among IDUs (52 percent) than among non-IDUs (3 percent).⁴ A pilot study of 108 incoming male and female inmates at the Hampden County, Massachusetts, Correctional Center (Springfield area) in 1998 found that 22 percent were infected with HCV.⁵

Conclusion

Although available data are very incomplete, it appears that rates of STDs and hepatitis B and C are higher among inmates than in the overall population. Hepatitis C positivity rates are particularly high among HIV-positive inmates and those with histories of injection-drug use. More widespread implementation of hepatitis B immunization and screening for hepatitis C in correctional facilities seem warranted.

Endnotes

1. Centers for Disease Control and Prevention, “The Epidemiology of Viral Hepatitis in the United States,” *Morbidity and Mortality Weekly Report* 43 (1994): 437–455.

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2. J.D. Ruiz and J. Mikanda, *Seroprevalence of HIV, Hepatitis B, Hepatitis C and Risk Behaviors Among Inmates Entering the California Correctional System*, Sacramento: California Department of Health Services, Office of AIDS, HIV/AIDS Epidemiology Branch (March 1996): 1, 9, 12.
 3. K.P. Fennie et al., "Hepatitis C Virus Seroprevalence and Seroincidence in a Cohort of HIV+ and HIV- Female Inmates," poster abstract no. Tu.C.2655, presented at the 11th International Conference on AIDS, Vancouver, July 9, 1996.
 4. L.Y. Lior et al., "A Look Behind Closed Doors: Injection and Sexual Risk Behaviour and HIV, HBV and HCV Inside a Canadian Prison," poster abstract no. 23528, presented at the 12th World AIDS Conference, Geneva, June 30, 1998.
 5. Thomas Conklin, Hampden County Correctional Center, unpublished data.

Chapter 3

HIV and STD Education and Behavioral Interventions

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Key Findings

- HIV and STD prevention programs are becoming more widespread in correctional facilities.
- However, few correctional systems have implemented comprehensive and intensive HIV prevention programs in all of their facilities.
- Peer-based education and prevention programs offer important advantages, including cost-effectiveness, credibility, flexibility, and benefits to peers themselves.
- Although few HIV/STD prevention programs in correctional settings have been rigorously evaluated, anecdotal evidence suggests that they can be successful in reaching this extremely high-risk population with practical risk-reduction messages.

Periods of incarceration offer important opportunities to provide HIV and STD education and behavioral intervention programs for populations that are at extremely high risk. Taking advantage of these opportunities, moreover, stands to benefit not only inmates themselves but also the health of the communities to which the vast majority of inmates return. A wide range of HIV and STD prevention programs have been offered in correctional facilities, but most have been and continue to be basic education rather than more intensive behavioral interventions. In any case, very few education and prevention programs in correctional facilities have been subjected to a rigorous evaluation that includes conducting interviews with former inmates in the community.¹

Data from the 1997 NIJ/CDC survey presented in this chapter show that HIV/STD education and prevention programs are becoming more widespread in correctional facilities. Nevertheless, the important public health opportunity to provide comprehensive HIV prevention programs for correctional inmates has by no means been fully utilized.

Types of HIV/STD Education and Prevention Programs Provided

Table 14 summarizes the types of HIV/STD education and prevention programs that correctional systems provided to inmates in at least one of their facilities, according to the 1992, 1994, and 1997 NIJ/CDC surveys. This shows that the percentage of State and Federal systems offering instructor-led education rebounded to 94 percent in 1997 after dropping to 75 percent in 1994. The percentage of city/county systems providing instructor-led education also increased in 1997 to 73 percent.

Peer-led programs are in place in an increasing percentage of State/Federal systems, but still in fewer than half. Only 7 percent of city/county jail systems have peer programs, in part because inmates' short jail stays make it more difficult to institute such programs.

Table 14. HIV/STD education and prevention programs for inmates, 1992–97

Programs	Percentage of State/Federal Prison Systems Providing in at Least One Facility			Percentage of City/County Jail Systems Providing in at Least One Facility		
	1992	1994	1997	1992	1994	1997
	(n = 51)	(n = 51)	(n = 51)	(n = 31)	(n = 29)	(n = 41)
Instructor-led education	86	75	94	58	62	73
Peer-led programs	33	35	41	10	7	7
Pre-/posttest counseling	N/A	N/A	96	N/A	N/A	93
Multisession prevention counseling	N/A	N/A	59	N/A	N/A	41
Audiovisual materials	96	88	84	90	66	78
Written materials	96	94	96	71	72	90

Source: NIJ/CDC surveys.

In the 1997 NIJ/CDC survey, the category “multisession prevention counseling” was added to gauge the extent to which correctional systems are moving beyond simple education and toward more intensive programs designed to help inmates make and sustain the difficult behavioral changes needed to reduce their risks of acquiring or transmitting HIV and STDs. Almost 60 percent of State/Federal systems and 41 percent of city/county jail systems reported offering such programs. Pre- and posttest HIV counseling is offered in virtually all prison and jail systems, almost all systems provide written materials on HIV and STDs, and large majorities of systems employ audiovisuals.

The above figures reflect only the percentages of systems that reported providing these types of education and prevention programs in at least one of their facilities. The percentages of facilities (as opposed to systems) that provide the same types of education and prevention programs (table 15) are, in most cases, substantially lower. For example, less than two-thirds of facilities provide instructor-led education, about one-third provide multisession prevention counseling, and only 13 percent of State/Federal prisons and 3 percent of city/county jails offer peer-led programs. Pre- and posttest counseling was offered in the vast majority of facilities.

The validation study, in which reported policies in individual facilities were compared with those reported by systems’ central offices, revealed a fairly general agreement

regarding education and prevention programs but a few discrepancies as well (table 16). In particular, in systems that reported providing multisession prevention counseling in all of their facilities, only 59 percent of the facilities actually offered such programs.

Table 15. HIV/STD education and prevention programs in adult correctional facilities, 1995–97

Programs	Percentage of State/Federal Facilities Providing		Percentage of City/County Facilities Providing
	1994	1997	1997
	(n = 1,207)	(n = 1,486)	(n = 152)
Instructor-led education	48	61	66
Peer-led programs	7	13	3
Pre-/posttest counseling	N/A	86	84
Multisession prevention counseling	N/A	31	33

Source: NIJ/CDC surveys.

Table 16. HIV/STD education and prevention programs for inmates, 1997 results of the validation study (VS)

Central Office Policy	Systems in VS With This Policy	Facilities From These Systems in VS	Percentage in Agreement
Instructor-led education in all facilities	7	20	75
Mandatory intake education	11	30	57
Mandatory prerelease education	7	25	60
Peer-led education in all facilities	1	1	100
Pre-/posttest counseling in all facilities	10	28	100
Multisession prevention counseling in all facilities	5	17	59
Videos/audiovisual materials in all facilities	11	29	76
Written materials in all facilities	12	31	97

Source: NIJ/CDC surveys.

The Importance of Comprehensive HIV/STD Education and Prevention Programs

Comprehensive HIV/STD education and prevention programs should be provided for correctional inmates, given the prevalence of high-risk behaviors among them, the opportunity for interventions afforded during periods of incarceration, and the potential public health benefits of such programs. Given the existing knowledge of prevention and of the particular circumstances and needs of the correctional setting, a comprehensive program may reasonably be said to include instructor-led education, peer-led programs, pre- and posttest counseling, and multisession prevention counseling. The results of the 1997 NIJ/CDC survey reveal that only 10 percent of State/Federal prison systems and 5 percent of city/county jail systems offer comprehensive programs meeting this definition in all of their facilities. Clearly, then, there remains much room for improvement in the depth and coverage of HIV/STD education and prevention programs in correctional facilities. A promising approach in this realm is occurring in Massachusetts, where the Department of Public Health is funding comprehensive HIV/AIDS programs in the State's county jails. To be eligible for this funding, the counties must propose a program including HIV/AIDS prevention and education for inmates and staff, HIV counseling and testing, HIV primary

care and case management, and aftercare/transitional planning. The HIV/AIDS prevention and education component must include "most or all" of the following elements:

- Orientation.
- Peer education.
- Community-based prevention and education.
- Individual prevention and education, on request.
- Written and audiovisual materials.
- Prevention and education in prerelease, day reporting, and pretrial populations.
- Gender-specific programs at facilities housing women.
- Expansion of HIV curriculums to cover other communicable diseases.
- Programs and materials available in Spanish and English.

In addition, each county program must commit to funding 50 percent of a full-time HIV/AIDS coordinator for the jail, with the State funding the other 50 percent.²

Instructor-Led Education and Educational Materials

Seventy-one percent of State/Federal prison systems and 5 percent of city/county jail systems reported that HIV/STD education was mandatory for all incoming inmates; 20 percent of State/Federal but no city/county systems reported mandatory HIV/STD education at release. Fifty-one percent of State/Federal systems and 44 percent of city/county systems reported voluntary HIV/STD education at release. The Illinois Departments of Corrections and Public Health jointly planned a prerelease HIV education and referral program being presented by existing prerelease counselors and inmate peer educators who were specially trained to provide these services in prerelease centers.

The smaller percentages of city/county systems with mandatory education programs no doubt relate to the shorter lengths of stay and more rapid turnover of inmates in jails as compared with those in prisons.

The validation study revealed some discrepancies regarding whether educational sessions were mandatory. Substantial

percentages of facilities in systems with “mandatory” HIV/STD education at intake or release reported that these sessions were not in fact mandatory for all inmates (table 16).

Table 17 shows the topics covered in HIV/STD education programs, according to the 1997 NIJ/CDC survey results. Basic information on the diseases and the meaning of test results tend to be covered in almost all systems’ education programs. However, topics pertinent to behavioral-risk reduction—including safer sex practices, negotiating safer sex, safer injection practices, and triggers for behavioral relapse—are less commonly included. These are the types of topics that are likely to be intensively covered in multisession prevention programs.

Similarly, validation study results indicate that discrepancies between central office and facility responses are most frequent on topics relating to behavioral-risk reduction (see table 18). This may be because these topics are more controversial. The left side of table 18 shows the extent of agreement in systems reporting that the listed topic is covered in their education programs. For example, in seven systems reporting that negotiation skills for safer sex were

Table 17. Topics covered in HIV/STD education for inmates, 1997

Topics	Covered in Education Sessions			
	U.S. State/Federal Prison Systems (n = 51)		U.S. City/County Jail Systems (n = 41)	
	No. of Systems	%	No. of Systems	%
Basic HIV information	51	100	35	85
Basic STD information	46	90	32	78
Meaning of HIV test results	51	100	38	93
Meaning of STD test results	48	94	36	88
Safer sex practices	34	67	29	71
Negotiation skills for safer sex	21	41	19	46
Safer injection practices	23	45	20	49
Tattooing risks	42	82	22	54
Alcohol/drug risks	41	80	30	73
Self-perception of risk	30	59	27	66
Identifying barriers to behavioral change	28	55	23	56
Triggers for behavior relapse	29	57	22	54
Referral to other services	49	96	36	88
Planning for positive test	40	78	26	63

Source: NIJ/CDC survey.

Table 18. Topics covered in HIV/STD education for inmates, 1997 results of the validation study (VS)

Central Office Policy	Systems in VS That Cover Topic	Facilities From These Systems in VS	% in Agreement	Systems in VS That Do Not Cover Topics	Facilities From These Systems in VS	% in Agreement
Basic HIV information	16	40	98	0	—	—
Basic STD information	15	38	89	1	2	0
Meaning of HIV test results	16	40	95	0	—	—
Meaning of STD test results	14	34	91	1	2	0
Safer sex practices	12	28	68	3	4	50
Negotiation skills for safer sex	7	20	45	8	16	50
Safer injection practices	9	23	35	6	12	67
Tattooing risks	13	32	78	2	4	25
Alcohol/drug risks	14	33	82	1	2	0
Self-perception of risk	11	28	68	4	8	38
Identifying barriers to behavioral change	10	23	56	5	12	67
Triggers for behavior relapse	9	22	45	6	14	71
Referral to other services	16	40	98	0	—	—

Source: NIJ/CDC survey.

included in their education, fewer than half (45 percent) of facilities reported that this topic was in fact covered. Conversely, in eight systems reporting that this topic was not covered in HIV/STD education, half of the facilities reported that it was included. Thus, some individual facilities are going beyond the educational topics ostensibly prescribed by their central offices.

Table 19 shows the categories of providers of HIV/STD education and prevention programs in correctional systems. Very few systems are using security staff to conduct HIV/AIDS education, whereas the involvement of public health departments, AIDS service organizations, and other community-based organizations is widespread. This indicates an increasing willingness on the part of correctional systems to permit outside organizations to offer programs in their facilities.

Accessibility and understandability of educational programs and materials are critical to their effectiveness with inmates. In this regard, issues of language, literacy, and cultural competence are pertinent. Thirty-nine percent of State/Federal prison systems and 49 percent of city/county jail

Table 19. Providers of HIV/STD education and prevention services, 1997

Categories of Providers	Percentage of State/Federal Systems Using Category (n = 51)	Percentage of City/County Systems Using Category (n = 41)
Security staff	8	0
Correctional medical staff	100	71
Public health department	67	78
Community-based org./ AIDS service org.	69	56
Inmate peer educators	41	7

Source: NIJ/CDC surveys.

systems report offering HIV/STD educational sessions in Spanish. These percentages remain virtually unchanged from the 1994 survey (39 percent and 41 percent, respectively). Fifty-five percent of State/Federal systems and 66 percent of city/county systems reported having HIV/STD educational materials for Latinos. Forty-one percent of State/Federal systems and 58 percent of city/county systems said they had materials especially for African-Americans, and 84 percent and 70 percent, respectively, reported having materials especially for women. Similar percentages were

reported in 1994. More attention should probably be paid to the development and distribution of culturally appropriate HIV/STD educational materials. The mean grade level of HIV/STD materials used by reporting correctional systems was 6.4 (SD = 1.8), which seems appropriate.

Three examples of instructor-led HIV/STD education and prevention programs observed as part of site visits conducted for the NIJ/CDC survey are presented in the following text boxes.

Forensic AIDS Project, San Francisco Department of Public Health

Forensic AIDS Project (FAP) staff offer “risk reduction groups” in all San Francisco jail facilities.³ About 15–20 sessions are held each week according to a master schedule, ensuring that all facilities are covered. These group meetings are voluntary, normal attendance is between 10 and 20 inmates (with as many as 60 participants at sessions in structured program settings such as substance abuse treatment programs), and the sessions last 1 to 2 hours, depending on the facility’s schedule and flexibility and the cooperativeness of custody staff.

Deputies vary widely in their degree of cooperativeness, FAP staff report. Some are extremely helpful and supportive, and others appear to go out of their way to obstruct FAP’s efforts. For example, one deputy confiscated a dildo used for a condom demonstration.

Topics covered in these sessions include general health; nutrition; practical risk-reduction strategies (condom use and cleaning of injection material); information on HIV/AIDS, STDs, and TB; HIV testing; and early intervention. The session format includes a lecture, a discussion, videos, and guest speakers. The educators also use games with prizes to involve the inmates in the sessions. Condom distribution occurs in the context of regular risk-reduction groups. The risk-reduction groups originally were planned with the assumption that each inmate would attend one session. However, with varying lengths of stay, the same inmates may attend multiple sessions, so educators vary their plans to avoid duplicating material.

Different educators have different approaches and concerns. For example, one educator reported that she does not do condom demonstrations in all-male classes because she feels it would undermine her authority. Therefore, she asks a male inmate to do the demonstration in these classes. In an effort to achieve greater consistency across educators, FAP has developed standard lesson plans for the sessions, synthesizing the ideas, strategies, and games/exercises used by the different educators.

FAP offers enhanced counseling to inmates who are identified as high risk by self-report or staff observation. This is multiple-session individual counseling designed to help inmates adopt and maintain risk-reducing behaviors. Special counseling is provided on the importance of partner notification. When possible, FAP facilitates postrelease counseling with partners.

Corrections AIDS Prevention Program, New York City Department of Health

The Corrections AIDS Prevention Program (CAPP) at the Rikers Island jail complex is operated by the Division of Special Populations of the New York City Department of Health, with funding from the Centers for Disease Control and Prevention.⁴ In collaboration with the Department of Corrections, CAPP has established “an aggressive approach . . . to HIV/AIDS prevention education,” which includes HIV/STD orientation for incoming inmates and ongoing prevention groups. Condoms are also made available to inmates.

Orientation sessions on HIV/AIDS and STDs are mandatory for all incoming inmates at Rikers Island. CAPP educators present basic information on transmission and prevention, as well as on counseling and testing, and ways to access additional information and assistance. During a site visit for the NIJ/CDC survey, an orientation session with about 60 men at the C-76 men’s facility was observed. The educator presented HIV/AIDS and STD risks in a direct, simple, and explicit manner. She spoke very directly about the risks of anal intercourse and the prevalence of this behavior in jail.

Ongoing prevention groups are held in several Rikers Island facilities. A health educator conducts a series of meetings with inmates who have longer sentences or are in drug-treatment programs. These meetings provide opportunities to build rapport and to explore topics in greater depth than can be done in an orientation session.

During a group meeting with about 15 men in a drug-treatment unit of the C-73 men’s facility, the educator engaged the men directly by asking questions. She effectively prevented anyone from getting distracted or losing attention by involving them in the discussion. She did a condom demonstration, discussed issues of sexual risk and the role of drug use in sexual risk, openly asked the men to consider what “your women are doing while you’re in jail,” and discussed the precautions they should take when they rejoin their women on the outside. The educator asked the inmates about the definitions of man and boy, emphasizing that a real man takes real responsibility for himself and his loved ones. She also asked how many of the inmates “always” use condoms; most raised their hand, but one said “A lot of people are lying here.” The educator spent a good deal of time on STDs. She passed around enlarged color photographs of the conditions that can result from various STDs. The inmates seemed quite affected by these photographs.

Massachusetts Department of Youth Services

In 1989 the Massachusetts Department of Youth Services (DYS) and the Massachusetts Department of Public Health (DPH) entered into an interagency agreement to provide an HIV/AIDS prevention program with CDC funding for two full-time bilingual (Spanish) and bicultural health/AIDS educators. One educator covers the Boston area and North and South Shore suburbs, and the other covers the rest of the State from her base in Worcester. An important program component is a small group of well-trained HIV-positive speakers who participate in varying formats, including youth-controlled question-and-answer sessions and presentation of personal stories with questions during and at the conclusion of each session.

The educators primarily provide HIV and STD prevention education to youths in DYS facilities and programs, group care, assessment programs, day reporting centers, shelter care programs, secure detention programs, and secure treatment programs. In addition, the educators train DYS frontline child care and casework staff so that they understand and support, rather than contradict or undermine, the education and prevention messages presented to the youths. Although increased knowledge has helped reduce concern about occupational HIV infection, educators still emphasize the importance of universal precautions in their staff education.

Two full-time educators alone cannot reach the entire DYS population on a regular basis or conduct the intensive interventions probably needed to produce significant behavioral changes. Possible methods of increasing coverage of HIV/AIDS and STD issues include hiring additional educators, increasing staff training and “weaving” these topics into the overall activities and programs of the various facilities, and using community-based resources as well as print and audiovisual materials.

The DYS education sessions primarily emphasize teaching the basic facts about HIV and STDs in a comprehensible and engaging manner. For example, in a session observed at St. Mary’s/Cornerstones, DYS educator Eduardo Tautiva effectively used games and understandable images to present complicated HIV facts, including a game demonstrating the potentially quick transmission of HIV among people with interconnected sexual relations and extended Pac-Man imagery showing the action of HIV in infecting cells and multiplying infected cells.

The DYS educators also work to dispel myths and misinformation by eliciting the youths’ active involvement in the discussions and then answering their questions with care and respect. In the session we observed, Tautiva demonstrated that he was at ease with the youths and the subject matter, which in turn helped participants feel more comfortable, safe, and open about sharing experiences and expressing concerns. The ability to connect and to establish trust and rapport with a youthful audience is essential in developing a two-way process in which DYS staff both learn from youths and teach them. It is always important to be sensitive to the youths’ mental and emotional state, their level of literacy and cultural identification, and their mingled senses of invulnerability and fear.

The DYS educators try to show program participants that they *can* succeed in learning something and that they *can* change their lives, if given clear goals and objectives and a realistic definition of success. The educators focus on practical risk-reduction strategies, such as condom use and proper cleaning of drug-injection material. However, since relatively few of the DYS youths are injection-drug users, the greater emphasis is properly placed on how use of marijuana, alcohol, and other drugs can lead to poor decisionmaking and high-risk sexual activity. While DYS does not object to frank and open discussion of risk-reduction strategies, condoms are not distributed for use within facilities; youths being released or going out on passes are given condoms.

An HIV-positive speaker observed at Connolly Secure Treatment gave an extremely powerful presentation that strongly affected her audience. She hopes that the story of her life can at least “plant the seed” in kids’ minds that things can be different, that a better life is possible. The speaker says that she is “living proof” that things can change for the better, even if one is HIV infected.

Peer-Based Programs

Inmate peer-based programs have four key advantages: credibility, range of services, cost-effectiveness, and benefits to peer educators themselves. Peer educators probably have more inherent credibility with inmates than representatives of “the system.” They speak the language of inmates and have had similar life experiences. To be effective, however, it is important and challenging for peer educators to avoid being seen as allies of or spokespersons for the system, particularly in programs in which correctional officials play evident roles in their selection.

Peers can offer a range of services, including orientation (“AIDS 101”); individual and group risk-reduction counseling; and informal interaction with inmates in the yard, during programs, and at other times and places apart from structured meetings and presentations. Peer educators often go on to work with inmates with HIV disease, explaining drug regimens and improving adherence, serving as “buddies” and offering other supportive services, and providing hospice care for terminally ill patients. Elizabeth Mastroieni, Coordinator of AIDS Counseling and Education (ACE) at New York’s Bedford Hills women’s facility, one of the first and best established HIV peer inmate programs, described some of ACE’s tangible and intangible benefits.

I witness miracles here every day. I see women . . . sharing their commissary and sharing their experiences. I witness women volunteering their time to nurse women back to health, to educate them about their health and cry with them about the experience of loss. I have been filled by the bittersweet memorial services where a woman’s life is celebrated as her memory fills the room and enlivens the spirit.

For three years I have witnessed the energy of brainstorming, creating, planning, and physically walking to raise money for children they do not know but care for because of their emotions as wife, mother, lover, aunt, sister, and friend

There is laughter. There is community. There is a sense that I can do for others and they can and want to do for me. There is support. . . . There are many miracles here at Bedford.⁵

Peer programs can be highly cost effective. Peers can provide formal and informal services almost around the clock. They are often available when regular staff are not.

The only substantial costs of peer programs are likely to be for training the peers. It is advantageous to have regular inmate work slots designated for peer educators (as at the Albion women’s facility in New York State and at several California prisons), but inmate wages are very low and in many systems are negligible, so this should not represent a large expense, particularly in comparison with the cost of other models of delivering education and prevention programs. The Oklahoma Department of Health developed a peer program for women inmates in that State for \$4,000 in outside grant funds.⁶

Finally, inmate peer educators commonly report tremendous improvements in self-esteem, knowledge, and commitment to the community based on their experiences in these programs. Many go on to paid positions in HIV prevention following their release from prison. Kathy McGrath became a peer educator at Massachusetts Correctional Institution–Framingham and now works as an HIV educator for Great Brook Valley Health Center in Worcester. McGrath reported that “becoming a peer educator was the start of my life” after years of drug addiction and repeated incarceration. Moreover, she stated, “There are so many women like me who have everything it takes inside, but no outlet for it.”⁷ Miguel Cruz was the first HIV peer educator at Hampden County (Massachusetts) Correctional Center and is employed as an HIV outreach worker at Holyoke Health Center. Cruz spent 18 years of his life as a heroin addict and dealer. According to a coworker:

Miguel is a man at peace with himself, and he is enjoying what life has to offer him for the first time in two decades—going to the movies, playing sports, doing a job he loves and doing it well, owning a car and nice clothes. These are the rewards of a new life and he is not about to give that up. His old friends from the street, he says, were at first skeptical just waiting for him to do that first bag. This hasn’t happened and that skepticism is being replaced with unmistakable respect and admiration. Miguel, their old compatriot, who was every bit one of them, now has turned his life around and is back to the same old streets, trying to help his buddies in any way he can to do the same. . . .

Miguel’s 18-year training program for his present job gives him the ability to accomplish things on the street that I, for example, simply never could. His mere presence on the street, as living proof to all his old neighbors that the evil power of addiction

can be beaten, has more life-changing potential than 10 doctors trying to patch these people up and to keep them alive. . . . Miguel is not a doctor, but he is a healer.⁸

Although HIV/AIDS peer programs are finding increasing acceptance among correctional administrators, there may still be resistance. Opposition is most often based on suspicion of initiatives that seek to “empower” inmates. Some administrators may view any empowerment of inmates as an ultimate threat to discipline and order in their facility. At one Federal facility, a new warden discontinued HIV/AIDS orientation presented by peer educators because he considered this an “inappropriate” role for inmates.

Inmates themselves may have to address and overcome stigma that may result from their involvement. It may be assumed, for example, that anyone volunteering to be an HIV peer educator must be HIV infected.

Inmate peer programs are easiest to implement in prison systems in which inmates stay long enough to have a stable group of educators. However, peer programs have been successfully established in jail systems as well. In jails, peer educators are generally drawn from sentenced inmates. As of the end of 1995, nine county jails in Massachusetts had established HIV peer education programs with funding from the State’s Department of Public Health (DPH).⁹ All of the Massachusetts county jails were expected to implement peer education in 1998 as part of comprehensive HIV/AIDS programs funded by DPH.¹⁰

Factors in successful peer-based programs include the following:

- Working closely with correctional officials in planning the program. To address common objections and overcome resistance, a written proposal should be submitted describing the program and its benefits.
- Involving outside organizations, such as public health agencies or AIDS service organizations, in leading or otherwise key roles to demonstrate the program’s independence from the correctional system and thereby to build credibility with the inmates.
- Carefully screening peer educator candidates for motivation, sincerity, commitment, and absence of emotional problems and inappropriate personal “agendas.” Candidates’ length of time left to serve should be sufficient to allow them to contribute significantly to the program before they are released.

