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1989 Update: AIDS in Correctional Facilities

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U.S. Department of Justice
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1989 Update: AIDS in Correctional Facilities

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

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Foreword

The managers and staff of correctional institutions were among the first criminal justice professionals to confront the problem of AIDS. Time has not diminished that challenge. By October 1989, a cumulative total of 5,411 confirmed AIDS cases (the vast majority the result of intravenous drug use) had been reported among inmates in the United States' prisons and largest jail systems—an increase of 606 percent over the first survey of inmate AIDS cases in 1985. Correctional administrators thus continue to face tough decisions about institutional management, the best and most equitable means of identifying and treating inmates with HIV disease, potential legal issues, and the costs of medical care. Policy makers and corrections officials cannot afford to wait until medical science produces an ultimate answer. To address the problem effectively today, they need the most accurate and up-to-date information available.

In late 1985, the National Institute of Justice (NIJ) began its first study of AIDS in prisons and jails and has, since then, annually surveyed and reported on the prevalence and institutional management of AIDS within the federal and state prison systems, as well as in the nation's largest jails. Over 35,000 copies of the first four editions have been distributed on request to date. This report updates the *1988 Update: AIDS in Correctional Facilities* published in 1989. These studies could not have been completed without the cooperation and assistance of numerous professionals in the fields of corrections and medicine.

This report is but one part of NIJ's ongoing effort to assist correctional administrators and other criminal justice professionals in meeting the challenge of AIDS. NIJ's *AIDS and the Law Enforcement Officer: Concerns and Policy Responses* examines AIDS-related policies, training programs, and appropriate precautionary measures in the context of current medical knowledge and the day-to-day realities of law enforcement. NIJ's *AIDS in Probation and Parole* examines the issues raised by AIDS for community corrections agencies.

In mid-1987, the Institute also established the NIJ AIDS Clearinghouse to provide a centralized national source of information about how AIDS affects criminal justice professionals and their work. In its third year of operation, the Clearinghouse (which may be reached at 301-251-5500) has responded to over 5,500 requests. Assistance has been provided to federal, state, and local criminal justice agencies, legislators, and health departments. The Clearinghouse gathers and disseminates AIDS-related information developed by NIJ, the Centers for Disease Control, other agencies of the U.S. Public Health Service, and the Department of Justice, as well as selected materials prepared by professional organizations, state and local governments, and criminal justice agencies throughout the United States. As part of the Clearinghouse, NIJ instituted a new publication series, *AIDS Bulletins*—short, non-technical summaries of AIDS-related topics for criminal justice practitioners.

The HIV epidemic places enormous stress on already overburdened correctional systems. Current and accurate information can place corrections officials in a stronger position to address the problem of AIDS, provide sound education and training, ensure equitable delivery of services, and develop reasoned and effective management policies. Correctional administrators and managers have already done much to meet the challenge of AIDS. The National Institute of Justice hopes that this update will be of assistance in their continued efforts.

James K. Stewart
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As always, this project could not have been completed without the cooperation of numerous correctional administrators, medical staff, legal counsel, and researchers. Staff at the National Commission on Correctional Health Care and at many other organizations graciously answered our questions and provided valuable information for the report.

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Introduction

While the crisis atmosphere surrounding AIDS in prisons and jails seems to have dissipated somewhat, the disease remains a serious issue for correctional administrators. Concern has shifted significantly from short-term "crisis" matters such as fear of casual transmission to "long-haul" issues such as housing, programming, and medical care for prisoners with HIV disease.

Since 1985, the National Institute of Justice (NIJ) has been providing correctional administrators with accurate and current information on AIDS and HIV infection. This *1989 Update* reports on NIJ's fifth annual survey of AIDS in correctional facilities. This year, we received responses from 49 of 50 state correctional departments and the Federal Bureau of Prisons. We were able to obtain at least partial information on the non-responding state, so our database for U.S. state and federal systems remains complete regarding prevalence and incidence of AIDS and the key correctional policy issues. Questionnaires were also sent to correctional systems in Puerto Rico, American Samoa, Guam and the U.S. Virgin Islands, but these jurisdictions did not respond. Thirty-seven questionnaires were sent to large city and county jail systems in the United States and 31 (84%) responded. These systems continue to represent a good sampling of the largest American jail systems. Eleven of 12 Canadian systems responded to the 1989 survey. Data presented in the report are current as of October-December 1989.

The report includes the following sections: 1) Biomedical and epidemiologic research developments; 2) Epidemiology of HIV infection and AIDS in correctional facilities and the population at large; 3) Tuberculosis and HIV infection; 4) Education and training; 5) Precautionary measures; 6) HIV antibody testing and notification issues; 7) Housing and correctional management; 8) Medical care and psychosocial services; and 9) Legal issues.

Chapter 1

Biomedical and Epidemiologic Research Developments

The year 1989 brought some new optimism to the battle against AIDS. There were important advances in the development and testing of therapeutic drugs; scientists' understanding of the natural history of HIV infection; the accuracy, interpretation, and meaning of HIV antibody test results; and the development of vaccines. There has also been additional epidemiologic information developed on several HIV transmission factors.

Natural History of HIV Infection

While a great deal has been learned about the genetic composition of HIV and the process of HIV infection *in vitro*, there remain many difficult questions regarding the process and timing of infection and disease progression in human beings. Several new studies have contributed information critical to answering these questions.

Based on recent studies of the amount of virus in the blood of infected individuals at various clinical points, an editorial in the *New England Journal of Medicine* suggests that the process of HIV infection may be divided into three stages: 1) the early, or acute, stage, usually lasting weeks; 2) the middle, or chronic, stage, usually lasting years and characterized by "minimal, but measurable, pathologic changes"; and 3) the final, or crisis, stage, generally termed AIDS and lasting months or years, depending in part on availability of effective treatment. The important conclusion with respect to both HIV transmission and pathogenesis is that active viral replication continues during all three of these stages, albeit at different levels, so that there appears to be no totally latent phase of infection. However, circulating viral levels in the blood appear to be higher in patients with more advanced disease.[1]

The mechanisms by which the timing of these stages is controlled remain unknown. However, there are indications that certain blood cells (HIV-specific cytotoxic T lymphocytes), rather than neutralizing antibody to HIV, may limit viral spread and replication during the chronic stage and trigger the crisis stage.[2]

These findings, technical as they may seem, have important implications for therapeutic interventions. For example, the suggestion that there is no absolutely latent phase of HIV infection and that the virus undergoes continual growth and mutation in the host provide strong support for continued treatment during the chronic phase of infection. Moreover, the finding that measurement of viral levels in plasma may be a better indication of clinical status than testing for circulating p24 antibody or antigen suggests that it may soon be possible to identify routinely patients at highest risk for progression to more serious active disease and to time the initiation and dosage of therapeutic drugs accordingly. Implicit in this, of course, is the importance of early identification and active and regular monitoring of HIV-infected persons. In turn, this suggests that persons with histories of high-risk behavior be encouraged to undergo testing for HIV antibodies on a voluntary and confidential basis.[3]

Finally, because high viral levels may be associated with a higher risk of viral transmission, identification

and treatment of persons with high levels of HIV may have a positive impact on efforts to reduce HIV transmission.[4]

Accuracy, Interpretation and Meaning of HIV Antibody Test Results

Studies of the accuracy of HIV antibody test results continue to show that, with adherence to strict quality control, the available antibody tests can virtually eliminate false positives, even in low-risk populations. However, other studies suggest that false negatives may continue to present problems in high-risk populations.

