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1994 Update: HIV/AIDS and STD's in Correctional Facilities

National Institute of Justice

Centers for Disease Control and Prevention

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1994 Update: HIV/AIDS and STDs in Correctional Facilities

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

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Foreword

This report results from the eighth national survey of HIV/AIDS in Correctional Facilities, sponsored jointly by the National Institute of Justice and the Centers for Disease Control and Prevention. The survey was carried out between May and December 1994, and had several new features this year. First, it covered the prevalence and prevention of sexually transmitted diseases among inmates and, second, a validation study permitted comparison of responses on key policy issues from State correctional systems' central offices with those from selected individual facilities. This revealed a number of interesting discrepancies between central office policies and facility practices.

The 1994 survey found that over 4,500 inmates have died of AIDS since the beginning of the epidemic and that there were over 5,000 inmates diagnosed with AIDS currently incarcerated in responding correctional systems. Despite the continued growth of the epidemic among inmates, however, the 1994 survey indicated a continued decline in the number of correctional systems providing face-to-face inmate HIV education. Results also suggest that there are continuing needs for improvement in HIV prevention counseling, medical care and supportive services for inmates with HIV, and drug treatment capacity for inmates.

Meeting the difficult challenges posed by HIV/AIDS in correctional facilities, as well as exploiting the significant opportunities for providing education, prevention, and intervention to a previously underserved population, requires collaboration among correctional and public health authorities. The National Institute of Justice and Centers for Disease Control and Prevention have committed themselves to promoting such collaborations. The agencies' continued joint sponsorship of the Updates on HIV/AIDS in Correctional Facilities represents one important method of keeping the lines of communication open and encouraging operational partnerships to address HIV/AIDS and other health issues in correctional and criminal justice settings.

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Theodore M. Hammett, Ph.D.
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Executive Summary

Epidemiology

The 1994 NIJ/CDC survey reveals a cumulative total of 4,588 inmate AIDS deaths since the start of the epidemic. At the time of their responses to the survey, correctional systems reported 5,279 current cases of AIDS among inmates. Cases continue to be unevenly distributed across systems and regions, with the highest number of cases in the Middle Atlantic region. Blacks and Hispanics are overrepresented among correctional AIDS cases, as they are among cases in the total population. AIDS incidence rates are substantially higher among inmates (518 cases per 100,000 State/Federal inmates and 706 per 100,000 city/county inmates in 1994–1995) than in the total U.S. population (41 per 100,000 in 1993). HIV seroprevalence rates are also generally higher in prison and jail populations than in the population at large, with a few systems having rates as high as 20–26 percent. However, most correctional systems continue to have inmate seroprevalence rates below 2 percent, and seroprevalence rates appear to be either stable or declining in most systems. Seroprevalence is often higher among female inmates than among male inmates. STD testing reveals varying rates of infection, with higher rates generally found in the East and South, and among women.

As in previous years, there have been no documented cases of occupational HIV transmission from inmates to correctional staff. Studies have shown that inmate-to-inmate HIV transmission occurs, but at quite low rates.

HIV/STD Education and Behavioral Interventions

There are some alarming policy trends to report, particularly with regard to HIV/AIDS education and prevention. Correctional systems have an important public health opportunity to address HIV and STDs through comprehensive prevention programs involving education and ongoing behavioral interventions. However, this opportunity has not yet been fully used. HIV knowledge among inmates is probably higher now than it was in the middle and late 1980's, but some areas of uncertainty and misinformation remain about transmission mechanisms and prevention measures. In this context, it is troubling that fewer correctional systems are offering instructor-led HIV education sessions for inmates in 1994 than in 1992–1993 (75 percent of State/Federal systems). Moreover, only about one-third of State/Federal systems offer inmate peer-based education and support programs, and this number has remained flat, even though such approaches represent a promising and cost-effective way to provide services. There is a continuing need for more educational programs and materials in Spanish and more culturally appropriate materials.

Validation study results suggest that most facilities are providing the modes of education required in their systems' policies but may be expanding upon specified topics to include more controversial subjects, such as safer drug injection practices.

Ongoing HIV prevention counseling (beyond pretest and posttest counseling) does not appear to be widely offered in prisons and jails, representing a continuing weakness in the correctional response to HIV/AIDS.

Precautionary and Prevention Measures

No additional systems have instituted condom availability since the 1992–1993 survey. Six systems make condoms available to inmates. As in past years, no systems have official policies making bleach available to inmates for cleaning injection material. Universal precautions for infection control are generally the policy in correctional systems, but they are not always well implemented.

Testing, Counseling, Confidentiality, and Disclosure Policies

Trends in HIV antibody testing policies and notification of test results remain stable. The list of 17 State and Federal systems with mandatory testing is identical to that in 1992–1993. Most systems offer HIV testing on request. About 90 percent of correctional systems conduct routine STD testing of inmates.

Few correctional systems notify correctional officers of inmates' HIV status as a matter of official policy, and validation study results indicate that facility policies generally comply in this regard. However, actual practice may differ from official directives, and unauthorized disclosure to officers and others remains a problem. Staff and resource shortages have prevented many systems from providing adequate pretest and posttest counseling.

Housing and Correctional Management

In the housing of inmates with HIV and AIDS, there has been a steady decline in segregation policies. Case-by-case decisions and presumptive general population assignments remain most common. Validation study results reveal some of the real complexity in implementing housing policies in institutions with different security levels and different population characteristics. Only two State systems—those in Alabama and Mississippi—continue to segregate all known HIV-infected inmates.

In most systems, inmates with HIV/AIDS are eligible for all program and work assignments. However, several systems exclude such inmates from kitchen work, and this remains a controversial issue, despite strong evidence that HIV is not transmitted through food.

Medical Care and Psychosocial Services

Medical care for inmates with HIV/AIDS continues to be uneven in quality. Although the best-known therapeutic drugs for HIV/AIDS are in widespread use, access to experimental drugs and clinical trials remains quite rare in correctional systems. Support groups and other supportive services are not offered as widely as they might be, and validation study results suggest that such services are even less available than central office responses would suggest. Similarly, drug treatment services appear to be reaching a far smaller proportion of inmates than could probably benefit from them, judging from estimates of the percentage of inmates with histories of drug use.

Sixty-one percent of State/Federal systems and 38 percent of city/county systems report policies for the early or compassionate release of inmates with AIDS. These numbers have not increased significantly since the 1992–1993 survey, although changes to the New York State law have resulted in many more releases from that system in the last year. Discharge planning and continuity of care for inmates leaving correctional facilities remain areas in need of significant improvement. In particular, validation study results indicate that a significant percentage (38 percent) of facilities in systems with policies calling for discharge planning were not actually providing such services.

Legal Issues

In legal developments, courts generally continue to uphold correctional systems' policies, irrespective of their direction, on the ground that correctional officials can best determine what approaches serve "legitimate penological interests." Perhaps the most significant caselaw development was a Federal Circuit Court of Appeals decision upholding the California Department of Corrections' policy of excluding HIV-infected inmates from food service assignments. The correctional system claimed that such assignments, although in reality posing little or no risk of HIV transmission, might lead to inmate riots.

♦ ♦ ♦

An appendix to this report summarizes recent biomedical and epidemiologic research developments.

In 1994, for the first time, State juvenile systems and city/county juvenile detention facilities were included in the NIJ/CDC survey. These results are presented in a separate *Research in Brief*.

Introduction

The health problems that increasingly affect correctional inmate populations—including HIV/AIDS, tuberculosis, and sexually transmitted diseases—pose difficult programmatic and fiscal challenges for the administrators and staff of prison and jail systems. But these problems—which are significantly associated with substance abuse, high-risk sexual activity, poverty, homelessness, and poor access to preventive and primary health care in the community—also offer opportunities for correctional systems to address and help improve the health of a particularly underserved and vulnerable segment of the population. Better HIV, TB, and STD prevention programs and medical care in prisons and jails will also benefit the larger society, since the vast majority of inmates return to the community. To date, providers of correctional health care and prevention services have not fully taken advantage of the "public health opportunity" available to them. However, it remains a significant opportunity that can be addressed by carefully designed programs and dedicated staff.[1]

There is increasing recognition that addressing the challenges and opportunities of health care and disease prevention in prisons and jails requires an active collaboration between correctional and public health officials. Attorney General Janet Reno and Secretary of Health and Human Services Donna Shalala have committed their departments to foster a broader understanding of the relationships among health and justice issues as reflected in responses to violence, substance abuse, and infectious diseases. As part of the effort to facilitate cooperation among health and justice agencies, the National Institute of Justice (NIJ) has established a working group of professionals representing law enforcement, public health, institutional and community corrections, medical and mental health services, the courts, and victim services.[2]

At the level of correctional systems and facilities, mutual understanding and cooperation can be encouraged through active dialogue among correctional staff, community groups, and inmates. Such a dialogue has begun in Canada and has helped to encourage the view that "the promotion of health in prisons does not necessarily entail lessening of the safety and security of prisons. . . . Indeed, promotion of health in the prison population and the education of both prisoners and staff may be the best ways to create safety and security."[3]

Another component of the DOJ/HHS strategy in the United States is the collaborative sponsorship of research like the national surveys and updates on HIV/AIDS in correctional facilities, which have been jointly supported for the past few years by the Centers for Disease Control and Prevention and NIJ. This *1994 Update* reports on the eighth national survey, conducted between May and December 1994. As in previous years, responses were received from all fifty State correctional systems and the Federal Bureau of Prisons. Twenty-nine large city and county jail systems also responded to the 1994 NIJ/CDC survey. In an effort to assess the extent to which individual facilities comply with or depart from policies established by systems' central offices, the 1994 survey for the first time included a validation study in which an abbreviated version of the instrument (covering only key policy areas) was sent to a sample of 50 facilities in 14 State systems and the Federal Bureau of Prisons.

Overall, the survey covered HIV/AIDS and STDs in adult corrections (reported in this *Update*) as well as tuberculosis (reported in a separate *Research in Brief*). The survey was supplemented with site visits to the State correctional systems of Texas, Vermont, and Massachusetts and to three facilities of the Federal Bureau of Prisons.

Endnotes

1. See, e.g., S. Polonsky, S. Kerr, B. Harris, J. Gaiter, R. Fichtner, and M. Kennedy. "HIV Prevention in Prisons and Jails: Obstacles and Opportunities," *Public Health Report* 109 (September-October 1994): 615–625; J. B. Glaser and R. B. Greifinger, "Correctional Health Care: A Public Health Opportunity," *Annals of Internal Medicine*, 118 (January 15, 1993): 139–145; D. E. Snider, K. M. Thorburn, R. C. Warren, W. R. Dowdle, "Correctional Health Care: A Neglected Public Health Opportunity," (draft submitted for publication, 1993).

2. L. F. Mock and C. A. Crawford, "Health and Criminal Justice: Strengthening the Partnership," *National Institute of Justice Journal* 228 (November 1994): 2–7.

3. R. Jurgens, "AIDS in Prisons in Canada," in *AIDS in Prisons*, P. A. Thomas and M. Moerings, eds., (Aldershot, U.K.: Dartmouth Press, 1994), 134.

Chapter 1

Epidemiology of HIV/AIDS and STDs in Correctional Facilities and the Population at Large

Patterns of HIV/AIDS in the U.S. Population

Reported AIDS Cases and the Revised Case Definition

In 1994, AIDS was the leading cause of death among all Americans 25–44 years old, outstripping homicide, suicide, heart disease, and cancer.[1] Reported AIDS cases in the United States increased very sharply—from 46,791 to 105,990, or 127 percent—between 1992 and 1993. However, this probably represents the one-time effect of the reporting of individuals who had been previously diagnosed with the conditions added to the AIDS case definition in 1993.[2] Under the revised definition of cases to be reported to the Centers for Disease Control and Prevention (CDC), HIV-infected persons with CD4 counts of less than 200 (but no current symptoms), pulmonary tuberculosis, recurrent pneumonia, and invasive cervical cancer are reportable as AIDS cases.[3]

Virtually the same number of AIDS cases was reported to CDC between July 1992 and June 1993, six months of which were covered by the new definition and six months by the old, as between July 1993 and June 1994, a period entirely covered by the new definition (85,944 cases versus 85,260 cases). If anything, this suggests a slowing of the overall rate of cases being reported nationally. Indeed, the CDC has found that the rate of increase in overall AIDS incidence began to slow during the middle of 1987.[4]

Through June 1994, almost 356,000 AIDS cases had been reported among adults and adolescents in the United States, and over 5,200 cases among children under 13 years. These figures include over 12,500 adult/adolescent cases and almost 300 pediatric cases reported from Puerto Rico, where the annual incidence rate for July 1993–June 1994 (74 cases per 100,000) was higher than all States except New York (85).

All States and cities and many rural areas have been affected by the HIV/AIDS epidemic, but a small number of States continue to account for the majority of reported cases of AIDS in the nation. Sixty percent of cumulative adult/adolescent cases have been reported from five States: New York (19 percent); California (18 percent); Florida (10 percent); Texas (7 percent); and New Jersey (6 percent). Three States account for more than half of the pediatric AIDS cases—New York (27 percent), Florida (15 percent), and New Jersey (9 percent)—suggesting that the epidemic of AIDS among children is even more geographically concentrated. Indeed, while the epidemic of HIV/AIDS has affected all parts of the country to some degree, it may be best understood as a pattern of "multiple localized epidemics" with disproportionately severe impacts in certain types of geographic areas, including those with high rates of poverty and poor access to health care.[5]

As of the end of 1993, there had been 217,917 deaths from AIDS reported in the U.S. This represents 54 percent of all diagnosed cases. The cumulative case-fatality rate declined by about 6 percent from 1992 to 1993. This reflects in large part the changing case definition, which increases the denominator of diagnosed cases on which the case-fatality rate is based. Real and significant declines in case-fatality rates are not likely in the near future, given discouraging findings (summarized in the appendix) that available antiretroviral therapies do not prolong survival with AIDS.

HIV/AIDS by Racial/Ethnic Groups

Blacks and Hispanics continue to be sharply overrepresented among U.S. AIDS cases. Through 1987, 60 percent of cumulative total cases were among whites, 25 percent among blacks, and 14 percent among Hispanics. By the end of 1993, the respective percentages of cumulative total cases had become 50, 32, and 17. The 10 percent shift from whites to blacks and Hispanics in six years reflects a much more rapidly growing epidemic in communities of color. Of new cases reported during 1993, 45 percent were among whites, 36 percent among blacks, and 18 percent among Hispanics.

AIDS cases reported in 1993 among Hispanics revealed some interesting differences in terms of exposure categories. The majority of cases in individuals born in Central/South America, Cuba, and Mexico were among men who have sex with men, while the majority of cases in persons born in Puerto Rico were associated with injection drug use.

Women and HIV/AIDS

The CDC has reported that the HIV/AIDS epidemic is increasing more rapidly among women than among men. Between 1992 and 1993, the percentage of total adult/adolescent AIDS cases represented by women increased from 13 percent to 16 percent. On the other hand, the absolute number of AIDS cases reported among male adults and adolescents actually declined by 4 percent between the periods July 1992–June 1993 and July 1993–June 1994, while female cases increased by 14 percent. This suggests that in fact the epidemic may be continuing to worsen among women while it is leveling off among men.

Women of color are disproportionately affected by HIV/AIDS. About 20 percent of women in the U.S. are black or Hispanic, but almost three-fourths (73 percent) of all female adult/adolescent AIDS cases have occurred in these groups (53 percent among blacks and 20 percent among Hispanics).

Recent research shows that the HIV/AIDS epidemic has hit particularly hard among young black and Hispanic women who regularly smoke crack cocaine. Because of higher rates of risky sexual practices (often associated with exchanging sex for money or drugs) and higher rates of sexually transmitted diseases, these women are at substantially elevated risk for HIV infection.[6]

The disproportionate effect of HIV/AIDS on women of color results in an equivalent disproportionality in the epidemic of pediatric AIDS. Eighty percent of pediatric cases have occurred among blacks (55 percent) and Hispanics (24 percent).

HIV/AIDS by Exposure Categories

Table 1 shows the distribution of cumulative total AIDS cases reported to CDC through 1993, by exposure categories and sex. Although the overall growth of the HIV/AIDS epidemic may be slowing, it continues to grow in some sectors—women, blacks, and Hispanics, and injection and other drug users.

At the end of 1992, CDC estimated that AIDS diagnoses in men who have sex with men and in injection drug users would plateau in the next two years, while cases attributed to heterosexual contact would continue to increase through the period.[7] Indeed, the percentage of AIDS cases attributed to heterosexual contact increased from 2 percent during 1985 to 9 percent during 1993. Heterosexually acquired AIDS cases jumped by 130 percent from 1992 to 1993, as opposed to an increase of 109 percent in cases in all other exposure categories combined. Although heterosexual contact accounts for only 9 percent of AIDS cases reported during 1993, this exposure category represented fully 25 percent of HIV positive tests reported to CDC by publicly funded HIV testing and counseling sites in 1993.[8] Persons most at risk for heterosexual acquisition of HIV/AIDS include adults and adolescents with multiple sexual partners and with STDs, and sexually active persons living in areas with high prevalence of HIV infection among injection drug users.[9]

The percentage of total AIDS cases that occurred among men who have sex with men dropped from 65 percent in 1987 to 54 percent in 1993, while the percentage attributable to injection drug use rose from 17 to 24 percent. In New York City, almost one-half (46 percent) of AIDS cases reported through March 1994 were attributed to injection drug use, as opposed to 37 percent among men who have sex with men.[10]

There has been concern about relapse to high-risk sexual behavior among gay men.[11] Recently, Dr. Harold Jaffe, director of CDC's Division of HIV/AIDS, predicted "a second wave" of AIDS among young gay men.[12] However, this pattern of new infections may not be reflected in changing AIDS case rates for 5 to 10 years. In the meantime, the number of AIDS cases reported among men who have sex with men has continued to decline nationally—by 10 percent between the periods July 1992–June 1993 and July 1993–June 1994—while the number of cases attributed to injection drug use increased by 3 percent, those

Table 1

CUMULATIVE TOTAL OF ADULT/ADOLESCENT AIDS CASES IN THE UNITED STATES BY EXPOSURE CATEGORY,[a] THROUGH DECEMBER 1993

	Males		Females		Total	
Exposure Category	**Number**	**%**	**Number**	**%**	**Number**	**%**
Men Who Have Sex With Men	193,652	62%	—	—	193,652	54%
Injection Drug Use	65,512	21	21,746	49%	87,259[d]	24
Men Who Have Sex With Men and Inject Drugs	23,360	7	—	—	23,360	7
Hemophilia/Coagulation Disorder	3,058	1	75	0	3,133	1
Heterosexual Contact	7,679	3	15,487	35	23,166	7
Receipt of Transfusion	3,660	1	2,521	6	6,181	2
Other[b]/Risk Not Reported or Identified[c]	14,657	5	4,528	10	19,185	5
Total	311,578	100	44,357	100	355,936	100

[a]This table lists AIDS cases by *exposure* category, that is, by the behavior or circumstance to which HIV transmission is attributed.

[b]"Other" refers to 12 health care workers who developed AIDS after documented occupational exposure to HIV; to 4 patients who developed AIDS after exposure to HIV in the health care setting; to 3 persons who acquired HIV perinatally and were diagnosed with AIDS after age 13; and to 1 person with intentional self-inoculation of blood from an HIV-infected person.

[c]"Risk not reported or identified" refers to persons under investigation; persons who died, who were lost to follow-up, or who declined interview; and persons who did not report one of the exposures listed above after interview.

[d]Includes one person whose sex is unknown.

Source: Centers for Disease Control and Prevention (CDC), *HIV/AIDS Surveillance Report* 5, no. 4, (February 1994) (cases reported through 1993).

attributable to heterosexual contact increased by 13 percent, and perinatal cases increased by 17 percent during the same period. Heterosexual and perinatal transmission have been closely associated with injection and other drug use—for example, infection through sexual intercourse with a drug user and vertical transmission from a mother whose infection is associated with injection or other drug use. Pediatric AIDS is most prevalent where the overall epidemic is most associated with injection and other drug use and heterosexual transmission of HIV.

The above discussion has been broadened to refer to "injection and other drug use" because of accumulating evidence that regular crack use is associated with HIV infection. A recent study of young women and men in poor minority communities of New York (Eastern and Central Harlem), Miami (Liberty City and Overtown), and San Francisco (Bayview-Hunter's Point) revealed that regular crack smokers were 2.4 times more likely to be HIV infected than those who had never smoked crack. The non–crack smokers were in many respects as socially and economically disadvantaged as the crack smokers. Four categories of sexual practice accounted for the higher rates of HIV infection among the crack smokers in the study: commercial sex work; recent, unprotected commercial sex work; anal sex between men; and homosexual anal intercourse with 50 or more male partners. In short, regular crack use leads to

higher rates of unsafe sexual practices, often in exchange for drugs or money, and in turn to higher rates of STDs and HIV infection.[13]

Estimates of HIV Infection in the U.S. Population

The precise level of HIV infection in the U.S. population as a whole is not known. A planned household seroprevalence survey was canceled in 1991 for methodological and political reasons. Composite estimates by the Public Health Service from serosurveys in "sentinel" populations suggest that about 800,000 Americans are infected with HIV, and most are probably unaware of being infected.[14]

HIV/AIDS in Correctional Facilities

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

As in all previous NIJ surveys, no job-related cases of HIV infection were reported among correctional officers in 1994. The CDC monitors occupational exposure and seroconversion to HIV among health care and emergency workers. As of the end of 1993, there had been 40 documented cases of HIV transmission to health care workers, and an additional 83 possible cases of occupational transmission. Thirty-three of the 40 confirmed cases were among clinical laboratory technicians (15), nurses (13), and nonsurgical physicians (5). No confirmed cases of occupationally acquired HIV infection have occurred among emergency medical technicians (EMT's) or paramedics, the category with exposure risks closest to those of correctional officers.[15]

For several years, CDC funded seven health departments to monitor potential HIV exposure and transmission incidents involving correctional officers, police officers, EMT's, and other first responders. These seven health departments reported no confirmed occupational HIV transmissions. One of the CDC-funded health departments monitored a correctional facility. It identified 166 potential exposure incidents involving 149 staff members—61 correctional officers and 88 medical or dental staff. No HIV transmissions occurred as a result of these incidents, however. A newly initiated CDC study is examining levels of compliance with universal precautions by health care workers employed in correctional settings.[16]

AIDS Cases Among Correctional Inmates

Previous reports in this series have included figures for cumulative total AIDS cases in the reporting correctional systems. However, beginning with this report, the cumulative total figure will no longer be presented because of increasing levels of missing data. As noted in the *1992 Update*, it has been necessary to estimate for some correctional systems at least one of the components necessary to calculate cumulative total inmate AIDS cases. The required data components are current cases, deaths in custody, and inmates released with HIV/AIDS. Estimation was based on previous years' data and was always very conservative. Because of this estimation, the cumulative total figures were subject to increasing uncertainty. In the 1994 survey, over half of the correctional systems were unable to provide figures for inmates released with HIV/AIDS, always the most problematic component to obtain. This seemed an unacceptably high level of missing data. By contrast, almost all systems were able to provide figures for current cases and deaths. It was therefore decided to discontinue the cumulative total calculation and present only current cases and deaths.

Inmate HIV/AIDS Deaths

While it is unfortunate to break the time series based on cumulative total AIDS cases, a time series on inmate deaths is being substituted. This time series for inmates can be compared to the equivalent time series in the total U.S. population, as was previously done with the cumulative totals. This comparison is presented in table 2. Between 1992–1993 and 1994, cumulative inmate AIDS deaths increased by 32 percent, while cumulative deaths in the total population increased by 42 percent. Since 1985, inmate AIDS deaths have increased by 1,311 percent, while AIDS deaths in the U.S. population increased by 2,904 percent, more than twice as large an increase.

Table 2 shows that 4,588 inmates in the reporting correctional systems had died of HIV/AIDS as of May–December 1994, when the survey was conducted. This should not be considered an absolutely accurate count, since the survey was not exhaustive of all correctional systems and underreporting may have occurred in participating systems. However, the figure represents 2 percent of the cumulative total HIV/AIDS deaths reported in the United States through June 1994 (240,323). Twenty-one percent of reported inmate HIV/AIDS deaths occurred since the 1992–1993 NIJ/CDC survey.

Table 2

CUMULATIVE TOTAL AIDS DEATHS AMONG CORRECTIONAL INMATES AND THE POPULATION AT LARGE, U.S., 1985–1994

	Cumulative Correctional Deaths[a]		Cumulative Deaths in Total U.S. Population[b]	
	Number of Deaths	% Increase from Preceding Report	Number of Deaths	% Increase from Preceding Report
November 1985	325	N/A	8,000	N/A
October 1986	533	64%	16,500	106%
October 1987	865	62	24,412	48
October 1988	1,306	51	42,142	73
October 1989	1,423	9	65,467	55
October 1990	2,504	76	94,375	44
November 1992–March 1993	3,474	39	169,623	80
May–December 1994	4,588	32	240,323	42

[a]The figures in this table represent inmate AIDS deaths in the Federal prison system, all 50 State prison systems, and a *sample* of 28–37 large city and county jail systems (depending on the year of the survey).

[b]Adult/adolescent cases only. Pediatric cases excluded.

N/A: Not available.

Sources: CDC, *AIDS Weekly Surveillance Reports—U.S.*, November 4, 1985, October 5, 1986, October 5, 1987, October 3, 1988; CDC, *HIV/AIDS Surveillance Report*, November 1989, November 1990, February 1993 (cases reported through 1992), 1994 mid-year edition (cases reported through June 1994); NIJ/CDC Questionnaire Responses.

Table 3 shows that the distribution of cumulative total HIV/AIDS deaths across correctional systems is quite uneven. Forty-three State/Federal systems reported 3,870 total deaths. Six State/Federal systems reported more than 100 inmate HIV/AIDS deaths, and seven systems reported more than 50 deaths.

The NIJ/CDC survey captures data from all State correctional systems and the Federal Bureau of Prisons but includes only a relatively small number of city/county jail systems—in 1994, 29 jail systems submitted responses. The sample includes the largest U.S. jail systems but omits many others of substantial size. In 1994, 17 city/county jail systems in the NIJ/CDC survey reported a total of 718 inmate HIV/AIDS deaths. Only 1 of the jail systems reported more than 100 inmate deaths from HIV/AIDS, 1 reported 26–50 deaths, and 5 reported 11–25 deaths.

Additional data on HIV/AIDS deaths in jails come from the Annual Survey of Jails conducted by the Bureau of Justice Statistics. The most recently available statistics, for 1992, cover 503 jurisdictions with inmate populations in excess of 100. Thirty-seven of these jurisdictions with "large jail populations" reported 107 inmate AIDS deaths during 1992. This represents 24 percent of the 445 total inmate deaths reported by these jurisdictions to the BJS jail survey in 1992.[17]

Table 4 reveals that the regional distribution of total inmate HIV/AIDS deaths is also uneven, with the highest number

Table 3

DISTRIBUTION OF CUMULATIVE TOTAL INMATE AIDS DEATHS, U.S., 1994[a]

Range of Total AIDS Deaths	State/Federal Prison Systems (N=51) Number of Systems	%	Number of AIDS Deaths	%
0	8	16%	0	0%
1–3	9	18	17	0.5
4–10	10	20	60	2
11–25	7	12	136	4
26–50	4	8	174	4
51–100	7	14	557	14
> 100	6	12	2,926	76.5
Total	51	100	3,870	101[b]

Range of Total AIDS Deaths	City/County Jail Systems (N=29) Number of Systems	%	Number of AIDS Deaths	%
0	12	41%	0	0%
1–3	6	21	8	1
4–10	4	14	20	3
11–25	5	17	78	11
26–50	1	3	0	0
51–100	0	–	49	7
> 100	1	3	563	78
Total	29	99[b]	718	100

[a]The figures in this table represent the *minimum* number of correctional AIDS deaths to date, since the NIJ survey does *not* include every U.S. county jail system.

[b]Due to rounding.

Source: NIJ/CDC Questionnaire Responses.

Table 4

REGIONAL DISTRIBUTION OF CUMULATIVE TOTAL INMATE AIDS DEATHS, U.S. (Federal Prison System Excluded)[a]

Region	State Prison Systems (N=50) Total AIDS Deaths	%	City/County Jail Systems (N=29) Total AIDS Deaths	%
New England[b]	132	4%	1	0%
Middle Atlantic[c]	1,850	50	595	83
E.N. Central[d]	151	4	3	0.5
W.N. Central[e]	18	1	0	0
S. Atlantic[f]	851	20	53	7
E.S. Central[g]	85	2	2	–
W.S. Central[h]	241	7	4	0.5
Mountain[i]	52	1	1	–
Pacific[j]	396	11	59	8
Total	3,776	100	718	99[k]

[a]The regional divisions used in this table are standard geographic divisions and are not based on numbers of AIDS cases. The figures in this table represent the *minimum* number of correctional AIDS deaths to date, since the NIJ survey does not include every U.S. jail system.

[b]Maine, New Hampshire, Vermont, Massachusetts, Rhode Island, Connecticut.

[c]New York, New Jersey, Pennsylvania.

[d]Ohio, Indiana, Illinois, Michigan, Wisconsin.

[e]Minnesota, Iowa, Missouri, North Dakota, South Dakota, Nebraska, Kansas.

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

[g]Kentucky, Tennessee, Alabama, Mississippi.

[h]Arkansas, Louisiana, Oklahoma, Texas.

[i] Montana, Idaho, Wyoming, Colorado, New Mexico, Arizona, Utah, Nevada.

[j] Washington, Oregon, California, Alaska, Hawaii.

[k]Due to rounding.

Source: NIJ/CDC Questionnaire Responses.

of deaths in the Middle Atlantic region (principally New York and New Jersey).

Current Inmate AIDS Cases

Table 5 shows the distribution of current inmate AIDS cases across the reporting correctional systems. Forty-seven State and Federal prison systems reported 4,827 current cases, an increase of 59 percent over the 1992–1993 survey. This increase is less steep than might be expected given the change in the AIDS case definition that went into effect at the start of 1993. This may result from less aggressive testing and diagnostic services and less complete reporting of cases in correctional facilities than in the outside community. State and Federal prison systems reported a range of 0 to 2.4 percent of inmates having AIDS diagnoses. Jail systems reported 0 percent to 1.4 percent of inmates with AIDS.