- Ensuring that peer educators reflect the linguistic, racial, and cultural profile of the inmate population.
- Giving peer educators specific goals and incentives, such as academic credit, prison job slots, or “good time.”
- Developing a peer-driven curriculum rather than one that is driven primarily by the goals of the correctional system.
- Being sensitive to the stigma still associated with HIV/AIDS in many correctional facilities that may adversely affect the recruitment of peers and attendance at programs.
- Providing counseling and support for peer educators as necessary.¹¹

The advantages of peer programs and the factors facilitating the success of such programs are well illustrated by case studies of programs in the adult correctional systems of Louisiana and California and the Los Angeles County juvenile system, observed during site visits for the survey.

Louisiana

Between 1992 and 1997, under the leadership of the late William Crawford, HIV/AIDS Services Education and Training Coordinator at the Louisiana Office of Public Health, peer education and counseling programs were established at six Louisiana State prisons—Angola, Avoyelles, Dixon, Hunt, and Washington (men’s facilities), and the Louisiana Correctional Institution for Women, St. Gabriel. More than 150 inmates were trained as peer educators/counselors. In addition, about 400 correctional staff in health services, mental health, and security received 2-day training sessions on HIV/AIDS and STDs.

The inmate peer educators/counselors provided HIV/AIDS and STD orientation sessions to all inmates at intake and prerelease. They also offered one-on-one counseling for inmates considering HIV antibody testing and others with concerns about HIV/AIDS and STDs, provided educational sessions to inmate clubs and organizations, gave support to inmates living with HIV or AIDS and those with loved ones living with HIV or AIDS outside, and acted as liaisons for inmates hospitalized with HIV disease.

In their educational presentations and individual prevention counseling, the peers were permitted to discuss practical risk

reduction—for example, condom use and cleaning procedures for drug-injection material—in frank and open terms, but they were not permitted to distribute condoms or bleach. In informal conversations, however, inmates from several prisons stated that condoms and bleach were fairly readily available—condoms “on the walk” (in the exercise yard) in exchange for cigarettes, and bleach from dorm-cleaning crews.

Crawford emphasized the importance to the success of the peer programs of gaining and keeping the trust and support of the correctional system and its staff. It is necessary to understand and be sensitive to the “gargantuan” task that prison administrators face and to accept the ground rules the correctional system sets for a peer program. Within these ground rules, Crawford stated, much can be accomplished. However, it is counterproductive to “press an agenda” for condom distribution or other controversial measures. Instead, it is better to reach agreement on what can and cannot be done. Crawford noted that “you can get a lot more with a smile than with a frown.”

To succeed, the program needs the full support of the administration at central office and facility levels. An advocate within the system is critical to overcoming the suspicion that inevitably greets suggestions for establishing inmate peer programs and to obtaining initial agreement. Once agreement is reached on scope and ground rules of the program, peers’ specific responsibilities can be negotiated.

Inmate peer educators/counselors in Louisiana were recruited and selected by nominations from other peers and from the mental health and health services staff of the facility. Inmates interested in being peer educators/counselors could also apply. The existing peers did the initial screening and recommended 12–15 inmates. At Avoyelles, the mental health director and peer program coordinator made final selections based on conviction offense, sentence, prison disciplinary record, and any handicaps. A critical criterion for selection was the inmate’s agreement to be a role model in terms of personal behavior. In particular, this meant that the inmate would have to commit himself or herself to abstaining from all sexual activity and drug use in prison. Final selections of peers had to be approved by the facility’s warden.

State Public Health Office staff conducted the training for the peer educators/counselors. The class consisted of a minimum of 12 inmates. Three or four classes were trained at each participating facility each year to ensure continuity and effective performance of responsibilities. As part of the

training, each trainee was required to prepare and deliver an orientation presentation chosen from a list of possible topics distributed to the class. At Avoyelles, one inmate asked to prepare a presentation on a topic of his own choice that was not on the list. This involved conducting and presenting the results of a survey of inmates on risk behaviors for HIV and levels of perceived risk. Peer programs at the Louisiana State Penitentiary at Angola and the Avoyelles Correctional Center are described in the text boxes on the following pages.

A major issue for the Louisiana peer educators was overcoming stigmatization and stereotyping by other inmates. One of the peers reported that his attendance at the training caused him to be “diagnosed with AIDS by my peers.” Another peer educator described this as a “powerful learning experience” regarding attitudes toward people with HIV/AIDS that “could have been taught no other way.” However, the peers were quite successful in winning the trust and support of the inmate population. Almost 50 inmates attended the first session offered by the peer educator who reported being initially stigmatized. He stated that there is much concern about HIV/AIDS among inmates, even though many will not speak openly about it.

A primary objective of any education/prevention program is to bring about positive change in the attitudes and behaviors of the target population. However, with efforts such as the Louisiana inmate peer education/counseling program, extremely important benefits can be achieved among peer educators themselves. They develop positive focus and purpose in their lives, become empowered, and perceive their own ability to influence others in ways they never believed they could do. The presentations by Louisiana peer educators during the site visit demonstrated the poise, confidence, and commitment the program has helped these inmates to develop. Andrew Joseph, an Angola inmate, has changed his attitudes regarding HIV/AIDS dramatically. In 1987, Joseph wrote in *The Angolite*, the inmate magazine, that he wanted nothing to do with inmates with AIDS. Within a few years, Joseph had become a leader of the peer education/counseling program at the prison and was master of ceremonies at the 1996 HIV/AIDS education conference.

Greg Lehtonen, a peer educator at Avoyelles, wrote about the way his HIV-positive status and his involvement in the peer program had changed his life:

My attitude is much different now. My life here in prison isn’t about being tough and playing games. I find myself caring much more about others, and

Peer Program at Angola

The first facility in Louisiana to establish an inmate HIV/STD peer education and counseling program was the Louisiana State Penitentiary, Angola, an extremely large (approximately 5,000 inmates) maximum-security prison. The peer program at Angola was established in September 1993, when William Crawford trained 42 inmates. Four of these inmates became Angola's first HIV/AIDS Peer Education Team.

Between 1993 and 1996, peer educators provided HIV/AIDS and STD education sessions to more than 1,200 incoming inmates at Angola. Peer Education Team members divided the topics included in the orientation: technical information on HIV/AIDS and STDs; strategies for surviving prison "games" and avoiding high-risk behaviors and situations; overcoming myths about HIV/AIDS; and modeling hope with a view to engendering it in others. The inmate peer educators counseled new inmates to get involved in positive activities such as educational and self-improvement programs. The peers also provided informal one-on-one counseling to inmates. Several members of the Peer Education Team were enrolled in a Baptist seminary through Angola and were authorized to provide pastoral counseling to inmates with HIV disease. The peer educators also provided education and training to orderlies and members of numerous prison organizations, including the CPR T.E.A.M., Drama Club, Latin American Cultural Brotherhood, and Amateur Boxing Association. The CPR T.E.A.M. presented HIV/AIDS education sessions at various locations throughout the sprawling prison, the Camp D Social Orientation Club conducted classes in the Camp D area, and the Angola Jaycees offered HIV/AIDS awareness sessions in the main prison. Members of the Latin American Cultural Brotherhood were trained as peer educators and offered HIV/AIDS education and counseling services in Spanish. They distributed Spanish-language fliers on HIV and STDs and presented a series of three weekly HIV/STD seminars on Friday evenings. More than 400 inmates signed up for the first series.

Several other features of the Angola program are noteworthy. First, with the collaboration and cosponsorship of the prison administration, the State Office of Public Health–AIDS Services Program, and the Delta Region AIDS Education and Training Center, the peer program presented three annual HIV/AIDS education conferences at Angola. The conference held in November 1996 attracted more than 400 health professionals, educators, correctional staff, and others from Louisiana, Arkansas, Mississippi, and Texas. The attendees were eligible for continuing education credits and heard a variety of presentations on HIV/STD peer education and counseling and related subjects.

A second feature of the Angola program is the work of the Drama Club. This group travels to other prisons and settings in the State to present its dramas and skits on HIV/AIDS, STDs, and other themes. These are written, produced, and acted entirely by the inmates.

Third, the Angola Peer Education Team established mechanisms for networking with peer programs in other prisons and jails. It published a newsletter to share information across the programs. The peer educators also attended and spoke at conferences and meetings of organizations throughout the State as well as at juvenile confinement facilities.

AIDS Counseling and Trust—Avoyelles Correctional Center

The Avoyelles Correctional Center is a medium-security men's facility with about 1,475 inmates. The AIDS Counseling and Trust (ACT) program was established at Avoyelles in 1994 with the training of 12 peer educators/counselors. At the time of our visit, a total of 60 had been trained, and 40 peer educators were active in the program. According to Shirley Washington, ACT Coordinator, the basis of the program is the belief that the best person to provide education and counseling to inmates is "one of their own."

ACT member Bobby Weatherton designed and wrote a brochure entitled *Johnny's Home from Prison, and . . . He Has AIDS*. This brochure tells the story of a man who has engaged in homosexual intercourse while in prison but does not know that he is HIV infected. Unwittingly, he infects his female lover soon after he is released. The brochure describes the "hidden" culture of homosexuality in prison in which men who play the dominant role in homosexual relations (that is the insertive partners in anal intercourse) often do not consider themselves homosexual or do not believe that they can become infected. Only the receptive partner is at risk of infection, many of these "straight men" believe. On the back of the brochure is a piece of advice to the potential sexual partners of men coming out of prison: "Do not assume a man is disease free because he has been in prison. Do not rely on his denial of risky behavior. DEMAND THAT HE BE TESTED!!" The brochure is printed and distributed by the Louisiana Office of Public Health's HIV/AIDS Services unit.

The ACT educators at Avoyelles were responsible for providing orientation sessions on HIV/AIDS and STDs for all new inmates. They used a video produced by inmates in a New Mexico State prison and followed this with an extensive question-and-answer session. During a "staged" question-and-answer session observed at a site visit to Avoyelles, ACT peers presented explicit information on practical risk-reduction measures.

ACT also provided HIV/STD prevention sessions for all inmates 30 days prior to their release. Inmates were referred to community-based providers. The ACT peer counselors prepared nine regional directories listing all types of health care and mental health services, substance abuse programs, benefit programs, and housing and employment services, with addresses and telephone numbers. Each inmate being released was provided with a copy of the directory for the region to which he or she was being released. The ACT peers also went through the directory with all inmates before they were released to make sure they understood what was available to them. Released inmates were also provided with "health care packages" that included condoms and bleach kits.

Individual counseling was available on request through the mental health department or informally in the prison yard and housing units at Avoyelles. One-on-one counseling was provided in a private room with no correctional officers or other staff present and was kept strictly confidential. The following issues were commonly addressed in individual counseling: Should you get tested? What do the results mean, and how would you deal with them? What should you do/not do if you are positive? What should you do/not do if you are negative?

Other ACT activities included educational sessions for sports clubs, self-help and religious groups, and other organizations at the prison; periodic Friday evening videos on HIV/AIDS and STDs; a drama group, patterned after the Angola Drama Club, presenting skits on HIV/AIDS written and performed by inmates (during the visit, the group presented an excellent skit on using knowledge and understanding to combat the stigmatization of and discrimination against persons with HIV and AIDS); a weekly support group consisting of about 15 inmates with HIV disease that encouraged inmates to "live healthy with HIV" and dealt with medications, side effects, and a range of psychosocial issues; and a Street Outreach Program in which members made presentations and provided services at parish jails, where inmate turnover is too rapid to permit effective peer programs.

my mind is on more serious matters . . . I constantly pray and hope that I will see my family again, whom I have not seen in so many years, due to my lifestyle! I always knew that I was a good person inside, and I want my family to see and know that side of me—instead of remembering the monster who did all those bad things. I used to not care about dying. Now I want to live and let people see the good Greg!

Two former ACT counselors from Avoyelles are now working for AIDS service organizations in the community. Other peer educators currently in prison are also interested in continuing this work when they are released. Many of them have shown an ability to overcome stigmatization and hostility and to become effective educators, counselors, and supporters of positive change among inmates.

California

The Public Health Section of the California Department of Corrections' Health Services Division is working closely with facility administrators and the custody and health services staff to implement standardized HIV peer education programs at all State prisons.¹² The Public Health Section is preparing a video on the peer programs in several State prisons. When completed, this video will be used for educational purposes as well as to help recruit new peer educators. The peer programs at San Quentin, Frontera, and Vacaville are described below.

California State Prison, San Quentin

The average daily population of San Quentin is 5,500 to 6,000 men. About 60 percent of the population of this medium-security facility are reception center inmates who are processed within 45 days and sent off to their assigned facilities in the system. The rest of the inmates are “endorsed” to San Quentin. Between 1986 and 1997, the California Department of Corrections and the Marin (County) AIDS Project (MAP) collaborated on HIV education and prevention programs at San Quentin. In 1997 MAP's role was assumed by Centerforce, another community-based service organization. Since 1991, the Center for AIDS Prevention Studies (CAPS) at the University of California, San Francisco, has been conducting collaborative evaluations with the staff of the San Quentin programs. The programs have evolved over the years with input from peer educators and strong support across the prison administration, from the warden and upper management to correctional counselors and officers.

The inmate peer education program is the centerpiece of San Quentin's HIV prevention initiatives. It began in 1986 with prerelease sessions facilitated by program staff and has since expanded to include comprehensive peer education training. Peers may facilitate most educational interventions, including new inmate orientation and other health-related services. San Quentin has five paid HIV peer educator prison work positions. The average tenure as a peer educator is 6 months, although many educators have served substantially longer.

Peer educators receive 5 days of comprehensive training. Centerforce staff and community experts present 2 of these training courses per year to 25–30 inmates. Graduates receive certificates as peer educators. The graduates receive an additional day of special training to present orientations, one of the key duties of the peer educators. The goals of this training are to create a pool of inmate peer educators, to introduce participants to public speaking techniques, to increase their awareness of the relationship between substance use and high-risk behaviors, to increase multicultural awareness, and to provide a broad perspective on the impact of HIV/AIDS on U.S. society and worldwide. Besides the usual attention to the basics of HIV/AIDS, antibody testing, and the related issues of STDs and TB, the training includes sessions on the real meaning of HIV/AIDS statistics, family issues, racial/ethnic diversity, gay sensitivity, and grief and loss. All participants also prepare and deliver timed talks to practice public speaking techniques. These talks are critiqued by the instructors and the class. Some classes have made videotaped public service announcements that have been broadcast on the prison's closed-circuit television station.

Peer educators observed during a site visit to San Quentin appeared to be highly dedicated and committed to their work. One of them noted that a year earlier he could not have imagined doing this work, but now he was committed to “giving something back” and felt very rewarded for the effort. Another peer educator said he originally signed up thinking that it would be an easy “kick back” job. Quickly, however, he realized that it was an intense, demanding job and accepted the challenge. Prison is the “perfect place” to do HIV education and prevention with this population, one of the peers noted, because the inmates are off drugs and have “clear heads.”

The program staff have to play a difficult balancing act to gain and keep the trust of both the inmates and the prison administration. If they are seen with inmates too much, they run the risk of having the officers and administration suspect

them of joining “the enemy.” Conversely, if they work too closely with the administration, they may cause suspicion among the inmates. The programs tend to emphasize “harm reduction” over strict abstinence, in part because this helps to overcome the resistance of the inmates, who otherwise might feel that “we’re just telling them what to do.” By succeeding in maintaining this balance, the program staff are able to educate both the inmates and the administration. They report that officers often ask them questions about HIV.

The peer educators are a diverse group, including African-Americans, Latinos, and whites, and gay and straight inmates with various drug and alcohol histories. Most of the peer educators are HIV positive, but about half of a recent group of trainees were HIV negative. Peer educators appear to be very supportive of one another. Several said they hoped to continue doing this work in the community after their release. One had already written to several community-based organizations (CBOs) asking about possible employment.

Orientation sessions. Inmate peer educators present required HIV orientation sessions for approximately 18,000 new inmates at San Quentin each year. This program was mandated in 1991 after focus groups with soon-to-be-released inmates suggested the need for more HIV information and education. The orientation is mandatory, but only about 75 percent actually receive it. Scheduling and other logistical problems preclude providing orientation to all incoming inmates.

The orientation is presented by teams of peer educators to groups of about 20 inmates in a classroom dedicated to this purpose. The session seeks to “put a face on the epidemic” and to increase inmates’ awareness of their own risky behavior by having an HIV-positive peer educator present his own story. Subsequently, the following topics are covered in the orientation: the difference between HIV infection and AIDS; the four body fluids that can transmit the virus; modes of transmission; safer sex issues; the role of substance use in high-risk behavior; and HIV-antibody testing. Ample time is allowed for questions and answers. The peers attempt to dispel myths about HIV, including the apparently persistent belief that HIV cannot be acquired heterosexually, and to encourage HIV-antibody testing. Another strategy is to focus on the inmate’s desire to protect his family from HIV as a way of resisting peer pressure to engage in high-risk behavior. The ultimate objective of the orientation and additional education that peers provide is to induce inmates to reduce their own risky behaviors.

In addition to making the presentations, the peer educators prepare paperwork for inmates interested in HIV testing (substantial numbers of inmates take advantage of voluntary HIV testing, but the precise rates are in dispute), document attendance, distribute and collect evaluations, and maintain the classroom. Bilingual educators are available to meet the needs of monolingual Spanish-speaking inmates. The peers also participate in training sessions for new educators.

Centerforce staff provide ongoing supervision, education, and other support to the peer educators, spending approximately 10 hours per week on site for these purposes. There is a weekly supervision meeting involving the peer educators, Centerforce staff, a prison counselor, and/or program sponsor.

CAPS and Centerforce conducted a collaborative study of the orientation component. In a randomized design, a total of 2,295 incoming inmates were assigned to orientation by an inmate peer educator, to orientation by a professional educator, or no intervention. All participants completed a survey of knowledge and behavioral intentions. The two intervention groups had similar outcomes, both outperforming the no-intervention group in intention to use condoms and seek HIV-antibody testing. The intervention groups also had significantly higher self-perceptions of HIV risk than the no-intervention group. The inmate participants overwhelmingly favored HIV-positive peer educators over other providers of the intervention.¹³

HIV intervention. Centerforce staff team up with one of the inmate peer educators to present HIV education sessions to various groups and in various settings in the prison, including prerelease classes (a 2-hour session during the voluntary 3-week prerelease program), English as a second language (ESL) classes, vocational classes, and others. The objectives of these sessions are to present the “personal side” of HIV/AIDS, to raise inmates’ self-perceptions of risk, and to increase general knowledge of HIV, testing issues, and resources available in the community following release.

Prerelease “booster” intervention. A prerelease booster intervention is presented on a voluntary basis to inmates 7–14 days prior to release. As part of a research study, prerelease inmates who agreed to participate were randomized to an intervention or no-intervention group. All participants received an extensive baseline survey of knowledge, attitudes, and behaviors, conducted one-on-one by a staff interviewer. The intervention group also participated in a 30-minute one-on-one prevention booster session with an HIV-positive peer educator. This session was specifically

designed to encourage risk reduction through condom use, avoidance of substance use, and safer substance use strategies. Participants also received referrals to community-based services. The no-intervention group received only written materials and referrals. Inmates being released from San Quentin received an HIV prevention brochure designed and written by the peer educators that contains practical risk-reduction suggestions described in frank language with drawings. Between 1 and 4 weeks after release, 43 percent of participants completed a telephone followup survey regarding risk education and risk behaviors. Intervention group participants were significantly more likely than comparison group members to report condom use in their first postrelease sexual encounter and were less likely to report using drugs or sharing needles in their first weeks after release.¹⁴

Centerforce and CAPS are also completing a 3-year project for HIV-infected inmates, funded by the universitywide AIDS Research Program at the University of California. This program includes a comprehensive 2-week “prerelease” education intervention with a focus on staying healthy and accessing community service providers upon release from custody. A unique aspect of this program is a resource fair of service providers from counties to which the inmate participants are being released. This allows the inmate and the community service provider to make face-to-face contact and a personal connection prior to release.

Peer educator support. HIV-positive peer educators provide support to other inmates who are newly diagnosed with HIV. This counseling includes discussion of the meaning of HIV infection, circumstances of the inmate’s learning his status, his current physical and psychological state, disclosure of status, sexual risk reduction, and policies for housing and treating inmates with HIV. The initial session lasts 20–30 minutes; followup sessions are offered. Inmate peer educators spend 2 hours per week doing this counseling. Centerforce staff provide support and educational backup for the peers.

HIV education for female visitors. Centerforce and CAPS are developing and evaluating a peer HIV education program for women visiting male inmates at San Quentin. Formative data reveal that female visitors are in need of HIV education, support, and community referrals. Inmate peer educators are planning and conducting group discussion sessions with women visitors in the visitor center. CAPS will evaluate the intervention in terms of utilization of community resources and self-reported behavioral change.

Two other peer programs in California State adult correctional facilities are described in the following text boxes.

Programs in Los Angeles County Juvenile System

Los Angeles County has the largest number of confined and probationary youths of any juvenile system in the United States. About 27,000 enter the system annually, and the average daily population of confined and probationary youths (that is, those involved in school or other programs at a juvenile facility) is about 4,000. Two peer-based HIV prevention programs for youths in the Los Angeles County juvenile system, the AIDS Video Project and the Peer HIV Education Project, are discussed below.

AIDS Video Project. The AIDS Video Project (AVP) provides youths on probation with interactive and culturally appropriate HIV and STD education. The AVP seeks to increase participants’ knowledge and application of HIV risk-reduction practices through classroom education and training to become peer educators. The video production component is the final stage in an educational process designed to teach as well as involve students, inducing them to “open up” about their risk factors and the behavioral changes needed to reduce their risks for HIV and other STDs.

To be certified as a peer educator, a student must successfully complete an eight-session educational program. More than 80 youths undergo this training each year. Once certified, the peer educators work in teams to create an HIV prevention video that can be shown as part of educational sessions that the peer educators help to present in their own and other juvenile facilities. The AVP has created about six videos each year since its inception in 1989 and reached about 600 youths with HIV and STD education.

At the conclusion of these education sessions, the attendees receive an information packet and, if the facility permits it, condoms. The information packet includes a resource guide developed by AVP, which lists testing/counseling, family planning, and related services at little or no cost within a 5- to 10-mile radius of each community education center.

Peer educator training. The peer educator training consists of eight 2-hour sessions offered primarily in the community school facilities attended by youths on probation who are living at home. The former AVP coordinator noted that this is best, since “there’s nothing like when they’re actually . . . able to have sex . . . [and] do drugs as opposed to when they were locked up. . . . That’s when they’re really struggling with issues like why it’s so hard a subject to talk about, or did they use condoms this weekend.”

California Institution for Women, Frontera

The California Institution for Women (CIW), Frontera, is one of five State prisons for women in California. The average daily population of the facility is about 1,600, of whom 38 were known to be HIV positive at the time of the site visit. New diagnoses of HIV disease average one per month. About 125 women per month receive voluntary HIV testing, a considerable increase from the period before establishment of the peer program.

CIW's HIV peer education program, started in 1994 by a public health nurse working at the facility, is staffed by 24 volunteer peer educators and 2 who receive "good time" credit ("day for day") for their work.

Peer program volunteers are carefully screened, and the inmates selected must be free of disciplinary action, highly motivated, able to communicate effectively, and capable of building rapport and trust with other inmates and staff. HIV-positive candidates and those with some previous knowledge of HIV/AIDS are preferred. Each applicant must obtain a recommendation from her correctional counselor, undergo an interview, and write a paragraph explaining why she wants to be in the program. Facility captains must approve all applicants before final selection to guard against women who may want to use the program to advance an independent "agenda." Selected applicants receive weekly training for 3 months provided by HIV Women's Voices, a community-based Orange County organization.

The CIW peer educators present classes for the general inmate population, substance abuse treatment programs, mental health groups, new intakes at the reception center, prerelease inmates, and inmates slated to attend forestry camps. During a site visit to CIW, four peer educators who were observed conducting a session for the general inmate population effectively spoke the inmates' language and established good rapport. Several had loved ones with HIV/AIDS; at least one was HIV positive. Each briefly told her own story; explained why she wanted to be a peer educator; and described how doing something positive for others made her feel better about herself. In their presentations, the peer educators repeatedly stressed personal responsibility and personal control—"you have the future in your hands" and "knowledge is power."

One educator effectively described the complex process of HIV infection and replication of infected cells by drawing Pac-Man-like figures on the board. Educators also used humor: in introducing an explicit discussion of sexual risk behaviors, one said, "They call me Dr. Ruth." This created a light atmosphere and encouraged the inmates to open up with their own stories and concerns.

Educators used games to engage participants in a discussion of risky behaviors. In "red light/green light," the class discussed a long list of very specific behaviors, and for each one decided whether the behavior posed no risk, low risk, or high risk of transmitting or acquiring HIV. Along with descriptions of proper condom use, proper cleaning of injection material, and introduction of the female condom, inmates discussed risk-reduction strategies for particular situations. The discussion also provided opportunities to address misconceptions. For example, when several inmates said that they considered it very risky to hug someone with HIV, one of the HIV-positive educators immediately hugged them, and the rest of the class reinforced the point that this posed no risk because it involved no exchange of body fluid. The discussion also addressed risks specific to prison life. For example, the educators cautioned that the common prison practice of using guitar strings for tattooing is particularly risky because the grooves in the strings can catch and hold blood.

The peer educators at CIW also conduct weekly pretest counseling classes. These classes take place under staff supervision to ensure consistency. The pretest classes generally have 25–30 inmates in attendance and last 1 to 1½ hours. Individual posttest counseling is provided by health services staff, not by peer educators.

California Medical Facility, Vacaville

The California Medical Facility (CMF) in Vacaville is the major medical and mental health treatment facility for the male inmates of the California Department of Corrections. The average daily population is about 3,200. The facility includes Unit 4, a segregated housing unit for inmates with HIV disease. Inmates in Unit 4 are eligible to participate in programming with the general population.

CMF has 10 paid HIV peer educators. Inmates apply to be peer educators and undergo a screening process. Jan Burrow, the program coordinator, trains the peer educators. Two peer educators are certified pre- and posttest counselors, although they do not perform this counseling in the prison.

The peer educators orient all new inmates and see about 800 inmates per month in group settings. They also provide informal education and counseling in housing units, the exercise yard, and program areas. The peer education program publishes a magazine, *PEP Talk*, whose contributors are inmates. All articles are in English and Spanish. A recent issue included articles on protease inhibitors, viral load monitoring, and the importance of forgiving one's self and others. The peer education program's "mission" and "oath" are printed on the back of each issue. These stress the spiritual and nurturing foundation of the work.