A study of Minnesota blood donors represents the first assessment of antibody test performance based on sequential ELISA and Western Blot testing, use of a sensitive HIV viral culture technique as the reference standard for true infection, large sample size (almost 300,000 donors), and a very low-risk population. The study found that false positive rates were extremely low (0%-0.0006%) while specificity (the ability of the test to identify accurately uninfected individuals) and the predictive value of a positive test (the fraction of all positive tests that are true positives) were both very high (99.9994%-100% and 81%-100%, respectively). The authors suggested that their results support the use of the available antibody tests for the screening of low-risk populations, but admit that accuracy such as that achieved in their study requires strict quality assurance standards. The authors also acknowledged that, because they were studying such a low-risk population, they were unable to examine systematically the question of "window period" false negatives—that is, units of infected blood that test negative because detectable antibodies have not yet appeared in it.[5]

These "window period" false negatives have been responsible for a small number of transfusion-associated HIV infections occurring even after the implementation of universal blood screening. The length of the "window period" is still a subject of study and debate. One paper suggests that in some high-risk homosexual men infection may occur three years before detectable antibodies appear. The precise level of infectiousness of such individuals during this long "window period" is unknown, but they must be assumed to be infectious.[6]

Interpretation of Western Blot (WB) test results remains problematic due to the lack of standardized test kits (only one Western Blot test—Du Pont's—has been licensed by the FDA) and the variability of interpretive criteria (at least four different criteria exist). CDC has evaluated the four interpretive criteria by testing blood from persons in four groups selected on the basis of clinical status and ELISA results. The criteria proposed by the Association of State and Territorial Public Health Laboratory Directors (ASTPHLD) and CDC performed best in this evaluation and have been recommended by CDC for universal adoption.[7] The ASTPHLD/CDC criteria produced positive results for 97 percent of AIDS patients and 98 percent of other symptomatic patients. None of the ELISA nonreactive individuals in the study were WB positive using any of the four criteria.

Notably, however, the ASTPHLD/CDC criteria produced positive results for only 78 percent of a group of asymptomatic individuals who were repeatedly reactive on the ELISA test. The remaining 22 percent of these individuals were indeterminate on the Western Blot using the ASTPHLD/CDC criteria. It is important to note as well that these results were obtained under ideal laboratory conditions. Thus, even the highest-rated interpretation criteria may be expected to be less accurate in less-than-ideal applications.

Based on these results, CDC underscored the importance of "careful risk assessment" in cases with indeterminate Western Blot results. Persons without risk factors who are WB indeterminate for six months should be considered antibody negative and informed that they "are almost certainly *not* infected with HIV-1." Persons with risk factors who are persistently WB indeterminate require additional diagnostic followup, including serial WB testing, immune system function assessment, and investigation as to the HIV status of the individual's sexual or needle sharing partners.[8] As another assessment of test performance concluded, "the readily available serological tests for diagnosing HIV infection are most useful when combined with knowledge of a potential exposure and with the clinical status of the patient."[9]

Development of Vaccines

In 1989, some very important strides were made in the development of vaccines against AIDS. In a summary report in *Science* in December 1989, Dani Bolognesi suggested that "the pessimism shadowing the development of an AIDS vaccine is showing some signs of receding." This resurgent optimism is based on three areas of advance: 1) evidence of the efficacy of killed whole virus vaccines in some primate models; 2) identification of key immunologic targets for vaccines on the virus and infected cells; and 3) information that humans may respond favorably to certain immunogens for HIV.[10]

The progress with animal models primarily involved studies of Simian Immunodeficiency Virus (SIV) in rhesus monkeys and chimpanzees. SIV causes the simian equivalent of AIDS. These studies showed that whole killed virus vaccine was able to delay the onset of disease for significant periods and perhaps permanently (the experiments are ongoing). Notably, this effect was obtained even in cases where entry of the virus was not completely blocked. This gives rise to the hope that a human vaccine may be effective without completely blocking infection. According to Bolognesi, "if some degree of infection with HIV can...be tolerated, a vaccine against the virus is much more within reach."[11]

In addition, Jonas Salk and colleagues found that a vaccine was able to clear SIV in previously infected chimpanzees. This raises hopes of analogous possibilities for HIV-infected humans.[12]

Research continues on viral and cellular sites where vaccines might be most effective. The merger between the SP120 protein of HIV and the CD4 "receptor" on the surface of the T4 target cell is crucial to the virus' ability to infect healthy cells and to reproduce itself. New work has identified numerous promising target sites which are not involved with the gp120/CD4 interaction, thus freeing a vaccine from the difficulty of competing with this interaction. Related to the identification of target sites for vaccine activity have been advances in the study of neutralizing antibodies that can attack virus-infected cells at these sites.[13]

Despite these important strides, however, Bolognesi and others caution that there is still much work to be done, and serious obstacles remain. While the two viruses are closely related, SIV causes immunodeficiency in sub-human primates but not in humans. Much of the hope generated by these studies is built on expectations of analogous results in humans, which may not be borne out. Moreover, whole killed virus vaccines such as those used in the primate studies are not generally considered a practical possibility for use in humans because they may contain infectious particles or viral particles that could be reactivated in the human host, potentially causing the very disease the vaccine is intended to prevent. Finally, there remain many obstacles to rigorous clinical trials of vaccines in human populations, given low rates of HIV transmission and long incubation periods, not to speak of complex ethical issues. Thus, while significant progress has been made in 1989, it still may be five to ten years before an effective AIDS vaccine is widely available for human use.[14]

Development and Testing of Therapeutic Drugs

The year 1989 saw progress in all four basic categories of therapeutic drugs for HIV infection and AIDS: 1) reverse transcriptase inhibitors; 2) drugs that inhibit viral entry to cells; 3) drugs that inhibit viral maturation;[15] and 4) drugs that prevent and/or treat opportunistic diseases.