Twenty-three city/county jail systems reported 452 current cases, an increase of 14 percent from 1992–1993. The distribution is quite uneven among State/Federal systems, with 22 percent of the systems reporting 83 percent of current cases. Fourteen percent of city/county systems reported 44 percent of current cases, a somewhat more even distribution.

AIDS Incidence Rates

The annual AIDS incidence rate in the U.S. in 1993 was 41 cases per 100,000 population. This was up sharply from 18 in 1992 due to the revised AIDS case definition. State incidence rates ranged from 2 cases per 100,000 in North Dakota to 96 cases per 100,000 in New York. Rates in metropolitan areas with populations in excess of 500,000 ranged from 6 in Youngstown, Ohio, to 288 in San Francisco.[18]

Table 5

DISTRIBUTION OF CURRENT INMATE AIDS CASES, U.S., 1994

Range of Current AIDS Cases	State/Federal Prison Systems (N=51)				City/County Jail Systems (N=29)			
	Number of Systems	%	Number of AIDS Cases	%	Number of Systems	%	Number of AIDS Cases	%
0	4	8%	0	0%	6	21%	0	0%
1–3	7	14	11	0	5	17	10	2
4–10	12	24	68	1	2	7	14	3
11–25	7	14	127	3	12	41	230	51
26–50	4	8	122	3	2	7	62	14
51–100	6	12	466	10	2	7	136	30
>100	11	22	4,033	83	0	0	0	0
Total	51	102	4,827	100	29	100	452	100

Percentages may not add up to 100 percent due to rounding.

Source: NIJ/CDC Questionnaire Responses.

Not surprisingly, AIDS incidence rates are higher among correctional inmates than in the total population. This is because of the high concentrations in correctional populations of persons with risk factors for HIV infection. Incidence rates in correctional systems vary widely, reflecting the uneven distribution of actual cases, as well as divergent diagnostic and reporting practices across systems.

In State/Federal systems, the aggregate AIDS incidence rate (i.e., based on the total number of cases and the total inmate populations across all systems) was 518 cases per 100,000, up from 362 cases in 1992–1993.[19] The median incidence rate for State/Federal prison systems was 186 AIDS cases per 100,000 inmates, with a range of 0 to 2,375 cases.

The aggregate incidence rate for reporting city/county jail systems was 706 cases per 100,000 inmates. The median incidence rate was 289 cases, with a range of 0 to 1,416 cases. However, the high turnover rates of jail inmates make these incidence rates difficult to interpret.

HIV Seroprevalence Among Correctional Inmates

Mandatory HIV screening (mandatory, identity-linked testing of all incoming, current, or about-to-be-released inmates) and blinded epidemiologic studies both capture populations uninfluenced by selection biases. Therefore, statistics based on these two methods are probably the most reliable estimates of HIV seroprevalence among correctional inmates.

The Bureau of Justice Statistics (BJS) develops national estimates of HIV seropositivity rates among inmates based on reports from systems with varying testing policies. The BJS estimate for 1993 is 2.4 percent.[20] As noted in previous updates, composite estimates based on data drawn from systems with different policies may be of suspect accuracy.

Tables 6 and 7 present available HIV seroprevalence data from mandatory testing and blinded studies. Table 8 provides data based on voluntary/on-request and other categories of testing. In general, these figures show that, as in previous *Updates*, HIV seroprevalence rates vary widely from system to system. Most systems continue to have rates of 1 percent or below, and a few systems have rates as high as 20–26 percent (females in New York State and New York City).[21] Jurisdictions with rates of inmate HIV seropositivity of over 5 percent based on mandatory screening or blinded studies include New Jersey, Massachusetts, Florida, Cook County (Chicago), and Illinois (females only). Systems with rates between 2 and 5 percent include California, Texas, Georgia, North Carolina, and King County (Seattle).

In most systems with data available for more than one period, HIV seroprevalence rates are most often stable or, in a few cases, declining. There do not appear to be any geographic patterns. The following jurisdictions reveal stable inmate HIV seroprevalence rates: Texas, Illinois, Georgia, Michigan, Missouri, Oregon, Alabama, Colorado, Tennessee, Nebraska, Oklahoma, Arkansas, Hawaii, and Rhode Island.

Declines in HIV seroprevalence based on blinded studies occurred in New York State (among males from 17 percent in 1987–1988 to 15 percent in 1990 [p=.01] to 11.5 percent in 1992 [p=.01]) and Florida (among females from 24 percent in 1992 to 11 percent in 1993). Based on mandatory testing programs, HIV seroprevalence dropped from 2.4 percent to 1.4 from 1990–1992 to 1994 in Nevada, and among females in New Hampshire from 7 percent in 1989–1990 to 3 percent in 1992 to 2 percent in 1993. Based on voluntary testing in Massachusetts, seropositivity among females dropped from 23 percent in 1987–1989 to 9 percent in 1991 to 5 percent in 1993, and among males from 10 percent to 6 percent to 2 percent over the same intervals.

There were a few increases in HIV seroprevalence. Rates among incoming male inmates in New Hampshire increased from 0.5 percent in 1989–1990 to 1.3 percent in 1992 to 2.2 percent in 1993. In Louisiana, based on blinded studies, HIV seroprevalence among males rose from 0.3 percent in 1990–1991 to 1.9 percent in 1992–1994.

Comparisons of HIV seropositivity rates from mandatory screening or blinded studies on the one hand and voluntary testing on the other are mixed. In New York State, blinded studies of incoming male and female inmates found higher rates of HIV seropositivity than did on-request testing (15 percent versus 7.5 percent for males, 20 percent versus 13.4 percent for females).[22] Similarly, in Massachusetts, HIV seroprevalence rates from a blinded study (7 percent for males and 13 percent for females) were higher than seropositivity rates from voluntary testing (2 percent for males and 5 percent for females). These discrepancies may reflect reluctance on the part of persons who know they are at risk to "get the bad news" and/or fear that HIV status would be disclosed and lead to discrimination or mistreatment of persons with HIV.

Conversely, HIV seropositivity rates were higher based on voluntary testing than on blinded studies in Rhode Island

Table 6

HIV SEROPREVALENCE DATA FROM MANDATORY MASS SCREENING OF INMATES

Inmates Tested	Correctional System	Dates	Number Tested	Number Seropositive	% Seropositive
All Incoming Inmates	Alabama	10/89–10/90	7,306 M+F	88 M+F	1.2% M+F
		8/85–1994	67,666 M+F	581 M	0.9 M+F
				54 F	
	Colorado	10/89–10/90	3093 M	20 M	0.6 M
			358 F	1 F	0.3 F
		1/92–12/94	17,434 M	85 M	0.5 M
			1,484 F	6 F	0.4 F
	Georgia	7/89–5/90	20,435 M+F	561 M+F	2.7 M+F
		1/93–12/93	17,045 M+F	413 M	2.8 M+F
				71 F	
	Idaho	1986–1992	13,010 M	43 M	0.3 M
			1,440 F	5 F	0.3 F
		7/93–6/94	1,380 M	5 M	0.3 M
			120 F	0 F	0.0 F
	Iowa	11/87–10/90	13,434 M+F	26 M+F	0.2 M+F
		7/93–5/94	3,882 M+F	1 M+F	0.03 M+F
	Michigan	4/90–2/91	22,669 M[a]	378 M	1.7 M
		4/90–2/91	5,510 M[b]	18 M	0.3 M
		4/90–2/91	1,895 F	42 F	2.2 F
		10/93–9/94	12,505 M	143 M	1.1 M
			877 F	14 F	1.6 F
	Missouri	1985–10/90	24,284 M+F	127 M+F	0.5 M+F
		1/87–4/94	59,736 M+F	293 M+F	0.5 M+F
	Nebraska	3/87–10/90	6,426 M+F	21 M+F	0.3 M+F
		3/87–12/92	10,756 M	35 M	0.3 M
			448 F	8 F	1.8 F
		3/87–5/94	15,024 M+F	57 M+F	0.4 M+F
	Nevada	1990–1992	7,100 M+F	167 M+F	2.4 M+F
		1/94–3/94	838 M	8 M	1.0 M
			66 F	5 F	7.6 F
	New Hampshire	1/87–9/89	1,760 M	9 M	0.5 M
		10/89–10/90	92 F	6 F	6.5 F
		1/92–9/92	838 M	11 M	1.3 M
			382 F	12 F	3.1 F
		1/93–11/93	911 M	20 M	2.2 M
			500 F	10 F	2.0 F
	North Dakota	1/92–12/92	408 M	0 M	0.0 M
			20 F	1 F	5.0 F
	Oklahoma	6/87–11/90	19,120 M	51 M	0.3 M
			2,346 F	3 F	0.1 F
		4/87–12/92	31,221 M	184 M	0.6 M
			4,103 F	12 F	0.3 F
		4/87–5/94	40,422 M	243 M	0.6 M
			5,355 F	17 F	0.3 F

Table 6 (continued)

HIV SEROPREVALENCE DATA FROM MANDATORY MASS SCREENING OF INMATES

Inmates Tested	Correctional System	Dates	Number Tested	Number Seropositive	% Seropositive
	Rhode Island	11/91–12/92	8,225 M	227 M	2.8% M
			775 F	62 F	8.0 F
		?–1994	38,135 M+F	1,351 M+F	3.5 M+F
	Utah	7/89–11/90	4,000 M	33 M	0.8 M
			231 F	6 F	2.6 F
		1/92–12/92	3,000 M	15 M	0.5 M
			500 F	0 F	0.0 F
	Wyoming	1/90–10/90	181 M	1 M	0.6 M
			46 F	0 F	0.0 F
All Current Inmates	Mississippi	7/89–10/89	7,743 M	78 M	1.0 M
			310 F	7 F	2.3 F
All Inmates at Release	Alabama	1987–1989	25,321 M+F	2 M	0.008M+F
				0 F	
		?–1994	48,654 M+F	4 M	0.01 M+F
				1 F	
	Missouri	1985–10/90	16,435 M+F	33 M+F	0.2 M+F
		1/87–4/94	40,264 M+F	13 M	0.03 M+F
				0 F	
	Nevada	1/90–12/92	6,265 M+F	9 M	0.1 M+F
				0 F	
		1/94–3/94	589 M	0 M	0.0 M
			27 F	0 F	0.0 F
	Wyoming	7/90	34 M	0 M	0.0 M

[a] Males 24 or more years old.

[b] Males 18–24 years old.

Source: NIJ/CDC Questionnaire Responses.

(both males and females), Florida (females only, male rates were similar), Rhode Island, and Washington (males only, female rates were similar). In these jurisdictions, inmates who believed they were at elevated risk were, for whatever reason, more willing to come forward for testing.

As in previous reports, HIV seroprevalence is often higher among female inmates than among male inmates. This pattern seems most common in the Northeast, where New York City, New York State, New Jersey, Massachusetts, Connecticut, and Rhode Island all report higher rates for females than males. As discussed below, this may be due to the high prevalence of injection drug and crack use among female inmates in these States. Elsewhere, HIV seroprevalence is higher among females than among males (Florida, Illinois, Cook County [Chicago], Nevada, California, and Washington State).

Characteristics of Inmates with HIV/AIDS

Gender. The vast majority of inmate AIDS deaths and current AIDS cases continues to be among men. Ninety-six percent of cumulative AIDS deaths and 91 percent of

Table 7

HIV SEROPREVALENCE DATA FROM BLINDED EPIDEMIOLOGIC STUDIES OF INMATES[a]

Correctional System	Dates	Number Tested	Number Seropositive	% Seropositive
Arkansas	7/90	698 M	6 M	0.9% M
		23 F	0 F	0.0 F
	2/92–11/92	1,500 M	8 M	0.5 M
		300 F	3 F	1.0 F
California	1/88–5/88[b]	5,372 M	137 M	2.6 M
	(All incoming)	807 F	25 F	3.1 F
Florida	1/88–1/89	900 M	53 M	5.9 M
		281 F	22 F	7.8 F
Hawaii	1/88–10/90	2,327 M	22 M	0.9 M
		142 F	0 F	0.0 F
	3/88–3/92	3,010 M	33 M	1.1 M
		273 F	0 F	0.0 F
	1/88–6/93	3,586 M	45 M	1.3 M
		314 F	1 F	0.3 F
Illinois[c]	1988	808 M	27 M	3.3 M
	4/89–6/89	501 M	20 M	4.0 M
	1/91–12/91	989 M	41 M	4.1 M
		880 F	50 F	5.7 F
Louisiana	1/90–12/91	2,000 M	6 M	0.3 M
	6/92–8/94	1,000 M	19 M	1.9 M
Massachusetts	1/92–6/92	1,890 M	137 M	7.2 M
		306 F	40 F	13.1 F
New Jersey	9/91–10/91	1,100 M	99 M	9.0 M
		100 F	15 F	15.0 F
New York (State)	12/87–1/88[d]	494 M	84 M	17.0 M
	1990	563 M	84 M	15.0 M
	1992[e]	2,532 M	292 M	11.5 M
	9/88–12/88	480 F	90 F	18.8 F
	1992–93[e]	872 F	177 F	20.3 F
North Carolina	11/89–4/90	7,942 M	238 M	3.0 M
		784 F	36 F	4.6 F
Oregon	9/90–10/90	437 M	4 M	0.9 M
		76 F	0 F	0.0 F
	9/90–6/92	2,035 M	23 M	1.1 M
		853 F	6 F	0.7 F
	?–1994	3,176 M	27 M	0.9 M
		1,421 F	18 F	1.3 F
South Carolina[f]	4/88–6/88	457 M	8 M	1.7 M
		3 F	0 F	0.0 F

Table 7 (continued)

HIV SEROPREVALENCE DATA FROM BLINDED EPIDEMIOLOGIC STUDIES OF INMATES

Correctional System	Dates	Number Tested	Number Seropositive	% Seropositive
Tennessee	7/88–8/90	4,461 M	52 M	1.2% M
		448 F	1 F	0.2 F
	7/88–1/92	9,810 M+F	126 M+F	1.3 M+F
Texas	9/89–10/89	1,226 M+F	30 M+F	2.4 M+F
	10/90–12/90	986 M	26 M	2.6 M
		279 F	11 F	3.9 F
	?–?	1,441 M	45 M	3.1 M
		502 F	19 F	3.8 F
Virginia[g]	6/89–8/89	1,287 M	30 M	2.3 M
Washington	8/87–1/88	796 M	5 M	0.6 M
	3/91–5/91	500 M	1 M	0.2 M
	3/87–12/91	1,296 M	1 M	0.08 M
		236 F	6 F	2.5 F
Los Angeles County, California	10/90	400 M	11 M	2.8 M
		100 F	1 F	1.0 F
Quebec, Canada	12/87–10/90	520 M	44 M	8.5 M
		248 F	19 F	7.7 F
Cook County, Illinois	11/89–12/89	372 M	23 M	6.2 M
		100 F	8 F	8.0 F
New York City, New York	9/89	1,690 M	272 M	16.1 M
		546 F	140 F	25.6 F
	1/91–2/91	2,061 M	262 M	12.7 M
		519 F	116 F	22.4 F
King County (Seattle), Washington	9/90–12/91	214 M	9 M	4.2 M
		24 F	1 F	4.2 F

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

[b] J. A. Singleton et al., "HIV Seroprevalence Among Prisoners Entering the California Correctional System," California Department of Health Services, January 1989.

[c] Illinois Department of Corrections and Abt Associates Inc., unpublished data.

[d] B. I. Truman et al., "HIV Seroprevalence and Risk Factors Among Prison Inmates Entering New York State Prisons," presented at the Fourth International AIDS Conference, Stockholm, June 1988.

[e] J. Mikl, P. F. Smith, and R. B. Greifinger, "HIV Seroprevalence Among New York State Prison Inmates Entering the Bedford Hills, Downstate, and Ulster Correctional Facilities, August 1992–February 1993," presented at the Ninth International Conference on AIDS, Berlin, June 1993.

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

[g] Commonwealth of Virginia, Department of Corrections, "HIV Seropositivity Study," October 1989.

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

current inmate AIDS cases in 1993 have been among males. Aggregate AIDS incidence rates in State/Federal systems were 464 cases per 100,000 among men and 705 cases among women. In responding city/county jail systems, the rates were 342 cases per 100,000 among men and 201 cases among women. As discussed above, HIV seroprevalence is very often higher among female than among male inmates.

Incarceration rates are rising faster among women than among men, and women in prisons and jails are more likely to be drug users than are male inmates. Economic dependency, injection drug use, crack use, and associated increases in unsafe sexual practices (e.g., exchanging sex for drugs and/or money) have placed many women at elevated risk for HIV/AIDS. Recent studies of incarcerated women in New York and Massachusetts confirm the correlates of high rates of HIV infection. In New York, a study of 216 women who agreed to voluntary testing (29, or 13 percent, of whom were HIV seropositive) found that injection drug use was the most significant predictor of HIV seropositivity, with drug injection in a shooting gallery further increasing the likelihood of being HIV seropositive.[23]

A study of 87 women recruited through the infectious disease clinic at Massachusetts Correctional Institution, Framingham, (70 percent of whom were HIV seropositive) explored a broader range of potential correlates than did the New York study. The Massachusetts study found that injection drug use, commercial sex work, a history of childhood sexual abuse, and a history of genital or anal warts were all predictive of HIV seropositivity. Perhaps the most important finding of this study is the strong association between sexual abuse and risk-taking behaviors related to HIV.[24] These findings indicate the importance of incorporating counseling for survivors of sexual abuse in HIV prevention programs for women. (This is discussed further in chapter 2.)

Racial/Ethnic Groups. Different correctional systems supplied various combinations of AIDS case statistics to the 1994 NIJ/CDC survey, including cases among current inmates, released inmates, and inmates who died of AIDS while incarcerated. Combining these statistics reveals the following median racial/ethnic breakdowns of AIDS cases in responding State/Federal systems: 43 percent black, 38 percent white, and 13 percent Hispanic. This compares with the following distribution among total cumulative AIDS cases in the U.S. population: 50 percent white, 32 percent black, and 17 percent Hispanic. The disproportionality in the total U.S. population is thus primarily between whites and blacks. The difference is even more striking in city/county systems where the median distributions are 58 percent black, 15 percent white, and 14 percent Hispanic.

Data from some systems independent of the NIJ/CDC survey also reveal disproportional distributions of cases by racial and ethnic groups, but with some differences. Of cases reported in the total New York State population through March 1994, 32 percent were among whites, 39 percent among blacks, and 28 percent among Hispanics. Among New York State inmate cases, 12 percent were among whites, 40 percent among blacks, and 47 percent among Hispanics.[25] The most striking difference in these New York State figures is the overrepresentation of Hispanics among inmates with AIDS. This overrepresentation of Hispanics among New York inmate cases may reflect the large Puerto Rican component of the Hispanic inmate population. This population has particularly high rates of HIV infection due to the movement of injection drug users back and forth between Puerto Rico and New York City communities, reinforcing the already high levels of HIV infection in these communities.

Exposure Categories. The NIJ/CDC survey does not seek breakdowns of AIDS cases by exposure categories. Efforts to obtain this information in previous years' surveys have been largely unsuccessful. However, data from some other sources indicate that injection drug use may be the predominant exposure category in inmate AIDS cases. Among New York State inmate cases reported through March 1994, 93 percent were attributed to injection drug use.[26] Studies in New York City and Maryland have also shown injection drug use to be the primary inmate exposure category.[27] Nationwide HIV testing data suggest increasing rates of infections due to heterosexual contact and other unprotected sex, especially among women. These patterns may begin to be reflected in correctional populations.

HIV Transmission Among Correctional Inmates

HIV transmission among correctional inmates remains a matter of serious concern. Indisputably, sex, injection drug use, and tattooing are occurring in prisons and jails regardless of prohibitions against all of these activities.

Condoms are not officially available to inmates in most correctional systems. In the absence of condoms, inmates may use and reuse expedients such as fingers cut from latex surgical gloves.[28]

Rape and other forms of nonconsensual sex are particularly serious issues demanding serious responses from correctional systems, independent of the issue of HIV transmis-

sion. While there is little systematic data on the incidence of rape behind bars, one advocate has asserted that 131,000 adult males are sexually victimized in correctional facilities each year.[29] In the spring of 1994, a series of investigative articles on rape in Massachusetts prisons prompted the State's Department of Correction to institute new procedures for identifying and investigating alleged rape incidents. This included training for all correctional officers, counselors, and medical staff.[30]

Some members of the Massachusetts State legislature and others have called for mandatory HIV testing as a response to the revelations regarding prison rape. In reality, however, rape and HIV are separate issues requiring independent responses.[31]

Research from Britain suggests that injection drug use is less common in prisons than on the outside but considerably more risky, because the very shortage of needles that reduces prevalence of use also increases sharing. Moreover, risk is exacerbated by inmates' often limited understanding of "sharing." In reality, sharing includes not only passing needles among people, but also using needles and syringes that have been used by persons not present, and perhaps not properly cleaned; sharing injection solutions (as in "backloading" and "frontloading"); and sharing containers, cotton, and other paraphernalia.[32] When needles are not available, pieces of pens and light bulbs are sometimes used by inmates to inject drugs.[33]

Tattooing is a common practice in prisons and jails, and it is often done with guitar strings and other expedient materials given the shortage of sterile needles. In tattooing, sharing of the needle or needle substitute, ink, and string used to transmit the ink may pose risks for HIV transmission.[34]

The only controlled study to date of HIV transmission in correctional facilities was carried out among male inmates in the Illinois Department of Corrections between 1988 and 1990. Of almost 2,400 inmates HIV seronegative on entry to the system (in an attempt to exclude "window period" infections, only inmates who had spent at least three months in a county jail prior to entering the State system were eligible for the study), seven had documented HIV seroconversions after one year of incarceration. This represents an annual incidence rate of 0.3 percent.[35] Several other U.S. studies with varying methodologies involving baseline and follow-up testing have found annual seroconversion rates of less than 1 percent.[36] While these are low rates, they nevertheless demonstrate that transmission has occurred and, when applied to total inmate populations, result in nontrivial numbers of in-prison HIV infections. Based on a model developed by researchers in Australia, annual HIV seroconversion rates among injection drug users in prison may range from 1.7 percent to 3.3 percent, depending on the assumed frequency of shared injections.[37]

Several other studies in the United States and Australia have identified cases of HIV infection by testing inmates continuously incarcerated since before the supposed appearance of HIV in the population.[38] The American study comes from the Florida State correctional system, where 87 of 556 inmates continuously incarcerated since 1977 had been voluntarily tested for HIV antibody and 18 were positive. This represents a seropositivity rate of 21 percent on the basis of the number tested.[39] This is quite a high rate. However, it is important to note that it may represent a self-selected sample of those who sought testing because they felt at risk for HIV infection due to their behaviors in prison. In any case, only 16 percent of those continuously incarcerated since 1977 were tested. Annual HIV seroconversion rates based on total numbers of inmates susceptible (that is, entering seronegative) and years of potential exposure would no doubt be much lower. The article does not present the data necessary to calculate annual seroconversion rates for the entire Florida inmate population. In general, it is equally important to avoid understating and, as the Florida article seems to do, overstating the problem of HIV transmission in correctional facilities.

A Scottish study found evidence of HIV acquisition among prisoners who admitted to injecting drugs while in prison.[40]

STD Testing Results

This year, for the first time, the NIJ/CDC survey sought statistics on STD testing results. As discussed above, STDs have often been found to be correlates of HIV infection, since HIV and other STDs share many risk factors. Statistics for syphilis, gonorrhea, and chlamydia testing are presented in tables 9–11. The statistics are divided into those based on routine testing (routine testing generally means that everyone is tested unless they specifically refuse) and those based on other testing policies, as specified. However, some of the high positivity percentages provided under routine testing indicate that in these instances, more selective populations were tested, such as individuals with symptoms or those convicted of sexual offenses. Results based on routine testing should be more reflective of the total inmate population, if they in fact reflect real "routine" testing of the entire inmate population.

Table 8

HIV SEROPREVALENCE DATA BASED ON OTHER TESTING CRITERIA

Inmates Tested	Correctional System	Dates	Number Tested	Number Seropositive	% Seropositive
Voluntary (Made Available to All)	Arkansas	1/92	125 M 10 F	1 M 0 F	0.8% M 0.0 F
	Colorado	1/92–11/92	1,580 M 122 F	1 M 0 F	0.0 M 0.0 F
	Connecticut	1/93–12/93	3,942 M 616 F	204 M 53 F	5.2 M 8.6 F
	Florida	7/92–9/92	3,491 M 257 F	236 M 61 F	6.8 M 23.7 F
		1/93–12/93	1,102 F	119 F	10.8 F
	Indiana	10/93–12/93	2,000 M+F	15 M+F	0.8 M+F
	Kansas	7/93–5/94	843 M+F	6 M+F	0.7 M+F
	Massachusetts (State prisons)	10/87–10/89	2,401 M 429 F	231 M 98 F	9.6 M 22.8 F
		1/91–12/91	2,425 M 337 F	141 M 29 F	5.8 M 8.6 F
		1/93–12/93	2,355 M 735 F	43 M 33 F	1.8 M 4.5 F
	Minnesota	11/87–12/92	7,500 M 200 F	60 M 2 F	0.8 M 1.0 F
	Montana	11/91–10/92	229 M 50 F	2 M 0 F	0.9 M 0.0 F
	New Mexico	10/88–10/89	1,818 M 145 F	9 M 0 F	0.5 M 0.0 F
		1/90–9/92	3,980 M 150 F	6 M 1 F	0.2 M 0.7 F
		7/93–6/94	2,453 M 272 F	9 M 3 F	0.4 M 1.1 F
	Ohio	1/90–12/90[b]	4,409 M 198 F	68 M 2 F	1.5 M 1.0 F
		1/93–12/93	17,253 M 1,484 F	201 M 20 F	1.2 M 1.3 F
	Oregon	11/88–10/89	354 M 76 F	3 M 2 F	0.8 M 2.6 F
	Rhode Island[C]	10/89–3/90	4,110 M 264 F	160 M 32 F	3.9 M 12.1 F
	Texas	1/91–12/91	5,684 M 1,712 F	418 M 67 F	7.4 M 3.9 F
		?–4/94	50,746 M 12,423 F	2,825 M 420 F	5.6 M 3.4 F
	Washington	10/85–4/94	7,152 M 452 F	125 M 10 F	1.7 M 2.2 F

Table 8 (continued)

HIV SEROPREVALENCE DATA BASED ON OTHER TESTING CRITERIA

Inmates Tested	Correctional System	Dates	Number Tested	Number Seropositive	% Seropositive
	Wisconsin	1/93–12/93	5,634 M 380 F	25 M 1 F	0.4% M 0.3 F
	West Virginia	10/89–10/90	257 M 0 F	0 M 0 F	0.0 M 0.0 F
	Alameda County, California	?–9/94	191 M 265 F	42 M 8 F	22.0 M 3.0 F
	San Francisco, California	4/93–5/94	413 M 137 F	43 M 22 F	10.4 M 16.1 F
	Orange County, California	6/93–6/94	922 M 1,103 F	13 M 15 F	1.4 M 1.4 F
	Fulton County, (Atlanta), Georgia	1/94–3/94	1,010 M 114 F	72 M 4 F	7.1 M 3.5 F
	Cook County (Chicago), Illinois	1/92–12/93	4,562 M 805 F	384 M 48 F	8.4 M 6.0 F
	Suffolk County (Boston), Massachusetts	11/88–11/89 1/92–11/92	364 M 149 M 14 F	59 M 7 M 2 F	16.2 M 4.7 M 14.3 F
	Hennepin (Minneapolis), Minnesota	5/93–4/94 11/93–6/94	88 M 11 F 64 M 5 F	2 M 1 F 1 M 0 F	2.2 M 9.1 F 1.6M 0.0 F
	Philadelphia, Pennsylvania	1/93–12/93	1,164 M 87 F	96 M 3 F	8.2 M 3.4 F
	Harris County (Houston), Texas	7/87–10/89 1/92–9/92	1,048 M 1,070 F 1,941 M 1,118 F	163 M 48 F 187 M 71 F	15.6 M 4.5 F 9.6 M 6.4 F
Voluntary and Clinical Indications	Maine	1/93–6/94	1,067 M 20 F	4 M 0 F	0.4 M 0.0 F
	South Carolina	1994	3,217 M+F	204 M+F	6.3 M+F
	Sacramento County, California	5/94	45 M 18 F	0 M 0 F	0.0 M 0.0 F
	Baltimore City, Maryland	6/94	35 M 1 F	17 M 1 F	48.6 M 100.0 F
	Marion County	1/92–12/92	63 M	5 M	7.9 M

Table 9

SYPHILIS TESTING DATA, 1993–1994[a]

Testing Policy	Correctional System	Number Tested	Number Positive	% Positive
Routine	Arizona	9,690 M+F	204 M+F	2.1% M+F
	Connecticut	11,781 M 3,412 F	943 M 580 F	8.0 M 17.0 F
	Georgia	23,512 M+F	1,187 M+F	5.0 M+F
	Iowa	4,162 M+F	15 M+F	0.4 M+F
	Kentucky	4,941 M	6 M	0.1 M
	Maryland	8,942 M 1,003 F	102 M 53 F	1.1 M 5.3 F
	Massachusetts	1,020 F	68 F	6.7 F
	Mississippi	4,001 M 370 F	116 M 5 F	2.9 M 1.4 F
	Missouri	10,846 M 1,189 F	185 M 122 F	1.7 M 10.3 F
	Montana	1,004 M	0 M	0.0 M
	New Hampshire	911 M 500 F	8 M 11 F	0.9 M 2.2 F
	New Mexico	3,347 M	52 M	1.6 M
	Oregon	5,421 M 512 F	137 M 3 F	2.5 M 0.6 F
	South Carolina	13,620 M+F	1,064 M+F	7.8 M+F
	South Dakota	695 M 84 F	8 M 0 F	1.1 M 0.0 F
	Texas	30,363 M 2,001 F	584 M 123 F	1.9 M 6.1 F
	West Virginia	372 M 20 F	1 M 0 F	0.3 M 0.0 F
	Wisconsin	527 F	9 F	1.7 F
	Wyoming	240 M	2 M	0.8 M
	Fulton County (Atlanta), Georgia	750 M 248 F	54 M 24 F	7.2 M 9.7 F
	Cook County (Chicago), Illinois	61,079 M 8,416 F	1,676 M 872 F	2.7 M 10.4 F
	Philadelphia, Pennsylvania	15,647 M 2,110 F	523 M 220 F	3.3 M 10.4 F
	Harris County (Houston), Texas	1,672 M+F	211 M+F	12.6 M+F

Table 9 (continued)

SYPHILIS TESTING DATA, 1993–1994

Testing Policy	Correctional System	Number Tested	Number Positive	% Positive
Clinical Indications and on Request	Alameda County (Oakland), California	367 M 68 F	10 M 2 F	2.7% M 2.9 F
	Orange County, California	650 M 1,103 F	7 M 71 F	1.1 M 6.4 F
	Marion County (Indianapolis), Indiana	243 M	4 M	1.6 M
	Suffolk County (Boston), Massachusetts	2,157 M 266 F	121 M 34 F	5.6 M 12.8 F

[a] Statistics were requested for the 12 months prior to the survey.