The peer educators offer a monthly schedule of hour-long educational sessions in housing units (including Unit 4), work sites, and program areas in the facility and in the prerelease center. Inmates must sign up to attend these sessions. In the minimum-security part of the facility, the peer educators offer a 5-week program with weekly meetings.

The educators employ a "stages of change" approach in some of the sessions, attempting to induce inmates to contemplate and then initiate changes in risk-reduction behavior. They discuss real-life situations—for example, exploring the relationship between substance use and high-risk sex. They use all media and a variety of strategies, including posters, audiovisual materials, stories, and games.

With support from the program coordinators, the peer educators are free to discuss practical risk-reduction strategies in their sessions with inmates. Although the peers always stress that sex in prison is against the rules and that regulations prohibit the distribution of condoms in the facility, relevant preventive methods are discussed. The peers used to be very explicit in suggesting alternatives to condoms—for example, the fingers of latex gloves—until the Department of Corrections (DOC) required a less specific message—for example, "use something latex; use your imagination." Moreover, if inmates ask about specific alternatives such as latex glove fingers, the peers answer the questions directly and honestly. For example, if an inmate asks about plastic wrap as an alternative to a condom, the peer educator will respond that "it's better than nothing." The educators also can make specific risk-reduction recommendations in the context of "what you should do when you return to the community," but this approach still provides suggestions that can be implemented inside the facility.

In their group meetings with HIV-infected inmates, the peer educators spend substantial time discussing the new medications and urging inmates to seek early intervention. Their theme is "knowledge is power." Educators also stress the importance of good nutrition and health habits, spiritual development, and avoidance of reinfection.

The training sessions are presented by the AVP coordinator and a health educator assistant. They follow an established curriculum that includes exercises focusing on making decisions, clarifying values, enhancing self-esteem, and exploring practical methods of HIV and STD risk reduction. Extensive use is made of games and interactive exercises to gain and hold students' attention. One session includes a presentation by an HIV-positive speaker.

In the session attended during a site visit for this study, the educators used several methods to involve the students. They passed around a "question box" into which students could place any questions they wanted answered, and the educators tried to answer all of them. The educators used cartoon depictions of techniques for cleaning drug-injection equipment, demonstrated proper condom use and factors for selecting condoms, and employed a game (the "condom relay") to enable students to practice proper condom use. The educators also provided good, understandable discussions of the natural history of HIV disease and the differences between confidential and anonymous testing.

Video production. As with the peer educator training, most of the video production takes place at community schools that the youths attend while living at home. The videos are the results of the collaborative efforts of the students, the educators, and an independent filmmaker. Only 3 days are allocated to the production of each video, from concept development to final product. Thus, things must move quickly. The first day is spent deciding on the concept and the story. The students develop the story, and the filmmaker helps them storyboard the elements of their story, cutting sections that do not fit or are impossible to shoot. All filming must be done in the facility, so sets and props are limited—"You notice a lot of 'beds' that look like desks." The filming of the 5- to 8-minute videos must be done in two 5-hour days of work. Shooting scripts are not used because of the students' low literacy levels, so each scene must be done as a rehearsed improvisation. The students all double as actors and crew members, getting an opportunity to learn about filmmaking as well as acting and the substantive issues involved in the story. Scenes are shot numerous times from different angles. Once shooting is completed, the students decide on music to be included and the filmmaker edits the video.

The filmmaker generally notes significant changes over the 3-day production period. The students often begin by being "kind of aloof" but become increasingly involved with and committed to the project. Their level of involvement is sparked by employing a monitor that allows the students to see simultaneously what is being filmed.

Completed AVP videos have used a variety of genres, including comedy, musical, and drama. In "Captain Condom," a "condom-adorned" superhero appears magically in a couple's living room to provide advice on safer sex. "Class reunion" explores the reaction of a class to the news that a member has died of AIDS. "Lunatic Rap" features a female rap duo performing "HIV is in the 'Hood.'"

Once the video is completed, the peer educators present it to the other students in the school as part of an HIV education session. The former AVP coordinator states that this is "the best day on the planet." The students are proud of their achievement, and the other students generally respond favorably and with respect. The day ends with AVP giving a party for the video makers.

Evaluation. AVP attempts to follow up with all peer educators at 3 and 6 months following their completion of the program. Tracking the population is difficult, so followup rates are fairly low. Of 61 peers trained in fiscal year 1994, 17 (28 percent) provided followup interviews. Low followup may indicate biased selection, so conclusions based on these samples may overstate positive outcomes. In any event, more than three-quarters (76 percent) of the 1994 peer educators who provided followup interviews reported an increase in HIV risk-reduction behaviors—condom use and/or cleaning of injection material. Among 662 confined and probationary youth exposed to AVP education sessions, the average pre- to postknowledge gain was 23 percent.

Recent data reveal an average pre- to postknowledge gain of more than 90 percent among the youths being trained as peer educators. Followup at 3 and 6 months revealed that more than 80 percent reported an increase in at least one risk-reduction behavior.

It is also important to recognize the intangible and immeasurable positive outcomes of AVP. The former coordinator notes that it is important to give these kids, many of whom are "set up to fail," a place where they can succeed at something. "And if you have kids who feel that they're succeeding, it will be easier for them to use a condom."

Peer HIV Education Project. The Peer HIV Education Project (PHEP) was operated by JWCH Institute and supported by the Los Angeles County Health Department using funds from the CDC Health Education and Risk Reduction Cooperative Agreement. The PHEP presented mandatory HIV/STD education sessions in county juvenile facilities, including community education centers, juvenile halls, and camps.

PHEP began operations in October 1995 using teams composed of a peer educator and an adult professional. The PHEP curriculum consisted of 4-hour sessions and included numerous games and interactive exercises.

An evening PHEP session at Camp Routh was observed as part of the site visit for this study. This was a condensation of the four-session curriculum into one 2-hour session, and it seemed to work quite well. The adult educator and the two peer educators involved in this session worked very well together, trading off sections of the presentation quite smoothly. All seemed comfortable with the subject matter and seemed able to establish rapport with the students. The peer educators spoke effectively from their own experiences with HIV risk behavior and used humor and understandable slang terms very well.

A particularly effective part of the session was an outside speaker's disclosure of his HIV-positive status in the midst of his presentation. He was not identified at the outset as an HIV-positive person but rather "sprung" his disclosure in the course of a discussion of heterosexual risk. Once he had disclosed his status, he said, "It pisses me off that so many of you think [based on your responses to the pretest] that you can't get HIV through sex with a woman." The speaker went on to challenge the notion that one can't deal with being HIV positive. It is admittedly very hard in some ways, he said, but it can also be rewarding and fulfilling to help others protect themselves against HIV. He acknowledged that he does not have sex very much anymore because he is scrupulous to disclose his status, and most women do not want anything to do with him once they know he is HIV positive.

The session also included the "Virus Z" game, in which handshakes among the group are used to demonstrate how a network of transmission can develop very quickly. The educators demonstrated proper condom use and involved students in this demonstration as well. In the course of the demonstration, the educators discussed common condom substitutes and cautioned against the use of microwavable plastic wrap because it has microscopic holes. Female condoms and dental dams were discussed and shown to the group. Another useful item of advice included in the presentation was to avoid oral sex within 4 hours of brushing teeth. Toothbrushing can cause small cuts in the mouth, thus providing a possible avenue of transmission. Finally, the educators passed around graphic photographs of STD conditions, and these seemed to have a strong impact on the youths.

Evaluation forms submitted at the end of this and other PHEP sessions observed during the site visit revealed overwhelmingly positive participant responses, particularly regarding the approach taken by the educators and the rapport they were able to develop with the participants. The following are some examples of these comments:

- I think Tricia and Kay are good speakers and make good games that are fun and let you learn at the same time. They're cool too, and respected us.
- I thought the speakers knew how to talk to us. I felt really comfortable with them.
- I thought I knew a lot about HIV/AIDS, but I guess not. And now I'm more interested in learning about my health!!!
- I really learned a lot and changed my mind about getting an HIV test. I was scared, but now I'm going to take the test.
- I would like to thank you all for taking the time for us. I'm glad you didn't take advantage of us being inmates. Thank you for treating us like real people.
- I think the class is very helpful. The teachers are great. They get down to the point. That's how it should be done.
- I feel this is important because it is something we all have to learn about, because it's not a fairy tale.

Conclusion

The 1997 NIJ/CDC survey reveals that HIV/AIDS and STD education programs are becoming more widespread in correctional facilities but that most facilities still do not provide a comprehensive program of HIV prevention. In particular, more intensive interventions such as multisession prevention counseling and peer-based programs should be expanded. Peer-based programs offer distinct advantages of credibility, cost-effectiveness, and benefit to the peer educators themselves. Although systematic evaluation of peer programs has been limited, there are strong indications from many programs, including those described in this chapter, that peer-based programs can be effective in reaching inmates with practical information on HIV and STD prevention.

Endnotes

1. See the extensive literature review in T.M. Hammett, J.L. Gaiter, and C. Crawford, "Reaching Seriously At-Risk Populations: Health Interventions in Criminal Justice Settings," *Health Education and Behavior* 25 (February 1998): 99–120; and in R. Braithwaite, T. Hammett, and R. Mayberry, *Prisons and AIDS: A Public Health Challenge*, San Francisco: Jossey-Bass, 1996.
2. Massachusetts Department of Public Health, AIDS Bureau, "Request for Applications: Massachusetts County Sheriff's Department HIV/AIDS Program," March 6, 1998. For more information on this program, contact Tim Gagnon, Massachusetts Department of Public Health, AIDS Bureau, 250 Washington Street, 3rd floor, Boston, MA 02108–4619 (telephone: 617–624–5300).
3. Further information on the Forensic AIDS Project's programs in the San Francisco jails may be obtained from Anne Stillwell, Director, 798 Brannan Street, San Francisco, CA 94103 (telephone: 415–863–8237).
4. Further information on the Corrections AIDS Prevention Program in New York City may be obtained from the New York City Department of Health, Bureau of HIV Prevention, Office of Corrections AIDS Prevention, Beverly McDonald, Director, 253 Broadway, Room 602, New York, NY 10007 (telephone: 212–676–2900).
5. "AIDS Counseling and Education" (program description), n.d. For more information about ACE, contact Elizabeth Mastroieni, Coordinator, Bedford Hills Correctional Facility, Bedford Hills, NY 10507.
6. "Tips for Starting a Peer Education Program for Inmates," *AIDS Policy and Law* (April 18, 1997): 8–9.
7. K. McGrath, presentation at panel on peer education, "HIV Treatment Update for Prisons and Jails," Cambridge, MA, March 13, 1998.
8. P. Loescher, untitled story of his 2 days on the streets of Holyoke with Miguel Cruz, distributed at the panel on peer education, "HIV Treatment Update for Prisons and Jails," Cambridge, MA, March 13, 1998.
9. Massachusetts Sheriffs' Association, *HIV/AIDS in the Massachusetts County Correctional System, 1995*, Massachusetts Sheriffs' Association Task Force Report, 1997.
10. Massachusetts Department of Public Health, AIDS Bureau, "Request for Applications: Massachusetts County Sheriff's Department HIV/AIDS Program," March 6, 1998.
11. This list is based in part on "Tips for Starting a Peer Education Program." See note 6.
12. For further information on peer programs in California prisons, contact Public Health Section, Health Care Services Division, California Department of Corrections, 770 L Street, Sacramento, CA 95814 (telephone: 916–327–1214).
13. O. Grinstead, B. Faigeles, and B. Zack, "The Effectiveness of Peer HIV Education for Male Inmates Entering State Prison," *Journal of Health Education* 28 (November–December 1997, Supplement): S–31—S–37.
14. O. Grinstead, B. Zack, B. Faigeles, N. Grossman, L. Blea, "Peer Led Pre-Release Intervention Increases Condom Use Among Male Prison Inmates" (draft under review, 1998).

Chapter 4

HIV Transmission and Risk Factors, Precautionary and Preventive Measures

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Key Findings

- High-risk behaviors for HIV transmission—sex, drug use, sharing of injection materials, and tattooing—occur in correctional facilities.
- HIV transmission among correctional inmates has been shown to occur.
- Comprehensive and intensive education and prevention programs represent the best response to these facts, although the precise content of such programs is controversial.
- Rape and coerced sexual activity also occur in correctional facilities but require a different response, one based on inmate classification, housing, and supervision.
- Implementation of “universal precautions” represents the heart of a correctional infection control program and the first line of defense against the occupational transmission of HIV.
- Condom distribution and other harm-reduction strategies have not been widely adopted in American correctional systems.
- Experience with harm reduction in correctional facilities in Europe and elsewhere may warrant the attention of U.S. correctional administrators.

There is evidence of high-risk behaviors and HIV transmission in correctional facilities but also an ongoing debate as to what precautionary and preventive measures against HIV should be implemented in these settings. The principle of equivalent responses within and outside the walls is challenged by demands from correctional officers’ unions, the rules of correctional facilities, and the perception that inmates should not and cannot be treated like other people with relationship to HIV prevention. This chapter discusses risk factors and HIV transmission in correctional facilities and addresses some of the key issues in formulating a policy response.

HIV Transmission and Risk Behaviors in Correctional Facilities

The possibility of HIV transmission among correctional inmates remains a politically charged issue, although there have been few recent studies of this. At this writing, it is possible that a study of HIV transmission in the Texas prison system will be undertaken. The most recently published study is from Florida and was based on voluntary HIV antibody testing of inmates continuously incarcerated since before the appearance of HIV in the United States. Although

this study revealed apparent in-prison HIV seroconversions, it presented a misleadingly high seroconversion rate by using as a denominator only those inmates who consented to be tested rather than all of the inmates eligible for the study on the basis of the length of their incarceration. The study also failed to calculate annual seroincidence rates based on total time of exposure (incarceration) represented in the study population.¹ The Illinois Department of Corrections replicated the Florida study, identifying 191 inmates continuously incarcerated since 1977, of whom 140 (73 percent) had either been previously tested for HIV antibodies in prison or consented to be tested for this study. Only 1 of these inmates (0.7 percent) was HIV seropositive.²

The important point, however, is that most studies have found evidence of at least some HIV transmission among prisoners, albeit at low rates. Further study is clearly warranted based on evidence of inmates' high-risk behaviors for HIV transmission. Focus groups with former inmates in New York State and New York City elicited reports of widespread sexual activity and drug use within correctional facilities.³ A survey of Nebraska inmates revealed fairly high rates of participation in consensual and forced sexual activity within the State's prisons.⁴ An Australian study demonstrated the existence of a network of needle sharing and associated HIV infections in prison.⁵ A small random survey of male and female inmates in two Canadian Federal prisons revealed that 28 percent had injected drugs in prison and 64 percent of these reported having shared needles. Thirty-three percent of the sample reported receiving a tattoo in prison. Thirty-eight percent of the surveyed inmates reported having engaged in sex in the correctional facility.⁶

Rape and Coerced Sexual Activity

The issues of rape and HIV transmission are separate and thus require separate and distinct responses. The primary means of addressing HIV transmission ought to be comprehensive programs of HIV education and prevention, whereas rape and other forms of sexual victimization must be addressed by better programs of detection and enforcement. By no means do all prison rapes result in HIV transmission, just as, conversely, by no means are all HIV transmissions in prison attributable to rape. The danger in treating the two issues as if they were interchangeable is that other important aspects of HIV prevention and rape prevention may be ignored or given insufficient attention.

It is nevertheless clear that rape and coercive sex are serious and possibly widespread problems in correctional facilities.

Dramatic accounts of sexual slavery such as contained in Stephen "Donny" Donaldson's "Punk's Song"⁷ and the testimony of former Illinois inmate Michael Blucker in his lawsuit against the correctional system⁸ indicate the potential horrors of prison life for those who are vulnerable. Such accounts and other evidence strongly suggest the need for better strategies to prevent sexual and other forms of victimization of prison inmates.

"Universal Precautions" Versus Correctional Officers' "Right to Know"

Very few correctional systems have policies for routinely notifying correctional officers of inmates' HIV status. However, many systems do have policies regarding notification if a possible transmission incident occurs. Some of these policies are based on legal or regulatory requirements. The advent of postexposure prophylaxis for HIV infection in health care settings is also pertinent to correctional facilities.

Some correctional officers' unions and some individual officers continue to assert their "right to know" the names of all known HIV-seropositive inmates, claiming that such knowledge will enable them to take special precautions when dealing with these inmates. There are several problems with this approach. First, no testing policy can identify all HIV-infected individuals because of ongoing seroconversions and individuals testing negative while in the "window period" of infection. Indeed, there is evidence that a person may be most infectious while in the acute stage of infection but may still be HIV-antibody negative.⁹ A mandatory and universal testing and notification policy may lull officers into a false sense of security, leading them to think that they know who all the HIV-infected inmates are. Second, even if it were possible to identify all HIV-infected inmates, officers might not be able to remember all of them. This would be a particular problem in systems with large numbers of HIV-infected inmates.

These problems seem to point to the wisdom of the alternative: maintaining confidentiality but systematically practicing "universal precautions." The principle of universal precautions, promulgated by the CDC in the mid-1980s and given full legal force by the Occupational Safety and Health Administration in 1991, means that one should treat all persons as if they are HIV infected, avoiding unprotected contact with body fluids that are considered potentially infective, especially blood and semen. Universal precau-

tions are not necessary for contact with saliva, tears, sweat, vomitus, urine, or feces unless they contain visible blood.¹⁰ Many correctional systems have issued their own policies regarding universal precautions, and administrators should ensure that all staff receive training on these policies and that these policies are implemented in everyday practice. Universal precautions are also important for preventing hepatitis C transmission. Hepatitis C is prevalent but commonly undiagnosed in the inmate population, and there is no vaccine or reliable treatment for the severe morbidity that may result from the infection.

It is important to note that written policies and procedures, no matter how detailed, cannot teach correctional officers how to act in every situation. Many incidents in prisons and jails require that officers and other staff decide what to do very quickly. Training and knowledge are important and helpful, but in specific situations staff must exercise their own discretion and judgment.

Condom Availability

An important component of HIV/STD education is the presentation and frank discussion of practical risk-reduction strategies. However, a major challenge to effective HIV prevention in correctional facilities is that in most prisons and jails the means to carry out practical risk-reduction strategies are not officially available. Indeed, in the vast majority of correctional facilities inmates are prohibited from possessing condoms. Table 20 shows that only six correctional systems make condoms available to inmates for use in their facilities. These are the same six systems that have had this policy for a number of years: Vermont, Mississippi, New York City, San Francisco, Philadelphia, and Washington, D.C. No additional systems have made condoms available since the early 1990s.

In contrast to the U.S. situation, condoms are available in most European¹¹ and Canadian prisons (although there have reportedly been some problems with ready and discreet accessibility in some facilities in Canada),¹² and pilot programs of condom distribution have been undertaken in correctional facilities in New South Wales (Australia) and in Western Australia. In announcing the expansion of the condom program in New South Wales prisons, Minister for Corrective Services Bob Debus said, “[T]his is a public health issue: only by providing condoms in our gaols can we ensure they don’t become breeding grounds for diseases which will eventually be spread to the wider community.”¹³ In launching a condom distribution trial at Western

Australia’s Wooroloo Prison Farm, a Justice Ministry spokesman said, “[We]’re not condoning sex in prisons, but we’re not naive, we know it happens, and we’re trying to make sure there’s some sort of way to stop the spread of sexually transmitted diseases like hepatitis and AIDS.”¹⁴

Bleach Availability

Research findings suggest that bleach may not be effective for HIV disinfection unless it is used at full strength and in strict accordance with recommended procedures. CDC’s revised procedures call for repeating the following sequence of steps three times: rinsing the needle and syringe with clean water, then with full-strength bleach, then with clean water again. The needle and syringe should be shaken for 30 seconds during each rinse. Bleach disinfection is considered a much less desirable risk-reduction method than using a new needle and syringe for each injection.¹⁵

As shown in table 20, 20 percent of correctional systems responding to the 1997 NIJ/CDC survey make bleach available to inmates within facilities “for any purpose.” The survey question was phrased this way because few if any correctional systems would be likely to report that they make bleach available specifically for cleaning injection equipment. However, if bleach is available to inmates for cleaning or other legitimate purposes, it is quite possible that it will be available in practice for cleaning injection equipment.

Table 20. Availability of condoms and bleach, 1997

Policy	State/Federal Prison Systems (n = 51)		City/County Jail Systems (n = 41)	
	n	%	n	%
Make condoms available for use within facility	2	4	4	10
Make bleach available for any purpose	10	20	8	20

Source: NIJ/CDC survey.

Officially sanctioned distribution of bleach for cleaning injection equipment is more widespread in correctional systems outside the United States. Half of the 20 European systems responding to a 1997 survey had such policies.¹⁶ A successful pilot bleach kit distribution program at a Canadian Federal prison in New Brunswick led to the expansion of the program to all Federal facilities. An inmate survey at the New Brunswick facility found overwhelming support (99 percent) for bleach kit distribution, and 63 percent of staff also felt that making bleach available to inmates as a preventive measure is “important.”¹⁷ In a survey of inmates in six Ontario provincial prisons, 52 percent of respondents expressed positive feelings about the distribution of bleach in their facilities.¹⁸

Needle and Syringe Exchange

Possession of needles and syringes in prisons and jails in the United States is a violation of law and/or of correctional regulations. However, needle/syringe exchange programs have been successfully implemented in Swiss prisons since 1992. Eight Swiss prisons have needle exchange programs. Evaluation of the program in the Hindelbank women’s facility in Switzerland found that contrary to some predictions, drug consumption did not increase, and needle sharing declined markedly. Also, there were no reports of needles being used as weapons. There were no incident cases of HIV or hepatitis B infection among program participants. The program was well received by inmates and staff.¹⁹ In October 1997 the Swiss Federal Office of Justice adopted an official statement that needle distribution in prisons was legal and that prison administrators had a duty to implement such programs in the context of an overall HIV prevention strategy. The issuance of this statement has led to discussion of prison-based needle exchange in at least seven Swiss cantons and its adoption in all four major correctional facilities in the canton of Berne.²⁰

Based on the experience of the Swiss facilities, needle/syringe exchange programs have been initiated in three prisons in Germany and one prison in Spain. An official at the Hamburg (Germany) prison stated:

[S]taff are members of the public as well. They started seeing that what was done outside is to the benefit of all drug users and the public, and started questioning . . . whether it would not be possible and beneficial to extend harm-reduction measures to prisons.²¹

A recent study in Australia found that needle/syringe exchange was feasible in prisons and recommended initiation of a pilot exchange program if the following conditions were met: (1) prison-based drug treatment was available; (2) security and health staff were thoroughly trained in the program; (3) the method of needle/syringe distribution was chosen jointly by inmates and security and health staff; (4) distribution was on a strict one-for-one exchange basis; and (5) changes in risk of infection to staff, inmates, and visitors resulting from the program were assessed. At this writing, the pilot needle/syringe exchange program has not been implemented in Australia.²² Seventy percent of inmates surveyed in Ontario expressed negative feelings about needle distribution in prisons.²³

Methadone Maintenance

Methadone maintenance is offered in correctional facilities in only five countries.²⁴ However, methadone maintenance may be an effective strategy for reducing needle use and potentially reducing HIV and hepatitis transmission in prisons. A study of former New South Wales (Australia) inmates with histories of injection-drug use found that individuals receiving methadone maintenance in the 3 months preceding their incarceration and those receiving methadone maintenance at a dose of at least 60 mg during incarceration reported significantly fewer injections per week in prison than those who had not received methadone maintenance.²⁵

Reduction of Risk Associated With Tattooing

Tattooing is extremely common in correctional facilities. If unsterile equipment is used, it can be as risky for the acquisition of HIV and hepatitis B or C as other forms of needle use. The correctional department of New South Wales (Australia) has published an informative booklet on risks and risk reduction for prison tattooing.²⁶ Indeed, one of the key points made in the booklet is that prison tattooing is inherently unsafe and should therefore be avoided in favor of visiting a professional tattoo artist following release. An experienced prison tattooist is quoted as saying: “I learnt very early in my sentence that there is *ABSOLUTELY NO WAY* a tattoo can be performed hygienically or safely in prison.” Importantly, the booklet notes, “[T]attoo guns made in gaol are virtually impossible to sterilise.” The booklet lists precautions for inmates who still wish to be tattooed in prison. These include the following:

- Make sure your tattooist wears gloves.
- Wash and shave the area to be tattooed.
- Make sure the gun is cleaned in bleach.
- Replace cotton each time the gun is used.
- Cover the gun with latex.
- Take care of your new tattoo; apply antiseptic and keep it out of the sun.

Conclusion

There is evidence of high-risk behaviors for HIV and STD transmission in correctional facilities, as well as of actual transmission of HIV infection among inmates. Rape and sexual victimization are also known to occur in prisons and jails, but these problems require a policy response independent from the problem of HIV and STD transmission. The practice of universal precautions remains the first line of defense against the occupational transmission of HIV and hepatitis B and C in correctional settings. Postexposure prophylaxis for HIV should also be considered. Harm-reduction approaches to prevention, such as making condoms, bleach, and sterile injection equipment available, have not been widely adopted in U.S. correctional facilities, although they are finding increasing acceptance elsewhere. There have been no additions since the early 1990s to the short list of correctional systems making condoms available to inmates. Correctional administrators should continue to consider the experience of other countries in implementing harm-reduction strategies.