Reverse transcriptase inhibitors block the transcription of the viral genome, which consists of RNA, into DNA, an essential early step in the replication of HIV. The most important of the reverse transcriptase inhibitors is AZT (also known as zidovudine, azidothymidine, and Retrovir). AZT remains the only anti-HIV drug with full FDA approval, and it has been shown to be effective in patients with advanced stages of HIV disease. FDA approval is limited to seriously symptomatic patients as defined by helper T-cell counts. Clinical trials of AZT in asymptomatic HIV-infected persons and those with moderate immune system damage have been in progress for several years. In August 1989, investigators announced that their data showed AZT to be effective in delaying the onset of severe AIDS-Related Complex (ARC) and AIDS in patients in two of these trials. The trials were terminated early and AZT was offered to patients who had been receiving placebo. In early March 1990, the U.S. Food and Drug Administration approved provision of AZT to asymptomatic HIV-infected adults with T-cell counts

below 500.[16]

The new data on AZT, which remain unpublished at this writing, also suggested that benefits were the same regardless of whether the patient has a lower-dose regimen or is receiving full dosages. Moreover, side effects of AZT appear to be reduced in patients with only moderate immune suppression. On the other hand, it is unknown whether early use of AZT lowers the effectiveness of the drug should the patient progress to more active disease, and whether early use contributes to the earlier development of AZT-resistant strains of HIV in the patient. Currently available data suggest that for people with helper T-cell counts above 500, AZT's beneficial effect (in terms of increased helper T-cell counts) lasted only about four months.[17] For patients with counts below 500, observed benefits lasted only one year. Thus, it may turn out that use of AZT in effect buys the patient the same amount of time whether they take it while asymptomatic or delay treatment until the onset of more serious symptomatic disease.

Other reverse transcriptase inhibitors undergoing clinical trials are ddC and ddI, which are both in Phase II trials, the first tests of efficacy in humans. (Phase I trials test safety, while Phase II and III trials test efficacy.) ddC is primarily administered alternately with AZT to patients who experience severe side effects to AZT. ddI is used as a substitute for, rather than in conjunction with, AZT. Early reports on ddI were quite favorable in terms of anti-viral activity and side effects were found to be quite mild. However, more recent data suggest that the drug's side effects may be more severe. Nevertheless, FDA has announced an early release program for ddI under its "investigational new drug" designation. The manufacturer, Bristol-Meyers, has also moved to grant "compassionate access" to those unable to pay for the drug. A March 1990 report indicated that patients taking ddI under the expanded access program have died at more than ten times the rate found in patients taking the drug in formal clinical trials. The FDA is currently investigating these abnormally high death rates.[18]

The drug which appears most promising in blocking viral entry to cells is soluble CD4. Soluble CD4 is an artificial form of the receptor to which HIV must bind in order to infect cells. Its injection into the bloodstream attempts to "trick" the virus by drawing it away from cells. Preliminary findings from clinical trials indicate that recombinant soluble CD4 is non-toxic and produces at least modest antiviral activity in patients with AIDS and less advanced symptomatic HIV disease. Accordingly, further trials of this compound are being undertaken.[19]

The third category of drugs consists of those which act at the end of the viral life cycle to prevent the assembly or maturation of viral particles. One such drug, G.D. Searle and Company's SC-48334 (a derivative of castanospermine, a product of the Australian chestnut tree) is in Phase I clinical trials.[20]

Finally, there have been advances in drugs apparently useful in preventing or treating opportunistic infections. Most prominent among these is aerosolized pentamidine for prophylaxis of *Pneumocystis carinii* pneumonia (PCP). In June 1989, the FDA approved this drug for people with HIV infection and evidence of some immune system damage (helper T-cell counts below 200 per cubic millimeter or proportionately representing less than 20 percent of total lymphocytes). This initiated an overall reconsideration of guidelines for PCP prophylaxis in HIV-infected persons.

The Public Health Service published guidelines in June 1989 recommending that HIV seropositive persons be monitored for helper T-cell counts at least once every six months. If the FDA criteria are met, patients should be offered medication to prevent onset of PCP: aerosolized pentamidine or, if it can be tolerated, oral trimethoprim-sulfamethoxazole with leucovorin. The guidelines specify that any existing lung infection, lesions, or tumors be ruled out before the medications are prescribed. Moreover, because of unknown side effects, the guidelines recommend that these medications not be used for infants, young children, or pregnant women.[21]

Implicit in many of these research findings and recommendations, as in those regarding the natural history of HIV infection, are the importance of early identification of infected persons, regular medical monitoring, and early intervention as indicated by such identification and followup. Indeed, it has been suggested that "early intervention" centers, which essentially combine aggressive voluntary HIV antibody testing programs, therapeutic intervention with AZT and other drugs, and intensive counseling to reduce infected persons' high-risk behaviors, may be the wave of the future in the prevention and control of HIV. The Centers for Disease Control (CDC) has funded some early intervention centers as pilot projects.[22]

Epidemiologic Information on HIV Transmission Factors

Accumulating evidence continues to reinforce the conclusion that HIV is transmitted in three ways—through sexual contact, blood-to-blood (or blood-to-mucous-membrane) exposure, and perinatally—but not transmitted through any form of casual contact, by insects, or in any other manner.

Recent studies provide additional detail on transmission factors. For example, a study of Kenyan men who acquired sexually transmitted diseases (STDs) from a group of prostitutes with a high prevalence of HIV infection found that HIV seroconversion among the men was associated with frequent prostitute contact, presence of genital ulcer disease, and lack of circumcision. These data help to elucidate the factors involved in heterosexual transmission of HIV and particularly the association between HIV and other STDs.[23]

Some of the strongest evidence against casual transmission or hitherto undiscovered transmission factors comes from CDC's ongoing followup studies of AIDS cases with previously undetermined risk. Of 6,456 such cases reported to CDC through November 1989, 3,119 have been investigated. Of these, 2,729 (87%) have been reclassified by investigation into existing transmission categories.[24]

Of the 390 who could not be reclassified, 100 gave histories of STDs and 62 cases admitted contact with prostitutes. These cases may represent heterosexual transmission. Another two cases were health-care workers who seroconverted after occupational exposures to HIV and 33 were health-care workers who reported needlestick or mucous-membrane exposures, although the timing of their seroconversions could not be documented. If these 197 additional cases are reclassified as heterosexual transmission and occupational blood-to-blood or blood-to-mucous membrane exposure, this increases the percentage of reclassified cases to 94 percent of those investigated. Moreover, none of these investigations brought to light new or unforeseen mechanisms of transmission. Even if such mechanisms lie undiscovered among the handful of cases unable to be reclassified, they must represent extremely rare events.

The investigation of AIDS cases with previously undetermined risk provides some quantitative measure of the number of health-care workers with AIDS whose disease is related to occupational exposure. This is of interest to correctional officers because their risk levels are sometimes compared with those of health-care workers. In fact, correctional officers experience much lower risks than do health-care workers because the former experience far fewer parenteral (i.e., puncture wound) exposures than do the latter.