Source: NIJ/CDC Questionnaire Responses.

As with HIV, these figures reveal a wide range of positivity rates for STDs among inmates. For syphilis, rates range from 0 percent to 17 percent (females in Connecticut). Rates tend to be higher in the Northeast, Middle Atlantic, and South and are often higher in women than in men.

Gonorrhea positivity rates based on routine testing range from 0 percent to 32.5 percent (Broward County, Florida). Rates are highest in the South. Fewer statistics are available for chlamydia. Positivity rates based on routine testing range from less than 1 percent to 4 percent (Massachusetts). Only a few systems reported the results of testing for pelvic inflammatory disease (PID). The contrast between the Northeast and the Midwest was manifest here again, as the PID positivity rate was 8 percent in Massachusetts and 0 percent in South Dakota.

Endnotes

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2. CDC, "Update: Impact of the Expanded AIDS Surveillance Case Definition for Adolescents and Adults on Case Reporting United States, 1993," *Morbidity and Mortality Weekly Report (MMWR)* 43 (March 11, 1994): 160–161, 167–170.
3. CDC, *HIV/AIDS Surveillance Report, 1994* 5, no. 4: table 3, p. 8.
4. CDC, *HIV/AIDS Surveillance Report, 1994* 6, no. 1: table 3, p. 8; CDC, "Update: AIDS United States, 1989," *MMWR* 39 (1990): 81–86; CDC, "HIV Prevalence Estimates and AIDS Case Projections for the United States: Report Based Upon a Workshop," *MMWR* 39, no. RR-16 (November 30, 1990); CDC, "Projections of the Number of Persons Diagnosed With AIDS and the Number of Immunosuppressed HIV-Infected Persons, United States, 1992–1994," *MMWR* 41, no. RR-18 (December 25, 1992).
5. D. C. Des Jarlais, N. S. Padian, and W. Winkelstein, "Targeted HIV-Prevention Programs," *New England Journal of Medicine* 331 (November 24, 1994): 1451–1453.
6. B. R. Edlin et al., "Intersecting Epidemics: Crack Cocaine Use and HIV Infection Among Inner-City

Table 10

GONORRHEA TESTING DATA, 1993–1994[a]

Testing Policy	Correctional System	Number Tested	Number Positive	% Positive
Routine	Georgia	3,964 M+F	409 M+F	10.3% M+F
	Iowa	381 M+F	7 M+F	1.8 M+F
	Maryland	1,003 F	3 F	0.3 F
	Massachusetts	1,020 F	41 F	4.0 F
	Mississippi	317 F	5 F	1.6 F
	Oregon	503 F	4 F	0.8 F
	South Carolina	12,618 M+F	230 M+F	1.8 M+F
	South Dakota	84 F	0 F	0.0 F
	Wisconsin	527 F	3 F	0.6 F
	Broward County, Florida	400 M 200 F	130 M 65 F	32.5 M 32.5 F
	Cook County (Chicago), Illinois	59,808 M	1,099 M	1.8 M
Clinical Indications and on Request	Iowa	381 M+F	7 M+F	1.8 M+F
	Marion County (Indianapolis), Indiana	243 M	43 M	17.7 M
Clinical Indications	Arizona	1,080 M+F	3 M+F	0.3 M+F
	Suffolk County (Boston), Massachusetts	150 M 100 F	100 M 25 F	66.7 M 25.0 F

[a] Statistics were requested for the 12 months prior to the survey.

Source: NIJ/CDC Questionnaire Responses.

Young Adults," *New England Journal of Medicine* 331 (November 24, 1994): 1422–1427.

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8. CDC, *HIV Counseling and Testing Data System: National Profile*, 1993.

9. CDC, "Heterosexually Acquired AIDS, United States, 1993," *MMWR* 43 (March 11, 1994): 155–160.

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12. Knox, "Awareness of AIDS Low," pp. 1, 36.

13. Edlin et al., "Intersecting Epidemics."

14. Knox, "Awareness of AIDS Low," pp. 1, 36.

15. CDC, *HIV/AIDS Surveillance Report 1994* 5, no. 4: table 16, p. 19.

Table 11

CHLAMYDIA TESTING DATA, 1993–1994[a]

Testing Policy	Correctional System	Number Tested	Number Positive	% Positive
Routine	Georgia	30 M	1 M	3.3%M
	Iowa	381 M+F	2 M+F	0.5 M+F
	Massachusetts	1,020 F	45 F	4.4 F
	Oregon	748 F	6 F	0.8 F
	South Dakota	84 F	1 F	1.2 F
	Wisconsin	527 F	9 F	1.7 F
Clinical Indications and on Request	South Carolina	195 M 102 F	6 M 5 F	3.1 M 4.9 F
	Alameda County (Oakland), California	57 F	2 F	3.5 F
	Harris County (Houston), Texas	76 M	5 M	6.6 M
Clinical Indications	Arizona	117 M+F	3 M+F	2.6 M+F
	Kentucky	26 M	1 M	3.8 M

[a] Statistics were requested for the 12 months prior to the survey.

Source: NIJ/CDC Questionnaire Responses.

16. Dr. Linda Martin, HIV Activity, National Institute on Occupational Safety and Health, Centers for Disease Control and Prevention, personal communication, February 2, 1995.

17. U.S. Department of Justice, Bureau of Justice Statistics, "Jail Inmates 1992" (Washington, D.C.: August 1993), table 16, p. 8.

18. CDC, *HIV/AIDS Surveillance Report 1994* 5, no. 4: tables 1–2, pp. 5–7. The annual incidence rate per 100,000 is a standard measure used to facilitate comparisons. The annual incidence rate is calculated as follows: total number of cases reported during 1993 x 100,000 ÷ total U.S. population.

19. Incidence rates for correctional populations were calculated as follows: current AIDS cases x 100,000 ÷ current inmate population. Current cases may be less than the total number of cases reported during the year, thus producing slightly understated incidence rates. However, most correctional systems do not maintain data on AIDS cases by year reported.

20. P. M. Brien and C. W. Harlow, "HIV in Prisons and Jails, 1993," (Bureau of Justice Statistics, draft bulletin, July 1995).

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23. Ibid.

24. J. Stevens, S. Zierler, V. Cram, D. Dean, K. H. Mayer, and A. S. De Groot, "Risks for HIV Infection in Incarcerated Women," submitted for publication, 1994.

25. New York State Department of Health, Bureau of HIV/AIDS Epidemiology, "AIDS Surveillance Quarterly Update, for Cases Reported Through March 1994," tables 2A and 3A.

26. Ibid., table 3A.

27. D. F. Vlahov et al., "Temporal Trends of HIV-1 Infection Among Inmates Entering a Statewide Prison System, 1985–1987," *Journal of the Acquired Immune Deficiency Syndromes* 2 (1989): 283–290; I. B. Weisfuse et al., "HIV-1 Infection Among New York City Inmates," *AIDS* 5 (1991): 1133–1138.

28. N. Mahon, "Let's Talk About Sex and Drugs: HIV Transmission and Prevention Behind Bars," Abstract PD0521 presented at the Tenth International Conference on AIDS, Yokohama, Japan, August 1994.

29. Stephen Donaldson, "Rape of Incarcerated Males in the U.S.A.: A Preliminary Statistical Look" (5th edition, April 1994); see also R. W. Dumond, "The Sexual Assault of Male Inmates in Incarcerated Settings," *International Journal of the Sociology of Law* 20 (1992): 135–157.

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32. P. J. Turnbull, G. V. Stimson, and G. Stilwell, *Drug Use in Prison* (Horsham, West Sussex, U.K.: AVERT, 1994), 57–58.

33. Mahon, "Let's Talk About Sex and Drugs."

34. Interviews with staff in facilities in the Federal Bureau of Prisons (Metropolitan Correctional Center, Miami), November 12, 1994, and Vermont Department of Correction (Northwest State Correctional Center, Swanton), November 8, 1994.

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Chapter 2

HIV and STD Education and Behavioral Interventions

The Importance of Comprehensive Correctional HIV/STD Prevention Programs

It has become a commonplace that prisons and jails are important settings for HIV/STD education and prevention efforts, because of the high concentrations among inmates of persons with histories of injection and other drug use, high-risk sexual practices, and other behaviors that may place them at elevated risk for HIV infection. In addition, inmate populations are "captive audiences" available for education and intervention programs for the length of their stays in correctional facilities. Finally, virtually all prisoners return to the community, so helping them to reduce their risk-taking behavior benefits not only them but also others they may encounter in the outside world.

The importance of seizing the opportunity to implement comprehensive, high-quality HIV/STD education and prevention programs in prisons and jails is, or should be, well known. To date, however, as the data presented in this chapter make clear, correctional systems have not taken full advantage of this opportunity. Moreover, few individuals being released from prisons and jails are able to have access to long-term support systems in the community to help them sustain difficult behavioral changes.

An abundance of research makes clear that information alone is insufficient to induce permanent changes in the often deeply ingrained or addictive behaviors that place people at risk for HIV infection. Instead, effective HIV prevention requires comprehensive approaches that address the complex contexts in which high-risk behaviors occur and persist. A recent report of the Institute of Medicine calls for integration of individual concepts such as "self-efficacy" (i.e., the individual's belief in his or her ability to act in a certain way) with sensitivity to how broader gender and sociocultural factors (e.g., the values and historical experiences of variously defined groups from couples to social networks to cultural and other communities to the society as a whole) influence individual behavior choices.[1]

Drawing on their perception that the epidemiology of HIV/AIDS in the United States represents "multiple localized epidemics," three leading researchers have recently called for a two-level prevention program composed of universal and targeted elements. The universal components should include dissemination of basic information on HIV/AIDS and risk reduction methods, efforts to reduce discrimination based on HIV status, and removal of restrictions on access to condoms, sterile needles, and other materials needed to implement guidelines for safer behavior. In addition, communities with high prevalence and/or risk of HIV/AIDS (which surely include correctional facilities, although they are not specifically enumerated by the authors) should be targeted with intensive interventions. These interventions should address the "physiologic, emotional, interpersonal and cultural contexts" of behavior and emphasize the following strategies: "communicating face to face in understandable language, . . . changing peers' attitudes toward sex and drug use, teaching new technical and social skills . . . , providing the means for safer behavior . . . [and continuously assisting persons] to avoid relapses into unsafe behavior."[2]

Correctional HIV prevention efforts have thus far emphasized education or provision of information. The other necessary elements of a comprehensive HIV prevention program have been largely missing. Too little attention has been paid to the very serious social, cultural, economic, and psychological barriers to HIV-related behavior change.[3] Harm reduction and risk reduction strategies have been insufficiently addressed in correctional HIV education pro-

grams, often because authorities are reluctant to teach about proscribed behaviors, such as sex and drug use, and to provide the means to render these activities safer.

The challenge of providing effective HIV education and prevention for correctional inmates is thus heightened by a central tension: the best programs seem to be those that are most explicit about particular precautionary and preventive measures, yet correctional regulations often prohibit such explicit messages and, in any case, almost universally prohibit the distribution of condoms, bleach, and other materials needed to implement them.

This chapter summarizes findings on HIV education and behavioral intervention programs from the 1994 NIJ/CDC survey and site visits and offers examples of efforts to move from largely informational strategies to more comprehensive prevention programs, even in the face of institutional proscriptions and obstacles. While staff education was not covered in the 1994 survey, this also represents a critical part of an overall HIV prevention program in correctional facilities.

The State of Knowledge Among Inmates

Knowledge is a first step in HIV prevention. However, in correctional facilities, as in the world outside, simply knowing what behaviors place one at risk for HIV usually does not translate into avoidance of these behaviors. There also continues to be discrimination against HIV-infected persons that may be based on misinformation or occur in spite of generally accurate understanding of transmission routes. A survey of Virginia inmates, for example, revealed that most were reluctant to be around persons with HIV even though they had a good understanding of how the virus is transmitted.[4]

Inmates are probably better informed about HIV now than they were in the middle and late 1980's, when irrational fear, sometimes approaching hysteria, about AIDS gripped many correctional facilities. A number of surveys document that most inmates and correctional staff understand the major means of HIV transmission. Still, areas of uncertainty and misinformation remain. In the Virginia survey cited above, most respondents knew that HIV is transmitted through sex and needle use, but many were uncertain how transmission actually occurred during these activities. Almost one-fourth of both male and female inmates in Virginia thought HIV could be transmitted during homosexual contact but not during heterosexual contact. At the same time, over 90 percent of both males and females said it was unsafe to have a blood transfusion, nearly half thought HIV could be transmitted through saliva, and one-fourth believed transmission could occur through sharing dishes or utensils. Misinformation about transmission through other forms of casual contact also persists among Virginia inmates.[5] Only about half of Oregon inmates attending HIV education workshops gave correct answers to pretest questions regarding the body fluids through which HIV may be transmitted, the most risky practices for HIV transmission, and the length of the "window period" between infection and development of detectable antibodies.[6]

Another issue that must be taken seriously in the planning and execution of HIV education programs is the extent to which certain groups, especially blacks, believe that HIV was deliberately introduced for genocidal purposes. This belief is apparently widespread among black inmates in New York State prisons.[7] This makes it even more important to have HIV education and prevention programs offered by persons with credibility among inmates and to institute peer-based programs.

Types of HIV Education and Prevention Programs Provided

Table 12 summarizes the types of HIV education and prevention programs provided by correctional systems according to the 1994 NIJ/CDC survey. It shows a continuing decline from 1992–1993 to 1994 in the percentage of State and Federal prison systems that provide instructor-led HIV education for inmates—that is, face-to-face educational sessions led by trained instructors at which inmates have the opportunity to ask questions. In 1994, 75 percent of prison systems reported providing instructor-led education in any of their facilities. Sixty-two percent of city and county jail systems, about the same as in 1992–1993, reported instructor-led inmate education in 1994.

Peer-based HIV education programs were reportedly offered in 35 percent of State and Federal prison systems and in only 7 percent of city/county jail systems. The small percentage of jail systems offering peer programs is, no doubt, partly explained by the high turnover and short average length of stay in these facilities. There has been little change in these percentages since 1992–1993.

HIV prevention counseling is reportedly provided by larger percentages of correctional systems than is instructor-led HIV education—86 percent of State/Federal systems and 69 percent of city/county systems. However, it is likely that at

Table 12

HIV/AIDS EDUCATION AND PREVENTION FOR INMATES, NOVEMBER 1992–MARCH 1993 AND 1994

	U.S. State/Federal Prison Systems				U.S. City/County Jail Systems			
	November 1992–March 1993 (N=51)		1994 (N=51)		November 1992–March 1993 (N=31)		1994 (N=29)	
	Number of Systems	%	Number of Systems	%	Number of Systems	%	Number of Systems	%
Instructor-Led Education[a,b]	44	86%	38	75%	18	58%	18	62%
Peer Education Programs[b]	17	33	18	35	3	10	2	7
HIV Prevention Counseling[b]	N/A	—	44	86	N/A	—	20	69
Videos/Audiovisuals[b]	49	96	45	88	28	90	19	66
Written Materials[b]	49	96	48	94	22	71	21	72

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

[b]Programs provided in at least one facility in the reporting correctional system.

N/A: Not available.

Source: NIJ/CDC Questionnaire Responses.

least some respondents mistook this question to refer to pretest and posttest counseling rather than to ongoing prevention counseling, as it was intended.

Audiovisual and written materials on HIV/AIDS are used in the majority of systems, but the percentages of systems reporting their use declined since 1992–1993.

The reasons for the continuing decline in attention to HIV/AIDS education and prevention in correctional facilities are unclear but may include dissipation of the earlier crisis atmosphere regarding AIDS, lack of attention to HIV issues in the outside community surrounding the facilities, and resource constraints. In any case, the trend is troubling. As already emphasized, correctional facilities are prime settings for ongoing HIV prevention work, but clearly many systems are not taking full advantage of this opportunity.

Table 13 provides further evidence of the missed opportunities to provide HIV/AIDS prevention and education programs for inmates. This shows that less than one-third (29 percent) of State/Federal prison systems provided instructor-led HIV education in all of their facilities, and 12 percent did not know how many facilities provided such programs. Only one State prison system reported offering HIV peer education in all of its facilities. Almost half of the State/Federal systems reported that HIV prevention counseling was offered and audiovisual materials on HIV/AIDS were used in all their facilities, while almost two-thirds said written materials on HIV/AIDS were distributed in all their institutions. There were no significant differences in coverage of men's and women's facilities by these education methods.

Table 13 is based on the responses of correctional systems' central offices regarding coverage of their facilities by different HIV education and prevention methods. Over the years since the NIJ/CDC survey series began, there have been concerns raised about the accuracy of information provided by systems' central offices. Therefore, in 1994,

Table 13

COVERAGE OF INMATE HIV EDUCATION/PREVENTION PROGRAMS WITHIN STATE/FEDERAL CORRECTIONAL SYSTEMS (N=51), 1994

	Where Provided Within System							
	In No Facilities		In At Least One but Not All Facilities		In All Facilities		Missing/Did Not Know	
Type of Program	Number of Systems	%	Number of Systems	%	Number of Systems	%	Number of Systems	%
Instructor-Led Education[a]	7	14%	23	45%	15	29%	6	12%
Peer Education Programs	30	59	17	33	1	2	3	6
HIV Prevention Counseling	3	6	20	39	24	47	4	8
Videos/Audiovisuals	3	6	22	43	23	45	3	6
Written Materials	0	—	16	31	32	63	3	6

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

Source: NIJ/CDC Questionnaire Responses.

abbreviated questionnaires focusing on policies were sent to samples of individual facilities in selected State and Federal correctional systems so that their responses could be compared with those submitted by central offices. (City/county systems were not included in the validation study, since they tend to have far fewer individual facilities.) The results of this "validation study" are presented throughout the report.

Table 14 displays validation study results for aspects of HIV education and prevention programs. It shows varying levels of agreement between central office and facility responses. For example, in three systems whose central offices reported that all of their facilities provided instructor-led HIV education, 80 percent of the individual facilities reported that they, in fact, offered instructor-led education. Analogous rates of agreement for HIV prevention counseling, use of audiovisuals, and distribution of written materials were 100 percent, 87 percent, and 91 percent, respectively. Further discussion of each of the major methods of HIV education and programming is provided below.

Instructor-Led Education

Instructor-led education is a basic means of providing information on HIV/AIDS, risk factors for HIV transmission, and methods of reducing inmates' risk of acquiring and transmitting HIV. Intake and ongoing education and prevention programs offer the chance to educate inmates about the particular risks they may encounter in a correctional facility and help them to reduce their high-risk behaviors, while prerelease programs afford an important opportunity to reinforce risk reduction messages and strategies as individuals are returning to the community.

In addition to the issues raised above regarding the extent to which facilities within a system are covered by particular programs, it is important to know the extent to which inmates in facilities providing education programs are actually attending them. An indication is provided by learning whether attendance is mandatory. Seventy-one percent of State/Federal systems report that HIV education sessions are mandatory for all incoming inmates, while 24

Table 14

HIV/AIDS EDUCATION AND PREVENTION PROGRAMS FOR INMATES: Results of the Validation Study (VS)

	Systems in VS With This Policy	Facilities in VS	% in Agreement
Instructor-Led Education (I-LE) Provided in All Facilities	3	5	80 %
I-LE Mandatory for All Incoming Inmates	10	27	82
I-LE Mandatory for All Releasees	4	15	47
HIV Prevention Counseling Provided in All Facilities	5	12	100
Videos/Audiovisual Materials Used in All Facilities	9	22	87
Written Materials Provided in All Facilities	9	22	91

Source: NIJ/CDC Questionnaire Responses.

percent report mandatory sessions for current inmates, and 25 percent for inmates about to be released. Validation study results (table 14) show a fairly high level of agreement regarding mandatory HIV education for incoming inmates (82 percent of facilities in agreement), but a lower rate regarding mandatory prerelease education (47 percent of facilities in agreement). This suggests that over half of the facilities in these systems are not abiding by a policy that HIV education be mandatory for inmates about to be released.

Table 15 shows the topics that correctional systems report are covered in their HIV/AIDS education programs. Topics such as basic HIV information, alcohol and drug risks, and safer sex practices are widely covered. However, smaller percentages of systems include practical prevention skills such as proper condom use, safer injection practices, and pregnancy choices. These topics may be more controversial (e.g., pregnancy termination) or difficult to address because the means to implement the messages (condoms, bleach, sterile injection material) are largely prohibited to inmates as a matter of correctional policy and/or law. In addition, fewer systems include topics such as negotiation skills for safer sex, identifying barriers to behavioral change, triggers for relapse, and coping skills that are best covered in ongoing prevention programs rather than in "AIDS 101" or similar introductory education sessions. Indeed, these lower percentages suggest that few systems are actually providing ongoing HIV prevention programs.

Validation study results on topics covered in HIV education (table 16) suggest some interesting patterns. In general, the percentages of facilities in agreement on topics supposed to be covered based on central office responses (on the left side of the table) are higher than the percentages of agreement regarding topics not supposed to be covered. That is, for example, in 12 systems where safer sex practices were supposed to be covered in HIV education, 88 percent of the facilities in the validation study reported that this topic was indeed included. On the other hand, in 5 systems where safer injection practices were not supposed to be covered in HIV education, two-thirds of the facilities reported covering this topic anyway. Thus, at least some individual facilities seem inclined and able to expand their educational pro-

grams beyond the topics specified or authorized by their systems' central offices. This should not be completely surprising, since, in most systems, wardens, superintendents, and health services staff retain substantial influence over how programs and policies are implemented in individual facilities. Thus, at least some facilities appear able to circumvent the limits placed by systems on the content of HIV education and prevention programs.

As noted, one of the key features of a targeted HIV prevention program is "communicating in understandable language." Since many inmates are not native English speakers, this should include offering education in non-English languages. Survey responses indicate that only 39 percent of State/Federal prison systems and 41 percent of city/county jail systems provide HIV education in Spanish. Beyond simple linguistic understandability there is the question of credibility. In general, there is likely to be substantial inmate mistrust of information provided by correctional staff, particularly on controversial topics such as HIV/AIDS. Therefore, correctional systems should seriously consider having inmate peers or outside groups, such as public health departments or AIDS service organizations, provide HIV education in their facilities. Survey results indicate that correctional systems are already making fairly widespread use of outside resources for HIV education. While 98 percent of State/Federal prison systems use their own medical staffs to provide HIV education,

Table 15

TOPICS COVERED IN HIV/AIDS EDUCATION FOR INMATES, 1994

	Covered in Education Sessions			
	U.S. State/Federal Prison Systems (N=51)		U.S. City/County Jail Systems (N=29)	
Topics	Number of Systems	%	Number of Systems	%
Basic HIV information	48	94%	23	79%
Meaning of HIV test results	43	84	22	76
Safer sex practices	44	86	22	76
Negotiation skills for safer sex	20	39	17	59
Proper condom use	30	59	19	66
Safer injection practices	28	55	16	55
Tattooing risks	45	88	17	59
Alcohol/drug risks	46	90	22	76
Self-perception of risk	32	63	18	62
Identifying barriers to behavioral change	28	55	19	66
Triggers for behavior relapse	19	37	18	62
Coping skills	24	47	15	52
Referral to other services	37	73	18	62
Vertical transmission of HIV	40	78	19	66
Pregnancy choices	29	57	14	48

Source: NIJ/CDC Questionnaire Responses.

Table 16

TOPICS COVERED IN HIV/AIDS EDUCATION FOR INMATES: Results of the Validation Study (VS)

Topics	Systems in VS That Cover Topic	Facilities in VS in These Systems	% in Agreement	Systems in VS That Do Not Cover Topic	Facilities in VS in These Systems	% in Agreement
Basic HIV information	12	31	100 %	1	2	0 %
Meaning of HIV test results	10	25	88	3	7	14
Safer sex practices	12	31	97	1	2	0
Negotiation skills for safer sex	7	13	77	6	20	30
Proper condom use	11	30	77	2	3	33
Safer injection practices	8	18	61	5	15	33
Tattooing risks	12	31	94	1	2	0
Alcohol/drug risks	12	31	90	1	2	0
Self-perception of risk	8	23	91	5	9	22
Identifying barriers to behavioral change	8	20	75	5	12	25
Triggers for behavior relapse	8	20	70	5	12	33
Coping skills	6	11	73	7	21	38
Referral to other services	10	29	97	3	4	50
Vertical transmission of HIV*	12	17	65	1	0	N/A
Pregnancy choices*	9	12	42	4	5	40

*These topics apply only to facilities with female inmates.

N/A: Not available.

Source: NIJ/CDC Questionnaire Responses.

80 percent also report using public health departments, 56 percent report using AIDS service organizations, and 31 percent say they use inmate peer educators. Among responding city/county jail systems, two-thirds report relying on their own medical staffs, but two-thirds also report using public health departments, 52 percent use AIDS service organizations, and only 10 percent report use of inmate peer educators.

New York State mounted an ambitious public health department–based HIV education effort for inmates. In 1990, the State health department's AIDS Institute was funded to provide basic HIV education sessions for inmates and staff, as well as testing and counseling services to the entire State prison system.[8] However, an inmate who has been active in efforts to establish inmate peer education programs on HIV in New York stated that the AIDS Institute's Criminal Justice Initiative had serious weaknesses. It did employ presenters who were more "street-wise" than most correctional or health department officials, but these presenters sometimes failed to address the very specific risk practices and myths about prevention that are common in prisons. Also, many sessions became diverted by lengthy and often fruitless discussions of prisoners' prevalent concerns that the HIV epidemic was deliberately created by the government. This New York inmate is very skeptical about the value of one-time sessions without follow-up. He reported that the anonymous testing provided by the State health department was very much welcomed by many inmates, but that anonymous testing was never again available at his facility after one opportunity in 1990. The peer education that was supposed to be the next phase of the AIDS Institute's program never materialized at the facility.[9]

An assessment based on focus groups with inmates in New York City jails and former New York State prisoners found a range of experience with HIV educational programs in correctional facilities. Generally, women reported more exposure to HIV education while incarcerated. By contrast, some men said they had been in facilities with no HIV education or prevention programs.[10]

In the Oregon State prison system, HIV education and pretest/posttest counseling have been provided since 1987 by Correctional Treatment Services (CTS), which is staffed and housed by the State's Mental Health Division but funded by the Department of Corrections. This arrangement has generally worked well to dissociate the provision of education and counseling from the correctional system. CTS educators and counselors appear to have developed excellent credibility with both inmates and correctional staff. Site visits conducted as part of this NIJ/CDC study included attendance at HIV education sessions presented at men's and women's facilities in Oregon. The CTS educator was extremely knowledgeable and effective in developing rapport with the inmates. She spoke in frank and understandable terms of situations and issues that were relevant to the experiences of this population, encouraged and elicited substantial inmate participation, and offered clear, practical guidelines for risk reduction.[11]

Achieving consistency of program quality, topic coverage, and factual information provided in HIV education become particularly complex and challenging issues in large correctional systems with multiple facilities. An innovative approach has been taken by the Florida system, which employed video teleconferencing to present HIV education sessions for inmates simultaneously at 10 men's prisons. With funding from Burroughs-Wellcome, the program was led by two HIV-positive educators and covered prevention, testing, drug therapies for HIV disease, and support and treatment following release. Inmates at all 10 prisons were able to ask questions using telephone hookups. A similar program was presented for female inmates in Florida.[12]

Inmate Peer Programs

As suggested above, noninmates can certainly provide effective HIV education programs if they are carefully chosen for the ability to develop rapport with, and win the trust of, the audience. However, peer-based programs do offer a number of advantages. They can be implemented at little cost to the correctional system, since inmates provide most of the labor. Moreover, provided they are carefully selected and thoroughly trained, peer educators may be more credible with inmates and more likely to speak in terms relevant and understandable to inmates. Peer educators are able to do substantial informal one-on-one outreach and support in the yard and other areas of the facility, as well as conducting formal education, counseling, and support groups, and can be available on a 24-hour basis.

Despite these advantages, inmate peer education programs on HIV are offered in only 35 percent of State/Federal prison systems and only 7 percent of responding city/county jail systems. These percentages, based on central office responses, showed little change since the 1992–1993 NIJ/CDC survey. There was insufficient validation study data on peer programs to assess the extent to which individual facilities in these systems are actually offering peer programs. However, in large systems, HIV education and other types of programs can vary considerably from facility to facility, depending on the receptivity of the warden and the inmates themselves.

A New York inmate who has worked to establish peer education programs in four different State prisons noted that it is really a "two-front" effort. The inmates themselves are often seriously divided along ethnic and racial lines, and some are hostile to persons with HIV and to all efforts to address the problem of HIV, whether offered by persons with HIV or not. At the same time, the prison administration must be convinced of the value and importance of peer education programs. This is complicated by the often inherent suspicion of and opposition to inmate organization and inmate-initiated programs.[13] This New York inmate reported meeting significant resistance from facility administrators. On several occasions, he was transferred to another facility just as he was beginning to get a peer program under way.[14] (Correctional officials indicate that these transfers were routine, based on his high escape risk, and had nothing to do with his efforts to organize peer programs.) Currently, there are peer programs of varying levels of activity at about 8 of 68 New York State prisons.[15] These include the well-known and exemplary ACE program at the Bedford Hills women's facility and the PACE program at Eastern men's facility. The success and visibility of the ACE program spawned programs in other facilities and encouraged some correctional administrators to support peer programs. There is also a community-based component of ACE (called ACE-OUT) that provides supportive services, including a "buddy" program, for former inmates with HIV.