Endnotes

1. R.C. Mutter et al., "Evidence of Intraprison Spread of HIV Infection," *Archives of Internal Medicine* 154 (1994): 793–795.
2. J. Coe and H.I. Shuman, "Comparison of HIV Seroprevalence Rates Among Long Term Incarcerated Inmates in Florida and Illinois" (unpublished paper).
3. N. Mahon, "New York Inmates' HIV Risk Behaviors: The Implications for Prevention Policy and Programs," *American Journal of Public Health* 86 (1996): 1211–1215.
4. C. Struckman-Johnson et al., "Sexual Coercion Reported by Men and Women in Prison," *Journal of Sex Research* 33 (1996): 67–76.
5. K.A. Dolan et al., "A Network of HIV Infection Among Australian Inmates," poster abstract no. We.D.3655, presented at the 11th International Conference on AIDS, Vancouver, July 10, 1996.
6. L. Calzavara et al., *Understanding HIV-Related Risk Behavior in Prison: the Inmates' Perspective*, Toronto: University of Toronto, Faculty of Medicine, HIV Social, Behavioral and Epidemiological Studies Unit, 1997.
7. D. Tucker, *A Punk's Song: View From the Inside*, AMS Press, 1981.
8. "From Thief to Cellblock Sex Slave: A Convict's Testimony," *New York Times* (Week in Review section), October 19, 1997, p. 7.
9. M. Piatak, Jr., M. Saag, L.C. Yang et al., "High Levels of HIV-1 in Plasma During All Stages of Infection Determined by Competitive PCR," *Science* 259 (1993): 1749–1754; D.V. Havlir and D.D. Richman, "Viral Dynamics of HIV: Implications for Drug Development and Therapeutic Strategies," *Annals of Internal Medicine* 124 (1996): 984–994; J.A. Jacquez, S.J. Koopman, C.P. Simon, and I.M. Longini, Jr., "Role of the Primary Infection in Epidemics of HIV Infection in Gay Cohorts," *Journal of Acquired Immune Deficiency Syndrome* 7 (1994): 1169–1184.
10. Centers for Disease Control and Prevention, "Perspectives in Disease Prevention and Health Promotion Update: Universal Precautions for Prevention of Transmission of Human Immunodeficiency Virus, Hepatitis B Virus, and Other Bloodborne Pathogens in Health-Care Settings," *Morbidity and Mortality Weekly Report* 37 (June 24, 1988): 377–382; and "Occupational Exposure to Bloodborne Pathogens," *29 Code of Federal Regulations* 1910.1030, December 6, 1991.
11. J-D Laporte, "Joint WHO/UNAIDS European Seminar on HIV/AIDS, Sexually Transmitted Diseases and Tuberculosis in Prisons: Results of a Survey in European Prisons," Geneva, Switzerland, Multifaculty Programme on Humanitarian Action and Institute of Legal Medicine, Geneva University, December 1997.

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12. R. Jurgens, *HIV/AIDS in Prisons: Final Report*, Montreal: Canadian HIV/AIDS Legal Network and Canadian AIDS Society, September 1996: 19–20.
 13. New South Wales Minister for Corrective Services, “Media Release: Protecting the Community,” Sydney, Australia, January 8, 1997.
 14. “Condom Trial Begins in Prison,” Australian Associated Press, January 19, 1998.
 15. “New Recommendations for Disinfecting Injection Equipment,” *Medical Alert* (October/November 1993),
 16. Laporte, “Joint WHO/UNAIDS European Seminar.”
 17. Jurgens, *HIV/AIDS in Prisons*, 8–13.
 18. L. Calzavara et al., “Inmates’ Opinions on Bleach and Needle Distribution in Correctional Centres in Ontario, Canada,” poster abstract no. 43400, presented at the 12th World AIDS Conference, Geneva, July 2, 1998.
 19. J. Nelles and A. Fuhrer, *Drug and HIV Prevention at the Hindelbank Penitentiary: Abridged Report of the Evaluation Results*, Bern, Switzerland: Swiss Office of Public Health, 1995.
 20. D. Zeegers Paget, “Needle Distribution in the Swiss Prison Setting: A Breakthrough?” poster abstract no. 43403, presented at the 12th World AIDS Conference, Geneva, July 2, 1998.
 21. Jurgens, *HIV/AIDS in Prisons*, 63–65.
 22. S. Rutter et al., *Is Syringe Exchange Feasible in a Prison Setting? An Exploration of the Issues*, Sydney, Australia: National Drug and Alcohol Research Center, technical report no. 25, 1995.
 23. Calzavara et al., “Inmates’ Opinions.”
 24. K. Dolan and A. Wodak, “An International Review of Methadone Provision in Prisons,” *Addiction Research* 4 (1996): 85–97.
 25. K. Dolan, W. Hall, and A. Wodak, “Methadone Maintenance Reduces Injecting in Prison” (letter), *British Medical Journal* 312 (May 4, 1996): 1162.
 26. New South Wales Department of Corrective Services, HIV and Health Promotion Unit, *Gaol Ink*, Sydney, Australia, n.d.

Chapter 5

Counseling and Testing, Confidentiality and Disclosure

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Key Findings

- Most correctional systems provide HIV-antibody testing, although testing policies differ widely.
- In 1997, 17 State correctional systems and the Federal Bureau of Prisons had policies for the mandatory HIV-antibody testing of inmates at intake and/or release.
- Few correctional systems have mandatory or routine pregnancy testing for female inmates.
- Ongoing assessment of HIV-antibody and pregnancy-testing policies is warranted in light of changing community standards for the treatment of HIV/AIDS.
- Very few correctional systems have policies for the notification of correctional officers regarding inmates' HIV status.
- Few correctional systems routinely screen inmates for STDs.

Policies for HIV counseling and testing have become more and more important as early intervention with antiretroviral therapy has produced increasingly promising results. After the HIV antibody test became available in 1985, debate about testing in correctional facilities focused on whether it could or should be used in conjunction with housing segregation to prevent transmission among inmates. During that period, there was no therapeutic reason for the early identification of HIV infection, since there was nothing to offer patients.

Beginning with the advent of zidovudine (AZT) treatment in the early 1990s, the terms of the debate began to change. Subsequently, with the availability of protease inhibitors and combination antiretroviral therapy in 1996, the value of early identification and intervention increased dramatically. The Bureau of Justice Statistics (BJS) surveys revealed

that 79 percent of State inmates in 1997 and 60 percent of local jail inmates in 1995–96 had been tested for HIV antibodies.

HIV-Antibody Testing Policies

The most recent data on correctional HIV-antibody testing policies come from BJS' 1996 National Prisoner Statistics and from the Ninth National Survey of HIV/AIDS, STDs, and TB in Correctional Facilities sponsored by NIJ and CDC. The BJS survey results offer an overall view of HIV-testing policies in the correctional systems of the States, Federal Government, and the District of Columbia, and the NIJ/CDC survey results yield a mutually exclusive categorization of testing policies for incoming inmates in State/Federal and city/county systems.

Overall HIV-Antibody Testing Policies in State, Federal, and D.C. Systems

Forty-nine States, the District of Columbia, and the Federal Bureau of Prisons test inmates based on certain criteria (see table 21, summarized in table 22). Only one State, Delaware, did not report whether it tested its inmates for HIV. Most jurisdictions (42 out of 51) test inmates if they have HIV-related symptoms or if the inmates request a test. Twenty-four States test inmates after involvement in an incident, and 14 States test inmates who belong to specific “high-risk” groups.

Sixteen States test all inmates who enter their facilities. Three of these States (Alabama, Missouri, and Nevada) and the Federal Bureau of Prisons also test inmates upon leaving the facility. Two States (Nevada and Rhode Island) reported testing inmates not only upon entering but also while in custody.

States also test inmates selectively, based on the special circumstances of an inmate. Forty States test for HIV upon inmate request; 38 test if the inmate exhibits HIV-related symptoms; 24 test after involvement in an incident; and 14 test inmates who belong to specific “high-risk groups.” Only four States (Maine, Massachusetts, Wisconsin, and New Mexico) and the District of Columbia test solely upon inmate request. The Federal Bureau of Prisons, Florida, and New York randomly test their inmates for HIV.

HIV-Antibody Testing Policies for Incoming Inmates

Table 23 presents a mutually exclusive categorization of HIV-antibody testing policies for incoming correctional inmates, according to the 1997 NIJ/CDC survey.

Mandatory and Routine Testing

Between the 1990 and the 1997 surveys, there was no change in the list of 16 State prison systems that conducted mandatory testing of all incoming inmates. (However, since the 1997 survey was completed, South Carolina initiated mandatory HIV-antibody testing of incoming inmates, raising the total number to 17.) As in previous surveys, no city/county jail systems reported mandatory testing at intake. The correctional systems with mandatory testing generally have low HIV seroprevalence among their inmates.

Some clinicians are calling for the mandatory HIV testing of correctional inmates because they believe that incarceration

provides a critical opportunity for therapeutic interventions with an extremely high-risk and previously underserved population. These clinicians typically argue that no policy of mandatory testing should be implemented unless the correctional system is fully committed to offering community standard of treatment to all HIV-infected people. In this context, they believe that the clinician’s ethical imperative to offer treatment overrides the patient’s right to decide whether to be tested.

As shown in table 23, two correctional systems have moved to “routine” testing, an intermediate point between mandatory and voluntary testing, in which patients are informed that they will be tested unless they specifically refuse. More recently, the Texas State system has also decided to adopt routine testing.¹

Offered and On-Request Testing

Most correctional systems continue to rely on voluntary testing to identify inmates who might benefit from therapeutic intervention. Table 23 shows that two-thirds of State/Federal systems and 80 percent of city/county systems have policies for offering HIV testing or providing testing on request. Dividing “voluntary” testing into these two policy choices in the 1997 NIJ/CDC survey was intended to distinguish between (1) systems in which staff enthusiastically offer or recommend testing to those who seem to be at risk based on a health history and assessment, and (2) systems in which inmates are not tested unless they request it. In other words, the distinction is between an active and a passive approach to testing. Table 23 indicates that correctional systems with voluntary testing are fairly evenly divided between these two approaches. The results of the validation study (table 24) reveal more discrepancies between central office and facility responses regarding offered and on-request testing than regarding mandatory testing, indicating possible confusion between these categories either in complying with policy or responding to the survey.

Most studies show that HIV seropositivity rates from voluntary testing in correctional settings are lower than seroprevalence rates found in blinded studies of samples of inmates representative of the entire incoming inmate population. In Maryland, for example, 2.5 percent of inmates receiving voluntary testing in 1991 were HIV-seropositive, as opposed to 8.5 percent of incoming inmates in a blinded study.² The major reasons adduced for voluntary testing programs understating the true HIV seroprevalence among Maryland inmates are that many truly at-risk inmates do not believe that they are at risk for HIV, and that inmates are in

Table 21. Testing policies for antibodies to the human immunodeficiency virus, by jurisdiction, 1995

Jurisdiction	Entering	All Inmates In Custody Upon Release		High-Risk Group	Inmate Request	Clinical Indication	Involvement in Incident	Random Sample	Other
Federal System			X		X	X		X	
Northeast									
Connecticut				X	X	X	X		
Maine					X				
Massachusetts					X				
New Hampshire	X			X		X			
New Jersey					X	X			
New York				X	X	X	X	X	
Pennsylvania					X	X	X		
Rhode Island	X	X			X	X	X		
Vermont							X		
Midwest									
Illinois				X	X	X	X		
Indiana				X	X	X			
Iowa	X								
Kansas					X	X			
Michigan	X				X	X	X		
Minnesota				X	X	X	X		
Missouri	X		X		X	X	X		
Nebraska	X				X	X	X		X
North Dakota	X								
Ohio				X	X	X	X		X
South Dakota					X	X			
Wisconsin					X				
South									
Alabama	X		X			X			
Arkansas				X	X	X	X		
Delaware									
Dist. of Columbia					X				
Florida				X	X	X	X	X	
Georgia	X				X	X			
Kentucky					X	X	X		
Louisiana					X	X	X		
Maryland					X	X	X		
Mississippi	X				X	X	X		
North Carolina				X	X	X	X		X
Oklahoma	X					X	X		
South Carolina					X	X	X		
Tennessee				X	X	X	X		
Texas				X	X	X	X		
Virginia					X	X			
West Virginia					X	X			
West									
Alaska					X	X			
Arizona					X	X			X
California				X					
Colorado	X				X	X	X		
Hawaii					X	X			
Idaho	X								
Montana					X	X			
Nevada	X	X	X						
New Mexico					X				
Oregon					X	X	X		
Utah	X			X					
Washington					X	X			X
Wyoming	X								

Source: BJS 1996 National Prisoner Statistics.

Table 22. Summary of HIV-Antibody Testing Policies

Testing Policy	No. of Jurisdictions
Upon inmate request	40
Upon clinical indication	38
Upon involvement in incident	24
All incoming inmates	16
High-risk groups	14
All inmates at time of release	4
Random sample	3
All inmates in custody	2

Note: Detail adds to more than 52 because a jurisdiction may have more than one testing policy.

Source: BJS 1996 National Prisoner Statistics.

Table 23. Mutually exclusive categorization of HIV-antibody testing policies for incoming inmates, 1997

Policy	State/Federal Prison Systems (n = 51)		City/County Jail Systems (n = 41)	
	n	%	n	%
Mandatory	16	31	0	—
Routine	1	2	1	2
Offered	18	35	14	34
On request	16	31	19	46
No policy	0	—	7	17
Total	51	99*	41	99*

*Due to rounding.

Source: NIJ/CDC survey.

denial about their risk status and, for this and other reasons, avoid being tested.³ In California, 0.8 percent of voluntarily tested inmates were HIV seropositive in 1994, while seroprevalence in a blinded study of incoming inmates the same year was 2.5 percent.⁴

There are several possible explanations for the lower HIV-seropositivity rates commonly found among voluntarily

Table 24. HIV-antibody testing policies, 1997: Results of the validation study (VS)

Central Office Testing Policy	Systems in VS With This Policy	Facilities in VS in These Systems	Percentage in Agreement
Mandatory*	6	11	100
Offered	8	23	35
On request	2	6	33

*Screening of all incoming inmates or all releases.

Source: NIJ/CDC surveys.

tested inmates as compared with those from blinded studies (presented in chapter 1). One is that many HIV-positive inmates may already know their status. In the context of “voluntary” testing programs, a critical question is how testing is presented to inmates and whether inmates trust that the system will maintain their confidentiality and provide them needed services if they accept testing.⁵ In Massachusetts a program that encourages voluntary testing and offers state-of-the-art medical treatment for HIV diseases has generated a sixfold increase in requests for testing.⁶ However, HIV-infected inmates may not have this level of trust. Of course, there are other possible explanations for inmates declining to be tested, including fear of discrimination and mistreatment, facing the consequences of being HIV positive, and psychological denial. All of these issues should be addressed in educational and counseling sessions.⁷

Occasions on which testing can be offered include intake medical screening, HIV/AIDS orientation sessions, and other education and prevention sessions. Individual risk assessments and pretest counseling sessions provide other opportunities to offer and recommend testing. Staff of the Forensic AIDS Project (FAP) of the San Francisco Department of Public Health conduct risk-assessment counseling with inmates in all jails. This involves individual counseling on HIV risk behaviors and behavioral risk reduction. Disclosure counseling, or post-test counseling, is provided to all tested inmates upon receipt of their results. In this counseling, FAP staff focus on the importance of risk reduction regardless of whether the inmate is positive or negative. Staff attempt to help inmates acquire and develop the skills needed to practice risk reduction when they return to the community. HIV-positive inmates are referred to FAP’s Early Intervention Team for in-jail services and develop-

ment of a treatment plan. All inmates are given materials on HIV prevention and referred to community-based resources.

In New York State both anonymous and confidential testing are offered to inmates through the AIDS Institute of the State health department. Inmates who receive anonymous testing also have the option of converting to confidential status so they can receive services. Anonymous testing programs may be affected by the increasing movement to the mandatory reporting of HIV infection.

Testing of Pregnant Women

Because of the findings of the AIDS Clinical Trials Group (ACTG) 076 trial that AZT treatment during pregnancy and delivery reduces the chances of perinatal HIV transmission by two-thirds—from the previous 25–30 percent to 8–10 percent⁸—early identification and treatment of pregnant HIV-infected women has become a major focus of testing policy. Public Health Service (PHS) guidelines issued in 1995 call for the routine counseling and voluntary testing of pregnant women as early as possible in their pregnancies.⁹ At this writing, the Institute of Medicine is engaged in a study mandated by the Ryan White Care Act Amendments of 1996 designed to evaluate State efforts to reduce perinatal HIV transmission, including efforts to increase the availability and acceptance of HIV testing in many settings, such as correctional facilities.

There are obviously two steps in identifying pregnant HIV-infected women. The first is to identify pregnant women and the second is to determine which are HIV infected. Thus, policies for both pregnancy testing and HIV testing are pertinent. Table 25 shows that less than half of correctional systems provide routine pregnancy testing of incoming female inmates, and the vast majority offer pregnancy testing on request. A summary of HIV-testing policies for pregnant women, shown in table 26, reveals that mandatory testing is the most common policy in State/Federal prison systems (39 percent), and offered testing is most common in city/county jail systems (51 percent).

The lists of State/Federal prison systems with routine pregnancy testing of incoming women and those with mandatory or routine HIV testing of incoming pregnant women are quite different. Thirteen States and the Federal Bureau of Prisons (FBOP) (27 percent of the total of 51) have both policies (of these 14, 13 States do mandatory screening of *all* inmates at intake; the FBOP does mandatory screening of all inmates at release). Nine systems (18 percent) have routine pregnancy testing but some form of voluntary HIV testing (all of

Table 25. Pregnancy testing for female inmates, 1997

Policy	State/Federal Prison Systems (n = 51)		City/County Jail Systems (n = 41)	
	n	%	n	%
Routine testing of all incoming women	23	45	12	29
On request	43	84	38	93
Clinical indications	51	100	39	95

Source: NIJ/CDC survey.

Table 26. HIV-antibody testing for pregnant female inmates, 1997

Policy	State/Federal Prison Systems (n = 51)		City/County Jail Systems (n = 41)	
	n	%	n	%
Mandatory	20	39	1	2
Routine	8	16	6	15
Offered	16	31	21	51
On request	7	14	9	22
No policy	0	—	4	10
Total	51	100	41	100

Source: NIJ/CDC survey.

these States do all HIV testing on a voluntary or on-request basis). Fourteen systems (27 percent) have mandatory or routine HIV testing of all incoming pregnant inmates but not routine pregnancy testing (7 of these 14 States have mandatory HIV testing of all incoming inmates). This leaves 14 State systems (27 percent) that have neither policy and rely on voluntary/on-request testing for both pregnancy and HIV testing.

Overall, therefore, most systems have the same policy for HIV testing of pregnant females that they have for HIV testing of all inmates. Only seven State systems and the FBOP have mandatory or routine HIV testing of incoming

pregnant women but voluntary/on-request HIV testing for other new inmates. Those with voluntary testing conform with the PHS guidelines recommending that HIV testing of pregnant women remain voluntary.¹⁰ However, the NIH/CDC survey data do not reveal whether pregnant inmates in systems with voluntary HIV testing are being routinely counseled regarding testing, which PHS also recommends.

Confidentiality and Notification of HIV Test Results

Confidentiality is an extremely important ingredient in—some would say prerequisite for—effective HIV diagnosis and treatment programs. As noted earlier, people may be discouraged from coming forward for voluntary HIV antibody testing, and thereby perhaps fail to receive timely therapeutic intervention, if they fear unauthorized disclosure of their HIV status and attendant discrimination or mistreatment. This may be a particularly challenging problem in correctional facilities, where confidentiality is more difficult to maintain and the consequences of breached confidentiality are more severe. However, it is possible to preserve confidentiality in a correctional setting, and many correctional systems are quite successful in doing so. Most of the blatant, systemic violations of confidentiality common in the earlier days of the epidemic—such as obvious flagging of medical records and posting or allowing free access to lists of HIV-infected inmates—have been eliminated. In an era of triple combination antiretroviral therapies, the most serious threat to confidentiality is the need for patients on these therapies to “keep on person” or swallow at a “pill line” large numbers of capsules that the inmate grapevine easily identifies as HIV medications. A health care provider in the Colorado prison system commented on other continuing challenges of maintaining confidentiality of inmates’ HIV status and other medical information:

During transport of inmates, the medical charts are given to the transporting correctional officers in a container that they are not supposed to open. If security requests medical information (e.g., concern for safety of an inmate during a forced cell entry) we are supposed to tell them only if there is or is not a problem that they should be aware of, but not necessarily the actual disease/reason for concern. The system works fairly well but it depends greatly on the individual provider. Similarly, security information is relatively inaccessible to [health care] providers. In reality, the barrier is somewhat porous to information flow in both directions.¹¹

In general, it is far preferable for policies to specify clearly, by category of individual, who is to receive notification of inmates’ HIV status and under what specific circumstances. Policies providing for disclosure to persons with a “need to know” should be avoided because the definition of such persons is almost sure to be a matter of dispute. The Clinical Director for the Vermont Department of Corrections commented that such “need to know” policies leave “far too much room for subtle and not-so-subtle pressure to be exerted on clinical staff by custody supervisors and officers whose perception of risk is generally much higher than it actually is.”¹²

Some States have laws or regulations requiring HIV testing and the notification of results following incidents involving the possible occupational transmission of HIV to correctional officers, law enforcement officers, emergency medical technicians, and other emergency response or health care-specified workers. In fact, California has a law on the books, resulting from a referendum, that requires notification to correctional officers of all HIV-seropositive inmates under their supervision. The Forensic Services staff of the San Francisco Department of Public Health reached a compromise with the correctional officers’ union, however, in which an incident-based testing and notification policy was substituted for the mandated blanket notification. In Rhode Island, similarly, a compromise for an incident-based policy was reached with the correctional officers’ union that has periodically called for disclosure of the HIV status of all inmates.

Table 27 summarizes correctional systems’ policies regarding the disclosure of inmates’ HIV-antibody-test results. Predictably, disclosure to the inmate and the inmate’s attending health care provider is virtually universal, followed by notification to a public health department. In recent months there has been considerable advocacy for and discussion of expanded reporting to public health departments. Although at the time of the survey HIV infection was reportable in only 29 States, 46 State/Federal correctional systems claimed to be reporting HIV infections to public health departments.

Only 12 percent of State/Federal systems and 7 percent of city/county systems reported official policies of notifying correctional officers of inmates’ HIV test results. Fewer than half reported notification to correctional management at the central-office or institutional levels or to parole agencies. Finally, policies for notification to victims of sexual or physical assault and sexual or needle-sharing partners are also relatively uncommon. Laws in some States require HIV testing of persons convicted of (or, in some jurisdictions,

Table 27. Policies regarding notification of inmates' HIV-antibody test results, 1997

Policy to Notify	State/Federal Prison Systems (n = 51)		City/County Jail Systems (n = 41)	
	n	%	n	%
Inmate	51	100	36	88
Attending health care provider	51	100	33	83
Correctional management (central office)	21	41	6	15
Correctional management (institution)	19	37	6	15
Correctional officers	6	12	3	7
Public health department	46	90	29	70
Victims of sexual/physical assault by inmate	24	47	10	24
Parole agency	15	29	0	—
Spouse/sexual partner(s)	16	31	6	15
Needle-sharing partner(s)	14	27	4	10

Source: NIJ/CDC survey.

persons charged with) sexual assault and notification to victims of the results.

Validation study results (table 28) indicate facilities' relatively high but not complete compliance with central office policy to notify correctional management and correctional officers but poor compliance with policies to notify victims

and sexual or needle-sharing partners. Central office prohibitions against notification of particular categories of persons are in general more often consistently followed by facilities. In particular, 34 facilities in 14 systems were 100 percent in agreement with the central office policies not to notify correctional officers of inmates' HIV status.

Table 28. Notification of HIV-antibody test results, 1997: Results of the validation study (VS)

Person or group	Systems in VS That Notify	Facilities From These Systems in VS	% in Agreement	Systems in VS That Do Not Notify	Facilities From These Systems in VS	% in Agreement
	Inmate	16	40	100	0	—
Attending health care provider	16	38	95	0	—	—
Correctional management (central office)	8	14	43	8	25	64
Correctional management (institution)	7	14	50	9	25	80
Correctional officers	2	5	60	14	34	100
Public health department	14	35	83	2	4	50
Victims of sexual/physical assault by inmate	8	12	33	6	17	76
Spouse/sexual partner(s)	6	15	27	6	12	67
Needle-sharing partner(s)	6	15	27	6	12	83

Source: NIJ/CDC surveys.

STD Screening in Correctional Facilities

Correctional inmates are disproportionately infected with and at high risk for other sexually transmitted diseases. Therefore, as with HIV/AIDS, correctional facilities are promising settings for the diagnosis and treatment of STDs. Jail-based programs of rapid syphilis screening and treatment funded by CDC have shown promising results.¹³ Indeed, it is possible that aggressive correctional STD screening and treatment programs could help reduce community-wide STD morbidity.¹⁴

Table 29 suggests an unrealized opportunity to initiate more aggressive STD screening and treatment in correctional facilities. Almost all State/Federal prison systems have mandatory or routine syphilis screening for incoming inmates, but coverage is much poorer for gonorrhea and chlamydia. In city/county systems, mandatory or routine STD screening is a relatively rare exception. A separate CDC survey of jails in 1997 also found that few facilities conducted routine STD screening, and those that had such policies tested fewer than half of the inmates. Few jails followed CDC's STD screening and treatment guidelines.¹⁵

Conclusion

Most correctional systems in the United States continue to provide HIV-antibody testing on a voluntary basis for all categories of inmates, including pregnant women. Discussion of mandatory testing is now driven more by the potential for early medical intervention than by the belief that primary prevention can be achieved.

Confidentiality of HIV status remains an extremely important issue in correctional facilities, as inmates may be discouraged from accepting voluntary testing if they fear the unauthorized disclosure of their results and the associated discrimination or mistreatment. However, correctional systems appear to be improving their performance in the protection of inmates' confidentiality.

Although the treatment implications of STD testing are relatively simple and straightforward, they are much more complex for HIV/AIDS. As described in chapter 7, the new HIV/AIDS regimens are challenging and complex and often have significant side effects. Thus, ongoing evaluation of policies for testing and early detection in light of factors likely to affect decisions to initiate antiretroviral therapy is extremely important.

Table 29. Mandatory and routine testing of incoming inmates for STDs, 1997

Policy	State/Federal Prison Systems (n = 51)		City/County Jail Systems (n = 41)	
	n	%	n	%
Syphilis				
Mandatory	31	61	9	22
Routine	14	27	8	20
Gonorrhea				
Mandatory	8	16	1	2
Routine	6	12	2	25
Chlamydia				
Mandatory	4	8	1	2
Routine	6	12	1	2

Source: NIJ/CDC survey.