Information from three prospective studies of occupationally exposed health-care workers indicate that the risk of infection associated with a single needlestick or other parenteral exposure is less than 1 percent and that associated with mucous-membrane or other non-parenteral exposure approaches zero, although several such cases have been reported. Through November 1989, there may have been as many as 35 occupationally acquired cases of AIDS among health-care workers in the United States. In addition, data published in June 1989 indicate that there had been approximately 25 occupational cases of HIV seroconversion among health-care workers who had not yet progressed to AIDS.[25]

Endnotes

1. David Baltimore and Mark Feinberg, "HIV Revealed: Toward a Natural History of the Infection," *New England Journal of Medicine* December 14, 1989; 321: 1673-1675.

2. Ibid.

3. Ibid.

4. Ibid.

5. K.L. MacDonald et al., "Performance Characteristics of Serologic Tests for HIV-1 Antibody among Minnesota Blood Donors," *Annals of Internal Medicine* April 15, 1989; 110: 617-621.

6. D.T. Imagawa et al., "HIV-1 Infection in Homosexual Men who Remain Seronegative for Prolonged Periods," *New England Journal of Medicine* June 1, 1989; 320: 1458-1462.

7. "Interpretation and Use of the Western Blot Assay for Serodiagnosis of HIV-1 Infections," *Morbidity and Mortality Weekly Report (MMWR)* July 21, 1989; 38: No. S-7, pp 1-7.

8. Ibid.

9. J.P. Phair and S. Wolinsky, "Diagnosis of Infection with HIV," *Journal of Infectious Diseases* February 1989; 159: 320-323.

10. Dani P. Bolognesi, "Progress in Vaccines Against AIDS," *Science* December 8, 1989; 246: 1233-1234.

11. Ibid.

12. Jean L. Marx, "AIDS Drugs—Coming But Not Here," *Science* April 21, 1989, 287.

13. Bolognesi, "Progress in Vaccines."

14. Ibid.; see also Philip J. Hilts, "Tests of a Vaccine on Monkeys Offer New Hope in AIDS Fight," *New York Times*, December 8, 1989, pp. A1, A35.

15. Jean L. Marx, "AIDS Drugs—Coming but Not Here," *Science* April 21, 1989, 287.

16. Jean L. Marx, "Wider Use of AIDS Drugs Advocated," *Science* 1989; 244: 811; "Study Finds AZT Effective in Early Cases; FDA to Consider Expanded Drug Labeling," *AIDS Policy and Law* August 9, 1989; 4: 1-2; "NIAID Says AZT Effective in Preventing Progression of AIDS Among Asymptomatics," *AIDS Policy and Law* September 6, 1989; 4: 1-2; "Wider Use of AZT is Urged for Adults with AIDS Virus," *New York Times*, March 3, 1990, p. A10.

17. Marx, "Wider Use of AIDS Drugs Advocated"; "Study Finds AZT Effective"; "NIAID Says AZT Effective."

18. Robert Yarchoan et. al., "In Vivo Activity Against HIV and Favorable Toxicity Profile of 2', 3'-Dideoxynosine," *Science* July 28, 1989; 245: 412-415; "ddI to Enter Large-Scale Trials," *Treatment Issues: The GMHC Newsletter of Experimental AIDS Therapies* October 30, 1989; 3: 1-2; Gina Kolata, "Odd Surge Found in Deaths of those Taking AIDS Drug," *New York Times*, March 12, 1990, pp. A1, B8.

19. R.T. Schooley et. al., "Recombinant Soluble CD4 Therapy in Patients with AIDS and AIDS-Related Complex: A Phase I-II Escalating Dosage Trial," and J.O. Kahn et al., "The Safety and Pharmacokinetics of Recombinant Soluble CD4 (rCD4) in Subjects with AIDS and AIDS-Related Complex: A Phase I Study," both in *Annals of Internal Medicine*, February 15, 1990; 112:247-261.

20. Marx, "AIDS Drugs—Coming But Not Here."

21. "Guidelines for Prophylaxis Against *Pneumocystis carinii* Pneumonia for Persons Infected with HIV," *MMWR* June 16, 1989; 38: No. S-5, pp. 1-9.

22. See Willard Cates and G. Stephen Bowen, "Education for AIDS Prevention: Not Our Only Voluntary Weapon," *American Journal of Public Health* July 1989; 79: 871-874; Donald Francis et al., "Targeting AIDS Prevention and Treatment Toward HIV-1-Infected Persons: The Prevention/Treatment Center Concept," *Journal of the American Medical Association* November 10, 1989; 262: 2572-2576.

23. D. William Cameron et al., "Female to Male Transmission of HIV-1: Risk Factors for Seroconversion in Men," *Lancet* August 19, 1989, 403-407.

24. CDC, *HIV/AIDS Surveillance Report*, December 1989, p. 14.

25. CDC, "Guidelines for Prevention of Transmission of HIV and Hepatitis B Virus to Health-Care and Public-Safety Workers," *MMWR* June 23, 1989; 38: No. S-6, pp. 7-8 and Table 2, pp. 32-33.

Chapter 2

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

Patterns of HIV Infection and AIDS in the Population at Large

Growth in AIDS Cases

The number of reported AIDS cases continues to increase steadily in the United States. Almost 32,000 new cases were reported to the Centers for Disease Control (CDC) in the year ending October 31, 1988 and over 35,000 in the year ending October 31, 1989. A total of 110,333 adult/adolescent AIDS cases had been reported to CDC through October 1989. An additional 1,908 pediatric cases had also been reported. In Canada, a total of 3,310 adult and pediatric cases had been reported through the end of 1989.[1]

While every U.S. state and metropolitan area has reported AIDS cases, a few states still contribute the majority of cases. Indeed, New York and California account for almost one-half of all U.S. adult/adolescent AIDS cases: New York for 24 percent (mostly in New York City) and California for 21 percent (largely in Los Angeles and San Francisco). Florida, Texas, and New Jersey together contribute another 22 percent of the total cases. It is interesting to note that, from 1988 to 1989, the AIDS incidence rates (cases per 100,000 population) remained stable for New York and California but increased greatly in Florida, Georgia and several other states.[2] It is not clear whether these increases in incidence rates represent true increases or artifacts of improved AIDS surveillance.

Through the end of October 1989, over 66,000 AIDS deaths had been reported in the United States. Fifty-nine percent of the reported cases have died. Just over 2,000 AIDS deaths have occurred in Canada through the end of 1989.[3] The total case-fatality rates do not yet appear to be declining despite some important advances in therapeutic drugs. CDC officials note that AIDS death reporting has been incomplete and that close to 100 percent of AIDS cases result in death within five years of diagnosis.[4] Perhaps the effects of new treatments will be reflected in case-fatality rates in the next few years.