Inmates and staff have both raised issues of confidentiality in opposition to peer programs. Concerns have been expressed that inmates' HIV status may be compromised through contact with peer educators or peer counselors. This could occur by the peer educators, directly divulging the information or, indirectly, by other inmates, observing interactions between peer educators and HIV-infected inmates. The medical director at the Federal Penitentiary in Atlanta asserted that peer HIV counseling would result in "putting a bullseye" on inmates seen associating with the counselors. Staff at the Federal Bureau of Prisons' Metropolitan Correctional Center in Miami have not permitted peer programs for similar reasons.[16]

Inmate peer educators in Oregon and elsewhere acknowledge that confidentiality is a serious issue—as a result, Oregon inmates cannot do pretest and posttest counseling—but are firmly committed to maintaining confidentiality and to ending discrimination against persons with HIV.[17] All peer programs must address this issue with sensitivity and care. The recently initiated inmate HIV peer education programs described below illustrate approaches that have worked well in a variety of correctional systems. As revealed in these examples, key ingredients of an effective HIV peer education program appear to be the active support and collaboration of facility administrators, use of a variety of formats and vehicles for education and prevention messages, and availability of ad hoc, one-on-one contact, as well as more formal and structured sessions.

Oregon State Penitentiary: Project O.A.S.I.S. (Oregon AIDS Support [Inmate] Services). Project O.A.S.I.S. was founded in 1994 by an inmate who became concerned after hearing many inaccurate statements about HIV from other inmates in the facility. With the support and close collaboration of a counselor from Correctional Treatment Services, O.A.S.I.S. initiated a number of programs and services including HIV workshops, one-on-one education and support, and referrals. Plans for the future include a "buddy" program for inmates with HIV/AIDS, a display of panels from the AIDS Quilt with associated educational programs, and development of HIV education videos. Currently, four highly dedicated and committed inmates are involved in the O.A.S.I.S. program, and the group has applied for official recognition as a "Special Interest Inmate Group."[18]

A series of three one-hour sessions is offered each quarter as part of the regular school program in the prison. Topics include basic facts on HIV and its transmission and treatment, as well as practical guidance on condom use and cleaning of injection equipment. Four series were held during 1994, with an average attendance of 12. A training manual and participant's workbook are being prepared.

One-on-one outreach, education, and support occur in the yard and other parts of the prison. According to members of O.A.S.I.S., they provide support to a number of HIV-infected inmates who are too mistrustful to have access to the correctional system's health services. The peer team provides counseling, referrals to services both within and outside the facility (for those about to be released), and other services that help to free Correctional Treatment Services providers to do more pretest and posttest counseling.

California Medical Facility, Vacaville: HIV Peer Education Program. California Medical Facility, Vacaville, is one of the largest correctional facilities in the United States and houses most of the system's known male HIV-infected inmates. Several different peer education programs have existed at Vacaville over the years, but the current program seems the most solid. It is an official program of the facility, with detailed policies and procedures. A psychiatric social worker, a paid staff member of the prison, supervises the six inmate peer educators. These positions are paid inmate

jobs. Peer educators must receive at least four hours of training each month. The educators reflect the diversity of the inmate population—three are black, three Hispanic, and three white. The threefold mission of the peer program is to work toward eliminating HIV transmission and reinfection within the facility, increase understanding of HIV/AIDS and compassion for inmates living with HIV, and create a "norm devaluing high-risk behaviors."[19]

To achieve these goals, the program has adopted a multimedia strategy, involving live presentations, guest speakers, videos, slides, audiocassettes, role-playing, storytelling, drama, posters, and a resource library. Because of the program's conviction that "learning takes place over time," sessions are presented on an ongoing basis every month.

Topics covered in monthly sessions include psychosocial issues in living with HIV, self-esteem and taking responsibility for one's behaviors, proper condom use, proper procedures for cleaning needles and injection material, relapse prevention, and maintaining behavior change. Although sessions include information on safer sex and safer injection practices, each must be preceded by a statement that drug use, tattooing, condoms, and sexual activity are prohibited in prison and that the education is not intended to encourage any prohibited practices.[20]

In addition to the monthly education sessions, the peer program at Vacaville offers on-call initial education for all new arrivals at the facility and counseling for HIV-infected inmates and those concerned about high-risk behavior or HIV antibody testing. The program emphasizes the facts about HIV and the importance of treating HIV-infected persons with respect and compassion. The texts of two posters developed by the program reflect these themes:

> Public Notice: As of 1993, there have been 194,334 AIDS-related deaths in the United States. As of 1993, there has been no documented case of a person contracting the disease by eating food prepared or served by a[n] HIV positive person. [Ironically, as discussed later in this Update, a recent court decision allowed the California Department of Corrections to exclude HIV-infected inmates from food service jobs on the ground that their presence in such jobs might cause a riot. This suggests the persistence of some aspects of HIV-related misinformation in correctional facilities.]
>
> Don't condemn those with HIV or AIDS. Condemn those who would turn their backs on those with HIV or AIDS.[21]

Louisiana State Penitentiary, Angola: HIV/AIDS Peer Education Program. This program was founded in October 1993 and has a staff of four inmate volunteers who received training from the State health department. All of these inmate peer educators have other prison jobs. Peer educators at Angola conduct weekly HIV education sessions for incoming inmates. One serious, but perhaps not uncommon, limitation is placed on this education by the prison administration: it is not allowed to cover specific safer sex techniques.[22]

In addition to the weekly sessions, the program has developed some innovative features including presenting almost weekly interviews and discussions on HIV issues on the facility's FM radio station (the only inmate-run station licensed by the FCC in the Nation); working with the Angola Drama Club (whose members have been trained as peer educators) to produce "The Enemy Within," a play on HIV written by one of the inmates; writing numerous articles for outside publications; speaking at other correctional facilities and other organizations in the community; and holding an all-day conference on HIV/AIDS at Angola in October 1994, attended by about 300 persons from inside and outside the prison.[23]

The conference included welcoming remarks by the warden; sessions led by facility professional staff on HIV peer education programs, the epidemiology of HIV/AIDS at Angola, and medical treatment of inmates with HIV/AIDS; sessions led by peer educators entitled "The Impact of Life Sentences on HIV/AIDS in Prison," "The Pros and Cons of Segregating HIV-Infected Inmates," "HIV/AIDS: Double Impact—Workable Solutions," "Living with HIV in Prison," and "Leaving the Penitentiary with HIV Infection"; and a presentation of the Drama Club's play on HIV in prisons. Peer educator Andrew Joseph told of how a life sentence and other pressures of prison life can engender carelessness about high-risk behavior. According to Joseph, some "lifers" "figure they will not get out of prison, so why should they care how they die? They begin to figure that it is better to die doing something that brings enjoyment to them than to waste away in prison and die of old age without family and friends." As a way of attempting to create a semblance of "normalcy in an abnormal place," Joseph and the peer education team strongly favor initiation of conjugal visits for inmates.[24] In "HIV/AIDS: Double Impact—Workable Solutions," peer educator G. Ashanti Witherspoon cogently described the impact of HIV/AIDS within the prison and outside, as inmates return to the community, and the generally inadequate correctional response in terms of medical care, education, and peer counseling. Witherspoon proposed a solution consisting of comprehensive peer edu-

cation for inmates, education for correctional staff and administrators, and cooperation among correctional staff, health departments, and community-based organizations to develop effective HIV services for inmates that are also sensitive to the security concerns of correctional officials. Witherspoon described some of the programs at Angola, including incorporation of HIV issues into the inmate-run CPR training program.[25] Theortic "Bojack" Givens outlined a discharge planning program under development by the peer educators at Angola that they hope will be implemented at all Louisiana prisons. This is part of the peer education team's overall effort to close the gaps among "those who make things happen; those who watch things happen; and those who ask what happened."[26] With the inspiration and encouragement of the Angola program, inmates at Avoyelles Correctional Center, another men's prison in Louisiana, recently began an HIV peer education program.

HIV Prevention Counseling

As already discussed, the survey questions on HIV prevention counseling may have been misinterpreted to refer to pretest/posttest counseling rather than ongoing prevention counseling as they were intended. Pretest and posttest counseling can be occasions for providing useful prevention information and guidance, but they often occur at moments of extremely high stress and preoccupation with test results. Therefore, ongoing prevention counseling and other work designed to encourage and maintain difficult behavior change is an extremely important part of a comprehensive HIV prevention program.

Bearing in mind the possible misunderstanding of the question, 86 percent of State/Federal prison systems reported offering prevention counseling, as did 69 percent of participating city/county jail systems. Validation study results for State/Federal systems reveal 100 percent agreement on the provision of prevention counseling within individual facilities in systems reporting that such counseling was available in all their facilities.

Virtually all of the responding correctional systems (96 percent of State/Federal systems and 86 percent of city/county systems) reported providing HIV prevention counseling to all inmates who requested it. Ninety percent of State/Federal prison systems and 59 percent of responding city/county jail systems said they provided counseling for all HIV-infected inmates.

As to the format of the counseling, 98 percent of State/Federal systems and 86 percent of city/county systems reported that it was individual, while 67 percent of State/Federal systems and 55 percent of city/county systems reported also offering group counseling services.

Audiovisual and Written Materials

Eighty-eight percent of State/Federal systems and 66 percent of city/county systems reported employing videos and other audiovisual materials in HIV education programs. Ninety-four percent of prison systems and 72 percent of responding jail systems said they distributed written materials on HIV. Validation study results in State/Federal systems revealed quite high levels of agreement for individual facilities in systems whose central policies called for use of audiovisuals and written materials in all facilities.

Materials used in HIV education and prevention programs must be understandable and accessible to the target populations and sensitive to diverse cultures and gender groups. The reported mean reading level for HIV materials used in prison and jail systems was seventh grade, which seems appropriate. Seventy-one percent of State/Federal systems reported using written materials on HIV specifically addressed to women, while 61 percent of prison systems said they had materials specifically prepared for Hispanics, 31 percent for blacks, and 18 percent for Asian Americans. The respective figures for city/county jail systems were 66 percent, 66 percent, 55 percent, and 24 percent.

STD Education

In 1994, for the first time, the NIJ/CDC survey included separate questions on STD education. The results indicate that STD education is not widely provided in correctional facilities. Less than half (49 percent) of State/Federal prison systems reported any instructor-led STD education, while one-third said that it was offered in all women's facilities, and only 16 percent reported such education in all their facilities. Use of written materials on STDs was more widely reported in State/Federal prison systems: three-quarters said such materials were provided in at least some facilities, while one-third said they were distributed in all of their facilities. About the same percentage of responding city/county jail systems (48 percent) reported instructor-led STD education in at least some facilities, while a slightly lower percentage of these systems (69 percent) reported distribution of STD written materials.

Given the often-identified relationship between STDs and HIV infection—both in terms of common risk behaviors and STDs as potential cofactors in the transmission of

HIV—education and prevention programs for inmates should more systematically incorporate information and guidance on STDs. Failure to address STDs in HIV prevention programs may compromise the effectiveness of the programs.

As noted earlier with regard to HIV prevention, correctional systems have not yet taken full advantage of opportunities to use discharge planning to engage inmates being released in longer-term STD prevention and related services in the community. These include family planning and prenatal care services.

Endnotes

1. Institute of Medicine (J. D. Auerbach et al., eds.), *AIDS and Behavior: An Integrated Approach* (Washington, D.C.: National Academy Press, 1994).

2. D. C. Des Jarlais, N. S. Padian, and W. Winkelstein, "Targeted HIV-Prevention Programs," *New England Journal of Medicine* 331 (November 24, 1994): 1451–1453. For a view opposing the concentration of HIV prevention efforts in specific neighborhoods or groups on the grounds that this would "encourage . . . the vast majority of people outside those specific neighborhoods to deny the epidemic's threat, ignore the need for their own preventive actions, and thus accelerate the virus' spread through all segments of our society," see D. E. Rogers and J. E. Osborn, "AIDS Policy: Two Divisive Issues," *Journal of the American Medical Association* 270 (July 28, 1993): 494–495.

3. Correctional Association of New York AIDS in Prison Project, "Draft for a National Policy Agenda Concerning Prisoners and Former Prisoners Living with AIDS/HIV in the United States," 1994, p. 11.

4. I. A. Ibrahim, "An Assessment of AIDS/HIV Knowledge, Attitudes and Risk Behaviors Among Parole Violators and New Commitments to the Virginia Department of Corrections, 1994," Survey Research Laboratory, Center for Public Service, Virginia Commonwealth University, April 1994, p. 2.

5. Ibid., pp. 14–15.

6. Project O.A.S.I.S. (Oregon AIDS Support [Inmate] Services), Annual Report, September 1994, Appendix A.

7. Interview with David Gilbert (inmate), Great Meadow Correctional Facility, Comstock, N.Y., November 10, 1994.

8. M. L. Lachance-McCullough et al., "Correlates of HIV Seroprevalence Among Male New York State Prison Inmates"; Lachance et al., "HIV Infection Among New York State Female Inmates."

9. Interview with David Gilbert, November 10, 1994.

10. Nancy Mahon (AIDS in Prison Project, Osborne Association), "Peer Education and Counseling in New York City and State Correctional Facilities," unpublished manuscript presented at American Public Health Association Annual Meeting, Washington, DC, November 1, 1994.

11. Interviews with Carol Schroeder, Lauren Fanning, and other staff of Oregon Correctional Treatment Services, and observation of HIV education sessions at Oregon Women's Correctional Center (Salem) and Columbia River Correctional Institution (Portland), September 19–20, 1994.

12. "Taking the Mystery Out of HIV Prevention, Testing & Treatment: A Video Teleconference," Florida Department of Corrections, February 23, 1993.

13. On this point, see also Mahon, "Peer Education and Counseling in New York City and State Correctional Facilities," pp. 1, 7.

14. Interview with David Gilbert, November 10, 1994.

15. The estimate of eight active peer programs came from the interview with David Gilbert, November 10, 1994.

16. Interviews at USP Atlanta, November 21, 1994, and MCC Miami, November 12, 1994.

17. Interviews with peer educators of Project O.A.S.I.S., Oregon State Penitentiary, Salem, September 19, 1994.

18. Interview with O.A.S.I.S. members, Oregon State Penitentiary, Salem, September 19, 1994. For further information about O.A.S.I.S., contact Ronald G. Meadows #4731308, 2605 State Street, Salem, OR 97310-0505, or Ms. Dana Ridling, Correctional Treatment Services, 2600 Center St., N.E., Cottage 21, Salem, OR 97310.

19. HIV Peer Education Program brochure, "Together We Can Make a Difference," September 1993. For further

information on the Vacaville program, contact Scott Cozza, 159 Kentucky Street, Room 10, Petaluma, CA.

20. HIV Peer Education Program, Operational Procedures, Addendum A, p. 8.

21. Texts of posters prepared by HIV Peer Education Program, California Medical Facility, Vacaville.

22. Shannon Hager, Infection Control Coordinator, Louisiana State Penitentiary, Angola, letter to Theodore M. Hammett, December 15, 1994.

23. For further information on the Angola peer program, contact Shannon Hager, Louisiana State Penitentiary, Infection Control Program, New General Hospital, Angola, LA 70712.

24. Andrew Joseph, "The Impact of Life Sentences on HIV/AIDS in Prisons," presented at HIV/AIDS Prevention Conference, Louisiana State Penitentiary, Angola, October 4, 1994; Barbara S. Schlichtman, "Peer Plan Curbs AIDS at Angola," *Baton Rouge Sunday Advocate*, October 9, 1994.

25. G. Ashanti Witherspoon, "HIV/AIDS: Double Impact—Workable Solution," presented at HIV/AIDS Prevention Conference, Louisiana State Penitentiary, Angola, October 4, 1994.

26. Theortic Givens, "Leaving the Penitentiary with HIV Infection," presented at HIV/AIDS Prevention Conference, Louisiana State Penitentiary, Angola, October 4, 1994

Chapter 3

HIV Precautionary and Preventive Measures

Responding effectively to HIV/AIDS within correctional facilities requires instituting reasonable procedures for the protection of inmates and staff from HIV infection. Implementing constructive policies often involves balancing conflicting demands. A key principle in this effort is that precautionary and preventive measures instituted be consistent with educational messages provided to inmates and staff about HIV/AIDS. Policies or procedures that conflict with or go beyond educational messages may cause unnecessary fear and increased mistrust of correctional authorities. This chapter discusses HIV preventive measures and some of the issues involved in implementing them in prisons and jails.

Infection Control Based on Universal Precautions

As detailed in chapter 4, few correctional systems reported a policy of notifying correctional officers of inmates' HIV status. However, these policies are still debated. Some correctional officers and unions believe that they need, and should have access to, this information in order to protect themselves on the job.

Opponents of disclosure policies generally point to two problems. The first is that no practicable testing program could ever ensure that all HIV-infected inmates are known.[1] However, programs of mandatory testing and notification might create the illusion that all infected people had been identified, which, in turn, could foster a false sense of security. Second, particularly in systems with many HIV-infected persons, it would be easy to forget or confuse who is HIV positive.

The best alternative to a disclosure policy is the principle of "universal precautions." Universal precautions treat all people as if they are infected. This means avoiding unprotected contact with body fluids that are considered potentially infective, especially blood and semen. Revised guidelines from CDC state that universal precautions are not necessary for contact with saliva, tears, sweat, vomitus, urine, or feces unless they contain visible blood.[2]

Universal precautions have long been recommended by the CDC for health care settings and apply equally well to correctional and law enforcement settings. Universal precautions should be applied by both staff and inmates in correctional facilities, as a sound approach to preventing all blood-borne infectious diseases including hepatitis B. CDC issued extensive guidelines regarding HIV transmission and prevention for health care and emergency workers in 1989. These include recommendations for the use of protective equipment, such as gloves and CPR masks, and for the disposal of needles and other "sharps," body and cell searches, handling of infectious materials, and cleaning up spills. Procedures to follow once an exposure has occurred are also specified; these include medical protocols and procedures for documenting incidents.[3]

However, there is evidence that despite strong recommendations and their embodiment in written policy, universal precautions are not well implemented in at least some corrections settings. A CDC-funded surveillance of possible occupational exposures to HIV in a State correctional system identified 166 incidents, including needlesticks, nonintact skin exposures, and mucous membrane exposures. Although no HIV infections occurred as a result of these incidents, CDC concluded that over half of the exposures could have been prevented had personal protective equipment been used.[4]

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

force to universal precautions in health care, correctional, and other work settings. Under these regulations, employers are required to establish written exposure control plans, identify and train workers with potential for exposure to blood-borne pathogens and tuberculosis, provide necessary infection control equipment, offer free hepatitis B vaccinations and PPD skin testing for TB infection, and provide evaluation and follow-up services to any employees who have had potential exposures.[5]

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

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

Availability of Barrier Protection

As noted in chapter 2, many correctional systems now include discussions of safer sex practices in their HIV educational programs. In the vast majority of correctional systems, however, the means to put these messages into practice are not officially available.

The number of systems that make condoms available to inmates has remained stable for several years. Mississippi[6] and Vermont are the only State systems that distribute condoms. No systems have begun distributing condoms since the 1992 NIJ/CDC survey. The San Francisco, Philadelphia, New York City, and Washington, D.C., jail systems also distribute condoms. Further, one other jail system reported making condoms available to inmates in practice, although the official policy is not to distribute condoms. The medical director of this jail system reported that he was motivated by clear public health needs, although disclosure of the practice would likely provoke public disapproval. Condom availability has also been instituted in all Canadian Federal prisons and some Provincial prisons in Canada.[7] Six State correctional systems in the United States, including the New York State system, make condoms available for conjugal visits.

Distribution of condoms varies by correctional system. Inmates at the Mississippi State Penitentiary in Parchman can buy unlimited supplies of condoms at the canteen for 25 cents each. Most systems tie condom distribution to health services or HIV education. In New York City, inmates are limited to one condom per medical visit and are supposed to be counseled by medical staff before receiving a condom. In Vermont, condoms are available through health services with counseling in most instances, but they are sometimes also made available in health services offices without counseling. In at least one Vermont institution, lubricant is provided with condoms. Condoms are available at HIV/AIDS educational programs in San Francisco and at HIV antibody test counseling sessions or during sick call in Philadelphia. Condoms are available in the infirmary and at counseling and education sessions in District of Columbia jails.[8] The number of condoms distributed to inmates annually varies widely by correctional system and is no doubt related to the method of distribution. In New York City, where condoms are available only after counseling, about 1,200 condoms are distributed annually. By contrast, in San Francisco, condoms are available to all who attend HIV education services, and about 10,000 condoms are distributed each year.[9]

In the San Francisco and District of Columbia jail systems, HIV prevention for women is specifically addressed by making dental dams available. These are squares of latex that can be used as barrier protection for oral-genital sex between women.

The Debate Over Condom Availability

Correctional medical staff often advocate condom availability whereas correctional administrators and security staff oppose it. This ideological divide reflects different perspectives. Health care workers view corrections from the public health model, which acknowledges that sex takes place in prison and stresses the need to prevent HIV transmission, while correctional officials tend to emphasize security and adherence to regulations. They worry that condom distribution would signal their acceptance of sex, which is proscribed within the institution, and that condoms might be used as weapons or to conceal drugs or other contraband.

Some correctional medical staff have implemented what they consider appropriate public health measures, such as, the distribution of condoms, even when this was prohibited by the correctional system.[10]

In Vermont, the condom availability policy was actually championed at first by a deputy superintendent of one of the facilities. He believed at the time, and continues to believe, that "good public health policy is good correctional policy." According to this correctional administrator, sex happens in prisons, and it would be irresponsible not to make protection available.[11]

In the systems with condom availability, few if any problems have occurred with condoms being used as weapons or for smuggling contraband, despite suggestions by opponents that this would occur. A hospital administrator at the Mississippi State prison in Parchman recalled only one incident when a condom was used for smuggling contraband.[12] In Vermont, after an initial period of some heightened interest and controversy, condom distribution became routine and was no longer an issue. Vermont officials report few if any problems with the misuse of condoms for smuggling contraband or for weapons, and they suggest that there is no evidence of increasing sexual activity or undesirable behavior since the condom policy was instituted. In a survey of over 400 officers in Canada's Federal prison system, 82 percent reported that condom availability had created no problems in their facilities.[13]

Bleach and Needle Availability

Many correctional systems include information on safer injection practices in their education and counseling. However, only two systems have policies for the provision of bleach, and no systems distribute needles. Since injection drug use is illegal in prison and in the outside community, correctional officials conclude that distributing bleach or needles would condone illegal activity. Moreover, needles and bleach do pose serious security and safety risks in correctional facilities. Still, needles are present in many facilities, and their scarcity tends to foster sharing and other risky practices. A British study found that although needle use was rarer in prisons than on the street, it tended to be riskier when it did occur.[14] A Scottish study provides further indication of high risk with injection drug use in prisons. Of 43 inmates in Glenochil prison who admitted to injection drug use at some time in their lives but not while in prison, 34 were tested for HIV antibody and none were positive. By contrast, 12 of 25 (44 percent) of inmates who admitted to injecting drugs in the prison tested HIV seropositive.[15]

In the United States, only the San Francisco and Harris County (Houston) jail systems officially make bleach available for cleaning drug-injection material. A pilot program of bleach distribution is being implemented in Canada, and the Canadian Expert Committee on AIDS and Prisons recommends making small quantities of full-strength bleach "easily and discreetly accessible" to inmates.[16] However, bleach is available for general cleaning purposes in many systems, and some inmates may have de facto access to bleach for needle cleaning even in the absence of policies explicitly permitting this.

Recent research has shown that bleach may not be fully effective for disinfecting injection equipment unless its use carefully follows correct procedure. The CDC's revised procedure calls for rinsing with clean water, then with full-strength bleach, then with clean water again at least three times, shaking the syringe for 30 seconds during each rinsing.[17] Although proper cleaning with bleach does significantly reduce the risk of HIV transmission, the only way to be certain that there is no infected blood in a needle or syringe is to use new sterile equipment every time. Bleach is recommended only "when no other safer options are available."[18]

Although there are no needle exchange programs in prisons in the United States, a Swiss prison has started a pilot needle exchange program. In addition to counseling and education, inmates at the Hindelbank Institution for Women can exchange used needles and syringes for sterile ones at automatic dispensers throughout the institution.[19] Some argue that providing needles to inmates condones illegal activity and would create safety risks within an institution. However, Martin Lachat, interim director of the Hindelbank Institution for Women, commented:

> The transmission of HIV or any other serious disease cannot be tolerated. Given that all we can do is restrict, not suppress, the entry of drugs, we feel it is our responsibility to at least provide sterile syringes to inmates. The ambiguity of our mandate leads to a contradiction that we have to live with.[20]

The Canadian Expert Committee recommended further research, including scientifically valid pilot studies on needle exchange in prisons.[21]

Endnotes

1. Because the widely available tests detect only the presence of antibody to HIV, and not the virus itself, there

can be a "window" period of up to six months and sometimes longer during which someone is HIV infected and tests negative.

2. Centers for Disease Control and Prevention, "Update: Universal Precautions for Prevention of Transmission of HIV, Hepatitis B Virus, and Other Blood-Borne Pathogens in Health Care Settings," *Morbidity and Mortality Weekly Report* 37 (June 24, 1988): 377–382.

3. CDC, "Guidelines for Prevention of Transmission of HIV and Hepatitis B Virus to Health-Care and Public-Safety Workers," *Morbidity and Mortality Weekly Report* 38, no. S-6 (June 23, 1989).

4. CDC, unpublished data, 1992.

5. "Occupational Exposure to Bloodborne Pathogens," 29 *Code of Federal Regulations* 1910.1030, December 6, 1991.

6. Mississippi's State system reported that it does distribute condoms, and at one male facility in Parchman, condoms are sold in the canteen. However, at the Central Mississippi Correctional Facility, condoms are currently not distributed to inmates. Staff at this facility have discussed the possibility of distributing condoms through the pharmacy or through an education program.

7. *HIV/AIDS in Prisons: Final Report of the Expert Committee on AIDS and Prisons* (Montreal: McGill Centre for Law, Medicine, and Ethics, February 1994), 55–56. See also R. Jurgens, "AIDS in Prisons in Canada," in *AIDS in Prison*, P. A. Thomas and M. Moerings, eds. (Aldershot, U.K.: Dartmouth Press, 1994), 126–127.

8. Mary Campbell, D.C. Department of Corrections, personal communication, April 1993.

9. Ralle Greenburg, Forensic AIDS Project, San Francisco Department of Public Health, Presentation at American Public Health Association Annual Meeting, November 1, 1994.

10. "Prisons' Care Systems Swamped by AIDS Epidemic, Panel Told," *AIDS Policy and Law*, December 12, 1990, p. 3.

11. Interviews at Chittenden Regional Correctional Center, S. Burlington, Vermont, and Northwest State Correctional Facility, Swanton, Vermont, November 8, 1994.

12. Jackie Walker, "AIDS Update," *The National Prison Project Journal* 7, no. 4 (Fall 1992): 26.

13. *HIV/AIDS in Prisons: Background Materials* (Montreal: McGill Centre for Law, Medicine, and Ethics, February 1994), appendix 5, p. 92.

14. For example, see P. J. Turnbull, K. A. Dolan, et al., "Prison Decreases the Prevalence of Behaviors but Increases the Risks," Poster Abstract No. PoC. 4321, Eighth International Conference on AIDS, Amsterdam, July 19–24, 1992.

15. A. Taylor et al., "Outbreak of HIV Infection in a Scottish Prison," paper presented at Tenth International Conference on AIDS, Yokohama, Japan, August 1994.

16. *Final Report of the Expert Committee*, p. 78.

17. "New Recommendations for Disinfecting Injection Equipment," *Medical Aler*t (October/November 1993).

18. U.S. Department of Health and Human Services, Public Health Service, Centers for Disease Control and Prevention, *HIV/AIDS Prevention Bulletin*, April 19, 1993.

19. Ralf Jürgens, "HIV Prevention Taken Seriously: Provision of Syringes in a Swiss Prison," *Canadian HIV/AIDS Policy and Law Newsletter* 1, no. 1 (October 1994): 1–3.

20. Ibid.

21. *Final Report of the Expert Committee*, p. 79.

Chapter 4

HIV and STD Testing, Counseling, Confidentiality, and Disclosure Policies

A fairly stable set of correctional systems continue to have policies for mandatory HIV antibody testing of inmates. In some instances, however, the justification for this policy has shifted from one based on the prevention of transmission (even, oddly, in the absence of an associated segregation policy) to one more grounded in medical intervention. Although mandatory testing could, in theory, increase access to diagnosis and treatment, most systems have found it preferable to pursue the goals of medical intervention and treatment in the context of voluntary or on-request testing policies. The CDC continues to support confidential HIV counseling and testing services in numerous correctional facilities through its cooperative agreements with public health departments.

This chapter discusses HIV and STD testing, counseling, and notification policies based on the results of the 1994 NIJ/CDC survey.

HIV Antibody Testing Policies

Tables 17 and 18 show that mandatory HIV testing continues to be the policy of a minority of State/Federal prison systems, but it is an apparently stable minority.

For the first time, the 1994 survey included pregnant females as a separate category for mandatory HIV testing. Thirteen State systems (26 percent) reported mandatory testing for pregnant women. None of the responding city/county systems reported mandatory testing of pregnant inmates. This will be an important policy to monitor in view of recent evidence that treating pregnant women with zidovudine (ZDV) reduces the risk of HIV transmission from mother to infant.

The above statistics on testing policies are based on central office responses to the survey. The validation study discovered high agreement rates in systems with mandatory mass screening and voluntary/on-request testing policies but a total absence of agreement in systems with policies calling for mandatory testing of pregnant females. Table 19 shows that of four women's facilities in systems with policies for testing all pregnant women, none reported carrying out this policy.

The following sections provide further discussion of mandatory and voluntary/on-request testing policies.