Endnotes

1. "Texas Revises Inmate Testing and Prevention Policies," *AIDS Policy & Law* 13 (March 20, 1998): 2.
2. P.M. Brien and A.J. Beck, *HIV in Prisons 1994*, Washington, DC: U.S. Department of Justice, Bureau of Justice Statistics, March 1996 (NCJ 158020), Table 1; C. Behrendt et al., "Voluntary Testing for HIV in a Prison Population with a High Prevalence of HIV," *American Journal of Epidemiology* 139 (1994): 918-926.
3. Behrendt et al., "Voluntary Testing for HIV in a Prison Population with High Prevalence of HIV."
4. Brien and Beck, *HIV in Prisons 1994*, Table 1; J. D. Ruiz and J. Mikanda, *Seroprevalence of HIV, Hepatitis B, Hepatitis C, and Risk Behaviors Among Inmates Entering the California Correctional System*, Sacramento: California Department of Health Services, Office of AIDS, HIV/AIDS Epidemiology Branch, March 1996: 1, 8.
5. A. DeGroot, T. Hammett, and R. Scheib, "Barriers to Care of HIV-Infected Inmates: A Public Health Concern," *AIDS Reader* (May/June 1996): 78-87.

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6. A. Epstein, "Massachusetts HIV-1 Program," letter, *Lancet* 351 (May 9, 1998): 1439.
 7. C. Behrendt et al., "Voluntary Testing for HIV in a Prison Population With a High Prevalence of HIV," 918-926.
 8. E.M. Connor, R.S. Sperling, and R. Gelber et al., "Reduction of Maternal-Infant Transmission of HIV-1 With Zidovudine Treatment," *New England Journal of Medicine* 331 (1994): 1173-1180; Centers for Disease Control and Prevention, "Recommendations of the U.S. Public Health Service Task Force on the Use of Zidovudine to Reduce Perinatal Transmission of HIV," *Morbidity and Mortality Weekly Report* 43, no. RR-11 (August 5, 1994): 1-20.
 9. Centers for Disease Control and Prevention, "U.S. Public Health Service Recommendations for HIV Counseling and Voluntary Testing for Pregnant Women," *Morbidity and Mortality Weekly Report* 44, no. RR-7 (July 7, 1995): 1-15.
 10. Ibid.
 11. J. Bloor, as posted on the Center for Integration of Health Sciences and Criminal Justice list server, March 20, 1998.
 12. T. Powell, Clinical Director, Vermont Department of Corrections, as posted on the Center for Integration of Health Sciences and Criminal Justice list server, March 7, 1997.
 13. Centers for Disease Control and Prevention, "Syphilis Screening Among Women Arrestees at the Cook County Jail—Chicago, 1996," *Morbidity and Mortality Weekly Report* 47 (June 5, 1998): 432-433.
 14. D. Cohen, R. Scribner, J. Clark, and D. Cory, "The Potential Role of Custody Facilities in Controlling Sexually Transmitted Diseases," *American Journal of Public Health* 82 (1992): 552-556; S. Blank et al., "New Approaches to Syphilis Control: Finding Opportunities for Syphilis Treatment and Congenital Syphilis Prevention in a Women's Correctional Setting," *Sexually Transmitted Diseases* 24 (1997): 218-226.
 15. Centers for Disease Control and Prevention, "Assessment of Sexually Transmitted Disease Services in City and County Jails—United States, 1997," *Morbidity and Mortality Weekly Report* 47 (June 5, 1998): 429-431.

Chapter 6

Housing and Correctional Management

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Key Findings

- Only a small number of correctional systems segregate inmates with HIV disease, and the number of systems with segregation policies has declined sharply since the late 1980s.
- Some correctional systems still limit the work assignments for which inmates with HIV are eligible.
- Few correctional systems permit conjugal visits for any inmates, and even fewer allow such visits for inmates with HIV.
- Policies for the early or compassionate release of inmates with terminal illness, including end-stage AIDS, are quite common, but relatively few inmates are being released under such policies.

This chapter presents findings from the 1997 NIJ/CDC survey regarding housing policies for inmates with HIV disease, as well as work assignments, conjugal visits, and early release programs. In chapter 7, case management, discharge planning, and continuity of care are discussed.

Housing Policies for Inmates With HIV Disease

Correctional housing policies for inmates with HIV disease have changed dramatically since the beginning of the epidemic, with the continuing eclipse of segregation. The changes were particularly pronounced during the period 1985–92. Table 30 shows that by 1997 only three State prison systems had policies for segregating all inmates with confirmed AIDS—Alabama, Mississippi, and California—down from four in 1994. In Alabama and Mississippi, the only two State prison systems that segregated all known HIV-infected inmates, from the asymptomatic through those with confirmed AIDS, the segregation is complete. Inmates known to have HIV infection and AIDS are totally separated from the rest of the inmate population residentially and

Table 30. Decline of segregation policies in State/Federal systems (n = 51), 1985–97

Year	Systems With Segregation Policies for:			
	HIV-Infected Inmates		Inmates With AIDS	
	No. of Systems	%	No. of Systems	%
1985	8	16	38	75
1986	8	16	30	59
1987	5	10	41	80
1988	6	12	20	39
1989	4	8	16	31
1990	4	8	9	18
1992–93	2	4	5	10
1994	2	4	4	8
1997	2	4	3	6

Source: NIJ/CDC surveys.

Table 31. State/Federal prison systems' housing policies for inmates with AIDS and asymptomatic HIV infection, 1994 and 1997

Housing Policy	State/Federal Prison Systems								
	AIDS				Asymptomatic HIV				
	1994		1997		1994		1997		
	n	%	n	%	n	%	n	%	
General population									
No restrictions	8	16	17	33	28	55	31	61	
With precautions	3	6	1	2	4	8	1	2	
Permanently segregated	4	8	3	6	2	4	2	4	
Case-by-case determination	36	71	30	59	17	33	17	33	
Total	51	101*	51	100	51	100	51	100	

*Due to rounding.
 Source: NIJ/CDC surveys.

programmatically. Since Alabama and Mississippi have mandatory HIV-antibody testing of all incoming inmates, these States probably identify and segregate a large percentage of HIV-infected inmates.

In most correctional facilities in California, inmates with AIDS live separately, but the majority of these inmates go out into the general population for work assignments, educational and vocational programs, and other activities. Several California facilities do house inmates with AIDS in the general population. In all California facilities, inmates with asymptomatic HIV infection and symptomatic HIV disease short of an AIDS diagnosis are housed in the general population.

In 1998 the South Carolina State correctional system initiated policies of mandatory HIV-antibody testing and assignment of inmates with HIV to one maximum-security facility regardless of their security classifications. However, inmates with HIV disease are not segregated in this facility. These changes were prompted primarily by a desire to identify inmates with HIV in a timely manner so that they could be offered early-treatment intervention.

Tables 31 and 32 compare prison and jail systems' housing policies for inmates with AIDS and asymptomatic HIV

infection in 1994 and 1997. The main change in State/Federal prison systems was the increase in the number of systems with policies providing for general-population housing with no restrictions. These increases came primarily at the expense of policies for the case-by-case determination of housing for inmates with confirmed AIDS and of policies for general-population housing with restrictions for asymptomatic HIV-infected inmates. Among city/county jail systems, the number and percentage of systems with policies for general-population housing without restrictions of inmates with asymptomatic HIV infection and AIDS increased from 1994 to 1997, whereas the number of systems making housing decisions on a case-by-case basis declined by similar amounts. The major policy shift between 1994 and 1997 reversed the trend noted between 1992 and 1994 from general-population housing policies to case-by-case determination.

Table 33 represents the results of the validation study regarding the housing of asymptomatic HIV-infected inmates and inmates with AIDS. Agreement is generally higher for the blanket policies under which all inmates in the category are either housed in the general population or segregated. Case-by-case policies are inherently more ambiguous in that they may operationally shade over into blanket policies. The converse is also true, which may

explain why the agreement rate in systems with central office policies for general-population housing of inmates with AIDS was quite low (29 percent). The divergent facilities all reported case-by-case housing assignment.

Work Assignments and Other Programming

The predominance, noted above, of policies for the unrestricted housing of inmates with HIV disease offers such inmates access to all work assignments and other programming.

Table 32. City/county jail systems' housing policies for inmates with AIDS and asymptomatic HIV infection, 1994 and 1997

Housing Policy	City/County Jail Systems								
	AIDS				Asymptomatic HIV				
	1994		1997		1994		1997		
	n	%	n	%	n	%	n	%	
General population									
No restrictions	1	3	10	24	14	48	32	78	
With precautions	0	—	1	2	2	7	0	—	
Permanently segregated	0	—	2	5	0	—	2	5	
Case-by-case determination	28	97	28	68	13	45	7	17	
Total	29	100	41	99*	29	100	41	100	

*Due to rounding.
Source: NIJ/CDC surveys.

Table 33. Housing of inmates with asymptomatic HIV infection and AIDS: Results of the validation study (VS)

Central Office Housing Policy	Systems in VS With This Policy	Facilities in VS in These Systems	Percentage in Agreement
Asymptomatic HIV-infected			
General population	8	19	79
Segregated	2	2	100
Case-by-case	6	16	25
AIDS			
General population	3	7	29
Segregated	3	5	60
Case-by-case determination	10	24	58

Source: NIJ/CDC surveys.

However, the eligibility of HIV-infected inmates for some program and work assignments remains controversial. In particular, some correctional systems continue to exclude HIV-infected inmates from food service jobs. One State correctional system spokesperson gave the following justification for this policy: "It's simply a health and safety issue. . . . Because people may get cut working in food service, we consider it prudent and responsible to eliminate the possibility, however slight, of exposing a great number of other people to the AIDS virus."

When informed of the CDC's position that there is no scientific basis for the exclusion policy, the correctional spokesperson said that "it's more a matter of perception than a health issue. It was a political concession made to the legislature some years back."¹ These statements exemplify an important problem. In fact, HIV/AIDS is a health issue, and policy decisions should be based on accurate health information rather than on "perception" or "political concession." Indeed, as in the case of the exclusion of HIV-infected inmates from food service work, policies without basis in accurate health information may encourage erroneous and dangerous perceptions that HIV may be transmitted through casual contact. Such policies may also undermine the credibility of education regarding the true means of HIV transmission. It is very important that policies and educational messages be consistent.

Conjugal Visits

The number of State/Federal prison systems permitting conjugal visits dropped from eight in 1994 to six (12 percent) in 1997. Of the six systems permitting conjugal visits, five allow HIV-infected inmates to have such visits. All six systems permitting conjugal visits make condoms available to inmates participating in these visits.

Compassionate Release and Medical Furlough

With the dramatic advances in treatment for people with HIV/AIDS, inmate AIDS deaths have declined in many correctional systems. Thus, there are generally fewer inmates with terminal AIDS who might qualify for early release or furlough programs.

Nevertheless, inmates continue to die from a variety of diseases, so policies making it possible for them to die at home or somewhere other than prison remain important.

Table 34 shows that almost two-thirds (65 percent) of State/Federal prison systems and almost half (44 percent) of city/county jail systems permit early/compassionate release based on either specific written policies or simply practice. Fewer systems, about one-third (37 percent) of State/Federal prison systems and less than one-fifth (17 percent) of city/county jail systems, permit medical furlough. Table 35 reveals that 12 State/Federal systems granted early/compassionate release to a total of 143 inmates during 1996, and 8 State/Federal systems medically furloughed a total of 30 inmates. Fifteen city/county jail systems granted early release to a total of 171 inmates, and 3 jail systems furloughed a total of only 10 inmates in 1996.

Conclusion

Policies of segregating inmates with HIV and AIDS continued their decline among U.S. correctional systems in 1997, although the most dramatic reductions occurred between 1985 and 1992. The unrestricted housing of inmates with HIV disease generally means that inmates have full access to work assignments and other programs offered in the facility. However, some systems exclude inmates with HIV from food service work assignments, which is problematic in that it may lead to the erroneous belief that HIV can be transmitted through food.

Few correctional systems permit conjugal visits for any inmates, and even fewer permit such visits for inmates with HIV/AIDS. Most systems have some form of compassionate release or medical furlough program on the books, but in fact relatively few inmates with HIV/AIDS have been released under such programs. One reason for this may be the

Table 34. Compassionate release and medical furlough, 1997

Policy	State/Federal Prison Systems (n = 51)		City/County Jail Systems (n = 41)	
	n	%	n	%
Early/compassionate release	33	65	18	44
Medical furlough	19	37	7	17

Source: NIJ/CDC survey.

Table 35. Inmates receiving compassionate release and medical furlough, 1996

	State/Federal Prison Systems		City/County Jail Systems	
	No. of Systems	No. Released	No. of Systems	No. Released
Compassionate Release				
Released no inmates	14	0	1	0
Released some inmates	12	143	15	171
Missing/don't know	7	—	2	—
Don't permit compassionate release	18	0	23	0
Total	51	143	41	171
Medical Furlough				
Furloughed no inmates	8	0	1	0
Furloughed some inmates	8	30	3	10
Missing/don't know	3	—	3	—
Don't permit medical furlough	32	0	34	0
Total	51	30	41	10

Source: NIJ/CDC survey.

improved medical condition and increasing survival of patients receiving the new combination antiretroviral therapies.

Endnote

1. D. Cauchon, "AIDS in Prison: Locked Up and Locked Out," *USA Today*, March 31, 1995, 6A.

Chapter 7

Medical Treatment and a Continuum of Care

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Key Findings

- Protease inhibitors and combination therapies have brought dramatic improvements in the medical condition and survival of people living with HIV, at least over the relatively short term that has been available for study to date.
- The new therapeutic combinations pose challenges for patient adherence, and failure to adhere consistently to the regimens may have serious public health consequences if drug-resistant strains are transmitted to others.
- New drugs and reduced dosing currently under study offer hope of more “patient-friendly” regimens.
- Clinicians must work closely with patients to make the best therapeutic decision.
- A continuum of services including early identification, timely and effective treatment, case management, discharge planning, and community linkages will make for optimal clinical and psychosocial outcomes for inmates with HIV disease.
- Continuity of care and bridging to community services also contribute to positive patient outcomes.
- Existing program models have not been rigorously evaluated yet probably warrant replication based on anecdotal evidence.

Inmate populations are disproportionately affected by a range of health problems, including HIV/AIDS, STDs, TB, other infectious and chronic diseases, high-risk sexual behavior, and substance abuse. Despite their high levels of need, however, most inmates have been seriously underserved in terms of medical care, drug treatment, and psychosocial services when they arrived at correctional facilities. Many have never had regular primary health care or dental care. In Connecticut 64 percent of about 200 HIV-infected inmates reported that they were first offered antiretroviral therapy in prison.¹

Female inmates may have particularly serious health and psychosocial problems: higher rates of substance abuse than male inmates, almost universal histories of sexual and emotional abuse, high rates of homelessness and other housing problems, and serious child custody and family issues.

Although alcohol and drug use does occur in correctional facilities, inmates are much more likely to be substance free while incarcerated than when they were in the community. In general, there are fewer distractions in prison than on the street. Therefore, periods of incarceration, however brief,

offer extremely important opportunities to treat many serious conditions, to introduce inmates to primary care, and to provide a wide range of health interventions.

This chapter discusses the availability of new antiretroviral drugs and combination therapies in correctional settings as well as the complex issues crucial to the selection and maintenance of regimens. It also discusses an ideal continuum of services for inmates, from screening and identifying health problems to discharge planning and community linkages.

Medical Treatment for HIV/AIDS

Since 1996 the treatment of HIV/AIDS has been revolutionized by the introduction of protease inhibitors and combination antiretroviral therapy. However, the average cost of the new drugs is \$12,000 per patient per year. The Government's AIDS Drug Assistance Program (ADAP) is generally not available to pay for the treatment of State inmates, but in some States, such as Massachusetts, it may cover county inmates.

The new HIV therapies appear to offer the possibility of long-term delay in HIV disease progression, the long-term reduction of HIV viral loads to undetectable levels, and consequent prolonged survival with HIV disease.² There have already been reductions in the numbers of AIDS deaths, both in the total U.S. population and in some prison systems, attributable initially to AZT monotherapy and two-drug combinations and even more markedly in the last 2 years following the introduction of protease inhibitors and triple combination therapy. A recent study found that the increased intensity of antiretroviral therapy produced increased reductions in morbidity and mortality.³

These new drugs and combination therapies, as well as AZT therapy for pregnant women, are widely available in correctional systems (table 36). Viral load monitoring, which is critical to the ongoing assessment of treatment effectiveness and adjustment of regimens, is not as widely available in correctional systems (80 percent of State/Federal systems and 59 percent of city/county systems).

Table 37 presents the results of the validation study regarding the availability of HIV-related therapies and monitoring methods. Rates of agreement regarding the availability of

Table 36. The availability of HIV therapies and monitoring, 1997

Policy	State/Federal Prison Systems (n = 51)		City/County Jail Systems (n = 41)	
	n	%	n	%
Protease inhibitors	46	90	38	93
Combination therapy (protease inhibitors with antiretrovirals)	46	90	37	90
Bactrim (prophylaxis for PCP)	50	98	41	100
AZT for pregnant women	47	92	38	93
CD4 monitoring	51	100	38	93
Viral load monitoring	41	80	24	59

Source: NIJ/CDC survey.

protease inhibitors, combination therapy, bactrim, and CD4 and viral load monitoring are very high. At the same time, in the one system whose central office reported that protease inhibitors and combination therapy were not available, the one facility in the validation study reported that these therapies were in fact available there.

Although survey results show the wide availability of therapies, interviews with staff and prisoner advocates in several major correctional systems indicate that a combination of factors—including high medication costs; inmate reluctance to seek testing and treatment based on denial, fear, and/or mistrust; and uneven clinical competence and lack of uniform treatment standards—may limit the availability of appropriate HIV treatment regimens to inmates.⁴

Clinical trials offer another mechanism for expanded inmate access to new HIV therapies. A study conducted in 1995 found that 9 of 32 correctional systems surveyed had procedures in place for inmate participation in trials, and 19 others prohibited inmate participation in clinical research.⁵ More recently, according to the 1997 NIJ/CDC survey, 242 inmates in 7 State systems were enrolled in trials of anti-HIV medications.

Table 37. The availability of HIV therapies and monitoring: Results of the validation study (VS)

Central Office Policy	Systems in VS With This Policy	Facilities in VS in These Systems	Percentage in Agreement
Protease inhibitors	15	37	84
Combination therapy (protease inhibitors with antiretrovirals)	15	38	87
Bactrim (prophylaxis for PCP)	16	39	92
CD4 monitoring	16	39	95
Viral load monitoring	14	34	82

Source: NIH/CDC surveys.

Guidelines for Antiretroviral Therapy

Leading HIV clinicians identify the following key objectives of antiretroviral therapy:

- To achieve maximum durable suppression of HIV viral replication.
- To preserve optimal immune function.
- To delay development of drug resistance.
- To maximize patient adherence by selecting a tolerable and understandable regimen.
- To maximize future treatment options in the event of failure.⁶

Two complementary sets of guidelines for HIV antiretroviral therapy have been issued.⁷ These provide principles and algorithms for selecting regimens that apply to all persons, including pregnant women. These guidelines strongly recommend aggressive combinations of two nucleoside reverse transcriptase inhibitors (NRTIs) with a potent protease inhibitor or, as a generally less desirable alternative, one non-nucleoside reverse transcriptase inhibitor (NNRTI) with two NRTIs. Combination therapies for pregnant women must include AZT.⁸ Combinations of two NRTIs and all monotherapies are strongly discouraged. The baseline measurement and ongoing monitoring of HIV viral load and CD4 counts at specified intervals are essential. The combination of these two measures provides the best assessment of disease progression and treatment effectiveness. The state of the art in HIV treatment continues to evolve. New drugs

and new combinations, including “protease sparing” regimens, as well as reduced dosing schedules for existing drugs are also being evaluated. Promising results on some of these fronts were presented at the 12th World AIDS Conference in Geneva in July 1998. The hope is that effective but more “patient-friendly” therapies will be widely available soon.

New guidelines have also been issued for the prevention of opportunistic infections in persons with HIV disease.⁹ Johns Hopkins University conveniently summarized the guidelines for antiretroviral therapy and prevention of opportunistic infections in *The Hopkins HIV Report*.¹⁰

The most dramatic benefit from the new therapies has been demonstrated most clearly in patients with advanced disease, whereas the risk-benefit ratio for initiating antiretroviral therapy in the early stages of HIV disease remains uncertain. Uncertainty about very early intervention is based on the relatively slow progression of untreated HIV infection, the possibly time-limited efficacy of the new therapies, the evolving knowledge of side effects, the potentially increased problems of adherence in patients who are entirely asymptomatic, possible adverse drug interactions, and potential drug resistance and consequent limits on future treatment options.¹¹ Nevertheless, as already discussed in chapter 4 with regard to pregnant women, it is important to consider policies for HIV counseling and testing—and particularly how aggressively to recommend testing to patients who appear to be at high risk—in the context of developing knowledge about the timing and efficacy of treatment.

Finally, the emergence of postexposure prophylaxis (PEP) for HIV infection poses interesting challenges and possibili-

ties for correctional clinicians and administrators. The strategy of administering a course of antiretroviral drugs immediately after parenteral or cutaneous exposure to HIV-containing body fluids is already a routinely recommended practice in health care systems.¹² PEP is currently under study in five U.S. cities in nonoccupational contexts. In the correctional setting, such exposure could occur through consensual or forced sexual intercourse, sharing of drug-injection or tattooing equipment, or fights among inmates or between inmates and staff. Given the prohibited nature of some of the activities that might prompt an initiation of PEP, the administrative issues are probably even more challenging than the clinical issues.

Rapid expansion and frequent change in the best practice with regard to HIV interventions require that clinicians keep constantly abreast of new developments and that the appropriateness of correctional policies for the clinical management of HIV disease undergo continuous evaluation. Some of the complex and challenging issues in delivering HIV care are discussed below.

Selection and Initiation of Antiretroviral Therapy

In selecting an antiretroviral regimen, it is critical to “get it right the first time” because failure of the first regimen can lead to cross-resistance to other drugs of the same class, which in turn limits future treatment options. In addition to proper combinations of drugs for maximum biological efficacy, patient characteristics and environmental factors must be considered because adherence to regimens is essential to treatment success with triple combination therapies. These complex decisions require knowing the patient, taking and considering his or her history and prior treatment, understanding and considering possible side effects and drug interactions, and considering patient characteristics and environmental factors that may affect adherence to a treatment regimen.

Beyond patient-specific costs and the consequences of treatment failure, the emergence of drug-resistant strains of HIV, which may be transmitted to others, threatens the larger public health. Thus, complex and challenging ethical issues surround the very decision to initiate antiretroviral therapy.¹³ These issues may be particularly difficult with regard to the populations likely to be in correctional facilities—people with serious substance abuse problems and highly chaotic and stressful lives. A clinician’s fundamental ethical obligation is to do what is best for the patient. Doing what is best

for the patient in terms of treating HIV disease involves selecting the best treatment regimen from at least three different perspectives: (1) what will work best biologically; (2) what will be most tolerable to the patient; and (3) what will gain maximum patient adherence. Because these perspectives, considered separately, will not always lead to the same treatment decision, they must be weighed together in the overall decision regarding a treatment.

One of the most important ways to prevent the development of drug resistance is to have the patient adhere to the prescribed regimen. Interruption of any one of the medications in a regimen for more than a few days is likely to present problems and, indeed, may be worse than discontinuing the entire regimen.

Even substantial adherence may be difficult to achieve among correctional populations. However, many of the antiretroviral regimens are complicated and challenging for even the most highly organized and motivated patients, in terms of dosing schedule, number of pills to be taken, and other requirements (for example, with or without food), as well as possible side effects. There may also be the problem of the continued availability of a regimen in the community, which could lead to potentially dangerous forced changes in drug combinations. Thus, in some cases, and particularly in jail settings from which most inmates are released very quickly, clinicians may reluctantly conclude that it would be more harmful for the patient and for the community to initiate antiretroviral therapy only to have the patient fail to adhere to the regimen or be unable to maintain access to the drugs, perhaps develop serious drug resistance, and transmit drug-resistant HIV to others. New and more “patient-friendly” regimens may help to address these adherence issues.

The Patient-Clinician Relationship

An open, trusting relationship between clinician and patient is essential to making the best decisions regarding HIV/AIDS treatment (that is, if at all possible, “getting it right the first time”) and to maximizing the likelihood that adherence to the selected regimen will be high both during incarceration and, even more important, following the inmate’s return to the community. The necessary clinician-patient relationship cannot develop from a single, short interview. Indeed, the optimum model of care provides for initially intensive consultation and regular subsequent contact, and for a continuity of providers both during incarceration and from the correctional facility to the community. As described later in this chapter, some correctional systems have been able to implement such models of care.

Female inmates may need even more intensive interaction with clinicians and even more complete continuity of care. Research advancing a “relational model” of women’s psychology suggests that women attach more importance to personal relationships in making key life decisions than do men. At the same time, the “other-directedness” commonly observed among women may mean that they resist giving precedence to caring for themselves,¹⁴ and so they might have difficulty adhering to complicated and demanding treatment regimens without substantial support. Clinicians’ experience with HIV-infected female inmates confirms these observations and indicates that treating women with HIV/AIDS poses challenges for correctional health care but offers opportunities for successful clinical and psychosocial outcomes in the hands of committed providers and administrators.¹⁵

Ideally, the clinician and the patient work together to decide on the best treatment strategy, exploring and considering all relevant clinical and behavioral factors as well as logistical issues posed by the correctional setting such as the inmate’s work, program, and meal schedule. The provider should present the options in terms of regimens and methods of administration available in the facility—for example, the “keep on person” versus “attending a pill line” approach and making sure that the patient understands potential threats to confidentiality and the stigmatization associated with these methods.

To win the trust of the inmate, the provider should also tell the whole truth regarding the proposed regimen—dosing schedule and number of pills to be taken at each time, as well as possible side effects—and make sure that the patient understands this information. For example, if the patient has not been clearly informed about the number of pills to be taken, he or she may be surprised at the number and may be suspicious of being given a dangerous overdose. Such concerns may be common in the correctional setting, where inmate mistrust of the “system” and suspicions regarding medications may be pervasive.

The clinician should emphasize the importance of the patient’s adherence to the regimen and the likely serious consequences of nonadherence. It is important to bear in mind that one of the few areas over which inmates may exert control is whether or not to take medications. They may therefore have psychological impulses to resist adherence. To address these and other potential issues, the patient’s “buy-in” to the treatment must be obtained and specific adherence goals clearly set.