Researchers have offered varying estimates of the number of AIDS cases expected in the United States by the end of 1991. After analyzing and comparing current forecasting methods, the U.S. General Accounting Office (GAO) estimated that total cases reported by the end of 1991 would be in the range of 300,000 to 480,000. The GAO report also identified flaws in the current methods of counting, and therefore predicting, numbers of AIDS cases. In particular, the report suggested that the number of AIDS cases attributed to IV drug use and heterosexual contact may be undercounted. The report noted that these undercounts may be due to problems in identifying, defining, or reporting AIDS cases, or to all of these factors.[5]

A study of the reporting of South Carolina AIDS cases between 1986 and 1987 exemplifies the undercounting problem discussed in the GAO report. The study found that 40 percent of AIDS cases (a total of 62) had not been correctly reported. The researchers suggested that such underreporting may also exist in other states. The federal government and CDC have recently strengthened surveillance efforts in South Carolina, Oregon, and other states where incompleteness of reporting, due to a variety of factors, has been an issue.[6]

HIV Infection and AIDS by Exposure Categories

As shown in Figure 1, 21 percent of the total adult/adolescent AIDS cases reported through October 1989 have been attributed to exposure through intravenous (IV) drug use, with 61 percent of cases attributed to exposure through male homosexual/bisexual contact. While the number of total AIDS cases in the IV drug use category is still substantially smaller than the number in the homosexual/bisexual contact category, the comparison is misleading and probably not predictive of the future course of HIV infection.

Studies reveal that since AZT became widely available in mid-1987, 36 percent fewer AIDS cases have been reported nationally among gay men than CDC had predicted. In New York City, San Francisco, and Los Angeles, the disparity was 72 percent. On the other hand, new cases among intravenous drug users, a group with far less access to AZT, have increased at the predicted rates over the same period. This study provides the first dramatic evidence of efficacy of early intervention with AZT.[7]

The percentage of cases in the IV drug use category has rapidly multiplied, particularly since 1987. Through 1987, 65 percent of cases had been attributed to homosexual contact and 17 percent to IV drug use. The shift of 4 percent between 1987 and 1989 reflects sharper increases in IV drug use-associated cases than in homosexual contact cases in the past two years. These increases not only represent real epidemiologic changes but also reflect reporting changes due in part to the 1987 expansion of the case definition for AIDS. By 1989, in at least three states (Connecticut, New Jersey, and New York) as well as Puerto Rico, total reported AIDS cases attributed to IV drug use exceeded cases attributed to homosexual contact.[8]

Many public health officials believe that while HIV transmission through homosexual contact may be leveling off or declining, IV drug use represents the second wave, and associated heterosexual transmission, the third wave, of the epidemic. One-half of all adult/adolescent AIDS cases attributed to heterosexual contact are specifically linked to sex with IV drug users. A growing number of infants are being born with HIV infection. These are generally the offspring of women who are HIV-infected IV drug users or sexual partners of IV drug users. Public health officials anticipate that AIDS cases in all categories associated with IV drug use will continue to increase sharply, at least over the next few years.[9]

HIV Infection and AIDS by Racial/Ethnic Groups

Blacks and Hispanics continue to be overrepresented among reported AIDS cases in the United States and to have very different exposure patterns compared to whites. Through 1987, 60 percent of total AIDS cases were in whites, 25 percent in blacks, and 14 percent in Hispanics. By October 1989, the percentages had shifted to 56, 27, and 15, respectively. These figures indicate that the AIDS epidemic is becoming even more disproportionately concentrated among minority group members over time.

Of the total adult/adolescent AIDS cases attributed to exposure through homosexual contact, nearly five times as many cases have occurred among whites as among blacks, and seven times as many among whites as among Hispanics. By contrast, more than twice as many AIDS cases attributed to IV drug use have occurred among blacks as among whites and one and a half times as many among Hispanics as among whites. HIV seroprevalence rates are also higher among black and Hispanic IV drug users than among white IV drug users. These comparisons highlight the differential exposure and transmission patterns across these three racial/ethnic groups and show that among blacks and Hispanics, IV drug use is the primary high risk-behavior to address in prevention programs.[10]

Figure 1

ADULT/ADOLESCENT AIDS CASES IN THE U.S. BY EXPOSURE CATEGORY, OCTOBER 1989[a]

Exposure Category	Number of AIDS Cases	%
Male Homosexual/Bisexual Contact	67,096	61%
Intravenous (IV) Drug Use	22,822	21
Male Homosexual/Bisexual Contact and IV Drug Use	7,749	7
Hemophilia	1,034	1
Heterosexual Contact	5,242	5
Receipt of Transfusion	2,708	2
Other/Undetermined[b]	3,682	3
Total	110,333	100%

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

[b]These individuals are thought to have had known risk factors, but information on these factors was not available for various reasons—e.g., they died before they could be interviewed, they refused to be interviewed, or they had forgotten or failed to admit high-risk behaviors.

Source: Centers for Disease Control (CDC), *HIV/AIDS Surveillance Report*, November 1989.

Estimates of HIV Infection in the U.S. Population

While the present and expected numbers suggest that AIDS will continue to be a serious problem for the United States, they do not capture the prevalence or transmission paths of asymptomatic HIV infection in the population. CDC notes that "[n]ational surveillance of life-threatening diseases associated with HIV infection, including AIDS, remains an essential indicator of the course of the HIV epidemic. Diagnosed cases of AIDS are, however, the clinical endpoint of the

continuum of infection with HIV; they do not necessarily reflect current HIV infection patterns, since the median interval between infection with HIV and onset of AIDS is nearly 10 years."[11]

The percentage of the total U.S. population infected with HIV is still unknown. However, the Public Health Service estimates that a minimum of 1 million persons are infected, while data from CDC's current hospital studies indicates that anywhere from 294,000 to 1.7 million individuals are infected in the United States. A CDC household study intended to develop HIV seroprevalence estimates for the total U.S. population has been pilot-tested in several cities. Other research studies sponsored by CDC and the National Institute on Drug Abuse are attempting to assess seroprevalence among subgroups of the population, including blacks, Hispanics, women, IV drug users (including prostitutes), and sexual partners of IV drug users.[12]

Patterns of HIV Infection and AIDS in Correctional Facilities

No Job-Related Cases of HIV Infection or AIDS Among Correctional Officers

Consistent with previous NIJ surveys, no correctional system reported any confirmed job-related cases of HIV infection or AIDS in 1989. Although some *non*-job-related cases have been reported among correctional officers, very little data are available on them.