Mandatory Screening

Table 20 lists the State/Federal prison systems—16 State systems and the Federal Bureau of Prisons—that report mandatory mass HIV screening of inmates at intake or release. Six of the 17 systems test at both times, whereas the Federal Bureau of Prisons reports mandatory testing only at release. Due to the rapid turnover in jail systems, it is not surprising that none of the responding city/county jail systems report mandatory mass screening policies. High turnover rates make the logistics of mass screening very difficult. There has been no change in the number of systems reporting mandatory screening since the 1992 update.

Although 16 prison systems report HIV screening at intake, the Alabama and Mississippi State systems remain the only 2 systems to segregate all known HIV-infected inmates. Housing policies are discussed in chapter 5.

Voluntary/On-Request Testing

As shown in tables 17 and 18, a large percentage of prison and jail systems offer HIV testing to inmates on request. In fact, among city/county systems, voluntary or on-request testing is the most frequently reported basis of testing. Dr.

Table 17

SUMMARY OF CORRECTIONAL POLICIES ON HIV ANTIBODY TESTING OF INMATES, 1994[a]

Testing Policies	U.S State/Federal Prison Systems (N=51) Number of Systems	%	U.S. City/County Jail Systems (N=29) Number of Systems	%
Mandatory Testing of:				
All Incoming/New Inmates	16	31%	0	0%
All Releasees	4	8	0	0
Pregnant Females	13	26	0	0
Voluntary/Inmate Request Testing Available to All Inmates	40	78	28	97
Testing if Clinical Indications[b]	49	96	25	86
Other Testing[c]	19	37	9	31

[a]This table includes actual and planned policies. The categorization is not mutually exclusive.

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

[c]Examples of other testing include court order, high-risk conduct, undiagnosed illness, etc.

Source: NIJ/CDC Questionnaire Responses.

Jan Diamond, a physician who formerly worked in the California prison system, argues strongly for encouragement of voluntary inmate HIV testing because it is "an important way to reach a disenfranchised population . . . who otherwise receive little HIV intervention or health care."[1]

Successful encouragement of voluntary inmate testing may be challenging. As noted in chapter 1, studies in New York State prisons show higher rates of HIV seropositivity in blinded epidemiologic studies representative of the entire inmate population than among those who came forward for voluntary testing. The apparent reluctance of HIV-positive individuals to be tested is at variance with the assumption that individuals who are at high risk for HIV infection will come forward for testing, particularly if they believe that they can benefit from early medical intervention. For both medical and psychological reasons, this assumption may be flawed. First, recent research suggests that early intervention with ZDV is probably ineffective in lengthening survival with AIDS. Second, whether or not they have considered the benefits of early medical intervention, many individuals may feel that it is psychologically easier not to know their HIV status: put simply, "they do not want any bad news." In a Maryland study of voluntary testing, about half of the inmates chose to be tested; the most common reason for declining testing was fear of a positive result.[2] A nurse at a Vermont prison confirmed this conclusion during an interview conducted for this NIJ/CDC study.[3]

Despite the discouraging news about early treatment with ZDV, there may be other early interventions useful for at least some who learn their HIV status. These include prophylaxis for *Pneumocystis carinii* pneumonia (PCP) or other opportunistic infections associated with HIV infection, immunizations, and counseling regarding diet and food preparation to avoid food-borne pathogens.

Table 18

HIV ANTIBODY TESTING OF INMATES, HIERARCHICAL CATEGORIZATION, 1994[a]

Procedure	U.S. State/Federal Prison Systems (N=51) Number of Systems	%	U.S. City/County Jail Systems (N=29) Number of Systems	%
Mandatory Mass Screening (all incoming inmates, current inmates, and/or inmates at release)	17	33%	0	0%
Voluntary/Inmate Request Testing	30	59	28	97
Testing if Clinical Indications[b]	4	8	1	3
Total	51	100	29	100

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

[b]In this table, clinical indications include lowered CD4 (T4) counts, opportunistic infections, and TB positivity or active TB.

Source: NIJ/CDC Questionnaire Responses.

A combination of mass HIV education and intensive counseling focusing on individuals who self-identify as high risk, may be a more effective means of getting inmates to volunteer for HIV testing.[4] Research done in the New York City jail system provides support for this strategy.[5]

Dr. Jan Diamond recommended the following methods of maximizing acceptance of voluntary testing: using non-correctional staff for counseling and testing; maintaining confidentiality if at all possible; considering the use of anonymous testing; and providing follow-up after testing with high-quality counseling, education, and medical care.[6]

Confidentiality and Disclosure of HIV Status

One of the best ways to maximize acceptance of testing by those most at risk for HIV is to ensure that confidentiality of results is protected. In correctional settings, this poses great challenges. As shown in table 21, the majority of prison and jail systems have policies against notifying correctional staff, other than medical staff, of inmates' HIV status. Policies permitting disclosure to nonmedical staff usually limit this to central office or institutional management staff. Indeed, policies for disclosure to central office

Table 19

HIV ANTIBODY TESTING POLICIES, HIERARCHICAL CATEGORIZATION: Results of the Validation Study (VS)

	Systems in VS With This policy	Facilities in VS in These Systems	% in Agreement
Mandatory Mass Screening[a]	4	11	82 %
Mandatory Testing of Pregnant Women	4	4[b]	0
Voluntary/On-Request Testing	8	21	95
Clinical Indications	1	1	0

[a] Screening of all incoming inmates or all releasees.

[b] Facilities with female inmates.

Source: NIJ/CDC Questionnaire Responses.

and institutional management staff declined among State/Federal systems by 12 and 14 percent, respectively, since the 1992 survey. In 1994, only four State systems (8 percent) and four responding city/county systems (15 percent) reported policies for notifying line correctional officers of inmates' HIV status.

Table 21 shows that the inmate, medical staff, and the public health department are the most commonly notified parties, as a matter of official policy. Next most common is sexual partners. A partner notification policy might mean that the inmate notifies the partner(s) directly, that correctional officials notify the partner(s), or that public health authorities are notified and follow up with the partner(s). About 90 percent of the State/Federal systems and 75 percent of city/county systems use two or more methods of notification. In such cases, notification of sexual partner(s) is not left entirely up to the inmate.

Table 22 summarizes validation study results regarding notification of HIV status. The left-hand side of the table shows the percentages of facilities reporting that they notify various parties in compliance with central office policies. Notably, facilities' reported compliance with central office policies against notification of correctional officers was extremely high (97 percent). Most other agreement rates are fairly high except those regarding central office staff, sexual and needle sharing partners, and assault victims. This suggests that some facilities are not notifying central offices of cases of HIV infection and that many facilities may not be complying with partner and victim notification policies established by their systems. The right-hand side of the table shows that unauthorized notifications are occurring in some facilities as a matter of institutional procedure. Such unauthorized notifications appear to be most common with regard to other medical staff and public health departments.

Beyond officially stated policies at the system or facility level, actually maintaining confidentiality of HIV-related and other sensitive information is extremely difficult in a correctional setting. One State system, for example, uniformly "flags" with a prominent sticker the medical records of inmates who are infected with blood-borne diseases. Although official policy does not require or authorize notification, medical staff practice may provide inmates or correctional staff with opportunities to learn confidential information.

Flagging or obvious coding of medical records has become relatively uncommon, but other means of unofficial disclosure of HIV status remain in the normal course of correctional life. Even without obvious flagging of records, medical staff or inmates working in medical units have access to the information and may disclose it. Despite official policies, many correctional officers and inmates

Table 20

CORRECTIONAL SYSTEMS CONDUCTING MANDATORY SCREENING OF INMATES, JUNE–DECEMBER 1994[a]

U.S. State/Federal Prison Systems (N=51)	U.S. City/County Jail Systems (N=29)
Federal Bureau of Prisons	None
Alabama Colorado Georgia Idaho Iowa Michigan Mississippi Missouri Nebraska Nevada New Hampshire North Dakota Oklahoma Rhode Island Utah Wyoming	

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

Source: NIJ/CDC Questionnaire Responses.

believe they are entitled to know who is HIV infected. Correctional officers have substantial power and can use it to obtain information. In short, official policies will only protect confidentiality if they are enforced through vigilant monitoring.

HIV Pretest/Posttest Counseling

Pretest and posttest counseling are critical components of HIV programs in correctional facilities. There may have been uncertainty about the meaning of the 1994 survey questions regarding HIV prevention counseling. The questions were intended to refer to ongoing prevention counseling, but many systems probably answered in terms of pretest and posttest counseling. Over half of all correctional systems reported providing HIV counseling in all of their facilities. Sixteen percent of State/Federal systems and 13 percent of city/county systems report that less than 50 percent of their facilities are providing counseling. On average, 78 percent of facilities in State/Federal and city/county systems are reportedly providing counseling.

Pretest and posttest counseling should be provided on an individual basis. However, many correctional systems simply do not have sufficient staff to offer individual pretest counseling and therefore conduct this counseling in groups. It is absolutely essential that posttest counseling be given individually, and almost all correctional systems report this to be their policy. However, as with confidentiality, policy

Table 21

POLICIES REGARDING DISCLOSURE/NOTIFICATION OF INMATES' HIV ANTIBODY TEST RESULTS, 1994[a]

Parties To Be Notified During Incarceration and/or at Release According to Policy[a]	U.S. State/Federal Prison Systems (N=51)		U.S. City/County Jail Systems (N=29)	
	Number of Systems	%	Number of Systems	%
Inmate/Patient	51	100 %	29	100 %
Attending Physician or Health Care Worker	50	98	26	90
Other Medical Staff (community or correctional)	36	74	19	66
Correctional Management—Central Office	20	39	6	21
Correctional Management—Institution	16	31	9	31
Correctional Officers (security)	4	8	4	15
Public Health Department	40	80	21	72
Spouse/Sexual Partner(s)	30	59	13	45
Needle-Sharing Partner(s)	19	37	7	24
Assault Victims of Inmate (in community and/or in prison/jail)	17	35	10	38
Parole Agency	10	20	2	7
Residential Placement[b]	6	12	0	0
Work Placement[b]	0	0	0	0
Other[c]	12	24	10	34

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

[b]Most systems view notification of residential or work placements as falling in the domain of parole agencies/divisions.

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

Source: NIJ/CDC Questionnaire Responses.

does not always translate into practice. There are numerous allegations regarding failure to conduct counseling with inmates when tests are negative (thereby losing an important education opportunity) and insensitive and inappropriate methods of notifying seropositive inmates.

Testing for Sexually Transmitted Diseases

Table 23 shows that the routine testing of inmates for STDs is much more common than the screening of inmates for

Table 22

NOTIFICATION OF HIV STATUS: Results of the Validation Study (VS)

Person or Group	Systems in VS That Notify	Facilities in VS in These Systems	% in Agreement	Systems in VS That Do Not Notify	Facilities in VS in These Systems	% in Agreement
Inmate	13	33	100%	0	N/A	N/A
Physician	13	33	100	0	N/A	N/A
Other Medical Staff	8	20	55	5	13	15
Central Office Staff	5	11	36	8	22	64
Institution Management	2	4	50	11	29	79
Correctional Officers/Security	1	1	100	12	32	97
Public Health Department	10	22	77	2	6	33
Spouse or Sex Partner	10	28	18	3	5	60
Needle-Sharing Partner	9	27	19	4	6	100
Victim	4	10	40	8	22	96
Parole Agency	3	8	63	10	25	80
Residential Placement	3	10	50	10	23	78
Work Placement	0	N/A	N/A	13	33	97
Other Public Agency	1	3	0	12	30	90

N/A: Not available.

Source: NIJ/CDC Questionnaire Responses.

Table 23

SUMMARY OF CORRECTIONAL POLICIES ON INMATE TESTING FOR STDs, 1994[a]

Testing Policies	U.S State/Federal Prison Systems (N=51) Number of Systems	%	U.S. City/County Jail Systems (N=29) Number of Systems	%
Routine Screening of:				
All Incoming Male Inmates	44	86%	11	38%
All Incoming Female Inmates	44	86	10	34
All Incoming Males and Females	42	82	10	34
All HIV-Positive Inmates	31	61	9	31
Voluntary/Inmate Request Testing Available to All Inmates	30	59	24	83
Testing if Clinical Indications[b]	49	96	27	93

[a]This table includes actual and planned policies. The categorization is not mutually exclusive.

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

Source: NIJ/CDC Questionnaire Responses.

HIV. (Routine testing means that individuals are tested unless they specifically decline.) Nearly 90 percent of State/Federal systems routinely test inmates for syphilis, gonorrhea, and/or chlamydia. Approximately one-third of city/county systems conduct such testing. Put another way, 42 of the responding State/Federal systems test all incoming inmates for at least one of these three STDs, yet of those 42 systems, 67 percent do not screen incoming inmates for HIV. And while no city/county system screens for HIV among incoming inmates, 36 percent do test for STDs. The wider use of routine STD testing probably results from the faster availability of results and the greater certainty of treatment effectiveness, as well as from the historically lesser concern associated with making STD testing mandatory. Probably because more systems conduct routine STD testing, fewer offer STD testing on request.

Two State systems and one city/county system test males for STDs but not females, and two State systems test females only. Again, this is most likely a matter of logistics. One of the State systems that reported testing only females explained that inmates are usually discharged or sent to their housing assignments so quickly that medical staff do not have enough time to take blood samples. In this State system, females are tested for syphilis because there is a phlebotomist available who is able to draw blood on the day female inmates arrive.

Unavoidable circumstances and logistical constraints sometimes limit the ability of correctional systems to provide routine STD testing. However, correctional health care staff should recognize the public health value of providing early detection and treatment services to incoming inmates with histories of high-risk behavior. At a minimum, formal systems for referral to STD testing and treatment services in the community should be incorporated into discharge planning. Such measures would contribute to the protection of public health in the larger community.

STD Notification

Eighty percent of all State/Federal systems have a policy for notifying the sexual partners of inmates with a positive syphilis test, 76 percent notify partners regarding gonor-

rhea positivity, and 72 percent notify partners of positive chlamydia tests.

City/county systems follow the same pattern of notification for the different types of STDs. Partners are notified most frequently if an inmate has a positive test for syphilis (79 percent of systems), followed by gonorrhea with 75 percent of systems reporting partner notification, and 68 percent of city/county systems reporting partner notification for chlamydia.

As with HIV notification policies, the NIJ/CDC survey collected information on what constituted partner notification. Specifically included was notification by the inmate, correctional officials, and/or public health authorities. Of the State systems that report STD partner notification policies, only 2 percent leave the notification of syphilis entirely up to the inmate. Slightly more State/Federal systems (8 percent) leave the notification of gonorrhea or chlamydia up to the inmate. Among the city/county systems that have notification policies, 18 percent leave notification of sexual partners up to the inmate.

The majority of systems report notification policies for partners of inmates with STDs, yet there is still a sizable minority of correctional systems that do not. An inmate's sexual partner may be outside the correctional system and therefore not the system's "responsibility." However, notification of an STD can be an important opportunity for education and prevention, as well as medical treatment of partners who may be unknowingly transmitting STDs to others in the community. Moreover, the timely notification of partners may result in substantial savings by avoiding costly treatment of STD complications.

Pregnancy Testing

Forty-four percent of State/Federal systems report routine pregnancy testing of incoming females. This is double the percentage of city/county systems that report pregnancy testing. The difference can probably be attributed to the high turnover and short average length of stay in jails. Pregnancy testing and HIV testing of women found to be pregnant may become increasingly important in light of research findings suggesting the efficacy of early intervention with ZDV in preventing vertical transmission of HIV. Moreover, STD testing and treatment of pregnant women would result in significant reduction of adverse birth outcomes, such as congenital syphilis.

Endnotes

1. J. Diamond, "HIV Testing in Prison: What's the Controversy?" (commentary), *The Lancet* 344 (December 17, 1994): 1605–1651.

2. 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. Interview with Lynn McMorrow, Northwest State Correctional Facility, Swanton, Vermont, November 8, 1994.

4. M. L. Lachance-McCullough, J. M. Tesoriero, M.D. Sorin, and A. Stern, "HIV Infection Among New York State Female Inmates: Preliminary Results of a Voluntary Counseling and Testing Program," *The Prison Journal* 73, no. 2 (1994): 198–215.

5. S. Florio et al., "HIV Infections in the New York City Jails: A Voluntary Program," Poster Abstract POC 4318, the Eighth International Conference on AIDS, Amsterdam, July 1992.

6. Diamond, "HIV Testing in Prison."

Chapter 5

Housing and Correctional Management of Inmates with HIV/AIDS

This chapter discusses issues regarding the management of inmates with HIV/AIDS, including housing policies, work assignments, availability of conjugal visits, early and compassionate release, and discharge planning.

Housing Policies

Since the first NIJ survey was conducted in 1985, there has been a marked trend away from policies calling for the segregation of inmates with HIV infection and AIDS. Table 24 shows the steady decline in the number of State/Federal prison systems reporting the segregation of inmates with AIDS and asymptomatic HIV infection. In 1985, 38 (75 percent) of the prison systems reported segregating inmates with AIDS, and 8 systems (16 percent) reported segregating inmates with asymptomatic HIV (then called HTLV-III) infection. By 1994, the numbers had shrunk to 4 and 2 systems respectively.

This change resulted from a steady erosion of the view that segregation represents an effective and prudent method of preventing the transmission of HIV. At the same time, alleviation of the earlier levels of hostility and even hysteria surrounding inmates with HIV disease has rendered it much more feasible for them to be housed in the general population of correctional facilities.

The same two State prison systems, those in Alabama and Mississippi, that had reported segregating all known HIV-infected inmates in 1992–1993 still reported such a policy in 1994. Alabama's segregation policy is the subject of a continuing lawsuit, as discussed in chapter 7.

Housing policies reported by prison and jail systems in 1994 for inmates with AIDS, symptomatic non-AIDS, and asymptomatic HIV infection are summarized in Table 25. This table shows that none of the city/county jail systems that responded to the survey segregate inmates with any type of HIV disease. While segregation policies have continued to lose favor, there was some shift between the 1992–1993 and 1994 surveys from policies calling for general population housing to those calling for case-by-case decisions. Some of this apparent shift may be due to respondents' uncertainty about the meaning of the categories—that is, a policy for the presumptive general population housing of inmates with HIV may be hard to distinguish from a policy in which decisions are made on a case-by-case basis. At the same time, there may also have been some real increase in a view that a case-by-case decision-making policy offers the best way to address the medical and psychosocial needs of inmates with HIV disease.

Differing interpretations of these two policy categories and/or real discrepancies in policy between central offices and individual facilities are apparent in the validation study results. In systems reporting policies for general population housing of inmates with AIDS, symptomatic non-AIDS, and asymptomatic HIV infection, rates of agreement for individual facilities were 60 percent, 75 percent, and 64 percent, respectively. Rates of agreement were even lower for facilities in systems reporting case-by-case housing decisions for these categories of inmates—33 percent, 24 percent, and 17 percent.

The real complexity of policies regarding housing and programming for inmates with HIV—particularly in large systems with HIV-infected inmates in multiple facilities—is well illustrated by the situation in the California State correctional system.[1] A 1990 consent decree in the case of *Gates* v. *Deukmejian*, which had challenged the State's policy of segregating all known male HIV-infected inmates in a closed wing at California Medical Facility, Vacaville, established a pilot program of partial integration for selected inmates.[2] These inmates continued to live in a

Table 24

DECLINE OF SEGREGATION POLICIES IN STATE/FEDERAL SYSTEMS (N=51), 1985–1994

Years	Systems With Segregation Policies			
	HIV-Infected Inmates		Inmates With AIDS	
	Number of Systems	%	Number 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
1992/1993	2	4	5	10
1994	2	4	4	8

Source: NIJ/CDC Questionnaire Responses

separate wing but could participate in educational and work programs with the general population of the facility. The pilot program was to be monitored and expanded or adjusted based on performance.

Over time, a dual system has been established at Vacaville and San Quentin, with open units (separate housing and integrated programming as in the original pilot program) and closed units (continued separate housing and programming). Inmates with documented histories of high-risk behavior (i.e., participation in anal intercourse, oral sex, or assault involving potential blood exposure to another) within the past year and those for whom there is "reasonable cause to believe" they will engage in such behaviors are excluded from assignment to an open unit.[3] At Vacaville and San Quentin there is no full integration of known HIV-infected inmates into the general population, although there are believed to be numerous inmates whose infection is not known to the correctional department and who remain in general population housing and programming. The plaintiff's attorneys in the *Gates* case have not fought to end segregated housing for HIV-infected inmates at Vacaville, because the vast majority of the affected inmates wanted this to continue. The lead attorney asserted that this is because the inmates with HIV feel safer being housed in the separate wing and believe they benefit from a stronger internal support system there. They are satisfied with this arrangement as long as they can have access to programs in the general population.

At the men's prison at San Luis Obispo, by contrast, known HIV-infected inmates live in the general population, but most are double-celled together. The prison authorities will not knowingly assign an HIV-infected and non-HIV-infected inmate to be cellmates.

Finally, at the women's prison at Frontera, all three conditions exist—that is, closed unit, open unit, and general

Table 25

HOUSING POLICIES FOR INMATES WITH AIDS, SYMPTOMATIC NON-AIDS, AND ASYMPTOMATIC HIV INFECTION, 1994[a]

	U.S. State/Federal Prison Systems (N=51)						U.S. City/County Jail Systems (N=29)					
	AIDS		Symptomatic Non-AIDS		Asymptomatic HIV Infection		AIDS		Symptomatic Non-AIDS		Asymptomatic HIV Infection	
Housing Policy	Number of Systems	%	Number of Systems	%	Number of Systems	%	Number of Systems	%	Number of Systems	%	Number of Systems	%
All Remain in General Population With No Restriction	8	16%	15	29%	28	55%	1	3%	5	17%	14	48%
All Remain in General Population With Restrictions/ Precautionary Measures[b,c]	3	6	5	10	4	8	0	0	1	3	2	7
All Permanently Separated/ Segregated[d]	4	8	2	4	2	4	0	0	0	0	0	0
Case-by-Case Determination (based on medical and/or security or unspecified reasons)	36	71	29	57	17	33	28	97	23	79	13	45
Total	51	101[e]	51	100	51	100	29	100	29	99[e]	29	100

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

[b]The figures in this category include systems who hospitalize a patient during severe illness but upon improvement return the inmate to general population.

[c]This category includes single-celling.

[d]This category includes presumptive hospitalization, infirmary housing, and administrative separation in medical or nonmedical units.

[e]Due to rounding.

Source: NIJ/CDC Questionnaire Responses.

population housing. In the California case, in other words, differing policies are known and permitted to exist in different facilities.

Work Assignments and Other Programming

In most instances, inmates with HIV who live in the general population or have access to general population programming are eligible for all work assignments and other programs. However, some types of program assignments have continued to be controversial. In California, participation of HIV-infected inmates in four types of programming—work furloughs, medical services jobs, family visits, and food service jobs—remained at issue at the time of the agreement on housing units. Subsequently, the correctional department allowed HIV-infected inmates to participate in work furloughs and work in medical services jobs but has remained firm in its opposition to family visits and food service work assignments.

Indeed, the assignment of inmates with HIV to food service work has continued to provoke controversy in a number of systems. In Arizona, a Federal district court ruled out the exclusion of HIV-infected inmates from food service assignments as a violation of the Federal Rehabilitation Act, but this decision was subsequently overturned by the Circuit Court of Appeals on technical grounds.[4] In California, by contrast, the correctional system's exclusion of HIV-infected inmates from food service jobs was upheld by the Ninth Circuit Court of Appeals. There was agreement regarding the lack of evidence of HIV transmission through food, but the court still accepted the correctional department's position that assigning HIV-infected inmates to food service jobs might lead to prison riots and abuse of those inmates. The Circuit Court's ruling overturned an earlier district court opinion on the issue of food service work assignments.[5]

Policies that exclude HIV-infected inmates from food service jobs or force them to eat on disposable dishes contradict and undermine educational messages. If educational programs stress that HIV is not contracted through casual contact, including food and utensils, then inmates will question the necessity of excluding HIV-infected persons from food service jobs. Likewise, they may wonder why disposable plates and utensils are used. Such concerns may lead to a mistrust of the correct educational messages and breed fear about the casual transmission of HIV. These policies may also break the confidentiality of HIV-infected inmates. Inmates can quickly deduce that anyone refused a food service job or forced to use disposable utensils is HIV infected.[6]

Conjugal Visits

Conjugal visits are available to inmates in only eight State/Federal prison systems (16 percent). No city/county jail systems reported making conjugal visits available to inmates. In those with conjugal visit programs, five (10 percent of all State/Federal systems) make these visits available to HIV-infected inmates. In 1991, the New York State correctional system, in a policy reversal, opened conjugal visits to HIV-infected prisoners. As noted above, HIV-infected inmates in California continue to be excluded from conjugal visits. In Louisiana, inmate HIV peer educators have argued that instituting conjugal visits would reduce the sexual tension that leads to homosexual contact in prisons and often to high-risk sexual activity among inmates.[7]

Early and Compassionate Release

It has commonly been argued that since inmates in the advanced stages of AIDS and other terminal illness pose little threat to the community, they should be afforded early release so that they can return to their families and communities and not be forced to die in prison. The 1994 NIJ/CDC survey reveals that 31 State/Federal prison systems (61 percent) and 11 responding city/county jail systems (38 percent) have policies for early or compassionate release, and 19 State/Federal systems (37 percent) and seven city/county systems (24 percent) have policies for medical furlough of such inmates. A total of 214 inmates in 22 State/Federal systems and 131 inmates in nine city/county systems have been reportedly released under such policies.

The generally hard-line political climate regarding the treatment of criminals and publicity surrounding crimes committed by inmates who were released through various programs have contributed to the difficulty of implementing and taking full advantage of early release programs for terminally ill inmates. In Massachusetts, a medical parole bill was vetoed by the Governor even though it included strong requirements for certification that the inmate to be released pose no threat to the community.

At the same time, revisions to the New York State medical parole bill adopted in the spring of 1994 render that provision more likely to be used. The original legislation

required a physician to make a judgment that the inmate was unlikely to commit further crimes if released. Very few physicians were willing to make such a nonmedical judgment. Under the legislative revisions, the physician is asked only to make a medical judgment that the prisoner's illness is terminal and results in severe restrictions on his or her ability to self-ambulate.[8] Over 50 New York State inmates with AIDS or other terminal illnesses were released on medical parole during 1994, as opposed to a total of only 6 through January 1993. There is no evidence that any of these individuals committed serious crimes following their release.

In Maryland, as part of a comprehensive discharge planning program (discussed below), inmates with HIV/AIDS are identified for expedited medical parole, and their cases are coordinated by a special staff of case managers and a nurse consultant. Under this program, the number of inmates receiving medical parole increased from 8 in 1991 to 23 in 1993. None of the inmates released on medical parole has been reincarcerated for violent crimes.[9]

Discharge Planning

There may be a temptation on the part of correctional authorities to reduce their medical services costs by seeking the release of inmates with AIDS and other illnesses. Regardless of how or when inmates with HIV/AIDS are released from prisons and jails, however, it is essential that comprehensive discharge planning be done so that inmates are connected with services they need in the community.

Eighty-two percent of State/Federal systems and 55 percent of responding city/county systems reported providing discharge planning for inmates with HIV/AIDS. Table 26 shows the services reportedly offered by correctional systems as part of the discharge planning process. Between 49

Table 26

DISCHARGE PLANNING SERVICES, 1994

	U.S. State/Federal Prison Systems (N=51)				U.S. City/County Jail Systems (N=29)			
	Referral Made		Appointment Made		Referral Made		Appointment Made	
Services	Number of Systems	%	Number of Systems	%	Number of Systems	%	Number of Systems	%
Medicaid/Related Benefits	36	71%	13	25%	13	45%	4	14%
CD4 Monitoring	33	65	12	24	13	45	4	14
Therapeutic Medications	35	69	12	24	14	48	6	21
Substance Abuse Treatment	25	49	7	14	14	48	6	21
Ongoing HIV Counseling	35	69	9	18	14	48	5	17
Psychosocial Support	32	63	8	16	14	48	4	14

Source: NIJ/CDC Questionnaire Responses.

and 71 percent of State/Federal systems report making referrals, depending on the category of service, whereas only 16 to 25 percent of systems report making actual appointments for releasees to obtain these services. Percentages are lower for both discharge planning referrals and arrangement of appointments in city/county systems. Experience shows that the more extensive the prerelease planning and arrangements, the greater the likelihood of follow-through by releasees.

Actual facility-level performance may have even more shortcomings than indicated by reported system-level policies. The validation study reveals that 62 percent of facilities in systems with policies to provide discharge planning reported actually providing such services. More than one-third of these facilities reported not providing discharge planning despite their central office's policy that it be done. A New York inmate interviewed for this study stated that this discharge planning was not occurring in some facilities despite a systemwide policy that facility parole officers help inmates with HIV/AIDS secure their benefits for medications (ADAP) and SSI prior to release. However, the inmate reported significant recent progress in discharge planning at his facility, especially for those inmates involved in an HIV support group led by the Catholic chaplain.[10]

A number of correctional systems have initiated special and, in some cases, quite innovative programs to improve discharge planning for inmates with HIV/AIDS. The Health Resources and Services Administration (HRSA) has funded a number of these programs under the Special Projects of National Significance (SPNS) component of the Ryan White Care Act. These programs seek not only to improve the process of discharge planning before inmates are released, but also to improve follow-through and continuity of care once they return to the community. Examples of these programs are provided below. A key to success in many of these programs is collaboration among correctional systems, academic institutions, and medical centers in the community. The most successful programs also appear to be those that do not limit their assistance to medical treatment but attempt to address the full range of human and social service program needs of the client. These may include housing, employment training and placement, drug treatment, and other services. In general, the more the releasee can be helped to make the transition to life in the community, the less chance he or she will commit further crimes and return to prison.

Rhode Island

Rhode Island's discharge planning program involves the correctional department, Miriam Hospital, and Brown University.[11] The program is staffed by part-time nurses who seek to provide full evaluation and discharge planning services for all HIV-infected inmates beginning at least three months prior to their discharge. The program also monitors and follows up on individuals' status and progress once they leave prison. In its first year of operation, the program provided services to 68 percent of HIV-infected inmates at the Rhode Island Adult Correctional Institution. Most of those inmates not reached had very short sentences.