A Continuum of Care for Inmates

An integrated continuum of care with continuity of providers is the best model for addressing the multiplicity of medical and psychosocial problems of inmates both within correctional facilities and following their return to the community. Such models are more and more commonly being implemented for inmates with HIV and AIDS. However, they are also needed for inmates with chronic diseases and other serious medical problems, those with substance abuse problems, and those who are medically healthy but behaviorally at risk for HIV/AIDS and STDs. In short, almost all inmates could benefit from such services. Moreover, comprehensive and integrated services may result in downstream savings in costs of treatment and reincarceration if they offer timely and effective interventions and help to reduce recidivism.

The key components of this continuum of care include the following:

- Screening and identification of medical and psychosocial problems.
- Case management.
- Psychosocial support services.
- Hospice care.
- Substance abuse treatment.
- Discharge planning.
- Continuity of care and community linkages.

Examples of programs in prison and jail settings that incorporate all or some of these components are presented below.

Screening and Identification of Medical and Psychosocial Problems

The important relationship between HIV- and STD-testing policies and timely and effective treatment has already been discussed. However, testing is only part of an overall strategy for identifying inmates’ physical and mental health problems. A comprehensive medical and psychosocial screening should be provided to all inmates as part of the intake process. At the Hampden County (Massachusetts)

Correctional Center, all new inmates receive comprehensive screening within 10 days of their arrival. This includes screening for infectious diseases, chronic noninfectious diseases, and high-risk behavior such as substance use, high-risk sexual practices, and violence. Women are screened for pregnancy as well as reproductive and gynecologic health needs. Registered nurses conduct daily triage in all Hampden County housing units. The nurses work closely with security staff on the units to ensure inmates' access to care. The procedure enables all inmates with a need for medical care to be seen quickly while also avoiding congestion of the system with unnecessary visits, as often occurs in a traditional "sick-call" model.

Case Management

For care to be coordinated and consistently delivered as prescribed, someone should be in charge of the overall treatment plan. In many correctional settings, case managers play this role, which involves coordination, monitoring, and patient advocacy. Case managers are employed primarily for inmates with HIV/AIDS and other serious medical problems, but a case management model can be used for prevention as well as treatment.

In response to recommendations from its AIDS Task Force, the Massachusetts Department of Corrections directed its health services contractor to add infectious disease case managers to its staff. Regional case managers work with all Massachusetts inmates with HIV/AIDS and other infectious diseases. In Hampden County, case managers who are dually based at the correctional center and the community health centers work with all inmates with HIV/AIDS and those with serious mental health problems.

At the Central California Women's Facility in Chowchilla, the Henry J. Kaiser Family Foundation and the California Endowment funded a demonstration case management program for female inmates with HIV/AIDS.¹⁶ This is presented as a social rather than a medical model of case management in which a full-time AIDS case manager is trained to identify and advocate for the holistic care of inmates' medical, mental health, and social problems. The case manager also conducts discharge planning with inmates and works to link them with services in the communities to which they will be released. However, this is not, strictly speaking, a continuity of care model, since the community-based service providers do not work with the inmates in the facility prior to their release. For most inmates, the distances from the facility to their home communities make such continuity infeasible.

However, even without continuity of care, the Chowchilla case management program has helped to reduce recidivism among women with AIDS being released from the facility. In the project's first 21 months, 114 HIV-seropositive inmates were paroled from Chowchilla, of whom only 19 percent returned to prison during this study period. The recidivism rate among HIV-infected women prior to the program's initiation had been 76 percent.¹⁷

Psychosocial Support Services

Inmates with HIV/AIDS and other serious medical problems generally need psychosocial support to cope with their illness as well as medical care to address their clinical conditions. Psychosocial services may be offered in a variety of ways. Table 38 shows that about two-thirds of prison and jail systems offer support groups led by AIDS service organizations. Less frequently offered are support groups led by correctional staff or by inmate peer leaders. At Avoyelles Correctional Center in Louisiana, the peer-based AIDS Counseling and Trust program offers support groups for inmates with AIDS. Individual peer support to inmates with HIV/AIDS is also provided in some facilities. At Stateville Correctional Center in Illinois, a peer educator lives in the infirmary, where he provides support and medical advocacy for inmates with HIV/AIDS. At San Quentin prison in California, HIV-infected peer educators provide counseling support to other inmates who have recently been diagnosed with HIV disease. The counseling includes discussion of the meaning of HIV infection, circumstances of the inmate's learning of his or her status, his or her current physical and psychological state, disclosure of status, sexual risk reduction, and the correctional system's policies for housing and treating inmates with HIV/AIDS.

Hospice Care

With the advent of effective new HIV/AIDS therapies and the resulting decline of AIDS deaths in at least some prison systems, there may be fewer terminal patients appropriate for hospice care. However, these services will still be needed in some cases.

Several prison systems have established hospice programs within correctional facilities. Many of these use inmate volunteers in key care-giving roles. Some also use community-based organizations to provide services.¹⁸

The first prison hospice in the Nation is at the Federal Bureau of Prisons' Medical Center in Springfield, Missouri. This

Table 38. Psychosocial and supportive services for inmates with HIV/AIDS, 1997

Policy	State/Federal Prison Systems (n = 51)		City/County Jail Systems (n = 41)	
	n	%	n	%
Peer support groups	17	33	2	5
Support groups led by correctional staff	32	63	13	32
Support groups led by outside AIDS organizations	34	67	25	61

Source: NIJ/CDC survey.

was established through the cooperation of the security and health care staff, with training provided by community-based organizations, and with heavy reliance on inmate volunteers. The hospice team at Springfield includes a chaplain and two nurse managers. There are two 20-bed wards, one for patients with cancer and the other for AIDS patients. The inmate volunteers receive 30 hours of initial training in counseling and supportive services and subsequently participate in twice-monthly training sessions. The inmates often become surrogate family members to the patients and are commonly with them at their deaths.¹⁹

In January 1997 a hospice was opened at the Stiles Unit of the Texas Department of Criminal Justice in Beaumont as a result of legislation sponsored by State Senator Michael Moncrief. Moncrief stated that inmates “have a right to die with dignity.” The Stiles hospice is “designed to do inside what a hospice does outside the walls,” that is, to provide care based on dying patients’ spiritual, psychological, and medical needs. Thirty-five trained inmates work in the hospice, keeping the patients company, reading to them, and writing letters for them. One inmate hospice volunteer explained the importance of his work as follows: “[A] lot of them [the patients] don’t have nobody. They are human. Everybody has downfalls.”²⁰

Substance Abuse Treatment

Most inmates with HIV/AIDS also have drug or alcohol problems. Indeed, according to a recent report from the

Center on Addiction and Substance Abuse (CASA) at Columbia University, almost 80 percent of the more than 1.7 million people incarcerated in U.S. prisons and jails are seriously involved with drugs and alcohol. In short, as the CASA report bluntly states, “[S]ubstance abuse and crime are joined at the hip in America.”²¹

Despite exploding numbers of incarcerated people, largely the result of more aggressive drug enforcement beginning in the early 1980s, and despite the unprecedented opportunity to provide substance abuse treatment in correctional facilities, treatment within the walls has become less available in the last few years in terms of treatment slots per inmate. According to the CASA report, the number of inmates in need of treatment increased from 688,000 to 840,000 between 1993 and 1996, but the number of inmates in treatment remained level at about 150,000. Moreover, much of this treatment was short term and inadequate to address most inmates’ deep-seated problems. Long-term counseling and residential treatment, such as therapeutic community-model programs, remain quite rare in correctional facilities. Even where they exist, they can accommodate only a small fraction of those who might benefit from them.²²

Some evaluations of prison-based drug treatment programs have shown positive results, but these studies have often suffered from methodological problems such as lack of control or comparison groups and flawed measurement of outcomes.²³ Despite these technical problems with the evaluation of programs, it is clear that treatment does work for some people in some settings and that inmates and correctional facilities offer treatment opportunities too important to miss. Substance abuse treatment is one of the types of health interventions in correctional facilities that may result in downstream savings in the costs of incarceration by helping to reduce recidivism rates. Economic benefit would also accrue in the form of income to newly productive and employed citizens. The CASA report estimates the cost of a year of a comprehensive program of in-prison drug treatment, aftercare, and vocational training at \$6,500 per person, whereas the first-year benefits would be \$68,800 per successful inmate, using conservative assumptions. Thus, even if only 10 percent of inmates in treatment were successful in staying sober and employed in the year following their release, the total cost of inmate drug treatment would be more than repaid. Successful treatment of 10 percent of the estimated 1.2 million inmates who are substance abusers would bring more than \$8.2 billion in total economic benefit in the first year following their release. This is more than \$456 million in excess of the total treatment, training, and aftercare costs for all substance-abusing inmates.²⁴

Discharge Planning

Whether they have HIV disease or other serious medical conditions or not, all inmates can benefit from assistance in making the difficult transition from a correctional facility to the community. Those with health problems need particular types of assistance and linkages to community-based services, but the others will almost certainly need help with housing, benefits, drug treatment, job training and placement, and child custody and family issues. Community corrections agencies should be brought into integrated aftercare programs, perhaps helping to ensure that ex-offenders with HIV/AIDS obtain their medications and adhere to their regimens and providing HIV/STD prevention and risk-reduction counseling to their at-risk clients.

Table 39 summarizes the discharge planning services provided for inmates with HIV disease, according to the 1997 NIJ/CDC survey. Ninety-two percent of State/Federal systems and 76 percent of city/county systems reportedly provide some discharge planning for inmates with HIV disease. Specific types of clinical and psychosocial services covered in discharge planning include enrollment in Medicaid and related benefit programs, monitoring of CD4 counts and HIV viral load, access to HIV medications, drug treatment, HIV counseling, other psychosocial support, and STD services.

Inmates in most State/Federal systems and in some city/county systems are given referrals for most of these services. As part of an 11-session health promotion series for HIV-positive inmates about to be released from San Quentin prison in California, participants are encouraged and helped to link up with services in the communities to which they will return. At Avoyelles Correctional Center in Louisiana, peer educators from AIDS Counseling and Trust conduct sessions for all inmates 30 days prior to their release. At these sessions, the inmates are given one of nine regional directories providing contact information for all types of health care and mental health services, substance abuse programs, benefit programs, and housing and employment services. The peer educators go through the directory with all of the inmates to make sure that they understand the services available to them.

As shown in table 39, fewer systems actually make appointments for inmates to receive these services in the community. Although good referrals are important, the frequent absence of appointments and additional support and assistance in making contact with and keeping appointments for services means that many released inmates never make contact and never receive the services they need. Instead, many quickly relapse to substance use and crime, often returning yet again to jail or prison.

Table 39. Discharge planning services, 1997

Services	Percentage of State/Federal Prison Systems Providing (n = 51)		Percentage of City/County Jail Systems Providing (n = 41)	
	Referral Made	Appointment Made	Referral Made	Appointment Made
Discharge planning for HIV+ inmates	92		76	
Medicaid/related benefits	78	35	56	29
CD4 monitoring	71	24	54	17
Viral load monitoring	61	22	46	20
HIV medications	82	31	66	27
Substance abuse treatment	75	22	63	24
HIV counseling	73	27	61	32
Psychosocial support	73	24	54	27
STD prevention and treatment	65	22	46	17

Source: NIJ/CDC survey.

Improved discharge planning, stronger community linkages, and continuity of care between the correctional facility and the community will help offenders negotiate the treacherous postrelease period more successfully and give them a better chance to make significant positive changes in their lives, obtain the services they need, reduce their risks of acquiring or transmitting HIV and STDs, and avoid returning to crime and incarceration. In designing programs, it is essential to bear constantly in mind that issues of HIV/AIDS prevention and treatment may be only one in a long list of serious problems faced by ex-offenders being released to the community. The immediate problems of housing, food, employment, and substance abuse treatment are likely to be more pressing. Thus, programs must place HIV services in their appropriate context and seek to help participants address their immediate survival needs and other ongoing psychosocial problems.

Several programs that offer comprehensive services bridging from correctional facilities to the community are described below. There are exemplary programs in both State prisons and county jails. A serious challenge to the successful development of true continuity of service from correctional facility to community is the great distance that often separates an inmate's facility from his or her home community. This is especially true in large State systems, where prisons are often in rural areas far from the cities that are home to most inmates. A possible strategy for solving this problem is to consider transferring soon-to-be-released inmates to State or even county facilities closer to home for the last few months before their release so that they can be linked directly and personally with service providers in their communities.

Continuity of Care and Community Linkages

Rhode Island program. The first program to provide true continuity of medical care for people with HIV/AIDS between the correctional facility and the community was established in Rhode Island in the late 1980s. The program was initiated by Brown University, Miriam Hospital, the Rhode Island Department of Corrections, and the Rhode Island Department of Health. Infectious disease physicians from Brown and the Miriam Hospital provide care for inmates with HIV/AIDS in the correctional facility and continue caring for them after their release. The program has been expanded to include about 40 community-based organizations and service providers, with comprehensive discharge planning and linkages to community services.²⁵ The program is now available to both HIV-positive inmates and high-risk but HIV-negative inmates. Initial results reveal

reduced recidivism rates among released females who are associated with participation in the program.²⁶ Dr. Timothy Flanigan of Miriam Hospital pointed to one of the key factors in the success of the Rhode Island program: the providers who will be working with the individuals in the community come into the prison and work with them there first. Dr. Flanigan emphasized that simply "giving an inmate a phone number and a piece of paper doesn't work. The inmate needs to see and meet the person he or she will be working with in the community." This dramatically increases the likelihood of follow-through after release. Indeed, the Rhode Island program has produced sharp increases in adherence to medical regimens and "show rates" for appointments with service providers.²⁷

Hampden County (Massachusetts) Correctional Center (HCCC). HCCC, in partnership with community health centers, has developed and implemented a public health model of correctional health care that incorporates the following key components:

- Early detection and effective treatment.
- Education and prevention.
- Case management and discharge planning.
- Continuity of care from HCCC to the community.²⁸

The model is also based on an integration of care both vertically (providing a comprehensive, holistic range of services) and horizontally (providing a seamless continuity of care from the facility to the community). To date the model has been implemented at a very reasonable cost of about \$6 per inmate day within a health services budget representing only 9 percent of the entire facility's.²⁹

Based on ZIP Code of residence, patients with HIV/AIDS and other serious medical and mental health conditions are assigned to four dually based health teams who work in the correctional center and in four community health centers. Eighty percent of the inmates come from the catchment areas of these four community health centers, and, on an average day, 1.5 percent of the populations of these catchment areas are incarcerated at HCCC.

Case management and discharge planning are currently provided by dually based case managers for all inmates with HIV/AIDS and serious mental health issues. A discharge planning nurse at HCCC provides similar services for inmates with chronic diseases. Discharge planning helps to

ensure continuity of care and community linkages with appropriate health providers. In 1997, more than 70 percent of persons with HIV/AIDS released from HCCC kept their first appointments at their assigned community health center. Releasees are also linked with community-based agencies that can address issues of family reintegration, housing, employment training and readiness, and benefit programs. All of these linkages have contributed to lower recidivism rates among people with HIV/AIDS released from HCCC with a linkage to Brightwood Health Center (46 percent over one year) versus the overall population of HCCC releasees (72 percent). This is not a perfect comparison for evaluation purposes but it may be suggestive of the program's efficacy. Additional evaluation of this and similar programs is needed.

Continuity of care between the facility and the community for patients with HIV/AIDS, chronic diseases, and other serious conditions is a hallmark of the model. This horizontal integration of care is strongly fostered by discharge planning and by the well-developed partnerships among the correctional center, the community health centers, and other community-based providers. The HCCC's partnerships with the community health centers have helped to promote an integration of community-based health services in Greater Springfield.

The Hampden County program serves a compact metropolitan area with a population of about 500,000 in which distances are short enough to make real continuity of care possible. Because 80 percent of the metropolitan areas in the United States have populations in this range—between 100,000 and 1 million—the Hampden County model should be replicable in many other places. Indeed, the Massachusetts Department of Public Health intends to fund similarly constituted comprehensive HIV/AIDS care programs in all of the State's county facilities.³⁰

ETHICS Unit. In New York City, the Nation's largest metropolitan area, the ETHICS Unit provides discharge planning and comprehensive transitional services for inmates with HIV disease being released from Rikers Island and New York State prisons.³¹ The ETHICS Unit is a program of the Fortune Society, an organization founded by ex-offenders in 1977 to help ex-offenders make better transitions to the community, and is funded as a Special Program of National Significance by the U.S. Health Resources and Services Administration, with additional funding from the New York City Department of Health.

Currently, five caseworkers and six peer counselors work in the ETHICS Unit. Most of them are ex-offenders and/or

recovering addicts. One caseworker does all of the outreach and discharge planning at Rikers Island and the State prisons as well as the remaining casework staff work with clients in the community following their release from prison or jail. The individual caseworkers have developed specialties and extensive contacts in housing, hospital care, substance abuse treatment, and benefits eligibility.

The peer counselors assist with outreach, meet new clients when they are released, and escort them to appointments with service providers. The peer counselors also provide informal counseling in the office where clients often come to receive support or just "hang out."

The ETHICS Unit has an open-door policy. Clients are always welcome in the office. They can take advantage of the educational, vocational, and other programs available at the Fortune Society.

The ETHICS Unit establishes relationships with its clients on a voluntary basis. The program does not accept "mandates" from probation or parole and will not provide information on its clients to these authorities except general reports on attendance, and then only if the staff member feels comfortable with the particular parole or probation officer. The program does not divulge information on drug use.

ETHICS Unit staff recruit clients through regular outreach visits to Rikers Island and to various New York State prisons. The site visit conducted for this study included observation of an outreach session in a Rikers Island unit housing and treating inmates with HIV disease. Because the session clearly and powerfully illustrates the challenges posed and the opportunities offered by these types of programs, it is worth describing it in some detail.

The first priority when ETHICS begins to work with an ex-offender is to help him or her achieve basic stability. This often means meeting clients at the jail, prison, or bus terminal to help them get through the first hours, when the temptation to relapse is particularly severe. The caseworkers find the person a place to stay and, if appropriate, help arrange medical care. Goals, objectives, and a treatment plan are worked out with the client. The caseworkers try to act as role models—demonstrating that it is possible to change one's life for the better—and to provide a positive and positively structured social network, but they avoid setting unreasonably high expectations. "We don't try to move too fast," a caseworker reported. They focus on getting the client stabilized and housed and then move on to employment issues.

An ETHICS Outreach Session at Rikers Island

William Whitaker, a 41-year-old African American,³² grew up in “the system,” entering the Spofford Youth Center at age 12, “graduating” to Rikers Island at 16, and then doing stretches for felonies in several facilities “upstate.” After he was released from prison 6 years ago, he decided to change his life so that he would never be sent back. He got sober and has stayed sober. Referred to the Fortune Society by his parole officer, Whitaker started as a client and then volunteered for several years before becoming a caseworker. He is driven to offer others the gift of new life he received through his own efforts and with the support of the Fortune Society. Whitaker describes looking down from the DOC bus on the way to Rikers and fixing his eyes on the driver of a car, wishing he was on that journey rather than on his way to jail. Now, Whitaker says, the people on the bus to Rikers are looking down at him, and he wants to help as many as he can to get off that seemingly endless bus trip and onto the journey to a new life.

Nanci Ryan, a 35-year-old white woman, grew up in a family where it was “funny” to get a 6-year-old child drunk, and it was evidence of “love” when her parents beat each other up. She began drinking early and turned to increasingly serious drug use, prostitution, and crime. Ryan also passed through the juvenile system, was a frequent inmate at Rikers, and served time at Taconic and Bedford Hills State prisons. She has three felony convictions and is HIV positive. Ryan, too, made it to the Fortune Society as a client, got sober and stable, and became a peer counselor for the ETHICS Unit. Ryan displays the same intensity of purpose as Whitaker.

Whitaker and Ryan work as a team, doing outreach for the Fortune Society’s ETHICS Unit at Rikers and at State prisons. Their session in Ward 4 of North Infirmery Command began slowly. The patients, prodded to attend, paid slight attention when Whitaker began his presentation as the TV blared in the corner. Whitaker turned down the TV and told his story: “Look at me,” he said. “I’ve been here . . . I know what it’s like . . . I got through it . . . I’m sober . . . I have a job and a place to live . . . I’m here to tell you about a program that will help you if you make the commitment to change. . . . Call me . . . I’ll stay with you; I won’t let you fall. . . . It can happen. . . . There is hope. . . . I’m living proof.” A few inmates started to pay attention. Whitaker encouraged the inmates to participate in a short intake interview and to begin thinking about what they’ll do when they get out. “We can help you make a discharge plan and help you live up to it. . . . The decision is yours.”

One inmate spoke up: “This is all b-----t . . . I’m in here for something I didn’t do. . . . The police planted a bag of dust on me.” Once a con, there’s no hope of getting out of it, he said. He slouched in his chair, angry and brooding. “Wait a minute,” Whitaker said, “I want to talk to you,” and he walked toward him. Then he presented the essence of his message: “Sure, the system is bad, but you can’t do anything to change it; you can only make the decision to change your own life and I can help you once you do that. . . . It’s up to you. . . . There will always be a bed for you here at Rikers Island. Do you want to find yourself a better bed outside this place?” The inmate began grudgingly to listen. Whitaker talked privately with him for a while; the inmate agreed to call him—“Sure I will,” he said. (Later, I asked Whitaker whether he thought the inmate would really call him. “Maybe,” he said. “I know he was listening; I’ll keep working on him.”) “Can a person with felony convictions get a job?” another inmate asked. “Yes,” replied Whitaker, “I have felonies and I have a job.”

Nanci Ryan also told her story in language the inmates could understand. “I thought I was hopeless . . . I thought it was God’s plan for me to be a junkie.” With tears in her eyes, Ryan talked about the friends she made in prison and on the street who have died of AIDS or drug addiction or gunshot wounds because they weren’t able to make the choice for their own lives or make it in time. She also talked of those, like herself, who had made that choice and were trying to maintain it day by day. Her passion for the cause was clear, particularly when she told the inmates that by staying in the cycle of drugs, crime, and incarceration, they were only fulfilling, and helping to perpetuate, society’s expectations for them. “Why not prove society wrong? . . . You can do it. . . . We’re here to help you.” About half of the inmates who attended the outreach session that day completed the intake interview for Fortune’s ETHICS Unit. It is only a first step.

ETHICS staff report that housing and medical care are the most critical and difficult-to-arrange services for their clients, many of whom are homeless when they are released. Ironically, the task is simpler if the client has AIDS. These clients qualify for a number of housing, treatment, and medication programs. However, those who are asymptomatic or have symptomatic non-AIDS are much more difficult to place. Dually or triply diagnosed individuals are also very hard to place. These categories of clients are more likely to end up in single residence occupancy (SRO) apartments or in the shelter system, where the temptations to return to drug use and crime are virtually irresistible. The old coping skills (getting high) are harder to avoid in the horrendous conditions of the shelters, and many of the SROs are essentially shooting galleries with around-the-clock drug activity. Even in the face of these challenges, the ETHICS staff are persistent. As noted, the caseworkers have developed specialties and identified many little-known referral resources.

Although no formal evaluation of the program has been done, the ETHICS Unit director reports that hundreds of clients have succeeded in turning their lives around with the help of the program. Many clients go on to become peer counselors, and some become paid staff members of the program.

A group of ETHICS clients expressed uniformly positive feelings about the program during the site visit conducted for this study. One client remarked that the ETHICS Unit had helped her to come to terms with, and accept, her HIV disease. "I'm not so afraid of it," she said, "there's no more blaming. I look at what I did to put myself in this situation and move on from there."

Many of the clients feel that the program is their home and the staff is their family. This feeling was clearly reflected in an emotional "Celebration of Life" that was held during a site visit conducted for this study. This celebration honored 16 clients who had "completed" the program to the extent that they are drug free, have stable housing, and are following their treatment plans. The clients told their stories: they are people who seemingly had no hope but who have been able to achieve remarkable transformations in their lives with the help of the ETHICS Unit. They have gotten sober and stayed sober, developed a positive social network, found inspirational role models, found stable housing, acquired job skills, and are firmly committed to finding regular employment. Many of the clients had found a spiritual basis for their lives and the changes they had achieved. They spoke openly of how their religious faith, as well as the support of ETHICS, had seen them through the hard times to

lives of brighter possibility. Clients and staff expressed great affection for one another; strong and lasting bonds had clearly developed. This is where the clients come for support and encouragement, and they receive it in full measure. The celebration also honored several people from community-based organizations and the community at large who had supported and assisted ETHICS clients.

The decision to include a client in the "Celebration of Life" is made jointly by the client and his or her caseworker. This milestone can be reached after 6 months to 2 years of enrollment in the program. The unit resists referring to the "Celebration of Life" as a "graduation" because this would imply completion and separation when it is but part of an ongoing process and clients are encouraged to stay in touch and stay involved in the program after the ceremony.

Health-Link. Another program in New York City, Health-Link, works with women and adolescents who are being released from Rikers Island to the South Bronx or Central Harlem and who have substance abuse problems and are at risk for HIV/AIDS.³³ People with HIV disease are also eligible. Health-Link provides educational and community-based supportive services to help women and adolescents make better transitions to the community. The program has been operated by the Hunter College Center on AIDS, Drugs, and Community Health since 1992, with funding from the Robert Wood Johnson Foundation (RWJF). In phase 3 of Health-Link, which began in 1997, the Fortune Society is providing all case management services in jail and in the community. The Health-Link staff includes 10 full-time equivalent case managers, 1 casework supervisor, and 1 casework coordinator.

Health-Link offers a structured and comprehensive program beginning with empowerment groups for women and adolescents at Rikers Island, linkages with a large network of community-based services in the South Bronx and Central Harlem, and case management with continuity of care—that is, the same case manager who works with the individual in jail continues to work with the individual in the community. The network of community-based providers, assembled in a Community Coordinating Council (CCC) that also includes the Department of Corrections (DOC), offers a comprehensive array of services designed to help ex-offenders make successful transitions to the community. These include educational, vocational, employment, housing, substance abuse treatment, HIV/AIDS prevention, and health care services. It is a holistic approach, in which clients are encouraged to analyze critically their life experiences and make their own decisions about where they want to go with

their lives and how they can get there. A rigorous evaluation of Health-Link employing a randomized design is being carried out.