There have been no documented cases of job-related HIV infection among any public-safety workers. However, in the cases of three law enforcement officers who became infected with HIV, occupational exposure could neither be confirmed nor ruled out.[13]

It is likely that, sooner or later, a job-related case of HIV infection will occur in a correctional officer or other public-safety worker. If and when this happens, it will be important to guard against a resurgence among staff of AIDS-related panic, in part by emphasizing the extremely low risk of infection in the types of contacts typically experienced by these workers. One, or even a small number of infections, out of the literally thousands of potential exposures that must certainly have occurred up to now does not constitute evidence of high occupational risk.

AIDS Cases Among Correctional Inmates

Cumulative Total AIDS Cases

As of October-November 1989, a total of 5,411 confirmed AIDS cases had been reported among inmates across the U.S. federal, state, and larger city/county correctional systems. These represent cumulative totals since the beginning of the epidemic. Of these cases, 3,661 occurred in 45 state systems and the federal system, while 1,750 occurred in 30 city/county jail systems.

These numbers require some qualification. The NIJ survey only samples some of the larger city/county systems and does not capture AIDS cases in those not included in the survey. The list of responding city/county systems varies somewhat from year to year (but not significantly so). Furthermore, apparent inconsistencies in correctional record-keeping indicate that these numbers should probably be considered minimum estimates of the actual number of AIDS cases. As record-keeping improves, numbers may appear to increase. On the other hand, since many state prisoners have spent time in county jails, there may be some double-counting of cases.

As revealed in Figure 2, for the first time in the five years NIJ has sponsored this survey, the percent increase in cumulative total correctional cases in the United States (72%) exceeded the increase in cases in the U.S. population at large (50%). The change results from a reduced rate of increase among cases in the population at large as well as a jump in the rate of increase in correctional cases. The higher rate of increase in correctional cases results, at least in part, from improved reporting and record-keeping in several correctional systems. The slowing in the rate of increase in the total population is primarily attributable to a leveling off in cases associated with homosexual contact. The increase in IV drug use-associated cases, while sharp, has not as yet compensated for the slowing in homosexual contact cases.

Canadian correctional systems reported a cumulative total of 57 AIDS cases, six in the federal system and 51 in provincial systems. This represents a 50 percent increase from 1988.

State and federal systems in the United States report that a cumulative total of 1,453 inmates have died of AIDS while in custody. Responding city and county jail systems reported 298 AIDS deaths. One-fourth of total inmate AIDS deaths in the United States have occurred since the 1988 survey was taken. Canadian systems reported a cumulative total of eight deaths, two of which have occurred since the autumn of 1988.

Figure 2

CUMULATIVE TOTAL AIDS CASES AMONG CORRECTIONAL INMATES AND THE POPULATION AT LARGE, U.S., 1985-1989

	Correctional Cases[a]	Cases in Population at Large[d]
November 1985	766	14,519
October 1986	1,232	26,002
% Increase 1985-86	61%	79%
October 1987	1,964	41,770
% Increase 1986-87	59%	61%
October 1988	3,136[b]	73,621
% Increase 1987-88	60%	76%
October 1989	5,411[c]	110,333
% Increase 1988-89	72%	50%

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

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

[c]Figures for 1989 include 32 city/county jail systems.

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

Sources: CDC, *AIDS Weekly Surveillance Reports—U.S.*, November 4, 1985, October 6, 1986, October 5, 1987, October 3, 1988; CDC, *HIV/AIDS Surveillance Report*, November 1989; NIJ Questionnaire Responses.

The distribution of cumulative total AIDS cases across correctional systems in the United States remains quite uneven, as shown in Figure 3. Two more state systems reported cases in 1989 than in 1988. Thus 45 of 50 state correctional systems have reported at least one inmate AIDS case. Almost one-half of state and federal and responding city and county jail systems reported ten or fewer cases. At the other extreme, 11 state and federal systems and five responding city and county systems have had more than 50 cases. Seven state and federal systems (14%) account for almost 80 percent of total inmate AIDS cases in this jurisdictional category, while three of the responding city and county jail systems (9%) account for almost three-quarters of cases in these systems.

Figure 4 shows that the regional distribution of cumulative total inmate AIDS cases remains uneven both in state and city and county systems. Among state systems, the share of the Middle Atlantic states (where most cases have occurred in New York and New Jersey) was over 60 percent, down somewhat from 1985 but virtually stable since 1988. Indeed, the overall regional breakdown of cases in state systems remained remarkably stable between 1988 and 1989. On the other hand, significant changes have occurred in the regional distribution of city and county cases in the last year. A major shift appears to have occurred between the Middle Atlantic and the Pacific regions, with the share of the former dropping by more than 20 percent (from 66% to 44%) and that of the latter increasing by more than 20 percent (from 18% to 39%). The other regions' shares of city and county cases remained quite stable since 1988.

Current AIDS Cases

Figures 3 and 4 are all based on cumulative total cases. Figure 5 shows the distribution of *current* AIDS cases across correctional systems. This shows that 39 state and federal systems had 1,351 inmates with AIDS in custody as of October 1989. Twenty-two responding city and county systems had 158 current cases. Three Canadian systems reported seven current cases.

The distribution of current cases across state and federal systems in the United States is similar to that for cumulative total cases. Seventy percent of the systems account for only 8 percent of the cases while, at the other extreme, 14 percent of the systems contribute 84 percent of the cases. Current cases are more widely dispersed in city and county systems with only one system reporting more than 50.

Current AIDS cases in state and federal systems tripled (from 445 to 1,351) between 1988 and 1989. This jump was also due in part to improved reporting in several jurisdictions. The number of current cases in responding city/county jail systems actually declined (from 192 to 158). Of course, the city/county figures are much more volatile due to rapid population turnover, so this decline should not be interpreted as meaning that there were generally fewer jail inmates with AIDS in 1989 than in 1988.

AIDS Incidence Rates

The annual incidence rate of AIDS in the total U.S. population was 14.65 cases per 100,000 in 1989, up from 13.3 in 1988.[14] Incidence rates for individual states ranged from less than one to 36, with most under ten. In state and federal correctional systems, AIDS incidence rates ranged from zero to 1,639, although almost one-third of systems had rates under 25 and only 14 had rates higher than 100.[15] The aggregate incidence rate for all state and federal systems was 202 cases per 100,000 in 1989, more than twice the rate in 1988.

Incidence rates in responding city and county jail systems ranged from zero to 1,206 cases per 100,000 in 1989, but almost half of the systems had rates under 25. The aggregate incidence rate for responding city and county jail systems in 1989 was 130. Rapid population turnover renders these incidence rates for city and county jail systems extremely suspect. The aggregate AIDS incidence rate for Canadian inmates was 22 cases per 100,000, sharply lower than in the United States.