The prerelease evaluation in Rhode Island includes needs assessment and arrangements for medical care, substance abuse treatment, finances, housing, family support, child care, and employment. The discharge planning staff have established an extensive network of organizations in the community willing to provide services to releasees. Under an arrangement with Miriam Hospital/Brown University, it is often possible for these releasees to be cared for by the same physicians who treated them in prison. Housing and substance abuse services have posed particular challenges, but the program has established important linkages with a range of residential and outpatient treatment agencies as well as with housing services. Sunrise House is a particularly important linkage, providing long-term housing and supportive services for releasees with HIV who have no families or others with whom they could live.

An indication of the effectiveness of the Rhode Island program comes from a comparison of short-term recidivism rates for participants and nonparticipants. Among women with HIV infection, 12 percent who had received discharge planning services returned to prison within six months, whereas 27 percent of those who had not participated in the program were back in prison within six months.

Maryland

In Maryland, medical case management is provided for inmates with HIV/AIDS beginning three to six months before their release.[12] Through this process, inmates are qualified for medicaid, SSI, and other benefits before they return to the community. The case management staff prepare and submit necessary paperwork while the inmate is still incarcerated. Moreover, the Maryland program has used the U.S. Department of Housing and Urban Development's Housing for People with AIDS (HPWA)

program to locate subsidized housing for a number of releasees.[13] Housing is often a particularly difficult problem for inmates with HIV/AIDS returning to the community, many of whom do not have families willing to take them in.

Connecticut

In collaboration with Yale University Medical School, the Connecticut correctional system has instituted a range of new programs for inmates with HIV/AIDS.[14] One program seeks to improve discharge planning and follow-up for female HIV-infected inmates at Niantic who are returning to the New Haven area.

An investigation of barriers to follow-up on referrals revealed problems with long waiting lists for methadone maintenance and other substance abuse treatment and delayed eligibility for medicaid and other benefits, as well as releasees' reluctance to contact agencies in the community unless they had been personally introduced to them prior to release. The Interfaith AIDS Network received a contract to conduct discharge planning and follow-up for women inmates with HIV/AIDS about to be released to New Haven. A case manager from Interfaith AIDS Network visits Niantic several times each week to meet with inmates scheduled for release. The case manager works with the inmates to expedite the process of qualification for medicaid and other benefits, to make appointments for medical treatment on the outside, and to find resources for substance abuse treatment, if appropriate. The case manager then follows up with inmates after they are released to ensure that they make appointments.

Among women involved with the program, rates of keeping appointments and following through on referrals have been quite high. Ninety-eight percent of the women kept initial medical appointments, and 77 percent were still under regular medical treatment six months after their release. Rates of successfully obtaining methadone maintenance and some other services were not as high, but the program has clearly helped many HIV-infected women to obtain better support and care in the community.

Federal Bureau of Prisons

At its Lexington, Kentucky, medical facility for women, the Federal Bureau of Prisons has undertaken a broad collaborative program with the University of Kentucky Medical Center and the national network of AIDS Education and Training Centers (AETC's) funded by the U.S. Public Health Service.[15] Using this network, female inmates with HIV/AIDS nearing release from Lexington are linked with medical providers in the communities to which they will return. The AETC's refer releasees to providers in these communities. The prison medical staff then communicate with the providers to ensure continuity of treatment and care. In some instances, referral providers have been able to enroll releasees in experimental treatment protocols.

Cook County (Chicago), Illinois

Discharge planning may be even more challenging in city/county jails where lengths of stay are generally short and turnover rates are high.[16] However, several large jail systems have undertaken efforts in this area. In Cook County, Illinois, case managers from Cermak Health Services meet with inmates and make referrals. Because of caseload and short stays, referrals are often made after the inmate is released. Necessary medical records on the inmate are then forwarded to the referral provider. Case managers also work to contact releasees who received HIV antibody tests in jail but had not yet been informed of their results prior to their release.

San Francisco

Each releasee from San Francisco jails receives a packet containing condoms, bleach, alcohol swabs, and printed HIV prevention and referral materials.[17] But inmates are "not just dumped onto the streets," according to Ralle Greenburg, director of the Forensic AIDS Project of the city's public health department. The program also provides extensive case management services for HIV-infected inmates in the city's jails. These services include community linkages for inmates being released. Placement and referrals for medical and psychosocial services are offered, and jail-based case managers often continue to work with the inmates after they return to the community.

Self-Help Materials

Discharge planning for inmates with HIV/AIDS is lacking or inadequate in many correctional facilities. Moreover, even where prerelease planning is adequate, there may be insufficient support and follow-up once inmates return to the community. To address this need, the AIDS in Prison Project of the Osborne Association in New York City has provided some simple written guidance and offers ongoing assistance and support for former inmates with HIV/AIDS.

The written guidance suggests prerelease steps (e.g., arranging housing, obtaining necessary identification papers, applying for medical and other benefits, and obtaining support and case management services) and provides specific information on organizations and resources that can help inmates make these arrangements. The guidelines also outline first steps for former inmates to take once they are released: report to your parole officer; find a case manager; maintain sobriety; and remain calm and be assured "that things will work out with patience and persistence."[18]

Endnotes

1. The following discussion is based on an interview with Matthew Coles, Esq., formerly of American Civil Liberties Union Foundation of Northern California, the lead attorney for the plaintiffs in the *Gates* case, December 1994.

2. *Gates* v. *Deukmejian* (U.S. Dist. Ct., E.D. California), No. CIVSW 87-1636, settlement approved March 8, 1990.

3. The terms of the agreement are included in *Gates* v. *Rowland* (Ninth U.S. Circuit Court of Appeals), Nos. 93-15363 and 93-16136, opinion dated November 4, 1994.

4. *Casey* v. *Lewis*, 773 F. Supp. 1365 (D. Ariz. 1991); *Casey* v. *Lewis*, 4 F. 3d 1516 (9th Cir. 1993).

5. *Gates* v. *Rowland* (Ninth U.S. Circuit Court of Appeals), Nos. 93-15363 and 93-16136, opinion dated November 4, 1994.

6. "Confidentiality Said Breached by Serving Food on Paper Plates," *AIDS Policy and Law*, December 12, 1990, p. 3.

7. A. Joseph (HIV/AIDS peer educator, Louisiana State Penitentiary, Angola), "The Impact of Life Sentences on HIV/AIDS in Prison," presented at HIV/AIDS Prevention Conference, Angola, October 4, 1994.

8. "New Hope for Medical Parole," *PWA Support* (PWA Legal Assistance Newsletter, a publication of Prisoners Legal Services of New York) 6 (Summer/Fall 1994): 7, 10.

9. B. A. Boyle and L. H. Kummer, "Medical Case Management for Correctional Systems: The Maryland Model for Inmates With HIV Infection," paper prepared for HRSA SPNS conference, Washington, June 1–2, 1994.

10. Letter from David Gilbert, inmate at Great Meadow Correctional Facility, Comstock, New York, to Theodore M. Hammett, November 14, 1994.

11. The following discussion is based on two draft papers: T.P. Flanigan et al., "Medical Care and Community Followup of HIV-Infected Prisoners: The Rhode Island Experience"; and T. P. Flanigan et al., "Prison Release Program for Incarcerated HIV Positive Men and Women."

12. The following discussion is based on B. Boyle and L. Kummer, "The Maryland Model for Inmates with HIV Infection."

13. Boyle and Kummer, "Medical Case Management for Correctional Systems."

14. The following discussion is based on F. L. Altice et al., "Discharge Planning and Continuity of Care for HIV Infected Female Inmates," paper prepared for the HRSA SPNS conference, Washington, D.C., June 1–2, 1994.

15. A. Macher, "Access to Continuity of Care for Inmates with HIV Disease: The Federal Initiative," paper prepared for the HRSA SPNS conference, Washington, D.C., June 1–2, 1994.

16. This discussion is based on T. Howleit and K. Stauffer, "Progress and Challenges in Linking Incarcerated Individuals with HIV/AIDS to Community Services," paper prepared for the HRSA SPNS conference, Washington, D.C., June 1–2, 1994.

17. The following discussion is based on a presentation by Ralle Greenburg (Forensic AIDS Project, San Francisco Department of Health) at the annual meeting of the American Public Health Association, Washington, D.C., November 1, 1994.

18. S. Machon, W. Lopez, and S. Meletiche, "What To Do Leaving Prison If You Are HIV," *PWA Support* 6 (Spring 1994): 1–3.

Chapter 6

Medical Care and Psychosocial Services

The provision of medical care and psychosocial services for inmates with HIV disease continues to pose challenges for correctional systems as the numbers of inmates requiring services increases and the pressure on budgets is heightened. In the face of escalating costs and caseloads in HIV/AIDS and other health problems, many correctional systems are turning to contracted services and managed care approaches.[1] Some argue that inmates with HIV disease remain seriously underserved and are often treated with cruelty and insensitivity.[2] There continue to be allegations of prisoners with AIDS being relegated to the "care" of untrained, incompetent, and unconcerned staff and permitted to die alone, without proper medical treatment or supportive services.[3] Others argue that many inmates are getting more and better medical and psychosocial services in prison than they ever got on the outside, and that although the state of care for inmates with HIV disease still needs improving, most correctional systems have come a long way in the availability of medical and psychosocial services.[4] There is clearly a mixed pattern, with some systems providing better levels of care than others.

Particularly challenging areas in the realm of medical and psychosocial services, beyond escalating caseloads and budgetary pressures already cited, include ongoing availability of therapeutic drugs, regular high-quality primary and specialty care (and the proper mix of these services), care for AIDS dementia and other neuropsychological manifestations of HIV disease, case management, follow-up and continuity of care, hospice care, access to clinical trials and experimental therapies, and appropriate nutritional supplements. Important aspects of adjunctive and psychosocial services include ongoing counseling and support, as well as substance abuse treatment. The Correctional Association of New York has offered a series of policy proposals for improving medical care for inmates with HIV/AIDS. These include the following:

- Standardized medical care policies and protocols.
- Independent quality assurance.
- Delivery of care by departments of health or private providers.
- A primary health care model.
- Expanded resources and support for correctional health care.
- Minority, multilingual, and multicultural health staff.
- High quality of women's health care.
- Access to AIDS-related clinical trials.
- Training in neuropsychological symptoms.[5]

Availability of Prophylactic and Therapeutic Drugs for Inmates with HIV Disease

The availability of zidovudine (ZDV) to inmates continues to be widespread in correctional systems throughout the United States. The 1994 NIJ/CDC survey reveals that ZDV is available in all responding correctional systems (table 27). The Food and Drug Administration and the Public Health Service have recently softened the recommendation that ZDV be prescribed when the CD4 count is 500 or below and suggested instead that ZDV be an option in cases where the CD4 count is 200–500, with case-by-case determination based on the CD4 count trend and other clinical indications. Fifty-five percent of State/Federal systems and 31 percent of responding city/county systems use a CD4 count of 500 or below as their criterion for ZDV administration. Thirty percent of State/Federal and 34 percent of city/county systems listed "other" criteria for ZDV administration, including relying on physicians' orders and offering the drug to all patients with symptoms or all with HIV infection.

Table 27

PROVISION OF ZIDOVUDINE FOR INMATES, 1994[a]

	U.S. State/Federal Prison Systems (N=51)		U.S. City/County Jail Systems (N=29)	
	Number of Systems	%	Number of Systems	%
Zidovudine Offered	51	100%	29	100%
Eligibility Criteria				
CD4 (T-4) count < 500	28	55	9	32
CD4 (T-4) count < 400	0	0	0	0
CD4 (T-4) count < 300–250	0	0	0	0
CD4 (T-4) count < 200	1	2	3	10
All HIV Positive	3	6	2	7
Doctor's Orders	4	8	5	17
Other/Unspecified	15	30	10	34

[a]Includes systems with policies under revision.

Source: NIJ/CDC Questionnaire Responses.

Although still less common in correctional care than ZDV, other antiretroviral drugs have increased in availability to inmates with HIV/AIDS. Table 28 summarizes the availability of other drugs for inmates with HIV disease. The drug ddI is offered by 86 percent of State/Federal systems and 96 percent of responding city/county systems. It is most commonly used when the patient is resistant or intolerant to ZDV, or when ZDV produces no clinical improvement.

DDC is also most commonly used when the patient is resistant or intolerant to ZDV, when the CD4 count is 500 or lower with symptoms, or simply at the recommendation of the physician. Although the 1994 survey reveals that DDC is fairly widely available, 24 percent of State/Federal systems and 18 percent of responding city/county systems do not offer this therapy to inmates with HIV disease.

Bactrim/Septra, a now more commonly used prophylactic than aerosolized pentamidine for *Pneumocystis carinii* pneumonia, appears to be most often used when the patient's CD4 count is 200 or less (42 percent of State/Federal and 37 percent of city/county systems). This prophylactic therapy is available in 96 percent of State/Federal systems and in all but one responding city/county system.

Access to Experimental Therapies and Clinical Trials

Access to both clinical trials and experimental therapies is still limited in prisons and jails. Just over one-quarter of State/Federal systems (28 percent) offer experimental drugs to inmates with HIV disease (a 10 percent increase over 1992–1993), and only three of the responding city/county systems offer such access. The low rate of access in jail systems no doubt relates to the high turnover in these facilities. As in 1992–1993, only six State/Federal systems (12 percent)—Maryland, New York, Texas, Ohio, Virginia, and the Federal Bureau of Prisons—reported having inmates in clinical trials, most commonly Phase II and Phase III efficacy trials. While a number of other systems

Table 28

PROVISION OF SELECTED DRUGS FOR INMATES, 1994

	U.S. State/Federal Prison Systems (N=51)		U.S. City/County Jail Systems (N=29)	
	Number of Systems	%	Number of Systems	%
Zidovudine Offered	51	100%	29	100%
Bactrim/Septra Offered	49	96	28	97
ddC Offered	39	76	22	82
ddI Offered	44	86	26	96
Experimental Drugs Offered	14	28	3	12
Inmate Participation in Clinical Trials	6	12	0	0

Source: NIJ/CDC Questionnaire Responses.

permit inmate participation in trials, such participation often poses logistical difficulties, and involves additional cost. Inmate subjects must sometimes adhere to complicated regimens and must be transported to outside medical centers for follow-up appointments.

Psychosocial and Supportive Services

Some organizations working with prisoners with HIV cite an ongoing lack of "regular, sympathetic and compassionate treatment" in correctional facilities.[6] These organizations also cite reductions in resources for psychosocial services as widespread and detrimental, particularly to inmates with HIV disease. Budget cuts often hit psychosocial and support services particularly hard. The increasingly common contracting out of medical care and related services for inmates sometimes results in cutbacks in individual counseling, support groups, and other psychosocial services.

Eighty percent of State/Federal systems report that correctional medical staff or public health personnel provide at least some HIV counseling. Nevertheless, the fact that so few survey responses described in detail a well-organized psychosocial support program is reason to be skeptical about the adequacy of these services. The number of correctional systems with full-time specialized counselors serving HIV-infected inmates is still low.

While the availability of specialized professional staff to provide psychosocial and support services is low, the availability of peer counselors remains very low as well. Table 29 shows that only 16 State/Federal systems (31 percent) and 3 city/county systems (10 percent) reported having HIV peer counselors. While lack of professional credentials and restrictions on inmate activities have been cited as obstacles for peer counseling programs in prison, this area merits a closer look. It may represent a cost-effective method of dealing with caseloads. Moreover, a wealth of creativity, resources, and commitment is often found in peer counselors. Research evidence suggests that peer counselors working in community-based outpatient drug treatment and HIV outreach programs, when given proper training and supervision, have been effective not only at counseling, but also at developing creative interventions, as well as maintaining long-term participation.[7]

Support groups represent another important part of psychosocial services to inmates with HIV/AIDS. HIV support groups conducted by correctional staff are reportedly offered in 67 percent of State/Federal systems and 22 percent of responding city/county systems; peer-led support groups are reported by 39 percent of State/Federal systems and 11 percent of responding city/county systems. Finally, 56 percent of State/Federal systems and 43 percent of responding city/county systems offer HIV support groups led by outside organizations.

Validation study results suggest that many individual facilities may fail to provide the support groups reported as policy by the central offices of their systems. One-half to two-thirds of facilities in systems reportedly providing support groups said that they did not in fact offer such groups (table 30).

An examination of requests for technical assistance adds further weight to the perception that there is a need to improve the availability, diversity, and quality of psychosocial and supportive services for inmates with HIV disease. About one-third of the systems responding to the survey indicated an interest in technical assistance on HIV counseling.

Ongoing supportive services are particularly important to prisoners with HIV disease (and other serious illnesses) who may be experiencing serious psychological difficulties associated with their condition and high levels of stress related to dealing with such illness in a correctional setting.

Stress can be particularly devastating for patients with HIV disease. A large body of research points to illness-related stress as having a major negative impact on the immune system.[8] Arguably, strategies to help inmates with HIV disease cope with their illness might be as important as access to therapeutic and prophylactic drugs. While psychosocial and supportive services are proven tools for helping people with stress, survey responses suggest they are far from well established in prisons and jails. Despite the low cost and standardization of stress management programs, very few correctional systems reported having such programs.

"Buddy" programs have been developed by AIDS service organizations in the outside community to provide support for persons living with AIDS. A similar approach holds promise for inmates with AIDS. Buddy programs for inmates with AIDS are being developed in Massachusetts prisons and by the inmate peer program in the Oregon State Penitentiary.

If they cannot be released to die in the community, prisoners in the terminal stages of AIDS or other diseases may benefit from the availability of hospice care within correctional facilities. This is now offered in the Florida State system, and others, including New York, are considering it.

Table 29

SUPPORTIVE SERVICES FOR INMATES WITH HIV/AIDS, 1994

Services Provided	U.S. State/Federal Prison Systems (N=51)		U.S. City/County Jail Systems (N=29)	
	Number of Systems	%	Number of Systems	%
HIV Peer Counselors Available	16	31%	3	10%
Inmate Peer-Led Support Groups	20	39	3	11
Staff-Led Support Groups	34	67	6	22
Support Groups Led by Outside Organizations	28	56	12	43

Source: NIJ/CDC Questionnaire Responses.

Drug Treatment

The dramatic increase in correctional populations during the past 12 years has been fueled by the mass incarceration of drug users. At least some incarcerated drug users find ways to continue their drug use behind bars.

Increasingly stringent mandatory sentencing provisions and persistently serious levels of substance abuse in the community will likely sustain the increase of the correctional population in general and of the number of drug-involved inmates in particular.[9] In this context, the provision of effective drug treatment remains both a challenge and an opportunity for correctional systems. As in the case of HIV education and prevention, correctional systems have ongoing access to large numbers of individuals in need of treatment and, by providing effective treatment, could help reduce relapse and recidivism rates. As the drug-using population increases, however, the resources needed for drug treatment, and psychosocial and medical services will also continue to increase.

Based on survey responses from 34 State/Federal systems, a median of 70 percent of male inmates were estimated to have histories of drug use other than marijuana. Based on responses from 32 State/Federal systems, a median of 71 percent of female inmates had histories of drug use other than marijuana. Among 17 city/county systems, a median of 80 percent of male and female inmates were estimated to have used drugs other than marijuana.

Although various drug treatment modalities may be found in correctional settings, the 1994 survey requested information on only two: residential (separately housed within the correctional institution) treatment and ambulatory counseling. Responses to the 1994 NIJ/CDC survey reveal that more than 48,000 inmates are participating in either residential treatment or ambulatory counseling in 37 State/Federal systems. This figure represents only 5 percent of the total reported incarcerated populations of these systems, very low given the estimated prevalence of pre-incarceration drug use among inmates.

About 5,800 city/county inmates in 16 systems were reported to be in residential or ambulatory treatment. This represents 4 percent of the inmate populations of these systems. The low percentage in jail systems is partly a result of short stays in such facilities.

These figures suggest a continuing serious shortfall in drug treatment services in correctional facilities. However, it is clear that some correctional systems offer access to high-quality drug treatment. Information on the methods utilized by these systems to provide quality drug treatment may be useful so that they can be replicated elsewhere. In general, more systematic communication and sharing of strategies and modalities of substance abuse treatment would be useful.

Table 30

SUPPORTIVE SERVICES FOR INMATES WITH HIV/AIDS: Results of the Validation Study (VS)

	Systems in VS With This Policy	Facilities in VS in These Systems	% in Agreement
Inmate-Led Peer Counseling Support Groups	7	18	33 %
Staff-Led Support Groups	10	26	42
Support Groups Led by Outside Agency	7	15	53

Source: 1994 NIJ/CDC Questionnaire Responses.

Massachusetts: A New Approach to Drug Treatment in Prison

Massachusetts has established a stress management and relaxation program for substance abusers in five of its prisons.[10] Admission to the program is based on a formal application process. This program is modeled after the nationally recognized Stress Reduction Clinic at the University of Massachusetts (UMass) Medical Center. The program is administered by UMass medical center staff trained under Dr. Jon Kabat-Zinn, founder of the Stress Reduction Clinic and author of the best-selling book *Full Catastrophe Living*. The UMass Medical Center program was profiled in the PBS documentary *Healing and the Mind* with Bill Moyers, for its unique capacity to help people control and even overcome chronic health problems for which standard biomedical science has provided no answers.

The program is conducted in a group setting. Groups meet twice a week for 1½ to 2 hours. The average group consists of 16 inmates. Those in attendance are substance abusers, and staff estimate that about 40 percent are also HIV positive and that many more are at high risk for HIV infection.

The correctional version of this program runs in ongoing cycles of six months. Each inmate-participant takes the whole six-month cycle once and graduates with the tools to deal with stress and achieve relaxation and "centering" for the rest of his/her life. Each cycle consists of three stages of eight weeks' duration. There is a one-week "vacation" between stages. At the end of the whole cycle, participants may be reclassified to lower security or join the general population if they had been in segregated housing.

In the prison setting, the program strives to address some of the same issues it tackles in the hospital setting: to help inmates work with their addiction, disease, and stress, as well as to assist in developing healthy coping mechanisms and control of specific and nonspecific pain. This is done by teaching inmates how to use meditation, breathing, and specific yoga-type exercises to focus the mind. The Stress Reduction Clinic program is referred to as "mindfulness-based stress reduction." In addition, it seeks to guide inmates through the difficult and painful process of coming into contact with feelings they have been avoiding most of their lives.

According to George Mumford, project director for the Prison Program at the Massachusetts Department of Correction, the intention is to provide inmates with the "opportunity to learn how to respond rather than react to, for instance, anger." The concept of "mindfulness" is used as the basis of this program, and that concept is defined as "moment-to-moment awareness" and a process of recognizing "the consequences of our actions . . . by learning how to pause and make [healthy] choices."

The Department of Correction program has been in place since 1992 and has graduated over 1,500 inmates. It reports changes that include "reductions in violence, relapse, anger, antisocial behavior, and especially a sense of health." Mumford adds that "stillness and quietness [in meditative practice] seems to improve [not only] the emotional life but the immune system and reduce problems associated with idle time in the prison setting."

Meditation programs in prisons are not new, but this one seems particularly effective. The UMass Medical Center has collected data suggesting that "the majority of people [involved in this program] report lasting decreases in both physical and psychological symptoms . . . pain levels also improve and people learn to cope better. . . . The majority also report an increased ability to relax, greater energy and enthusiasm for life, improved self-esteem and an increased ability to cope more effectively with both short- and long-term stressful situations." (Since they are not based on a controlled study, these data should be considered suggestive rather than conclusive evidence of program effectiveness.)

The cost-effectiveness of such programs is also appealing. At the UMass Medical Center, the cost of this program for the general public is over $600 for a three-month program cycle. In contrast, the correctional system's relaxation and stress management program is estimated to cost about $250 per inmate for a six-month program cycle. The lower cost in the correctional setting is attributed in part to an interagency agreement providing a "bulk" price for large numbers of inmates.

The same program is also accessible to correctional managers and officers in Massachusetts. According to Mumford, it is important to make this type of program available to correctional staff, because "if they understand and experience what we are doing they will be in a position to help us improve the program for everyone."

Endnotes

1. Douglas C. McDonald, *Managing Prison Health Care and Costs* (Washington, D.C.: National Institute of Justice, May 1995).

2. Interview with Anne Braudy, staff attorney, Massachusetts Correctional Legal Services, November 17, 1994.

3. See, e.g., Judy Greenspan et al., "Struggle for Compassion: The Fight for Quality Care for Women With AIDS at Central California Women's Facility," *Yale Journal of Law and Feminism* 6 (Summer 1994): 383–395.

4. Interview with Tim Gagnon, contract manager for HIV/AIDS Correctional Programs, AIDS Bureau, Massachusetts Department of Public Health, December 2, 1994.

5. AIDS in Prison Project, Correctional Association of New York, "National Policy Agenda Covering Prisoners and Former Prisoners Living With AIDS/HIV in the U.S.," draft, 1994, pp. 6–7.

6. Interview, Amy Montgomery, SPAN, Inc., Prison to the Community Programs, Boston, November 10, 1994.

7. Abt Associates Inc., unpublished data, 1995.

8. See, e.g., M. A. Chesney and S. Folkman, "Psychological Impact of HIV Disease and Implications for Intervention," *Psychiatric Clinics of North America* 17 (March 1994): 163–182.

9. See, e.g., U.S. General Accounting Office, "Drug Treatment: State Prisons Face Challenges in Providing Services," Report to the Committee on Government Operations, U.S. House of Representatives, September 1991, GAO/HRD-91-128.

10. The following discussion is based on an interview with George Mumford, director of the Prison Program, the Stress Management Clinic, University of Massachusetts Medical Center, November 15, 1994; and (program brochure), *University of Massachusetts Medical Center, Stress Reduction Clinic, Department of Medicine, Division of Preventive and Behavioral Medicine.*

Chapter 7

Legal Issues

Although courts continue to come to different conclusions about the rights of inmates and policies for housing, correctional management, and medical care for HIV-positive inmates, several general principles are emerging. While segregation of asymptomatic HIV-infected inmates appears to be on the decline, courts generally continue to uphold correctional systems' housing policies as well as prohibitions against food service and other work assignments for those found to be HIV positive or to have other infectious diseases. The courts have also sought to tackle the question of the right of inmates to live free from the risk of contracting HIV or other physical injury. In *Farmer* v. *Brennan*, the U.S. Supreme Court articulated the duty of prison officials to protect prisoners from assault by other inmates.[1]

The following sections review recent legal developments related to HIV/AIDS in correctional settings.

Issues Raised by Inmates

In 1993–1994, new cases brought by prisoners have challenged policies and practices regarding protection from harm by fellow inmates, mandatory and other HIV antibody testing, confidentiality, segregation and housing assignments, access to programs, and medical care.

Protection From Harm by Fellow Inmates

What may turn out to be the first case arising from inmate-to-inmate transmission of HIV involves Christopher Clugston, a convicted murderer recently released from a Florida prison after being granted clemency by Governor Lawton Chiles. Clugston, who spent 10½ years in prison, claims he was infected with HIV during a gang rape while incarcerated.[2] However, Clugston has yet to file any formal legal action embodying this allegation.

Prisoners at risk of sexual attack that could expose them to HIV infection can turn to the courts for relief under the Eighth Amendment by bringing suit under 42 U.S.C. § 1983 against the responsible officials or government entities.[3] Perhaps the most significant case to come before the courts in recent years with relevance to HIV/AIDS in prisons is *Farmer* v. *Brennan*, 114 S. Ct. 1970 (1994), mentioned above. The U.S. Supreme Court's ruling in *Farmer* may help to define further the obligation of corrections officials to protect prisoners from injury at the hands of fellow prisoners. On June 6, 1994, the high court ruled that prison officials may be found liable for failing to protect an inmate from violence at the hands of other prisoners if the officials did not act when they knew of a "substantial risk of physical harm."[4] The Court's 9-0 ruling came in the case of a transsexual Federal prisoner whose suit against prison officials had been dismissed by two lower Federal courts in Indiana. The ruling gave the prisoner a chance to show at trial that the beatings and rapes he suffered were the result of prison officials' "deliberate indifference" to his need for special protection. In a case three years ago, the court made deliberate indifference the governing standard for lawsuits, asserting that prison conditions were so far below accepted standards as to amount to cruel and unusual punishment.[5]

The *Farmer* case, which clearly established the duty of prison officials to protect inmates from fellow inmates as well as from officers, still requires a showing by the prisoner that the officials knew of the risk and failed to take reasonable measures to prevent injury to the prisoner. However, an inmate can prevail without proving that he or she had warned officials of a particular threat or that officials believed that harm was about to befall a particular inmate. Circumstantial evidence can suffice to demonstrate that officials had the requisite knowledge, and the judge or jury "may conclude that a prison official knew of a substantial risk from the very fact that the risk was obvious."[6]

The *Farmer* ruling, together with a 1993 Supreme Court ruling that the involuntary exposure of prison inmates to secondhand tobacco smoke can amount to cruel and unusual punishment, is of potential importance to HIV-positive

inmates who risk physical violence at the hands of fellow inmates and to those who may be infected with HIV through a rape in prison. While the *Farmer* ruling does not make it easier for prisoners to win such cases, it makes it more difficult for the government to have the suits dismissed at an early stage.[7]

Challenges to Mandatory Testing

Connor v. *Foster*, 833 F. Supp. 727 (N.D. Ill. 1993), involved an arrestee who alleged that he was involuntarily tested for HIV after his arrest, in part because one of the arresting officers had been pricked during the arrest by a hypodermic needle in the plaintiff's pocket. The court ruled that there was no clearly established right to refuse an HIV test under these circumstances, and Illinois statutes authorized the test.

In considering the plaintiff's claim, the court ruled that State law explicitly sanctioned the testing of the arrestee. Effective January 1, 1990, Illinois amended its statutes to dispense with the need for written informed consent to conduct an HIV test,

> when a law enforcement officer is involved in the line of duty in a direct skin or mucous membrane contact with the blood or bodily fluids of an individual which is of a nature that may transmit HIV as determined by a physician in his medical judgment.[8]

The arrestee had admitted being a drug user and that the arresting officer stuck himself on the hypodermic needle the arrestee had used shortly before he was arrested. The court ruled that because the puncture suffered in conducting the search clearly contained the potential for transmission of HIV, under Illinois law, no written consent was needed to force the arrestee to undergo a blood test to determine the presence of HIV antibodies.