The program maintains a careful balance between emphasizing individual responsibility and its philosophy of providing comprehensive social support. All clients are required to work with their case manager to develop a discharge plan (including commitment to a primary community placement) and to sign a contract to abide by it. Case management services are provided for 1 year following discharge. In most instances clients are escorted to their community placement. They are expected to meet with their case managers several times a week during the first 10 weeks following discharge. The number of meetings tapers off subsequently, depending on caseloads and client needs.

The relationship between Health-Link and its clients is voluntary; that is, participation in the program is not a formal alternative to incarceration or condition of probation or parole. However, Health-Link staff realized that they could not treat the relationship with clients as if the criminal justice nexus did not exist. Therefore, Health-Link staff do work with their clients and serve as advocates with the probation and parole authorities.

Health-Link clients are recruited through empowerment groups at the women's and adolescent facilities at Rikers Island. Case managers lead the groups in teams of two; those recruited to the case management component will be assigned to one of these case managers but will also know another person to contact if the primary case manager is not available.

To be eligible for enrollment in the Health-Link case management program, an inmate must have less than 1 year to serve before his or her release. Adult women must have attended three empowerment group meetings; because of generally shorter lengths of stay, adolescents must attend two group meetings to be eligible for case management. All clients must sign a discharge plan contract. They must also agree to receive services in the South Bronx or Central Harlem neighborhoods, although they need not live in these neighborhoods. Many of the program's clients were homeless when they were sent to jail.

An extremely important facet of the Health-Link program is the mobilization of community-based providers to meet the needs of ex-offenders as they return to the community. The CCC of Health-Link now comprises an array of about 40 organizations in the South Bronx and Central Harlem. The

CCC meets each month, with the meeting place rotating among organizations so that participants can take a closer look at the settings and services of member organizations. Each meeting is chaired by a representative of the host organization.

There are various relations between Health-Link and CBOs. One important facet is that Health-Link helps build the capacity of CBOs to serve ex-offenders by raising the organizations' level of knowledge and sensitivity regarding the needs of ex-offenders. For example, ex-offenders may consider highly structured and regimented drug-treatment programs to be too much like jail, so programs may need to be a bit more flexible and nonregimented, bearing in mind that ex-offenders tend to do best in fairly structured situations. Health-Link also advocates for more attention to the particular needs of women in substance abuse treatment programs—for example, for child care services.

The DOC is also represented on the CCC of Health-Link. This involvement offers good opportunities to establish and strengthen lines of communication and coordination between CBOs and the DOC, as well as for the CBOs and the DOC to “educate” each other about their respective needs, roles, and concerns. As a result of their involvement in the CCC, more CBOs have been able to provide services in, and receive referrals from, Rikers Island.

The planned enrollment for Health-Link in phase 3 is 92 women and 92 adolescents in the first year and 115 in each group in the second year. This is, of course, far short of the need for such services. Indeed, discharge planning at Rikers Island and other New York City facilities is currently very much a “hit or miss” proposition. In part because of rapid turnover and short lengths of stay, many inmates receive no discharge planning—they are simply turned loose to fend for themselves. Many of them are homeless and have substance abuse and/or mental health problems. With these problems, and with no transitional help, they are almost guaranteed to return to jail. Health-Link wants to make discharge planning an integral part of services for all inmates, arguing that this is likely to be very cost-effective in terms of reduced recidivism. The New York City DOC has established a committee to work toward the “institutionalization” of discharge planning.

As previously discussed, inmates who are not infected with HIV but are behaviorally at high risk of becoming infected are probably as much in need of discharge planning, transitional assistance, and continuity of service from jail or prison to the community as are those with HIV disease. However,

there are still relatively few programs available to the high-risk uninfected. The Rhode Island program and Health-Link, already described, are open to the uninfected. Two programs in Massachusetts county jails specifically target this group.

Search Out Another Road (SOAR). SOAR, a “reintegration program” of the South Shore AIDS Project in Brockton, Massachusetts, works with inmates about to be released from the Plymouth, Barnstable, and Bristol County jails.³⁴ The SOAR reintegration counselor leads an eight-session course encouraging participants to reflect upon their lives and to focus on realistic behavioral changes. Following release, participants meet with the same counselor once a month for at least 6 months to assess issues of work, addiction, and risk reduction. The SOAR program works to place releaseses in residential drug treatment or intensive outpatient treatment.

After-Incarceration Support Systems (AISS). AISS, in Hampden County, Massachusetts, provides transitional assistance to inmates without serious medical problems.³⁵ A resource room has been established at the correctional center where inmates may view and explore a range of materials and computer databases. These cover resources and referrals in education, job training, job readiness, health services, housing, substance abuse prevention and treatment, family counseling, stress reduction, violence prevention, and leisure activities. Counseling is available for participants before they are released, and support groups are offered in the community for participants who have been released.

Conclusion

New drugs and combination therapies have brought dramatic improvements to HIV/AIDS care but also pose challenges for implementation, which may be especially difficult for correctional inmate populations. However, new and more “patient-friendly” regimens offer the hope of addressing these challenges. In any event, clinicians must work closely with patients to make decisions regarding treatment regimens that consider efficacy as well as maximum likely adherence, particularly following release from incarceration. Nonadherence may mean not only treatment failure for the patient but also danger for the larger public health in terms of the development and transmission of drug-resistant strains of HIV.

Inmates with HIV, STDs, and other medical and psychosocial problems will benefit from a continuum of care that includes early detection, effective treatment, case manage-

ment, psychosocial services, hospice care when appropriate, substance abuse treatment, discharge planning, and linkage to community-based services. Continuity of care and bridging to the community are particularly important for the maintenance of adherence to HIV/AIDS treatment regimens. This chapter has described extremely promising approaches to providing this continuum and continuity of care, including programs in Rhode Island; Hampden County, Massachusetts; New York City; and California. Although there is a need for a more systematic evaluation of these programs and approaches, preliminary data indicate that they may be cost-effective in terms of promoting positive transitions to the community, reducing recidivism, and producing downstream savings in costs of treatment and reincarceration. The available evidence suggests that these program approaches deserve widespread replication.

Endnotes

1. F.L. Altice, F. Mostashari, A.S. Thompson, and G.H. Friedland, “Perceptions, Acceptance and Adherence to Antiretrovirals Among Prisoners,” presented at the 4th Conference on Retroviruses and Opportunistic Infections, Washington, DC, 1997.
2. S.G. Deeks et al., “HIV-1 Protease Inhibitors: A Review for Clinicians,” *Journal of the American Medical Association* 277 (1997): 145–153.
3. F.J. Palella, Jr., et al., “Declining Morbidity and Mortality Among Patients With Advanced HIV Infection,” *New England Journal of Medicine* (March 26, 1998): 853–860.
4. M. Purdy, “As AIDS Increases Behind Bars, Costs Dim Promise of New Drugs,” *New York Times*, May 26, 1997, A1, A12.
5. A. Collins, D. Baumgartner, and K. Henry, “Prisoners’ Access to Experimental HIV Therapies,” *Minnesota Medicine* 78 (November 1995): 45–48.
6. V. Stone, “HHS Guidelines: The Role of Caregivers, Patients, and Corrections,” presentation to the HIV Treatment Update for Prisons and Jails panel, sponsored by Brown University, Cambridge, MA, March 13, 1998.
7. U.S. Department of Health and Human Services, National Institutes of Health, *Report of the Panel To Define Principles of Therapy of HIV Infection*, Rockville, MD:

- U.S. Department of Health and Human Services, 1997; U.S. Department of Health and Human Services and the Henry J. Kaiser Family Foundation, *Guidelines for the Use of Antiretroviral Agents in HIV-Infected Adults and Adolescents*, Rockville, MD: U.S. Department of Health and Human Services, 1997.
8. U.S. Public Health Service, "U.S. Public Health Service Recommendations for Use of Antiretroviral Drugs During Pregnancy for Maternal Health and Reduction of Perinatal Transmission of HIV-1 in the U.S.: Request for Comment," September 1997.
 9. U.S. Public Health Service and Infectious Disease Society of America, "Guidelines for the Prevention of Opportunistic Infections in Persons Infected with HIV," *Morbidity and Mortality Weekly Report* 46 RR-12, (November 4, 1997): 1-46.
 10. Panel on Clinical Practices for Treatment of HIV Infection, "Department of Health and Human Services Guidelines on Use of Antiretroviral Agents in HIV-Infected Adults," *The Hopkins HIV Report* 9 (Supplement, December 1997): 1-7.
 11. B. Hirschel and P. Francioli, "Progress and Problems in the Fight Against AIDS" (editorial), *New England Journal of Medicine* 338 (March 26, 1998): 906-908.
 12. M.H. Katz and J.L. Gerberding, "Postexposure Treatment of People Exposed to HIV through Sexual Contact or Injection-Drug Use," *New England Journal of Medicine* 336 (April 10, 1997): 1097-1100; and J.L. Gerberding, "Prophylaxis for Occupational Exposure to HIV," *Annals of Internal Medicine* 125 (September 15, 1996): 497-501.
 13. R. Bayer and J. Stryker, "Ethical Challenges Posed by Clinical Progress in AIDS" (commentary), *American Journal of Public Health* 87 (1997): 1599-1602.
 14. J.B. Miller, *Toward a New Psychology of Women*, Boston: Beacon Press, 1986.
 15. A. DeGroot, E. Hight, A.K. Goodman, and C. Stevenson, "Special Issues for HIV-Infected Incarcerated Women," paper presented to the panel HIV Treatment Update for Prisons and Jails, sponsored by Brown University, Cambridge, MA, March 14, 1998.
 16. For information on the program at Chowchilla, contact Mary C. Wallace, Executive Director, Central San Joaquin Valley HIV Care Foundation, 2491 W. Shaw Avenue, Suite 110, Fresno, CA 93711 (telephone: 209-243-0580).
 17. M.C. Wallace, "Women in Prison: AIDS Case Management," thesis prepared for the Credentials Committee in partial fulfillment of the requirements for Fellow status in the American College of Health Care Executives, February 20, 1998.
 18. R.A. Kiel, "Caring for Terminally Ill Inmates: On-Site Hospice Care or Compassionate Release?" *CorrectCare* (June-July 1995): 5, 13-14.
 19. E. Craig, "A Visit to the Hospice Program at the U.S. Medical Center for Federal Prisoners," *Fanfare* 9 (Fall 1995): 18-19.
 20. B. Rodriguez, "Some, However, Will Never Go Home" (third part of a five-part series on HIV/AIDS in prisons), *San Antonio Express-News*, September 16, 1997, 1A, 6A.
 21. National Center on Addiction and Substance Abuse (CASA) at Columbia University, *Behind Bars: Substance Abuse and America's Prison Population*, New York: CASA, January 1998: 27.
 22. *Ibid.*, 114-115.
 23. T. Hammett, J. Gaiter, and C. Crawford, "Reaching Seriously At-Risk Populations: Health Interventions in Criminal Justice Settings," *Health Education & Behavior* 25 (February 1998): 111.
 24. CASA, *Behind Bars*, 163-165.
 25. P.S. Dixon, T.P. Flanigan et al., "HIV Infection in Prisoners: Meeting the Health Care Challenge," *American Journal of Medicine* 95 (1993): 629-635.
 26. J.Y. Kim et al., "Successful Community Follow-up and Reduced Recidivism in HIV-Positive Women Prisoners," *Journal of Correctional Health Care* 4 (1997): 5-17.

-
27. T.P. Flanigan, presentation to HIV Treatment Update for Prisons and Jails panel, sponsored by Brown University, Cambridge, MA, March 13, 1998.
 28. A.A. Skolnick, "Look Behind Bars for Key to Control of STDs," *Journal of the American Medical Association* 279 (January 14, 1998): 97–99; T.J. Conklin, T. Lincoln, and T.P. Flanigan, "A Public Health Model To Connect Correctional Health Care With Communities," *American Journal of Public Health* (accepted for publication).
 29. For more information on the Hampden County program, contact Thomas Conklin, M.D., Director of Health Services, Hampden County Correctional Center, 627 Randall Road, Ludlow, MA 01056 (telephone: 413–547–8000, ext. 2344).
 30. Massachusetts Department of Public Health, AIDS Bureau, "Request for Applications: Massachusetts County Sheriff's Department HIV/AIDS Program," March 6, 1998.
 31. For more information on the ETHICS Unit, contact JoAnne Page, Esq., Executive Director, The Fortune Society, 39 West 19th Street, New York, NY 10011 (telephone: 212–206–7070).
 32. The description is from T. Hammett, "Lessons From a Day at Rikers Island," unpublished article, April 1997.
 33. For more information about Health-Link, contact Dr. Nicholas Freudenberg, Director, Hunter College Center on AIDS, Drugs, and Community Health, 425 East 25th Street, New York, NY 10010 (telephone: 212–481–4363).
 34. For more information on SOAR, contact South Shore AIDS Project, Inc., P.O. Box 2259, Brockton, MA 02405.
 35. For more information about AISS, contact Jen Sordi, Manager, Hampden County Correctional Center, 627 Randall Road, Ludlow, MA 01056 (telephone: 413–547–8000, ext. 2446).

Chapter 8

Tuberculosis

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Key Findings

- In recent years there have been declines in the incidence of TB disease both in the overall U.S. population and among correctional inmates, although its incidence remains much higher among inmates.
- Most State/Federal prison systems appear to be following CDC guidelines regarding TB screening, isolation and treatment, and preventive therapy, whereas city/county jail systems are less adherent to CDC guidelines.
- However, better collection and reporting of screening data would help to document the burden of TB infection and disease among inmates.
- Improvements are also needed in the use of directly observed therapy and directly observed treatment of tuberculous infection, as well as in postrelease adherence to TB treatment and preventive therapy.

This chapter summarizes available statistics on tuberculosis (TB) disease and infection among inmates and describes correctional policies regarding the screening of inmates and staff, management of suspected and confirmed TB disease, preventive therapy, discharge planning, and education.

Tuberculosis Disease and Infection

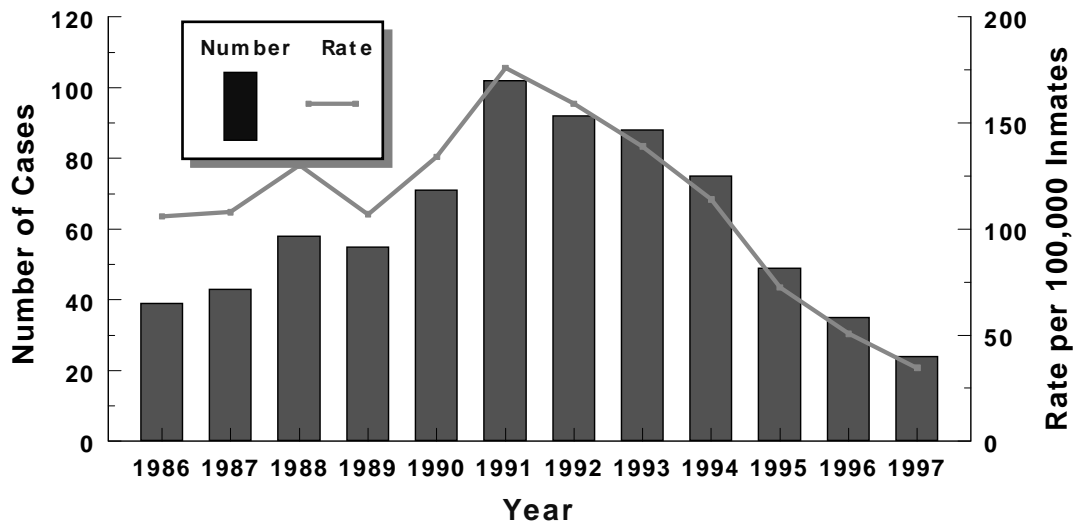
Concurrent with the rapid increase of the HIV epidemic and facilitated by the prior dismantling of tuberculosis control programs and increased immigration from areas of high TB prevalence, there was a resurgence of TB disease in the United States in the late 1980s and early 1990s. However, CDC surveillance data reveal that the incidence of TB disease has dropped off again in recent years as control measures have been rapidly reinstated.¹

The incidence of TB disease among inmates has followed a similar pattern since the late 1980s but with much higher

rates than in the total population. Since 1993, the CDC case report form for TB disease has included a question as to whether the person was a resident of a correctional facility at the time of diagnosis. This enables CDC to provide fairly complete surveillance statistics on TB disease in correctional facilities. The numbers of new cases among correctional inmates declined from 1,065 in 1994 to 729 in 1997, the latest year for which data are available. In 1997, inmate cases represented 3.7 percent of the total in the U.S. population.²

New TB cases and incidence rates among inmates in New York State, where a serious outbreak of multidrug-resistant TB occurred in 1991, also declined from 1991 through 1997, as shown in Figure 1. A new and aggressive policy for screening inmates and staff, initiating and completing preventive therapy, and managing cases of TB disease was probably responsible in large measure for this decline. However, the incidence of TB disease among New York State inmates in 1997, about 30 cases per 100,000, was still much

Figure 1. Tuberculosis Cases and Rates Among New York State Inmates (Exclusive of New York City), 1986-97



Source: New York State Department of Health, Bureau of Tuberculosis Control: Tuberculosis in New York State, 1997 Annual Statistical Report.

higher than the 13 per 100,000 found in the total population of the State.³

Data on new cases of TB disease among inmates from the NIJ/CDC surveys in 1994 and 1997 are remarkably similar to the statistics reported by CDC—768 cases under treatment in 1997 and 919 cases in 1994. However, reporting to the NIJ/CDC survey on TB disease was very incomplete, with almost one-third of State/Federal systems and 12 percent of city/county systems in the survey not providing this information (table 40). This indicates that CDC surveillance data may undercount the actual incidence of TB disease among inmates. The correctional systems participating in the 1997 NIJ/CDC survey also reported 64 cases of drug-resistant TB among inmates.

Data on TB infection reported to the 1997 NIJ/CDC survey, indicated by a positive result on a purified protein derivative (PPD) skin test, were also incomplete, as shown in table 41. More than half of the State/Federal systems and more than a third of city/county systems failed to report numbers of PPD-positive inmates. Among those reporting, six systems had PPD positivity rates of 10 percent or higher among inmates over the preceding 12 months. Altogether, 24 State/

Federal systems and 25 city/county systems reported more than 45,000 positive PPDs in the 12 months prior to the survey.

Correctional employees may be at risk of contracting TB infection and TB disease, depending on the control measures in place. One correctional officer died during the multidrug-resistant TB outbreak in New York State, and correctional staff and unions in many jurisdictions have been active in demanding more aggressive control measures. According to CDC surveillance data, approximately 18 correctional staff were diagnosed with TB disease during 1997, although it is not known how many of these cases resulted from occupational exposure.⁴ Among New York State correctional staff, occupational exposure to TB reached a peak in 1992 and has declined since.

In 1992, one-third of all 466 PPD skin-test conversions identified among New York State prison employees were attributed to occupational exposure. Higher odds ratios for PPD conversion related to occupational exposure were found in the prisons with known inmate TB cases and in the categories of correctional employees likely to be in direct contact with inmates.⁵

Table 40. Active TB disease among inmates, 1997

Inmates Under Treatment	State/Federal Prison Systems (n = 51)			City/County Jail Systems (n = 41)		
	No. of Systems	%	No. of Cases	No. of Systems	%	No. of Cases
0	12	24	—	13	32	—
1–10	15	29	52	17	41	51
11–50	5	10	94	4	10	117
51–100	1	2	74	2	51	33
>100	2	4	247	0	—	—
Did not report	16	31	—	5	12	—
Total	51	100	467	41	100	301
Drug-resistant TB cases			35 (7%)			29 (10%)

Source: NJ/CDC surveys.

Table 41. TB infection among inmates, 1997

Percentage With Positive PPD	State/Federal Prison Systems (n = 51)			City/County Jail Systems (n = 41)		
	No. of Systems	%	No. of Cases	No. of Systems	%	No. of Cases
<5	20	39	6,512	9	22	6,117
5–9.99	3	6	7,200	11	27	8,162
10–20	1	2	1,283	5	12	16,165
>20	0	—	—	0	—	—
Did not report	27	53	—	16	39	—
Total	51	100	15,033	41	100	30,539

Source: NJ/CDC surveys.

The Role of Policy Change

Although tuberculosis is an airborne infection, its transmission can be well controlled through aggressive implementation of screening and disease management policies. The declining incidence of TB in New York prisons since the

1991 outbreak is clearly related to the institution of mandatory intake and subsequent annual PPD screening of inmates and staff, as well as universal directly observed therapy for TB disease and treatment of TB infection and strict isolation of persons with known or suspected infectious TB. The New York State policy represents a good model for the control and management of TB in the correctional setting.⁶

In 1996, CDC issued revised guidelines for the prevention and control of TB in correctional facilities.⁷ These guidelines focus on three critical areas of activity: (1) screening—identifying persons with TB infection and TB disease; (2) containment—preventing transmission of TB and providing adequate treatment to patients with TB disease and latent TB infection; and (3) assessment—monitoring and evaluating screening and containment efforts. Screening for TB symptoms is the first line of defense, which CDC recommends be done as soon as possible after intake for inmates in all types of correctional facilities. Anyone with symptoms of TB disease should be immediately isolated, evaluated, and treated as appropriate. Inmates in long-term correctional facilities should be mandatorily screened for TB infection (using the PPD skin test) at intake and on an annual basis thereafter. Those with positive PPDs and those with or at risk for HIV infection, regardless of the PPD result, should receive a chest radiograph and medical evaluation. Inmates who fall into various risk categories for TB disease listed in the CDC guidelines should be considered for treatment of tuberculous infection.

The CDC guidelines call for TB symptom screening of inmates in short-term facilities as soon as possible following entry. However, CDC acknowledges that PPD screening may be infeasible in short-term facilities because most inmates are released before a PPD can be read. Larger facilities serving populations at high risk for TB should consider minifilm x-ray screening of all incoming inmates for TB disease. The cost-effectiveness of minifilm screening depends on the rates of TB infection in the population being screened. In short-term facilities serving populations generally at low risk for TB, further screening beyond initial symptom screening should depend on an ongoing assessment of the risk level of the population and the potential for exposure within the facility.

CDC also recommends mandatory PPD screening of correctional employees at hiring and at annual intervals thereafter.

CDC's recommended strategies for containment include immediate isolation in negative-pressure rooms of all persons with suspected or confirmed TB disease. If active TB is confirmed, isolation should continue until the patient is receiving effective treatment, improving clinically, and has three consecutive negative sputum smears collected on different days. The recommended initial treatment for TB disease in most patients is four drugs: isoniazid (INH), rifampin (RMP), pyrazinamide (PZA), and either ethambutol (EMB) or streptomycin (SM).

CDC recommends evaluating all PPD-positive individuals and HIV-seropositive but PPD-negative persons for treatment of tuberculous infection with INH. Individuals with various risk factors for TB disease should be treated for latent infection. Treatment of latent infection should be a 6- to 12-month course of INH. Both treatment for TB disease and treatment of TB infection should be directly observed for all patients.

Screening

Table 42 summarizes screening policies for TB disease and TB infection reported to the 1997 NIJ/CDC survey. This shows that almost three-fourths of systems are following the CDC recommendation regarding screening for TB disease. More than 90 percent of State/Federal systems have mandatory PPD screening for inmates at intake and annually thereafter. These systems include primarily long-term facilities and thus conform with CDC recommendations. The validation study revealed that in 15 State/Federal systems with policies for mandatory PPD screening of incoming inmates, 97 percent of facilities reported this policy as well.

Only about half of city/county jail systems, which operate primarily short-term facilities, require PPD screening of inmates at intake. Ten percent of city/county jail systems reported screening for TB disease by minifilm x ray.

Table 42. Screening inmates for TB, 1997

Screening Policy	State/Federal Prison Systems (n = 51)		City/County Jail Systems (n = 41)	
	n	%	n	%
All incoming inmates screened for TB disease	37	73	30	73
All incoming inmates screened for TB infection (mandatory)	46	92	21	51
All inmates screened at regular intervals for TB infection (mandatory)	43	91	17	41

Source: NIJ/CDC survey.

The vast majority of correctional systems reported screening employees for TB infection. Ninety percent of State/Federal systems and 97 percent of city/county systems reported mandatory PPD screening of all new employees, and 79 percent of State/Federal systems and 76 percent of city/county systems reported mandatory screening of staff at specified intervals during their employment.

Containment

Critical components of a strategy to contain TB are the isolation of patients with suspected or confirmed TB disease, proper treatment of TB disease, and treatment of TB infection. The vast majority of systems—98 percent of State/Federal systems and 85 percent of city/county systems—reported isolating inmates with suspected or confirmed TB disease in negative pressure rooms. Eighty-four percent of State/Federal systems and 74 percent of city/county systems reported policies for the duration of isolation that conformed to the CDC guideline of three consecutive negative sputum smears, although the other details of these policies often differed from the precise CDC recommendations.

Seventy-one percent of State/Federal systems and 67 percent of city/county systems reported conformity with CDC's recommendation of a four-drug initial therapy for TB disease. The validation study found that in 13 systems whose central office policy calls for the recommended four-drug initial regimen, 76 percent of the 29 facilities reported the same policy. Most systems reported a treatment duration of at least 6 months. Eighty-three percent of State/Federal systems and 65 percent of city/county systems reported at least 6 months of treatment for HIV-negative patients with TB disease, and 85 percent and 76 percent, respectively, reported at least 6 months of treatment for HIV-seropositive patients.

Completion of the course of therapy is important to prevent relapse, continued transmission, and development of drug resistance. Directly observed therapy and postrelease followup are critical factors in regimen adherence and completion. Ninety-eight percent of State/Federal systems and 95 percent of city/county systems reported employing directly observed therapy for all inmates under treatment for TB disease. In 15 systems with this policy, the validation study revealed agreement from 94 percent of the 35 responding facilities. Although it may be difficult to maintain adherence following release, outreach and followup programs in the community can achieve positive results. In New York City, for example, initiation of an expanded outreach pro-

gram that included incentives for patients under treatment for TB disease who were released from Rikers Island helped to produce a dramatic increase in appearance rates for followup appointments in the community, from less than 20 percent to 92 percent.⁸

Eighty percent of State/Federal systems and 87 percent of city/county systems reported providing INH treatment to *all* PPD-positive inmates less than 35 years of age. This policy appears to diverge from the CDC recommendation that patients in this age group be started on treatment if they are considered likely to be able to complete 6 months on the regimen. Ninety percent of systems reported providing at least 6 months' treatment of TB infection to HIV-seronegative patients, the CDC guideline, and a smaller percentage—71 percent of State/Federal systems and 56 percent of city/county systems—adhered to the CDC recommendation of 12 months' treatment for HIV-infected patients. Directly observed treatment of TB infection was the reported policy for all patients in 90 percent of State/Federal systems and 85 percent of city/county systems.