AIDS incidence rates are predictably higher in correctional populations than in the population at large. This is because of the overrepresentation among inmates of individuals with histories of high-risk behavior, particularly IV drug use. The wide range of incidence rates in correctional populations reflects the uneven distribution of cases across correctional systems.

Figure 3

DISTRIBUTION OF CUMULATIVE TOTAL INMATE AIDS CASES, U.S., NOVEMBER 1985 AND OCTOBER 1989[a]

State/Federal Prison Systems

Range of Total AIDS Cases	November 1985 (N=51) Number of Systems	%	Number of AIDS Cases	%	October 1989 (N=51) Number of Systems	%	Number of AIDS Cases	%
0	26	51%	0	0%	5	10%	0	0%
1-3	15	29	24	5	7	14	82	.4
4-10	5	10	30	7	12	23	155	2
11-25	2	4	42	9	10	20	143	4
26-50	1	2	33	7	6	12	227	6
51-100	1	2	95	21	4	8	278	8
> 100	1	2	231	51	7	14	2,906	79
Total	51	100%	455	100%	51	101%[b]	3,661	99%[b]

City/County Jail Systems

Range of Total AIDS Cases	November 1985 (N=33) Number of Systems	%	Number of AIDS Cases	%	October 1989 (N=32) Number of Systems	%	Number of AIDS Cases	%
0	13	39%	0	0%	2	6%	0	0%
1-3	10	30	16	5	6	19	10	1
4-10	7	21	43	14	6	19	40	2
11-25	1	3	12	4	10	31	186	11
26-50	1	3	40	13	3	9	115	7
51-100	0	0	0	0	2	6	104	6
> 100	1	3	200	64	3	9	1,295	74
Total	33	99%[b]	311	100%	32	99%[b]	1,750	101%[b]

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

[b]Due to rounding.

Source: NIJ Questionnaire Responses.

Figure 4

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

	State Prison Systems				City/County Jail Systems			
	November 1985 (N=50)		October 1989 (N=50)		November 1985 (N=28)		October 1989 (N=32)	
Region	Total AIDS Cases	%	Total AIDS Cases	%	Total AIDS Cases	%	Total AIDS Cases	%
New England[b]	16	4%	239	7%	0	0%	3	2%
Mid-Atlantic[c]	327	75	2,115	61	222	71	763	44
E.N. Central[d]	6	1	118	3	8	3	59	3
W.N. Central[e]	0	0	24	.7	1	.3	12	.7
S. Atlantic[f]	49	11	433	12	24	8	106	6
E.S. Central[g]	1	.2	45	1	0	0	5	.3
W.S. Central[h]	12	3	205	6	3	1	70	4
Mountain[i]	2	.5	57	2	1	.3	46	3
Pacific[j]	20	5	220	6	52	17	686	39
Total	433	100%[k]	3,456	99%[k]	311	101%[k]	1,750	100%[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 cases to date, since the NIJ survey does not include every U.S. jail system. Recent tightening of case identification and recording may partially explain the large increases since last year, in correctional AIDS cases in certain regions.

[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 Questionnaire Responses.

Figure 5

DISTRIBUTION OF CURRENT INMATE AIDS CASES, U.S., OCTOBER 1989

Range of Current AIDS Cases	State/Federal Prison Systems October 1989 (N=51) Number of Systems	%	Number of AIDS Cases	%	City/County Jail Systems October 1989 (N=32) Number of Systems	%	Number of AIDS Cases	%
0	12	23%	0	0%	12	38%	0	0%
1-3	10	20	21	2	10	31	18	11
4-10	14	27	86	6	8	25	54	34
11-25	8	16	109	8	0	0	0	0
26-50	3	6	130	10	1	3	35	22
51-100	3	6	178	13	1	3	51	32
>100	1	2	827	61	0	0	0	0
Total	51	100%	1,351	100%	32	100%	158	99%[a]

[a]Due to rounding.

Source: NIJ Questionnaire Responses.

Characteristics of Inmates with HIV Infection and AIDS

Data from the 1989 NIJ survey on demographics and exposure categories of AIDS cases are incomplete. However, studies performed by individual correctional systems suggest that demographic and risk factor patterns among prisoners with HIV infection and AIDS have remained stable. Data on AIDS cases from Illinois, Georgia, and New York State, and on

seropositive inmates in Georgia, Virginia, and the Federal Bureau of Prisons indicate that inmate cases are primarily male, that blacks and Hispanics are overrepresented relative to the outside population and, in some cases, to the correctional population as well, and that IV drug use is the predominant exposure category.[16]

Although the patterns vary somewhat across these jurisdictions, the basic conclusions hold true. In all of these systems, over 90 percent of inmates with AIDS or HIV infection have been male. In all of the systems except New York State, at least 60 percent of AIDS cases have been among blacks. In New York State, 48 percent of AIDS cases have been among Hispanics, 38 percent among blacks, and only 13 percent among whites. IV drug use is the leading risk factor for HIV infection and AIDS in all of these systems, although the actual percentages vary somewhat: 44 percent among seropositives in Virginia; 58 percent among AIDS cases in Georgia; 69 percent among seropositives in the Federal Bureau of Prisons; 84 percent among AIDS cases in Illinois; and fully 95 percent among AIDS cases in New York. (These tabulations of exposure categories include both individuals with IV drug use alone and those with IV drug use and homosexual contact.)

These breakdowns indicate that the typical prisoner with HIV infection or AIDS is a black or Hispanic male IV drug user. While this is not yet the profile of the typical AIDS case in the outside population, the changing face of the epidemic suggests that it may become so in the not too distant future.

HIV Seropositivity Among Prison Inmates

Increasing information is available regarding HIV seropositivity among prison inmates. However, there are many different types of testing programs in correctional systems, so results are not always comparable. The most reliable estimates of overall HIV seroprevalence in correctional populations come from mass screening programs (mandatory, identity-linked testing of all incoming, current, or about-to-be-released inmates) and from blind epidemiologic studies, because they capture populations largely uninfluenced by selection bias.

Available seroprevalence data from mass screening programs and blind epidemiologic studies are shown in Figures 6 and 7. Most seroprevalence rates from mass screening programs are still one percent or lower. It should be noted, of course, that most high-prevalence states have not undertaken mass screening. Georgia, Michigan, Alabama, Utah, Mississippi, Nevada, and the Federal Bureau of Prisons reported rates of more than one percent. Notably, in all of these systems except Georgia, rates were higher for women than for men. (Female seroprevalence rates were unavailable for Alabama.) This probably reflects the fact that a larger percentage of female inmates than male inmates are IV drug users.