Other Testing Policies

On April 19, 1994, the Federal Court of Appeals for the Sixth Circuit ruled that the constitutional rights of a Kentucky prisoner were not violated when he was refused HIV antibody testing by correctional authorities for more than two years because he did not meet the State's testing criteria for prisoners.[9] In *Doe* v. *Wigginton*, 21 F. 3d 733 (6th Cir. 1994), the Court of Appeals for the Sixth Circuit upheld a Federal district court decision denying the inmate plaintiff's request for an HIV antibody test on admission to prison. The prison's policy restricted testing to persons presenting clinical symptoms including a "presumptive history of exposure" or pregnancy combined with a history of injection drug use, prostitution, or sexual activity with an injection drug user. Subsequently, the plaintiff asked for and received a test based on his statement, later disavowed, that he had "slept with" a number of drug-addicted prostitutes. The plaintiff then tested positive. Later, an officer opened the plaintiff's medical file, which had been stamped "confidential," and discussed his HIV-positive status publicly.

Considering the initial failure to test, the appeals court ruled that the prison's HIV testing policy does not constitute deliberate indifference because it reflects the likelihood of infection. The defendants did not deliberately decide to reduce the plaintiff's life expectancy; although their actions were deliberate, they did not know their actions would have that effect. The court also found that the testing policy does not violate prisoners' right to equal protection because testing "rationally furthers" a legitimate State interest and no cases have suggested that persons who do not have a "presumptive history of exposure" to HIV are a "suspect class."[10]

Finally, the appeals court ruled that the disclosure to the officer of the plaintiff's HIV status does not violate the plaintiff's right to privacy. In its decision, the Court of Appeals relied on a 1981 Sixth Circuit case holding that the disclosure of juveniles' "social histories" does not violate the right of privacy and that the Constitution "does not encompass a general right to nondisclosure of private information."[11]

In *Lile* v. *Tippecanoe County Jail*, 844 F. Supp. 1301 (N.D. Ind. 1992), a case brought *pro se* (by an inmate without assistance of counsel), a Federal district court in Indiana found that inmate plaintiffs' rights were not violated by a jail's failure to provide inmates with HIV antibody tests after they were splattered with the blood of a fellow inmate who tried to commit suicide.

Litigation over whether a State court can order the HIV antibody testing of a prisoner who bites a guard continues to be a matter of lively debate before the State courts. On August 5, 1994, the Illinois Appellate Court for the Fourth District upheld a ruling of the Circuit Court of Livingston County ordering that a prisoner be tested for HIV despite the opposition of the Illinois Department of Corrections to the test. In a 2-1 decision, the court stated that while it is not the duty of the courts to supervise the day-to-day operations of prisons, the issue at hand is not a case where a court attempts to direct what meals should be served or what hours should

be kept. And, in a concurrence to the majority, a justice wrote, "This case has nothing to do with the operation of a place of incarceration; it involves proper information to a victim of a wrongdoing."[12] Jane Doe, a corrections officer at the Dwight (Ill.) Correctional Center, was bitten twice by an inmate. Doe had alleged that a first test of the inmate was inadequate and had asked the trial court to direct the Department of Corrections to conduct a second test.

Anderson v. *Murdough*, No. 1:92-2694-17BD (D.C.S.C.), a Federal district court case from South Carolina, considered the HIV antibody testing of those convicted of criminal sexual conduct. In *Anderson*, a *pro se* plaintiff who had been convicted of the kidnapping and rape of a convenience store operator contended that his Fourth Amendment constitutional rights were violated when he was forced to undergo a blood test ordered by a State circuit judge.

Citing a similar decision in *State* v. *Farmer*, 805 P. 2d 200, 208 (Wa. 1991), in an order dated October 23, 1993, the *Anderson* court noted that testing under this statute applies only when a person has been convicted of a crime involving sexual battery that exposed the victim to the convicted person's bodily fluids and, "where there is a legitimate compelling State interest."[13] The court's order further stated:

> The obvious purpose for the statute is to protect victims of criminal sexual conduct from becoming unknowing carriers of the HIV virus. The statutory scheme addresses the problem of awareness of HIV for the protection of those to whom the virus may have been transmitted. If, therefore, a defendant is convicted of such criminal sexual conduct, a quick determination of whether he or she is infected with the HIV virus is important so the victim may be then tested and may take appropriate action. Thus, the statute's testing requirement serves an obvious and compelling "special need." Public safety and the magnitude of danger justifies the minimal invasion of Anderson's rights.[14]

Confidentiality

The confidentiality of HIV antibody test results has also been the subject of litigation within and outside the prison context. In *Doe* v. *City of New York*, 825 F. Supp. 36 (S.D.N.Y. 1993) (*Doe I*), a Federal district court in New York held that "the constitutional right to privacy does not extend to matters of public record."[15] The case considered the disclosure at a press conference of the plaintiff's HIV-positive status by officials of the New York City Commission on Human Rights. The district court held that while the disclosure may have violated a contract (i.e., a conciliation agreement), there was no violation of the Constitution. The only Federal issue before the district court in *Doe I* involved the constitutional right of privacy.

In *Doe* v. *City of New York*, 15 F. 3d 264 (2d Cir. 1994) (*Doe II*), the Federal Appeals Court for the Second Circuit reversed the district court opinion in *Doe I* holding that "individuals who are infected with the HIV virus clearly possess a constitutional right to privacy regarding their condition."[16] The *Doe II* court wrote that "this was a right to 'confidentiality,' rather than autonomy and independence in decision-making." ". . . The right to confidentiality includes the right to protection regarding information about the state of one's health."[17] The plaintiff's entry into a conciliation agreement on his discrimination claim filed with the City Commission on Human Rights did not constitute a waiver of his privacy rights. While this case did not involve an inmate or correctional setting, it raises important issues regarding disclosure of HIV status.

In another recent case, the Court of Appeals for the Tenth Circuit ruled that disclosure that a person is HIV positive is a breach of confidentiality even if subsequently it is determined that the test result was incorrect. In reversing and remanding a decision of the Federal district court for the District of Utah, the court of appeals in *A.L.A.* v. *West Valley City*, No. 92-4210 (10th Cir. 1994), ruled that disclosure by a police officer who arrested the plaintiff for passing a bad check "severely damaged the plaintiff's personal life."[18] During the arrest of the plaintiff at a mall for passing a bad check, the arresting officer found a piece of paper in the plaintiff's wallet indicating that he had tested positive for HIV. Later, at the police station, the arresting officer told the plaintiff's sister, two housemates, and at least one other witness that the plaintiff was HIV positive. As a result, according to the plaintiff, his friends and family shunned him and refused to visit him in jail. His fellow prisoners and the prison guard subjected him to harassment and discriminatory treatment, and he had to undergo treatment for depression while in jail because of the damage done to his familial relationships. The plaintiff was particularly distraught because his relationship with his mother had suffered irreparable damage. In its decision, the court wrote that an HIV test later conducted in jail showing the plaintiff free from infection was "simply immaterial to the question of whether the plaintiff sustained a personal injury as a result of the broadcasts."

The needs of corrections staff to protect themselves from HIV-positive prisoners may, however, permit the release of a prisoner's HIV-positive status by prison officials. For example, in *Selby* v. *Rapping*, 1992 WL 400739 (S.D.N.Y. 1993), a Federal district court in New York State rejected a prisoner's claim that his rights had been violated by the disclosure to a guard and a doctor that he had AIDS. The inmate, a Westchester County Jail prisoner, had been sent to Westchester County Medical Center for care. His medical records included the language "body fluid precaution," and when he arrived at the hospital, a prison guard told the treating physician that the inmate had AIDS.

In its decision, the court rejected the inmate's argument that only the medical unit at the jail was allowed to know he was HIV positive. The district court judge also ruled that the State's confidentiality law allows prison staff and doctors treating prisoners to know a prisoner's HIV status if there is a need.[19]

Segregation and Housing Assignments

Prisoner petitions and lawsuits concerning the segregation of HIV-positive inmates continue to be quite common, with the courts generally, but not universally, issuing rulings upholding correctional policies. The trend in prisons appears to be to desegregate, or mainstream, HIV-positive prisoners. To date, however, there has been no definitive case upholding this policy.

HIV-positive inmates may seek to challenge their segregation, confinement, and limits on their right to prison jobs and activities as a violation of a State's human rights act. Citing a lack of evidence, in *Todd Balow* v. *Minnesota Department of Corrections*, No. PS00916 (1992), the Minnesota Department of Human Rights dismissed an HIV-positive inmate's complaint alleging that he was subjected to differential treatment on the basis of his HIV status. While the case presented evidence to indicate that a prison work supervisor had made a remark about the inmate's HIV-positive status and that as a result other inmates avoided the inmate, the department found insufficient evidence to make a determination as to who was responsible and how information on the inmate's HIV status was leaked. In its decision, the department further stated that even if the supervisor breached the confidentiality of the inmate's medical condition, this breach alone may not be actionable under the Minnesota Human Rights Act, unless accompanied by the intent to discriminate.[20] Finally, the department's ruling notes that the evidence shows the supervisor was "lenient" with the inmate with respect to disciplinary action (segregation).[21]

Derby v. *Allison*, Civil No. 4-93-CV-10160 (S.D. Iowa), a Federal district court case from Iowa, involves an HIV-infected inmate's civil rights action alleging that Iowa prison officials violated his constitutional right to privacy, equal protection, free exercise of religion, and access to the courts when they ordered the inmate medically segregated from the general population. The inmate, Arthur Derby, was diagnosed as HIV positive in 1987. By June 6, 1991, when he reported to the Iowa Medical Classification Center (IMCC), Derby had AIDS.

In accordance with the communicable disease policy of the Iowa Department of Corrections, Derby was not initially segregated from the general population. Under the policy, inmates with communicable diseases such as AIDS are housed in the general population unless they act in such a way as to heighten the risk of transmission to other inmates. Initially, Derby, a minimum-security inmate, was sent to a medium-custody prison so that he could complete the drug and alcohol program available there.

In December 1992, Derby received a report for having sexual contact with another inmate and for soliciting sex from others. In response to the health risk posed by this behavior, the Department of Corrections' nursing director began an investigation of the matter which involved an interview with the inmate and a group interview with twelve inmates who may have had sex with Derby. Based upon a determination that Derby had engaged in sex with another inmate and the fact that Derby had two infectious diseases—AIDS and hepatitis B—Derby was placed in medical segregation. Having determined that this was the best method of reducing the risk of the spread of HIV by Derby, the inmate was transferred to the Iowa State Penitentiary (ISP) for the remainder of his term.

At ISP, Derby was not allowed to attend chapel services, visit the law library, and eat or exercise with other inmates.[22] Derby also alleged that ISP guards violated his constitutional right to privacy by telling fellow inmates that he had AIDS. He further alleged that a red medical segregation tag and infectious disease protocol posted on his cell violated his right to privacy and led inmates to threaten him out of fear of his illness.

Instructed to make recommendations to the district court hearing the case, a Federal magistrate issued a ruling generally supportive of the actions of prison officials. The magistrate's report recommended the following findings:

- Defendants did not violate Derby's rights by transferring him because an inmate has no

constitutional right to a particular prison classification or status.

- Concerning Derby's challenge to defendants' decision to place him in medical segregation, the administrative segregation in this instance was not a pretext for punitive segregation and Derby received sufficient due process.[23]

- Since the Supreme Court has held that inmates do not have an absolute right to participate in rehabilitation programs,[24] Derby's rights were not violated by his transfer out of a facility with an alcohol and drug treatment program.

- Concerning Derby's allegation that he was segregated because he is homosexual and afflicted with AIDS, there is no merit to Derby's equal protection challenge. Derby posed a health risk because of the danger of transmission of HIV through solicited sexual contact. He was not similarly situated to the inmate population to which he compares himself.

- Derby has not proven that unnamed guards told inmates about his AIDS status.

The magistrate also rejected Derby's claim that section 504 of the Rehabilitation Act was violated, finding that the defendants transferred him not solely because he had AIDS, but also because of his sexual behavior. As to Derby's claims that his right to freedom of religion and access to the courts were violated, the magistrate found no evidence that his rights were substantially burdened or actually infringed. Finally, the magistrate recommended that the district court reject most of Derby's claims with respect to a consent decree covering inmates' rights in Iowa prisons.[25]

Following the release of the magistrate's recommendations in October 1994, the plaintiff sought additional time to respond and object to the report.

Goss v. *Sullivan*, 839 F. Supp. 1532 (D. Wyo. 1993), a Federal district court case from Wyoming, involved a plaintiff inmate assaulted by another inmate who, he alleged, was HIV positive and who deliberately sought to make blood-to-blood contact. In his pleadings, the plaintiff conceded that the failure to segregate an HIV-infected prisoner from the general population or to disclose the results of HIV antibody tests to the general population does not violate the Constitution. The district court ruled that since the plaintiff failed to show any evidence that any defendant was or is aware of any risk of spreading HIV by his assailant or any other prisoner, he failed to establish deliberate indifference. The court noted:

> Allegations of a generalized fear of contracting AIDS from allegedly aggressive HIV-positive inmates and conclusory allegations that prison officials were or are aware of such intentions but have done nothing to intervene, are insufficient to state a constitutionally inhumane condition of confinement or a culpable state of mind.[26]

In *Johnson* v. *United States*, 816 F. Supp. 1519 (N.D. Ala. 1993), a Federal district court in Alabama ruled that placing the plaintiff in a cell with an HIV-infected inmate did not violate the Eighth Amendment prohibition against cruel and unusual punishment. *Johnson* involved an inmate's action against the Federal Bureau of Prisons and prison officials alleging a violation of his Eighth Amendment rights against cruel and unusual punishment in that his former cellmate tampered with his toothbrush, toothpaste, and razor blade. In addition, the plaintiff claimed that on several occasions, he observed his cellmate's blood on their sink, toilet, and towels. Although the plaintiff did not allege that he contracted HIV from sharing facilities with his HIV-infected cellmate, he fears he may have contracted HIV from him. In addition, Johnson complained that he was subjected to witnessing his cellmate's deteriorating condition and that during the two days prior to his cellmate's death, he was forced to feed and "sanitize" him. At the time of the court's decision, the plaintiff had tested negative for HIV three times since the cellmate's death.

In its decision, the *Johnson* court wrote that "to establish an Eighth Amendment claim, the evidence must show that the measure taken inflicted unnecessary and wanton pain and suffering . . . or was totally without penological justification" and that prison officials were deliberately indifferent to a condition of confinement which constitutes cruel and unusual punishment and further requires a showing of a culpable state of mind on the part of prison officials. The court also stated that the plaintiff is further required to show, first, that the conditions to which he is subjected constituted a deprivation of minimal civilized measures of life's necessities or basic human needs, and second, that the prison official's state of mind was one of deliberate indifference to the needs of the plaintiff.[27]

In its decision, the court cited the declaration of Dr. Kenneth Moritsugu, the medical director of the Federal Bureau of Prisons:

> The Bureau of Prisons does not segregate HIV-positive inmates. HIV-positive inmates remain in an institution's general population as long as they do not require hospitalization. The Bureau's emphasis on education, universal precautions, and professional management of HIV-positive inmates has rendered isolation unnecessary. . . . Inmates who are HIV-positive and who are believed to put other inmates or employees at risk (e.g., those who display intentional behavior that can result in the spread of the virus) are administratively separated from those whom they place at risk.
>
> All Bureau of Prison inmates are informed of ways to avoid contracting AIDS. . . . Policy and training stress that individuals must respond to the presence of blood, semen, vaginal fluids, or any body fluids containing visible blood under the presumption that these fluids are contaminated. Inmates are informed that casual contact will not result in exposure to the virus. . . .
>
> An inmate can have an HIV-positive roommate and not be at any risk of contracting the virus unless the inmates engage in high-risk behavior. . . .[28]

The *Johnson* court reasoned that as the prison rules prohibit the types of behavior that result in the transmission of the HIV virus, those prisoners who follow the rules are not in significant danger of contracting HIV infection. Therefore, prison officials' policy decisions not to segregate the HIV-infected inmates cannot be said to constitute deliberate indifference. The plaintiff had not been deprived of any basic need by the prison officials' actions. The plaintiff alleged neither that his former cellmate had engaged in high-risk conduct that would expose him to HIV nor any facts from which it might be inferred that the decision to house an HIV-infected inmate with the plaintiff evidenced a deliberate indifference to his serious medical needs or a culpable state of mind on the part of the defendants.

Marcussen v. *Brandstat*, 836 F. Supp. 624 (N.D. Iowa 1993), a Federal district court case from Iowa, involved an inmate's complaint that he was double-celled with an HIV-positive prisoner who used his toiletries, including his razor, cigarette roller, and drinking cup. In its ruling, the court held that the plaintiff would have to show a "pervasive risk of harm to inmates" to prevail.[29] The plaintiff did not show sufficient risk of contracting HIV through the kinds of everyday contact he alleged, and prior case law rejects any requirement that HIV-positive inmates be segregated. The court went on to say that prison rules prohibiting inmates from acting so as to expose others to infection provide sufficient protection to uninfected inmates. In addition, noted the court, qualified immunity generally shields "government officials performing discretionary functions from liability for civil damages so long as their conduct does not violate clearly established statutory or constitutional rights of which a reasonable person would have known."[30] In any case, the defendants would be entitled to qualified immunity.

Similarly, in *Camarillo* v. *McCarthy*, 998 F. 2d 638 (9th Circuit 1993), the Federal Court of Appeals for the Ninth Circuit ruled that the defendants were entitled to qualified immunity from the plaintiff's claim that he was denied freedom of association by virtue of being transferred to a unit for HIV-positive inmates. While it was established that prisoners have First Amendment association rights, the "relevant, properly particularized question" before the court was whether it was clearly established that "inmates are entitled to be free from prison regulations that restrict their association with members of the general prison population."

Zaczek v. *Murray*, No. 91-6098, 1992 U.S. App. LEXIS 33993 (4th Cir. 1992), involved a Federal prisoner's appeal of a district court's dismissal with prejudice of his complaint alleging he was falsely arrested, falsely imprisoned, and maliciously prosecuted.[31] The prisoner filed numerous successive and repetitive motions in spite of admonitions from the court, arguing in part in his lengthy pleadings that corrections officials violated his rights by not conducting mandatory HIV antibody testing of prisoners and segregating infected inmates.

In his district court pleadings, the plaintiff, Zaczek, contended that the defendants failed to protect him from a known risk of infection with HIV because they failed to conduct mandatory HIV antibody testing and failed to segregate inmates infected with the virus. The plaintiff further claimed that the defendants had violated both statutory and constitutional protections through their actions. In support of the statutory claim, Zaczek cited Virginia Code Section 53.1-34 (Michie 1991), but the court rejected that argument noting that the State code section cited pertains only to local jails and Zaczek was incarcerated in a State prison.

Zaczek also claimed that failure to segregate inmates infected with HIV constituted deliberate indifference to his health and safety. While acknowledging that it had not addressed the issue of the segregation of prisoners infected with the virus, the district court noted that several other courts had already taken up this issue.

After distinguishing a line of cases that, in light of challenges to prison decisions to segregate inmates with the AIDS virus, authorized segregation or other precautionary treatment of infected inmates as a permissible exercise of the discretion accorded to prison officials, the court went on to reject the plaintiff's claim,[32] comparing the facts in *Zaczek* to other cases in which courts have denied requests for the mandatory segregation of inmates with AIDS. One of these cases, *Glick* v. *Henderson*, 855 F. 2d 536 (8th Cir. 1988), involved claims similar to those brought by Zaczek. In *Glick*, a prisoner contended that prison administrators' failure to segregate inmates infected with HIV from the general prisoner population constituted a failure to protect the health and safety of noninfected inmates. The *Glick* court held that the complaint did not state a claim of deliberate indifference, because the plaintiff did not show a pervasive risk of contracting the virus, and that his claims were based on "unsubstantiated fears and ignorance."[33] The *Zaczek* decision reads as follows:

> Although some courts have upheld prison officials' decisions to undertake mandatory testing and segregation, . . . cases dealing with this issue all have one basic premise in common: each of the courts relied heavily on prison administrators' exercise of discretion. We hold that under this reasoning, the district court's rejection of Zaczek's claims regarding inmates infected with the AIDS virus was correct. Therefore, we affirm the . . . judgment in favor of the Defendants.[34]

Access to Programs

In *Gates* v. *Rowland*, No. 93-15363, 93-16136, D.C. No. CV-87-01636-LKK (9th Cir. 1994), the Federal Court of Appeals for the Ninth Circuit ruled that a district court had improperly ordered prison officials to allow HIV-positive inmates to work in prison food service.[35] The ruling comes in a case that considered a class action lawsuit by prison inmates challenging conditions of confinement at the California Medical Facility at Vacaville, California. In the district court case, the inmates claimed that staffing shortages and overcrowding at Vacaville had exposed them to an unconstitutional risk of harm. The inmates further alleged that the denial of access to medical and mental health care and to attorneys, and the segregation of HIV-positive inmates violated their constitutional rights. A subclass of HIV-positive inmates also alleged violation of section 504 of the Federal Rehabilitation Act of 1973. Section 504 provides that

> "[n]o otherwise qualified individual with a disability . . . shall, solely by reason of her or his disability, be excluded from the participation in, be denied the benefits of, or be subjected to discrimination under any program or activity receiving Federal financial assistance.[36]

Following settlement negotiations, which began after two months of trial in the district court, the parties approved a consent decree that stated that the defendants must review the staffing levels at Vacaville to determine whether they were adequate to providing proper supervision, escorts, and other services to inmates. The consent decree also provided that the defendants would develop a pilot program to determine the feasibility of desegregating HIV-positive inmates. When the defendants submitted their report, the plaintiffs disputed its findings and a mediator was brought in to resolve differences between the parties.

With respect to the prison's policy regarding HIV-positive inmates, after reviewing the policy and after an evidentiary hearing on the matter, the mediator recommended that the court prohibit the defendants from denying food service employment to HIV-positive inmates, absent a written determination that an individual inmate was not otherwise qualified to perform the job and that the defendant could not reasonably accommodate the inmate so that he would be able to perform the essential function of the job. The district court adopted these findings and held that the policy of excluding HIV-positive inmates from food service violated the Rehabilitation Act.

In *Gates*, the relevant issue before the appeals court was how the Rehabilitation Act was to be applied in a prison setting. Reasoning that there is no reason to believe Congress intended the Rehabilitation Act to apply to prison facilities without regard to the reasonable requirements of effective prison administration, the appeals court deemed the applicable standard for the review of the act (statutory rights) in a prison setting to be equivalent to the review of constitutional rights in a prison setting. That standard, set forth in *Turner* v. *Safley*, 482 U.S. 78 (1987), reads as follows:

> [W]hen a prison regulation impinges on inmates' constitutional rights, the regulation is valid if it is

> reasonably related to legitimate penological interests.[37]

In reversing the district court on the issue of exclusion of HIV-positive inmates from work in food service, the appeals court stressed the particular sensitivity of prisoners to food service, which had often been the source of violence or riots. The court noted:

> The prisoners have no choice of where to eat. The prison authorities testified that if HIV-seropositive inmates are placed in food service jobs, the other inmates will perceive a threat regardless of scientific research or medical pronouncements. When the transmission is by bodily fluids, such perceptions are particularly likely. Inmates fear that other inmates may do things to food that might be objectionable. If HIV-seropositive inmates are placed in food service jobs, other inmates will think the worst—that they will bleed into the food, spit into the food, or even worse. If the inmate population perceives a risk from the food they must eat, they will want the infected inmates removed from the food service jobs. If they have no assurance that the infected inmates are removed, there may be violent actions against the inmates with the virus, inmates they perceive to have the virus, or the staff that permits the perceived risk.[38]

In response to the plaintiffs' response that proper education concerning HIV transmission will remove the perceived risk, the court added that the prison authorities point out that many members of the general prison population are not motivated by rational thought and have irrational suspicions or phobias that education will not modify. In light of these findings, the appeals court ruled that Vacaville prison officials had provided a reasonable basis for the exclusion of HIV-positive inmates from food service positions.

In *Casey* v. *Lewis*, 4 F. 3d 1516 (9th Cir. 1993), an earlier decision by the Ninth Circuit Court of Appeals that effectively skirted the issue, the court ruled that a district court in Arizona should not have enjoined a prison's policy prohibiting HIV-positive prisoners from working in food service. In relevant part, in *Casey*, the appeals court considered an Arizona Department of Corrections appeal of an order enjoining the department from denying food service jobs to HIV-positive inmates. In ruling for the department, the court found that there was no evidence that any named plaintiff was HIV positive or that any named plaintiff had ever stated he or she was interested in a food service job or had applied for one. Inmates had brought the original lawsuit under 42 U.S.C. § 1983 (1988) and section 504 of the Rehabilitation Act of 1973, 29 U.S.C. § 794 (1988).

At issue in *Casey* was a policy adopted by the Arizona Department of Corrections prohibiting HIV-positive individuals from obtaining employment in its food service department. The inmates argued that they had standing (the right to sue) to challenge the validity of this policy because a named inmate was then HIV positive and because this inmate would have been denied had she applied for such employment.

The *Casey* court rejected this argument, writing that the HIV-positive inmate did not demonstrate any injury in fact as she was not identified as HIV positive until three months after the issuance of the district court's injunctive order, and she neither applied for a food service position nor demonstrated that she intended to do so. Nor did the record in the case establish that any named plaintiff was seropositive. Therefore, found the court, the class of inmates lacked standing and the district court lacked the power to enter the injunction. Even if a named inmate had been identified as HIV positive as early as the pleading stage, the inmates still failed to demonstrate an actual injury. No named plaintiff has ever stated that he or she was interested in a food service job. None applied for one, and there was reason to believe that an HIV-positive inmate would never seek such a position. The unrebutted affidavit of the chief of security at the Central Unit in the Florence, Arizona, facility, indicated that whenever inmates discovered that another inmate was HIV positive, which according to the official occurs despite stringent confidentiality efforts by Arizona Department of Corrections' staff members, threats were made against that inmate's life. According to the official's affidavit, an HIV-positive inmate whose seropositive status was discovered by the general inmate population would be in a life-threatening situation. Declaring that no named plaintiff had been personally subject to the alleged unlawful policy, the appeals court ruled that the district court lacked jurisdiction to enter the injunction prohibiting the application of the policy.

In *Williams* v. *Hill*, No. 94-2399 (E.D. Pa. 1994), a 1994 Federal district court case from the Western District of Pennsylvania, the court threw out the case of an HIV-positive inmate who alleged that his constitutional rights were violated when he was denied a job as a "block worker" doing general duties at the prison. In granting the defendant's motion for dismissal, the court found that neither the U.S. Constitution nor any Federal statute guarantees an inmate the right to a prison job because he is HIV positive.

Onishea v. *Herring*, a Federal case from Alabama, considers the question of whether HIV-positive prisoners are "otherwise qualified" under section 504 of the Rehabilitation Act of 1973 or could become so through reasonable accommodation, and thus be able to participate in more prison activities.[39] Section 504 of the Rehabilitation Act applies to persons with contagious diseases, and using these guidelines, courts have held that persons who are HIV positive are handicapped persons to whom section 504 applies.[40] These issues were left unresolved by the ruling in *Harris* v. *Thigpen*, 941 F. 2d 1495 (11th Cir. 1991), an Eleventh Circuit Federal Appeals Court case that upheld the Alabama Corrections Department's regulations requiring the HIV-antibody testing of inmates and the segregation of those found to be HIV positive. *Onishea* considers the issues remanded to the district court by the appeals court's decision in *Harris* v. *Thigpen*. The court in *Harris* v. *Thigpen* also directed the district court to reconsider whether the lack of adequate access to the prison law library by HIV-infected prisoners denies them their right of access to the courts, thus violating the First or Fourteenth Amendment.

Adequacy of Medical Care

Prison litigation continues to focus on the adequacy of medical care and associated services for prisoners with HIV and AIDS. In *Jose Otero* v. *Larry Dubois*, C.A. No. 93-6712 (Suffolk Superior Court), an HIV-infected Massachusetts inmate incarcerated in New Hampshire alleged that he was not provided the same level of care and treatment provided to other HIV-infected Massachusetts inmates incarcerated in-State. Defendants in the case have filed a motion to have the case thrown out as lacking merit. A decision on the motion is pending.

Criminal Indictment and Sentencing of Persons With HIV Infection

Sentencing of Persons with HIV/AIDS

Whether and how the judicial system should consider HIV infection in its processing of persons accused and/or convicted of crimes remains a challenging question for the Nation's criminal and appellate courts. Conflicting rulings appear largely related to the nature of the crime committed and to the nature of the defendant's illness. For example, while in recent years several courts have considered not prosecuting, or commuting the sentences of, defendants with HIV or AIDS who have been charged with or convicted of nonviolent crimes, other crimes like having unprotected sex with teenagers are treated quite severely. In one such nonviolent offender case, *New York* v. *Larson* (App. Div., 1st Dept. 1993), a majority of the Appellate Division of the New York Supreme Court, First Department, affirmed a lower court's dismissal of indictments against a man indicted for drug dealing. In its decision, the Appellate Division noted that at the time the trial court announced the dismissal, the court had noted that "the defendant's physical condition had progressively deteriorated during the pendency of the prosecution to the point that the defendant had become as thin as a rail and could hardly stand."[41] The Appellate Division went on to note that the alleged criminality had been motivated by the suspect's need to feed his addiction, and since that addiction was now being addressed in treatment, there was little risk of recidivism and no danger posed to the community.

In contrast, many courts are quite harsh in dealing with HIV-positive individuals who engage in unprotected sex. For example, in May 1994, in the case of *Virginia* v. *Webb*, No. F-796-93 (Petersburg Cir. Ct. 1994), a Petersburg, Virginia, court sentenced a 28-year-old HIV-positive man to 10 years in prison for knowingly having unprotected sex with three teenage girls. Two of the girls had been infected with HIV and one of the two was pregnant. Although Virginia has no legal precedent for the charges against Webb, the State looked to legal theories from other States where such persons have been convicted of attempted murder or assault with a deadly weapon.[42] According to the charging attorney, Webb had known since 1988 that he was HIV positive and "knew the importance of protected sex and disclosure to his sexual partners." In spite of this knowledge, the defendant continued to have unprotected sex with multiple partners without disclosing that he was HIV positive.[43]

Proving intent was a concern of prosecutors in *Webb* because the defendant made no statement that he intended to kill anyone or that he intended to spread the HIV virus. In the end, the prosecution prevailed, relying in part on a State court of appeals decision holding that specific intent may be shown by circumstances and facts in a particular case.