Studies of inmate adherence to treatment of TB infection have shown mixed results. In a Texas program under which inmates received education and were asked to sign written agreements to adhere to treatment appeared to increase adherence rates.⁹ A study of 262 persons released from King County Jail in Seattle while on treatment for TB infection revealed that 40 percent could not be contacted, another 40 percent had enrolled in a community-based directly observed treatment program, and 20 percent had selected self-supervised therapy. Sixty percent of those who selected directly observed treatment completed the course of treatment, as opposed to 29 percent of those who selected self-supervised therapy. In sum, only 30 percent of the starting sample of releasees completed treatment of TB infection.¹⁰ Clearly, more effective strategies for helping patients to complete treatment are needed. A San Francisco study also found low rates of postrelease adherence—only 3 percent of 93 eligible patients appeared at the public health department's TB clinic for followup within 1 month of release. Nevertheless, the authors concluded that jails represent important settings for TB screening and recommended more intensive efforts to improve postrelease adherence to the treatment of TB infection, given the potential effects of nonadherence on the incidence of TB disease.¹¹ A short-course preventive therapy regimen—2 months on a combination of rifampin and pyrazinamide—is under study. A reduction from 6 months to 2 months of therapy, if shown to be effective, would be likely to improve adherence.¹²

Discharge Planning

Appropriate discharge planning for inmates receiving treatment for TB disease or TB infection may improve postrelease adherence. Results of the 1997 NIH/CDC survey reveal that discharge planning for inmates with TB disease and TB infection, as for those with HIV/AIDS, almost always involves referrals to the public health department (100 percent of State/Federal systems and 97 percent of city/county systems), but much less frequently includes making specific appointments for releasees with community-based providers (35 percent of State/Federal systems and 21 percent of city/county systems). At the same time, the vast majority of systems (92 percent of State/Federal systems and 87 percent of city/county systems) report the names of persons with TB being released from their facilities to public health departments along with locator information. Thus, health departments may be able to locate and follow up with patients in the community after their release.

Education

Educational programs may also help improve adherence, as well as reinforce other aspects of TB-control policies and procedures. A survey of TB knowledge among inmates and staff in Texas State correctional facilities found common misconceptions about means of transmission, the difference between TB infection and TB disease, and methods for the prevention and treatment of TB. The study concluded that educational programs sensitive to literacy levels and cultural differences in the target population should be provided to inmates and staff in the facilities of the Texas Department of Criminal Justice (TDCJ).¹³ Consequently, TDCJ instituted a TB module as part of its regular inmate education curriculum. The program includes pre- and posttests of knowledge and viewing and discussion of a video produced by TDCJ called “What You Don’t Know About Tuberculosis Can Kill You.” A TB study guide prepared by the Windham School District for TDCJ includes a range of other activities and suggestions for weaving discussion of TB-related topics into other school subjects such as language arts, mathematics, social studies, and health/science.¹⁴

Conclusion

The incidence of TB disease has declined in recent years both in the total U.S. population and among correctional inmates, but TB incidence rates remain much higher among

inmates than in the total population. Policies such as those recommended by CDC in its revised guidelines and implemented by the New York State Department of Correctional Services can help reduce further the incidence of TB in correctional settings. Most State and Federal prison systems are following key CDC recommendations regarding the screening of inmates and staff and the isolation and treatment of persons with TB disease and TB infection. Substantial improvement is needed in city/county jail systems. In general, directly observed therapy should be more widely implemented. Continuing problems with adherence to regimens for the treatment of TB disease and TB infection following release to the community may be amenable to improvement by better education, discharge planning, linkages with health departments and community-based providers, incentives to appear for followup appointments (for example, food coupons and bus tokens), and shorter courses of therapy.

Endnotes

1. Centers for Disease Control and Prevention, *Reported Tuberculosis in the United States, 1996*, Atlanta (July 1997), table 1: 5.
2. *Ibid.*, table 12, 19; Centers for Disease Control and Prevention, *Reported Tuberculosis in the United States, 1994*, Atlanta (July 1995), table 12: 19; Centers for Disease Control and Prevention, *Reported Tuberculosis in the United States, 1997*, Atlanta (July 1998), table 14: 25.
3. Centers for Disease Control and Prevention, *Reported Tuberculosis in the United States, 1997*, table 6: 15.
4. *Ibid.*, table 23, 34.
5. K. Steenland, A.J. Levine, K. Sieber, P. Schulte, and D. Aziz, “Incidence of Tuberculosis Infection Among New York State Prison Employees,” *American Journal of Public Health* 87 (December 1997): 2012–2014.
6. New York State Department of Correctional Services, Division of Health Services, Health Services Policy Manual, policy no. 1.18, “Tuberculosis,” May 20, 1996.
7. Centers for Disease Control and Prevention, “Prevention and Control of Tuberculosis in Correctional Facilities: Recommendations of the Advisory Council for the Elimination of Tuberculosis in Correctional Facilities,” Atlanta (July 1997), table 1: 5.

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- nation of Tuberculosis," *Morbidity and Mortality Weekly Report* 45, RR-8 (June 7, 1996): 1-27.
8. T.R. Frieden, P.I. Fujiwara, R.M. Washko, and M.A. Hamburg, "Tuberculosis in New York City: Turning the Tide," *New England Journal of Medicine* 333 (1995): 229-233.
 9. G.L. Woods et al., "Tuberculosis Education: Developing Effective Programs for Incarcerated Individuals," presentation at the 21st National Conference on Correctional Health Care, San Antonio, TX, November 11, 1997.
 10. C.M. Nolan, L. Roll, S.V. Goldberg, and A.M. Elarth, "Directly Observed Isoniazid Preventive Therapy for Released Jail Inmates," *American Journal of Respiratory Critical Care Medicine* 155 (1997): 583-586.
 11. J.P. Tulskey, M.C. White, C. Dawson, T.M. Hoynes, J. Goldenson, and G. Schechter, "Screening for Tuberculosis in Jail and Clinic Followup After Release," *American Journal of Public Health* 88 (1998): 223-226.
 12. M. Lobato, Division of Tuberculosis Elimination, Centers for Disease Control and Prevention, personal communication, September 29, 1998.
 13. G.L. Woods, S.L. Harris, and D. Solomon, "Tuberculosis Knowledge and Beliefs Among Prison Inmates and Lay Employees," *Journal of Correctional Health Care* 4 (1997): 1-9.
 14. Margaret Smith, *Tuberculosis: A Study Guide*, Huntsville, TX: Windham School District, 1997.

Chapter 9

Legal and Legislative Issues

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Key Findings

- The U.S. Supreme Court has ruled that HIV and HIV-related discrimination are covered under the Americans With Disabilities Act.
- There were few other major legal developments affecting HIV/AIDS in correctional facilities during the period covered by this Update report, although courts generally continued to uphold correctional systems' policy responses to HIV/AIDS.
- Some State legislatures have attempted to expand the requirements for the HIV-antibody testing of inmates and disclosure of inmates' HIV status, but these efforts have been generally unsuccessful.

This chapter summarizes legal developments pertinent to HIV/AIDS, STD, and TB policies in correctional facilities. Main legal topics include confidentiality of medical information, segregation, access to programs and work assignments, alleged exposure to HIV, treatment, early release, and TB issues.¹ Recent legislative activity, which focused on HIV testing and disclosure of test results, is also summarized.

Confidentiality

As discussed in chapter 5, very few correctional systems have official policies for disclosing inmates' HIV status to correctional officers or other correctional officials. As part of a settlement in *Shumate v. Wilson*, the California Department of Corrections agreed to end practices by which inmates with HIV were identified to unauthorized persons in two women's prisons.² By and large, however, courts have limited inmates' rights of privacy and confidentiality regarding medical information such as HIV status. Indeed, in *Anderson v. Romero*, the U.S. Court of Appeals for the Seventh Circuit ruled that prisoners have no constitutional protection against the unauthorized disclosure of their medical information, even if such disclosure is motivated by spite. An HIV-infected Illinois prisoner sued a warden and correctional

officer for revealing his HIV status, and the U.S. District Court held that the inmate might have a legitimate right-of-privacy case. However, on appeal, the Circuit Court ruled that prison officials have wide discretion regarding the disclosure of medical information about inmates. In his opinion, Judge Richard Posner wrote: "We cannot find any appellate holding that prisoners have a constitutional right to the confidentiality of their medical records." The court also held that this inmate's right to privacy must be subordinate to other inmates' rights to be free from exposure to HIV; the protection of other inmates was alleged to have been the objective of the disclosure.³

Segregation of HIV-Infected Inmates

Only two State correctional systems, those in Alabama and Mississippi, segregate asymptomatic HIV-infected inmates. The Alabama policy of segregation and exclusion of HIV-infected inmates from programs and activities has been the target of a lengthy lawsuit, originally filed in 1987 as *Harris v. Thigpen*. In November 1997, a divided three-judge panel of the U.S. Court of Appeals for the Eleventh Circuit overturned the District Court's 1995 ruling that HIV-infected

prisoners in Alabama could be excluded from programs on the basis that HIV transmission is possible in such program settings. The case, now captioned *Onishea v. Hopper*, was remanded for retrial and the original judge was ordered removed. Subsequently, however, in January 1998, the Eleventh Circuit Court vacated the panel's ruling and ordered that the case be reheard en banc, that is, before the full Circuit Court.⁴

At the same time, courts continued their usual pattern of upholding correctional policies whether they require segregation or integration of HIV-infected inmates. In *Robbins v. Clarke*, the Eighth Circuit Court upheld a ruling by the U.S. District Court for Nebraska that housing HIV-infected inmates in the general prison population does not constitute "cruel and unusual punishment" of uninfected inmates.⁵ In a more recent Iowa case, *Massick v. North Central Correctional Facility*, the Eighth Circuit Court upheld the District Court's dismissal of an inmate's claim that prison officials acted with "deliberate indifference," the constitutional standard of cruel and unusual punishment regarding health issues, by knowingly housing him in a double cell with an HIV-infected inmate who had open wounds. The dismissal was based on acceptance of the defendant's assertion of qualified immunity, the superseding of which would have required the plaintiff to prove that prison officials knowingly placed him at substantial risk of serious harm and failed to abate that risk. The District Court held that this had not been established, and the Eighth Circuit Court agreed.⁶ Implicit in this opinion is the principle that correctional officials may house HIV-infected and HIV-uninfected inmates in the same cells.

Access to Programs

The issue of access to programs is closely related to the issue of segregation, as in the Alabama case. Indeed, the Eleventh Circuit Court's decision in *Onishea v. Hopper* may be influenced by the U.S. Supreme Court's important rulings in *Bragdon v. Abbott* and *Pennsylvania Department of Corrections v. Yeskey*. In *Bragdon*, the Court held that HIV-related discrimination in the provision of health care services is prohibited under the Americans With Disabilities Act (ADA) unless an alleged transmission risk used to deny service could be assessed on the basis of objective, scientific information.⁷ In the *Yeskey* case, the Court ruled that the ADA applies to correctional inmates. Previously, the Third, Seventh, Ninth, and Eleventh Circuit Courts had held that prisoners are covered by the ADA, whereas the Tenth Circuit Court has issued an ambiguous opinion on the subject, and

the Fourth Circuit Court has ruled against prisoners' rights under the ADA. The *Yeskey* case did not allege discrimination against an inmate with HIV disease, but rather claimed that a hypertensive inmate was improperly excluded from a boot camp program.⁸ Pennsylvania, joined by 36 other States, argued that a ruling for *Yeskey* would undermine its ability to manage prisons efficiently and establish programs with restrictive eligibility criteria. Attorneys for *Yeskey* countered that the ADA requires only "reasonable accommodation" of disabled persons and that Congress intended the Act to cover everyone.⁹ The Supreme Court announced its decision in June 1998. In his majority, Justice Antonin Scalia wrote that the ADA "unmistakably includes State prisons and prisoners within its coverage."¹⁰

Two other Pennsylvania cases addressed correctional systems' ability to exclude inmates with HIV from certain work assignments. As part of a settlement in *Austin et al. v. Pennsylvania Department of Corrections*, a class action civil rights suit challenging a range of conditions of confinement, the department agreed not to discriminate against inmates with HIV in making work assignments unless performance of the job could involve a direct threat to the health of others.¹¹ No definition of such direct threat to health was provided. However, the *Austin* settlement was cited by the same court in rejecting the claims of two Pennsylvania inmates that the department's failure to screen food handlers for HIV antibodies in effect threatened the plaintiffs with infection. The court held that under the *Austin* settlement the correctional department was not permitted to exclude inmates from these work assignments on the basis of HIV status.¹²

Alleged Exposure to HIV

There have been several cases in which inmates alleged that they were infected with HIV through a rape in a correctional facility. None has yet resulted in a verdict against a correctional department or its employees. The most recent, and perhaps most highly publicized, of these cases was *Blucker v. Washington*, in which a former Illinois inmate claimed that he was repeatedly raped and consequently infected with HIV, and that prison staff knew that the rapes were occurring but did nothing to protect him. The suit named 15 individual defendants, but not the Illinois Department of Corrections. Prior to trial, the court dismissed the cases against eight of the defendants. In September 1997 a Federal jury refused to assess damages against five of the remaining defendants but could not reach verdicts on the other two. A new trial was held as to the last two defendants, and in January 1998 a jury

found no liability on their part.¹³ The defendants' main line of argument was that Blucker's sexual relations with other inmates had been consensual. Blucker's acquisition of HIV while incarcerated was not in dispute.

In Arkansas the Court of Appeals for the Eighth Circuit ordered a new trial in the case of an inmate who claimed to have been infected with HIV through a prison rape after the warden failed to protect him from his cellmate. A U.S. District Court judge had initially found no basis in the inmate's allegation that the warden's failure to change his housing assignment represented "deliberate indifference." The Circuit Court determined, on the contrary, that the warden had disregarded direct evidence that the plaintiff was at risk of being sexually assaulted by his cellmate.¹⁴

A Federal District judge dismissed a New York inmate's suit against prison officials for failing to protect him from an HIV-infected inmate who threw feces and semen at him. The court held that the plaintiff produced no evidence that the prison officials deliberately denied him protection from his assailant.¹⁵ However, the conviction of a Georgia inmate with HIV for reckless endangerment by attempting to bite a correctional officer was upheld. The inmate's attending physician testified that it was "very strongly possible" that HIV could be transmitted though a bite.¹⁶

Medical Treatment

Several important cases involving the medical treatment of inmates with HIV/AIDS were recently decided. In settling *Shumate v. Wilson*, the California Department of Corrections agreed to provide inmates at two women's prisons with care for HIV/AIDS, cancer, heart disease, and other serious illnesses that meets or exceeds community standards. Under the terms of the settlement, four medical experts are monitoring the provision of care for 16 months.¹⁷

In *Franklin v. District of Columbia*, a Federal District judge held that the correctional department's failure to provide interpreters for Spanish-speaking prisoners in health care and other situations was unconstitutional. She specifically cited the department's inability to provide adequate HIV counseling and care, diagnosis and treatment of illness, and mental health services for Latino inmates. "It is difficult to conceive of an example of [a] medical care system that can be more deliberately indifferent than one in which illnesses are diagnosed and medication is prescribed based upon the

patient pointing to a region of his or her body and saying the Spanish word for pain, 'dolor.' . . . For medical care to be adequate, a doctor and patient must be able to understand each other."¹⁸

In another case the Court of Appeals for the Ninth Circuit refused to grant a sentence reduction to a Federal inmate with AIDS who claimed that he needed to receive experimental medications available only through trials being conducted in the community. The court did not rule directly on the inmate's right to receive such experimental medications if he could not tolerate the FDA-approved drugs available in the prison, but relied on the "sparse" evidence presented by the plaintiff regarding the seriousness of his medical condition and the urgency of his need for the medication.¹⁹

Early Release

In *Jerrell v. State of New York*, a U.S. District judge ruled against an inmate with AIDS who claimed to have been unconstitutionally denied early release. Jerrell argued that the State's tightening of the eligibility criteria for early release, thereby excluding him because he was sentenced as a "persistent, violent felony offender," represented a statute not rationally related to a government interest and unduly burdensome to him as an HIV-infected person. Jerrell claimed that he should be eligible for early release because of his terminal medical condition and his exemplary prison record. The court disagreed, holding that the State's tightening of the eligibility criteria for release was rationally related to the State's interest in protecting its citizens. Therefore, the court held, Jerrell's constitutional rights had not been abridged in the application of these eligibility criteria to him.²⁰

Tuberculosis Issues

A fairly well-developed line of judicial opinion holds that correctional systems are empowered to take aggressive measures, including the mandatory PPD screening of inmates, to control tuberculosis in prisons and jails. Indeed, courts have held correctional systems liable for failing to implement such measures, thereby placing inmates at risk of acquiring TB.²¹ The most recent major case involving correctional TB policy is *Cunningham v. Coughlin*, a New York action in which inmates exposed to TB sought an end to double bunking in dormitory settings. This case is still pending.²²

Legislative Developments

The area of most common legislative activity regarding HIV/AIDS in correctional facilities has been, and continues to be, testing and disclosure policy. Many States have legislation mandating HIV testing and disclosure of test results in certain circumstances, such as being convicted of or charged with a sex offense or a drug offense, assaulting another inmate or correctional staff member, or otherwise exposing another person to blood or body fluids. The specific provisions of these laws vary widely regarding when and how testing is to be performed and disclosure of results effectuated.

Recent legislative developments in this area include the passage of separate laws in Oklahoma requiring the HIV-antibody testing of persons charged with sex offenses and inmates who hurl or expel body fluids at officers or other inmates.²³ Colorado Governor Roy Romer vetoed legislation that would have required the HIV testing of persons charged with sex crimes involving penetration and forced public health agencies to divulge whether an HIV-positive defendant had previously been notified of a positive test result. The intent of the law was to enable prosecutors to charge individuals who had been given a positive test result in the past with the felony of committing a sex act with prior knowledge of being HIV infected. In his veto message, Romer argued that using confidential public health surveillance information for this purpose might discourage people from seeking confidential HIV testing.²⁴

The New York State Assembly took no action on a bill passed by the Senate that would have made an inmate who throws feces, urine, blood, or semen on a correctional officer guilty of a felony. A California law shortened the time and streamlined the process by which inmates can appeal an order to be tested for HIV antibodies following incidents in which others were exposed to their body fluids. Legislatures in California and Arizona voted down proposals requiring the mandatory HIV screening of inmates. The governors of Washington and Rhode Island vetoed bills that would have given correctional officers access to the names of HIV-positive inmates. California Governor Pete Wilson vetoed a bill that would have permitted the release of terminally ill inmates expected to die within 6 months and required correctional officials to consider the costs of such inmates' continued incarceration in making release decisions. Finally, a new Florida law requires all persons convicted of drug offenses to participate in an HIV awareness program.²⁵

Conclusion

The period under review in this Update has produced few major developments in case law or legislation regarding HIV/AIDS or TB in correctional facilities. Courts generally have continued to permit correctional systems broad discretion in devising the policies they think necessary and appropriate and have been loath to interfere with this policy-making function. Some legislators have sought radical expansions of existing HIV-testing and disclosure policies but generally have been unsuccessful in enacting such laws.

Endnotes

1. A convenient summary of recent litigation is found in *AIDS in Correctional Facilities: Critical Issues and Cases*, Horsham, PA: LRP Publications, 1997.
2. "California Agrees To Settle Inmates' HIV Privacy Claims," *AIDS Policy and Law* (September 19, 1997): 9.
3. *Anderson v. Romero*, 7th Cir., no. 94-1251, decided December 15, 1995.
4. *Onishea v. Hopper*, 11th Cir., no. 96-6213, State's petition for rehearing en banc granted January 23, 1998; "Two Major Prison Cases Poised for Court Review," *AIDS Policy and Law* (February 20, 1998): 1, 8.
5. *Robbins v. Clarke*, 8th Cir., no. 90-2431, decided October 8, 1991.
6. *Massick v. North Central Correctional Facility*, 8th Cir., no. 96-3980NI, opinion dated February 13, 1998; "Prison Not Liable for Putting Bleeding Inmate With HIV in Shared Cell," *AIDS Policy and Law* (March 6, 1998): 14.
7. *Bragdon v. Abbott*, U.S. Sup. Ct., no. 97-156.
8. *Pennsylvania Department of Corrections v. Yeskey*, U.S. no. 97-634, petition for certiorari granted January 23, 1998; "Two Major Prison Cases Poised for Court Review." See note 4 above.
9. C. Mondies, "High Court Examines Whether Disability Law Applies to Inmates," *Philadelphia Inquirer* (April 29, 1998), A3.

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10. *Pennsylvania Department of Corrections v. Yeskey*, U.S. no. 96-6213, decided June 15, 1998; *AIDS Policy and Law* (June 26, 1998).
 11. *Austin et al. v. Pennsylvania Department of Corrections*, ___F. Supp.,___ (E.D. PA., January 17, 1995), 1995 WL 65458.
 12. *Martin v. Vaughn*, D.CE. PA., no. CA 92-3828, decided May 30, 1995; "Inmates Lose Bid To Screen Food Handlers for HIV Infection," *AIDS Policy and Law* (September 22, 1995): 7.
 13. *Blucker v. Washington*, ND, IL, no. 95C50110, jury verdicts dated August 29, 1997, and January 23, 1998; "Illinois Begins Testing Inmates for HIV Following Rape Trial," *AIDS Policy and Law* (September 19, 1997): 1, 8-9; "Jurors Disbelieve Inmate's Claim That Rape Reports Were Ignored," *AIDS Policy and Law* (February 20, 1998): 3.
 14. "Arkansas Warden Faces Retrial on Inmate's HIV Rape Allegation," *AIDS Policy and Law* (August 7, 1998): 9-10.
 15. *Whitfield v. Scully*, SD, NY, no. 94-CIV-3290 (DC), decided December 6, 1996.
 16. *Burk v. Georgia*, GA Ct. App., 2d Div., no. A96A2310, decided November 13, 1996.
 17. "California Agrees To Settle Inmates' HIV Privacy Claims," *AIDS Policy and Law* (September 19, 1997): 9.
 18. *Franklin v. District of Columbia*, D. DC, no. CA 94-0511(JHG), decided April 16, 1997.
 19. *U.S. v. Borkowski*, 9th Cir., nos. 95-10480, 95-10481, decided September 16, 1996; "Court Rejects Inmate's Request for Access to Drug Trials," *AIDS Policy and Law* (November 1, 1996): 5.
 20. *Jerrell v. State of New York*; E.D. NY, no. CV-94-3036-CPS, decided January 19, 1996; "HIV-Positive Prison Inmate Loses Bid for Early Release," *AIDS Policy and Law* (April 19, 1996): 7.
 21. For a review of policy and related case law, see L.O. Gostin, "The Resurgent Tuberculosis Epidemic in the Era of AIDS: Reflections on Public Health, Law, and Society," *Maryland Law Review* 54 (1995): 1-131, esp. 50-67.
 22. *Cunningham et al. v. Coughlin et al.*; E.D. NY, 92-CV-0579; "News on the TB Case," *PWA Support* 7 (Spring 1995): 2.
 23. "State Legislation: Oklahoma Adopts Testing Laws for Inmates, Rape Suspects," *AIDS Policy and Law* (May 15, 1998): 12-13.
 24. "Governor Vetoes Bill That Would Test Sex Offenders for HIV," *AIDS Policy and Law* (June 26, 1998): 11.
 25. These developments are summarized in "HIV/AIDS and the States: Looking Back at 1996," *AIDS Policy and Law* (bonus report, January 1997): 3.

About the National Institute of Justice

The National Institute of Justice (NIJ), a component of the Office of Justice Programs, is the research agency of the U.S. Department of Justice. Created by the Omnibus Crime Control and Safe Streets Act of 1968, as amended, NIJ is authorized to support research, evaluation, and demonstration programs, development of technology, and both national and international information dissemination. Specific mandates of the Act direct NIJ to:

- Sponsor special projects, and research and development programs, that will improve and strengthen the criminal justice system and reduce or prevent crime.
- Conduct national demonstration projects that employ innovative or promising approaches for improving criminal justice.
- Develop new technologies to fight crime and improve criminal justice.
- Evaluate the effectiveness of criminal justice programs and identify programs that promise to be successful if continued or repeated.
- Recommend actions that can be taken by Federal, State, and local governments as well as by private organizations to improve criminal justice.
- Carry out research on criminal behavior.
- Develop new methods of crime prevention and reduction of crime and delinquency.

In recent years, NIJ has greatly expanded its initiatives, the result of the Violent Crime Control and Law Enforcement Act of 1994 (the Crime Act), partnerships with other Federal agencies and private foundations, advances in technology, and a new international focus. Some examples of these new initiatives:

- New research and evaluation are exploring key issues in community policing, violence against women, sentencing reforms, and specialized courts such as drug courts.
- Dual-use technologies are being developed to support national defense and local law enforcement needs.
- The causes, treatment, and prevention of violence against women and violence within the family are being investigated in cooperation with several agencies of the U.S. Department of Health and Human Services.
- NIJ's links with the international community are being strengthened through membership in the United Nations network of criminological institutes; participation in developing the U.N. Criminal Justice Information Network; initiation of UNOJUST (U.N. Online Justice Clearinghouse), which electronically links the institutes to the U.N. network; and establishment of an NIJ International Center.
- The NIJ-administered criminal justice information clearinghouse, the world's largest, has improved its online capability.
- The Institute's Drug Use Forecasting (DUF) program has been expanded and enhanced. Renamed ADAM (Arrestee Drug Abuse Monitoring), the program will increase the number of drug-testing sites, and its role as a "platform" for studying drug-related crime will grow.
- NIJ's new Crime Mapping Research Center will provide training in computer mapping technology, collect and archive geocoded crime data, and develop analytic software.
- The Institute's program of intramural research has been expanded and enhanced.

The Institute Director, who is appointed by the President and confirmed by the Senate, establishes the Institute's objectives, guided by the priorities of the Office of Justice Programs, the Department of Justice, and the needs of the criminal justice field. The Institute actively solicits the views of criminal justice professionals and researchers in the continuing search for answers that inform public policymaking in crime and justice.