In *Arizona* v. *John Wayne Ellevan*, 1 CA-CR 93-0754-PR (Arizona Ct. of App., Div. One), an Arizona appeals court ordered the resentencing of a convicted thief who is HIV positive because his 16-year sentence amounted to life in prison. In its decision, the court noted, "Positive HIV status is material to informed plea bargaining and sentence be-

cause it can transform into a life sentence a term of years that would otherwise end well within the recipient's probable life span."[44] The inmate, John W. Ellevan, sought a resentencing on his conviction after learning while in prison that he was HIV positive. A trial court judge had dismissed the inmate's petition saying that the inmate had failed to prove that he became infected before he was sentenced.

Rejecting the trial court's reasoning in a unanimous decision, the Arizona Court of Appeals held that the trial court had abused its discretion in failing to grant a resentencing. "Of two possible alternatives," wrote the court, "—that petitioner was infected with HIV before or after sentencing—the evidence introduced at the hearing tended only to support the first." The appeals court also noted that the State had offered no evidence to support its assertion that the prisoner could have become infected inside the prison.[45] The appeals court decision ordered the trial judge to resentence the prisoner in light of the discovery of his HIV-positive status.

Spitting and Biting

Despite evidence that HIV has never demonstrably been transmitted through saliva, over the last several years, at least two HIV-infected inmates have been prosecuted and convicted of attempted murder for biting or spitting on a correctional officer. New Jersey inmate Gregory Dean Smith was serving a 5-year term for robbery when he was sentenced to an additional 25 years in prison for biting a correctional officer.

Texas inmate Curtis Weeks, serving a 2-year sentence for robbery, received a sentence of 99 years or life for spitting in an officer's face.[46] On October 11, 1994, a Federal district court judge in Texas refused to overturn the life sentence of Weeks. In her order in *Weeks* v. *Collins*, D.C. S. Texas., S. Div., No. H-93-3708 (October 11, 1994), the Federal judge applied the Supreme Court standard that a court "must determine whether, after reviewing the evidence in the light most favorable to the prosecution, any rational trier of fact could have found the essential elements of the crime beyond a reasonable doubt."[47] That evidence, the judge noted, included testimony that the inmate had HIV, that some people infected with HIV have the virus in their saliva, that blood might be in saliva because the inmate needed dental work and had just eaten, that the virus is transmitted through the mucous membranes, and that the inmate's saliva got inside the guard's nose, a mucous membrane. Attorneys for the inmate have already filed a notice of appeal to the Federal Court of Appeals for the Fifth Circuit.

In *Weeks* v. *Collins*, attorneys for the inmate had urged the district court to recommend immediate dismissal of his "illegal, unconstitutional conviction and sentence," saying the State had "failed to prove an essential element of the crime of attempted murder." The pleading came in response to Texas's motion for summary judgment in *Weeks* v. *Morales*, D.C. S. Texas, S. Div., CA No. H-93-3708, a case considering a writ of habeus corpus[48] filed by Weeks in November 1993. In their brief to the court, attorneys for Weeks argued that the State failed to prove an essential element of the crime of attempted murder because there was no evidence establishing that spitting by an HIV-infected person can cause death. Attorneys for Weeks further argued that the State failed to demonstrate that Weeks acted with the capacity to commit the offense because it failed to offer any proof that Weeks's saliva contained HIV. While some legal scholars believed that Weeks had a good argument, he made essentially the same one before a State appeals court, which rejected it in *Weeks* v. *State*, 834 S.W. 2d 559 (1992).[49] In her ruling in *Weeks* v. *Collins*, the district court judge also rejected the inmate's attorneys' request to take judicial notice of an advisory published in the *Texas Register* suggesting that biting and being bitten are not considered exposure to HIV unless blood is present.

Civil Cases Involving Potential Exposure to HIV

In *Esser* v. *Glens Falls Hospital*, No. 26731, Appeal No. 3701 (N.Y. Sup. Ct.), on April 13, 1994, a Glens Falls, New York, hospital filed an appeal seeking dismissal of a suit brought against it by a corrections officer who was accidently sprayed with the HIV-infected blood of a prisoner being treated at the hospital. The officer was standing next to the HIV-positive inmate in the hospital's prison ward when he was sprayed in the face and chest with the inmate's blood from a syringe. Although the officer continues to test negative for HIV, his suit sought damages for emotional distress and psychological injury he alleges were caused by the accident. At the trial court level, the judge dismissed the defendant hospital's motion, writing that proof is "overwhelming of breach of duty, traumatic injury, and causal relation between [the] contact and the resulting injury."

Industrial Accident Claims

In 1994, 6 industrial accident claims were filed by Massachusetts Department of Correction employees who alleged that they were either bitten or otherwise exposed to HIV by inmates. All of the claims have been settled, with the department agreeing to provide temporary leave and/or payment for HIV screening for the employees.

Cases Involving Hepatitis and Sexually Transmitted Diseases

In the pending case of *James DeFuria, et al.* v. *Mass. DOC, et al.*, C.A. No. 92-1834, Massachusetts inmate plaintiffs are challenging a State prison's medical care and treatment for hepatitis B and C. The inmates are also seeking access to the medication alpha interferon and to other medical procedures and tests for all inmates with hepatitis B.

Ray Wesley Robinson v. *Larry DuBois, et al.*, C.A. No. 93-5144 (Middlesex Superior Court), another Massachusetts case, involves a prison inmate's claim that he contracted herpes while in prison and has been denied adequate medical treatment for his condition. Litigation in the case is in its early stages.

Endnotes

1. *Farmer* v. *Brennan*, 62 U.S.L.W. 4446, 4448 (June 6, 1994).
2. B. Mooar, "Freed Md. Man Faces AIDS and His Anger: Ex-Florida Prisoner Fights to Clear His Name," *Washington Post*, October 2, 1994, Final Edition, p. a23.
3. D. M. Siegal, "Rape in Prison and AIDS: A Challenge for the Eighth Amendment Framework of *Wilson* v. *Seiter*," *Stanford Law Review* 44 (1992): 1541, 1551–1552 .
4. L. Greenhouse, "Prison Officials Can Be Found Liable for Inmate-Against-Inmate Violence, Court Rules," *New York Times*, June 7, 1994, p. A18.
5. Ibid., citing *Wilson* v. *Seiter*, 501 U.S. 294, 111 S.Ct. 2321 (1991).
6. *Farmer* v. *Brennan*, 114 S. Ct. 1970 (1994).
7. Greenhouse, "Prison Officials Can Be Found Liable."
8. 410 Illinois Consolidated Statutes 305/7(c) (1992), *Connor* v. *Foster*, 833 F. Supp. 727, 730 (N.D. Ill. 1993).
9. "Refusal to Test Prisoner for HIV Held Not to Violate His Rights," *AIDS Policy and Law*, April 29, 1994, p. 6.
10. Ibid.
11. According to John Boston, project director for the Prisoners' Rights Project of the Legal Aid Society of New York City, in its decision the court does not cite any of the contrary authority on this point from other jurisdictions.
12. "Ill. Appeals Court Overrules State on Testing of Prisoner Who Bit Guard," *AIDS Policy and Law*, August 19, 1994, pp. 2–3.
13. Order dated October 25, 1993, in *Anderson* v. *Murdough*, No. 1:92-2694-17BD (D.C.S.C.).
14. Ibid.
15. *Doe* v. *City of New York*, 825 F. Supp. 36, 38 (S.D.N.Y. 1993).
16. *Doe* v. *City of New York*, 15 F. 3d 264, 267 (2d Cir. 1994).
17. Ibid.
18. "Disclosure of HIV a Breach of Confidentiality Even If Diagnosis Wrong, Appeals Court Rules," *AIDS Policy and Law*, June 24, 1994, p. 1.
19. "Cases," *PWA Support*, Fall 1993, p. 11.
20. The Department of Human Rights conceded that the prisoner's claim might otherwise succeed under State law.
21. Decision of the Minnesota Department of Human Rights in the case of *Todd Balow* v. *Minnesota Department of Corrections*, No. PS00916 (July 23, 1992): 5.
22. Since April 1994, contrary to the nursing director's recommendations, ISP officials have permitted Derby to attend open chapel services and to visit the law library.
23. Normally, a prison official's classification decision is not a matter subject to judicial review. See *Hewitt* v. *Helms*, 459 U.S. 460, 468 (1983).
24. *Moody* v. *Daggett*, 429 U.S. 78, 88, n. 9 (1976).

25. *Parrott* v. *Ray* decree, S.D. Ia. Civ. No. 78-174-2 (1981).

26. *Goss* v. *Sullivan*, 839 F. Supp. 1532, 1537 (D. Wyo. 1993).

27. *Wilson* v. *Seiter*, 111 S. Ct. 2321, 2324 (1991).

28. Ibid.

29. According to John Boston, project director of the Prisoners' Rights Project of the Legal Aid Society of New York City, the notion of "pervasive risk" is applicable to generalized risks rather than specific risks to particular inmates such as in this case.

30. "In Brief . . . ," *AIDS Policy and Law*, April 15, 1994, p. 6.

31. Also see *Zaczek* v. *Fauquier County, VA*, 764 F. Supp. 1071 (E.D. Va. 1991); *Zaczek* v. *Fauquier County, VA*, 16 F. 3d 414 (1993), affd.

32. The *Zaczek* court noted *Muhammad* v. *Carlson*, 845 F.2d 175 (8th Cir. 1988) (challenging on due process grounds procedure for transferring inmates to AIDS ward), cert. denied, 489 U.S. 1068 (1989); *Judd* v. *Packard*, 669 F. Supp. 741 (D. Md. 1987) (challenging placement in isolation unit while being tested for AIDS virus); *Cordero* v. *Coughlin*, 607 F. Supp. 9 (S.D.N.Y. 1984) (holding that segregation of inmates with AIDS did not amount to cruel and unusual punishment or violate inmates' equal protection or free association rights). These courts have discussed the difficulties confronting prison administrators as a result of the increasing incidence of AIDS and the need to balance the rights of inmates with AIDS with the rights of noninfected prisoners. See *Harris* v. *Thigpen*, 941 F. 2d 1495, 1514-21 (11th Cir. 1991) (discussing in detail balancing of inmates' rights and holding policy of mandatory testing and segregation of infected prisoners constitutionally permissible).

33. *Glick* v. *Henderson*, 855 F. 2d 536 (8th Cir. 1988).

34. *Zaczek* v. *Murray*, No. 91-6098, 1992 U.S. App. LEXIS 33993 (4th Cir. 1992).

35. The court's ruling came in an appeal challenging a district court's interpretation of a consent decree so as to require prison officials to hire additional staff and to stop denying food service jobs to HIV-positive inmates. Corrections officials also appealed the district court's award of attorneys' fees and costs to the plaintiffs for expenses incurred in monitoring the defendants' compliance with the district court's decision.

36. Section 504, as amended and codified at 29 U.S.C. § 794(a).

37. *Turner* v. *Safley*, 482 U.S. 78, 89 (1987).

38. *Gates* v. *Rowland*, No. 93-15363, 93-16136, D.C. No. CV-87-01636-LKK (9th Cir. 1994), 13523, 13542.

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

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

A handicapped person is any person who:

(1) has a physical or mental impairment that substantially limits one or more of such a person's major life activities,

(2) has a record of such impairment, or

(3) is regarded as having such an impairment. 29 U.S.C. § 706(7)(B).

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

> is able to meet all of a program's requirements in spite of his handicap. In the employment context, an otherwise qualified person is someone who can perform the essential functions of the job in question. *School Board of Nassau County v. Arline*, 480 U.S. 272, 287 n. 17, 107 S. Ct. 1123, 1131 n. 17 (1987).

40. See *Chalk* v. *U.S. Dist. Court Cent. Dist. of California*, 840 F. 2d 701 (9th Cir. 1988); *Martinez* v. *School Board of Hillsborough County*, 861 F. 2d 1502, 1506 (11th Cir. 1988).

41. "In the Field . . . ," *AIDS Policy and Law*, November 26, 1993, p. 6.

42. "HIV Positive Man Is Sentenced to 10 Years for Having Unprotected Sex With Three Teens," *AIDS Policy and Law*, May 27, 1994, p. 1.

43. Ibid.

44. "Court Says Thief With HIV Shouldn't Be Jailed for Life," *AIDS Policy and Law*, November 18, 1994, p. 6.

45. Ibid.

46. M. Hansen, "Biting, Spitting Bring Jail Terms. Two HIV-Positive Inmates Unsuccessful So Far in Appealing Convictions," *ABA Journal* (March 1994): 30.

47. "Texas Prisoner Who Spat on Guard Loses His Bid for Freedom," *AIDS Policy and Law*, December 2, 1994, p. 4.

48. A writ of habeas corpus is a prisoner's request to the court to release the party from unlawful custody.

49. Hansen, "Biting, Spitting Bring Jail Terms."

Appendix

Biomedical and Epidemiologic Research Developments

The period between the Ninth International Conference on AIDS in Berlin in June 1993 and the Tenth International Conference in Yokohama in August 1994 was marked by increasing pessimism that dramatic breakthroughs in HIV treatment were on the horizon. Several developments contributed to this shift in perspective:

- An increased appreciation for the limitations of the drug most widely used to treat HIV infection—zidovudine (ZDV, previously called azidothymidine, or AZT).
- Evidence that strains of HIV emerge that are resistant to antiviral drugs already approved for use as alternatives to ZDV and to other drugs earlier in development.
- Discouraging results from early studies of vaccines to prevent HIV, which led the United States Government not to proceed with plans for the first large-scale trials of such vaccines.

On the other hand, an encouraging finding was that use of ZDV by HIV-infected pregnant women after the fourteenth week of pregnancy could reduce the likelihood that the virus would be transmitted to their newborns.

Generally disheartening findings from clinical research led to recommendations for increased emphasis on laboratory investigations into the fundamental molecular mechanisms involved in processes of HIV infection and disease development.[1] This shift in emphasis was endorsed at the summer AIDS meeting in Yokohama by the newly appointed director of the Office of AIDS Research, which has budgetary authority over more than $1.3 billion in AIDS research funding across all the institutes of the National Institutes of Health.[2] Even activist groups, who had previously called for faster access to drugs in development, shifted to criticisms of the Food and Drug Administration (FDA) for giving premature approval to new drugs, coupled with calls for more thorough clinical evaluation of drugs (both prior to licensure and marketing and through postmarketing testing).

Against this backdrop of pessimism regarding breakthroughs in HIV treatment, the expansion and improvement of prevention programs designed to foster and sustain reductions in HIV risk behaviors became even more important.

Uncertainties About "Early Intervention"

In the summer of 1989, the National Institute of Allergy and Infectious Diseases (NIAID), one of the National Institutes of Health (NIH), reported the results of a clinical trial testing the effects of ZDV among HIV-infected persons with relatively intact immune systems—as measured by T-helper lymphocyte (CD4+ cell) counts between 500 and 200 per cubic millimeter. Based on the observation that CD4+ cell declines were delayed in persons who received ZDV, NIAID recommended that therapy with ZDV be initiated earlier than previously recommended: when CD4+ counts dropped below 500, rather than 200. The FDA changed the labeling indications for ZDV consistent with this recommendation. Four years later, shortly before the international conference in Berlin, the joint British-French-Irish "Concorde" study showed that the initial benefits attributed to dosage with ZDV relatively early in the course of HIV infection did not persist. After a year of follow-up, the drug showed no measurable benefit in terms of slowed disease progression among persons who began using it when they were asymptomatic. Overall, ZDV was not shown to delay progression to AIDS or to prolong survival.[3]

These new data led the NIH to convene the "State of the Art Conference on Antiretroviral Therapy for HIV-Infected Patients" in June 1993, soon after the Berlin conference. Retreating from an unequivocal recommendation for "early intervention" when CD4+ counts drop below 500, the resulting guideline left it to patients and their physicians to decide whether or not to initiate therapy for asymptomatic patients with CD4+ counts between 500 and 200 per cubic millimeter. Continued monitoring without medication is now considered an equally defensible option. In the absence of evidence of prolonged survival or slowed disease progression, an alternative rationale for early intervention with ZDV might be improved quality of life. In early 1994, results of a study of the effect of ZDV showed that persons assigned to receive the drug when initially asymptomatic and with CD4+ counts above 200 experienced no fewer clinical symptoms than placebo recipients.[4]

The difference between the initial clinical findings on early intervention with ZDV and the more recent studies resulted from the duration of the trial and the first study's dependence on "surrogate markers" of clinical improvement rather than "clinical end points." The Concorde study showed the same early benefit found in the United States trials: an association between ZDV and delayed decline in helper T-cell (CD4+) counts, a laboratory "surrogate" that was expected to predict improved clinical outcomes (such as increased overall survival). However, the Concorde trial continued long enough to make direct measurements of clinical end points, including survival, and it showed that the initial benefit as measured by CD4+ lymphocyte counts did not translate into prolonged survival. Although FDA licensure of other anti-HIV drugs has continued to be based on the surrogate of improved CD4+ lymphocyte counts, analysis of 16 clinical trials of ZDV and other drugs of the same type showed that improvements in CD4+ counts do not necessarily predict slowed disease progression or improved survival rates.[5]

Resistance to Anti-HIV Drugs and Therapeutic Choices

The emergence of strains of HIV resistant to ZDV had been observed as early as 1992 and associated with clinical observations suggesting a limited benefit for the drug when administered over long periods of time. Although it elicited little comment when first published, a 1993 report described the apparent transmission of a ZDV-resistant strain of HIV which was associated with more rapidly progressing clinical disease shortly after infection than is ordinarily observed. The promotion of early intervention in HIV infection with ZDV had meant that increasing numbers of healthier HIV-infected persons were being encouraged to take the antiviral drug between 1989 and mid-1993. A possible link between the spread of ZDV-resistant HIV strains and more severe clinical illness associated with such strains has important public health significance: in effect it could mean that a recommendation designed to reduce the burden of disease might, over time, have had the opposite effect by selectively favoring those strains of HIV that cause more severe or more rapidly progressing illness. Because this potential concern rested on only a single case history, it remained largely speculative. Recently, however, a larger series of such cases from the United States, Switzerland, and Australia has been assembled: among 111 newly infected persons in the United States, 13 percent were found to harbor an HIV strain containing a genetic marker for ZDV resistance. From 1988–1990 to 1993–1994, the proportion of persons shown to harbor such strains rose from 3 percent to 19 percent.[6]

In the meantime, anti-HIV treatment relies on the principle that HIV strains resistant to one antiviral compound may be susceptible to other drugs. Laboratory studies and clinical research have supported this principle. For example, patients whose disease progresses or who develop sustained adverse effects after a period of six months or more of ZDV therapy seem to benefit from switching to another drug such as Didanosine (ddI)[7] or Zalcitabine (ddC).[8] In 1994, another drug using the same basic strategy as ZDV, ddI, and ddC, called Zerit (stavudine, or d4T), received FDA approval for use when other anti-HIV drugs prove ineffective or toxic.[9]

Also during the period 1993–1994, additional data appeared that supported previous analyses suggesting that adding the antiherpes drug acyclovir to ZDV might prolong survival. Approximately 500 users of the two-drug regimen survived longer than an otherwise similar group of 300 persons who used only ZDV.[10] These findings from a retrospective analysis of observational data cannot be considered definitive until a randomized, controlled, double-blinded clinical trial is conducted. However, acyclovir has minimal side effects and is licensed and thus available by prescription, so some patients and physicians are already using it even without meeting the labeled indication for use to treat herpes virus infection and in the absence of a definitive trial.

Zidovudine and Vertical (Mother-to-Infant) Transmission of HIV

In February 1994, preliminary findings were released from a United States/French trial designed to test whether zidovudine (ZDV) treatment of HIV-infected pregnant women and their newborns would reduce the rate of transmission to their newborns. While the rate of transmission in untreated women and infants was 26 percent, in women and infants who received ZDV it was 8 percent.[11] Women enrolled in the study were in the 14th or later week of pregnancy and had CD4+ counts above 200, no symptoms considered to warrant ZDV treatment, and no previous ZDV exposure. They received a standard dose of ZDV until delivery and high-dose ZDV administered intravenously during delivery; newborn infants received ZDV for the first six weeks of life.

In August 1994, the United States Public Health Service (PHS) released formal guidelines recommending the use of ZDV to prevent vertical transmission of HIV. These guidelines extended the recommendations for ZDV use beyond women who met the enrollment criteria specified in the original clinical trial to those with more advanced HIV disease and to later stages of pregnancy, at delivery, and postpartum to the newborn infant.[12] In September 1994, the FDA changed the labeling indications of ZDV to include administration to pregnant women for the purpose of reducing the likelihood of transmission during pregnancy or at delivery. Two areas of uncertainty remain regarding these findings.

First, the long-term effects of exposure to ZDV during fetal development will not be known for years. In laboratory studies, newborn rats exposed to 50 times the relative ZDV dose administered to humans showed developmental and skeletal abnormalities. No toxic effects specifically associated with the ZDV dosages in the human studies have been documented thus far in ZDV-exposed infants. The infection rate in the placebo group in this trial and other studies of pregnancy outcomes associated with HIV infection suggest that most infants born to HIV-infected pregnant women (in this case almost three-fourths) will not become infected anyway: routine use of ZDV during pregnancy therefore would expose a majority of infants to a drug of uncertain toxicity, so as to rescue a minority who would otherwise be infected (in this case between 10 and 20 percent) from perinatal exposure to HIV. The PHS recommendations note that long-term follow-up of all ZDV-exposed infants is important.[13]

A second limitation of this study relates to the specific circumstances of the clinical trial and its generalizability. The group of women enrolled in the study were in the second trimester of pregnancy, and the results therefore do not establish a firm treatment regimen. Given that the developing fetus may be more susceptible to drug-related adverse effects at an earlier stage of development, the PHS recommendations do not advise ZDV use earlier in pregnancy. It is not known whether initiation of ZDV closer to the expected date of delivery, at delivery, or postpartum in the newborn will reduce transmission. The recommendations encourage pregnant women and their physicians to consider such uses based on the principle that a two-thirds reduction in the rate of HIV transmission from mother to infant would outweigh any harm less severe than malignancy or profound developmental delay among a large proportion of ZDV-exposed infants.

New Anti-HIV Drugs in Development

The group of anti-HIV drugs that have moved from clinical trials to marketing approval by the FDA all belong to a class of compound called nucleoside analogs, which intervene at the same stage in the life cycle of HIV: the molecular "reverse transcription" process during which the genetic information in HIV is coded into the DNA of infected cells. Nucleoside analogs all have limitations that restrict their long-term usefulness, including the emergence of strains of HIV that are drug resistant, the limited duration of benefits as measured during clinical trials, and significant toxicity. As a result, considerable interest has focused on non-nucleoside drugs that inhibit the process of reverse transcription, and on drugs that intervene at other stages in the life cycle of HIV.

Among the former group, nevirapine was found to elicit the development of resistant strains of HIV even more quickly than the nucleoside analogs. Clinical trials are now underway evaluating the efficacy of combining nevirapine with approved nucleoside analogs such as ZDV. Another drug designed to slow down the process of reverse transcription by acting on a regulatory mechanism (a "tat inhibitor") has shown no clinical benefit in initial trials.

Among the latter group, drugs known as protease inhibitors are in development by a number of pharmaceutical manufacturers (e.g., Abbott, Hoffman-LaRoche, and Merck).[14] Protease inhibitors act at the point in the life cycle of HIV

when new viral particles are beginning to be formed. The deputy director of the Division of AIDS in the National Institute of Allergy and Infectious Diseases has commented that "after the protease inhibitors I don't see much in drug development."[15] Early indications are that it is difficult to achieve high levels of these drugs in the body without dosages so large that recipients may suffer toxic side effects, but that in lower doses they are as effective as the approved reverse transcriptase inhibitors. Clinical trials of the efficacy of a number of protease inhibitors will not be completed until 1996.[16]

It is known already that strains of HIV can emerge that are resistant to these drugs. Researchers speculate that a better understanding of the nature of "escape" mutants of HIV that resist these compounds may provide enough information for them to design compounds that prevent the development of resistance.[17] It is also possible that resistance to a mixture of anti-HIV drugs would require a combination of mutations that together would be lethal to HIV or would render it clinically innocuous. This possibility will be evaluated in a planned clinical trial comparing various combinations of drugs that, individually, elicit HIV-resistant strains. A novel feature of this trial is its sponsorship by a newly formed Inter-Company Collaborative for AIDS Drug Development, a consortium of 16 major pharmaceutical manufacturers involved in AIDS research.[18]

Preventive Vaccines

In June 1994, the director of the National Institute of Allergy and Infectious Diseases accepted a recommendation of a multidisciplinary review panel, the AIDS Research Advisory Committee and its Subcommittee on Vaccine Development, that the government delay large-scale domestic efficacy trials of the only two candidate vaccines currently available.[19] The panel explicitly noted that its recommendation was intended to pertain only to United States trials and not to other regions of the world where the intensity of the epidemic and other factors might suggest a different weighting of the costs and benefits of conducting an efficacy trial. The subtype of HIV prevalent in the United States, for which these products were developed, is also found in the Caribbean basin and among some injection drug users in Southeast Asia.

A subsequent meeting of scientific consultants convened by the World Health Organization (WHO) in October 1994 reached a different conclusion, that large-scale trials of candidate preventive vaccines "could go ahead to establish if they can protect people from HIV infection."[20] This recommendation represented a departure from previous positions regarding HIV vaccine clinical trials in non–United States settings: implementation of large-scale United States efficacy trials of products similar to those proposed for non–United States populations had been considered a prerequisite for the initiation of such trials in developing nations. Instead, WHO indicated that if a member nation or nations wanted to initiate such large-scale trials, WHO would actively support of the decision.

The decision to delay domestic vaccine trials had been based on the failure of the candidate products to meet a key guideline that had been established earlier in the development process. Antibodies collected from volunteer vaccine recipients participating in early clinical trials had been shown, in test tube studies, to control the growth of HIV strains widely used for laboratory studies. These antibodies were then tested against HIV isolates collected in the field from patients who had recently become infected and were found not to "neutralize" or inactivate these "primary isolates." Those findings cast doubt on the likelihood that such vaccines would prove highly effective in field trials.[21]

Shortly before the June meeting, media reports called attention to a handful of volunteers in preliminary trials of these products who had become infected through sexual exposure even though they had been partly or fully immunized.[22] Although a few such "breakthroughs" were anticipated, they cast further doubt on the viability of these candidate products. Counterevidence—in the form of animal studies in which these vaccines appeared to protect chimpanzees from infection when inoculated with HIV—was considered equivocal because HIV is considered only a weakly effective virus in chimpanzees.

The panel suggested that large-scale trials in the United States would be warranted either (a) when other products that use an alternative theoretical approach to immunization reach an appropriate stage of clinical testing, or (b) when additional data become available on the current products that provide more convincing evidence that they are likely to be effective at preventing HIV infection. Vaccines using alternative approaches are not likely to be ready for consideration for large-scale trials until 1996 at the earliest.[23] The WHO recommendations supportive of international trials of gp120 and other products did not reflect a different scientific evaluation of the likely efficacy or potential risks of such vaccine candidates, but instead emphasized that 90 percent of all new infections are occur-

ring in developing countries where the "devastating effects of HIV and AIDS on individuals, families and societies lends a special urgency to the search for an effective vaccine to prevent infection."[24]

Unusual Modes of Transmission

During the period 1993–1994, the Centers for Disease Control and Prevention issued a full report of the results of an investigation of possible transmission of HIV to patients in the practice of a dentist who died of AIDS, and also reported two cases of HIV transmission in household settings, apparently through the direct exposure of the skin lesions of an uninfected person to the blood of an infected household member.

In 1990, the CDC reported a possible transmission of HIV infection from an infected Florida dentist to a patient. Subsequently, a total of six patients of this dentist were reported to have acquired HIV infection while receiving care from this dentist. Investigators have been unable to determine the exact means of transmission in these cases, but the most likely are contamination and improper sterilization of dental instruments and blood-to-blood exposure following an injury to the dentist.[25] This remains the only health care practice in the United States in which HIV transmission to patients has occurred, but it has occasioned substantial controversy about the likelihood of further transmission to patients in health care settings in the future.[26]

In July 1991, the name of another dentist with AIDS was published in Miami newspapers. To assess the likelihood that HIV is transmitted to patients in the practice of HIV-infected dentists, CDC and the State of Florida carried out an extensive investigation of the HIV status of this second dentist's patients. Twenty-eight of the patients were found to be HIV infected, but all but four of these had independent behavioral risk factors. An analysis of the genetic sequences of the viruses in blood from the dentist and 24 of the 28 HIV-infected patients suggested that the strains were not linked. This, in turn, led the investigators to conclude that there was no evidence of dentist-to-patient or patient-to-patient transmission in this practice. (Notably, the investigation also discovered breaches of proper infection-control procedures in the dentist's practice.) Investigations of 12,499 patients of 32 other dentists and dental students infected with HIV have documented no dentist-to-patient transmission of HIV in the practice setting. Similarly, no transmissions from surgeons or obstetrician-gynecologists to patients have been reported.[27]

The cases of apparent transmission via blood exposure in households involved direct personal care without routine use of universal precautions.[28] In one case, an HIV-infected woman with open, draining, and bleeding skin lesions had direct contact with her previously uninfected pre-school-aged child (including hugging and sleeping in the same bed); the child at times also suffered from open, bleeding skin lesions. In the second case, a woman with no other risk factors for exposure to HIV had direct contact with the feces and possibly blood on cotton swabs used by her HIV-infected son, although direct blood-to-blood contact was not documented. CDC reaffirmed in its report that household members coming into contact with blood or other body fluids or excretions should wear protective gloves and wash their hands after any such potential exposures.

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