Figure 7 displays results of blinded epidemiologic studies. These are anonymous studies in which there is no possible link between identifiers and test results. Such studies permit a system to assess seroprevalence accurately while avoiding the problems associated with mandatory identity-linked testing. As a result of these advantages, some of the putatively higher prevalence jurisdictions, such as New York State and California, have undertaken epidemiologic studies. The results of these studies are fairly predictable. Many still find seroprevalence rates under one percent —primarily in jurisdictions with few AIDS cases. Higher seroprevalence rates are generally found in correctional systems covering jurisdictions with larger numbers of AIDS cases (e.g. New York State, Florida, California, Texas, Illinois, Fulton County [Atlanta, Georgia]). More particularly, seroprevalence rates in correctional populations generally follow rates among IV drug users in the outside populations because substantial percentages of inmates have histories of IV drug use. Where one rate is higher, the other rate will also be higher, as in New York State, and Florida. However, seroprevalence rates among prison inmates are not as high as those among IV drug users in the outside world because not all correctional inmates are IV drug users.

Figure 8 brings together results from a wide variety of other testing programs including testing in response to incidents, voluntary testing, on-request testing, testing of prisoners with clinical indications, testing of "risk-group" members, and testing of unspecified groupings. The common thread in these results is that they all cover *subsets* of prisoners either selected by the correctional systems on the basis of some incident or characteristic or self-selected by the inmates themselves. All such factors introduce selection bias which makes

Figure 6

AVAILABLE SEROPREVALENCE DATA FROM MANDATORY MASS SCREENING OF INMATES

	Correctional System	Dates	Number Tested	Number Seropositive	% Seropositive
All Incoming Inmates	Alabama	1987-89	16,815 M+F	107 M 23 F	0.8% M+F
	Colorado	11/85-11/89	15,088 M+F	98 M 5 F	0.7 M+F
	Georgia	7/88-7/89	15,052 M 1,227 F	505 M 29 F	3.4 M 2.4 F
	Idaho	1987-10/89	2,450 M 50 F	8 M 0 F	0.3 M 0.0 F
	Iowa	1/86-10/89	9,171 M+F	17 M 3 F	0.2 M+F
	Michigan	4/89-7/89	3,589 M 289 F	63 M 7 F	1.7 M 2.4 F
	New Hampshire	1/87-9/89	1,760 M 15 F	9 M 0 F	0.5 M 0.0 F
	Oklahoma	5/87-9/89	12,662 M 1,511 F	69 M 3 F	0.5 M 0.2 F
	Federal Bureau of Prisons[a]	6/87-10/87	9,640 M+F	240 M+F	2.5 M+F
All Current Inmates	Alabama	1987	10,753 M	129 M	1.2 M
	Mississippi	7/89-10/89	7,743 M 310 F	78 M 7 F	1.0 M 2.3 F
	Oklahoma	6/87	7,811 M 403 F	34 M 0 F	0.4 M 0.0 F
	Utah	8/89-10/89	2,579 M 136 F	19 M 5 F	0.7 M 3.7 F
All Inmates at Release	Alabama	1987-89	25,321 M+F	2 M	0.008 M+F
	Federal Bureau of Prisons[a]	1989	14,643 M+F	224 M+F	1.5 M+F
All Incoming & All Releasees	Nevada	1/89-9/89	3,775 M 384 F	34 M 8 F	0.9 M 2.1 F
All Incoming & All Current	North Dakota	1987-11/89	460 M 40 F	3 M 0 F	0.6 M 0.0 F
10% Random Sample of Incoming	Federal Bureau of Prisons[a]	8/88-8/89	3,914 M+F	108 M+F	2.8 M+F

[a]Federal Bureau of Prisons, unpublished data.

Source (unless otherwise noted): NIJ Questionnaire Responses.

Figure 7

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

Correctional System	Dates	Number Tested	Number Seropositive	% Seropositive
California[b]	4/88-5/88 (All Incoming)	5,372 M 807 F	137 M 25 F	2.5%M 3.1 F
Florida	1988 (consecutive intakes)	1,000 M+F	69 M+F	6.9 M+F
Hawaii	2/88-9/89 (All incoming at 2 facilities)	1,359 M 88 F	15 M 10 F	1.1 M 11.3 F
Illinois[c]	4/88-8/88 (All Incoming)	808 M	27 M	3.3 M
Illinois[c]	4/89-6/89 (All Incoming)	501 M	20 M	4.0 M
New York (State)[d]	12/87-1/88 (All incoming at Downstate Correctional Facility, Fishkill)	494 M	84 M	17.0 M
Oregon	3/89-5/89	768 M 114 F	5 M 2 F	0.6 M 1.7 F
South Carolina[e]	4/88-6/88 (All Incoming at 1 Reception Center)	457 M 3 F	8 M 0 F	1.7 M 0.0 F
Tennessee	7/88-8/89	1,834 M 244 F	19 M 0 F	1.0 M 0.0 F
Texas	7/88-8/89	1,287 M	30 M	2.3 M
Virginia[f]	6/89-8/89	852 M 69 F	23 M 0 F	2.7 M 0.0 F
Washington	8/87-1/88	796 M	5 M	0.6 M
Wisconsin[g]	1/88-8/88 (All Incoming)	1,621 M	9 M	0.6 M
Maricopa County, Arizona	6/89-11/89	813 M	28 M	3.4 M
Los Angeles County, California	10/88 (All Incoming)	800 M 200 F	26 M+F	2.6M+F
Santa Clara County, California	10/86-10/89	348 F	6 F	1.7 F

Figure 7 (continued)

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

Correctional System	Dates	Number Tested	Number Seropositive	% Seropositive
Fulton County, Georgia	7/88-12/88	160 M 40 F	11 M 3 F	6.9 M 7.5 F

[a]These studies are 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 4th International AIDS Conference, Stockholm, June 1988.

[e]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.

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

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

Source (unless otherwise noted): NIJ Questionnaire Responses.

Figure 8

AVAILABLE DATA FROM HIV ANTIBODY TESTING OF OTHER INMATE CATEGORIES[a]

	Correctional System	Dates	Number Tested	Number Seropositive	% Seropositive
Incident Involvement[b]	Montana	1/89-11/89	2 M	0 M	0.0%M
	Nebraska	10/89	1 M	0 M	0.0 M
	North Carolina	—	5 M	1 M	20.0 M
	Oregon	11/88-10/89	2 M	0 M	0.0 M
	Maricopa County, (Phoenix) Arizona	6/89-11/89	10 M	1 M	10.0 M
	Los Angeles County, California	5/85-10/89	76 M 4 F	8 M 2 F	9.5 M 50.0 F
	Fulton County, (Atlanta) Georgia	1/88-12/88	2 M	0 M	0.0 M
	Hennepin County, (Minneapolis) Minnesota	1/89-11/89	6 M	0 M	0.0 M
	King County, (Seattle) Washington	1/89-10/89	14 M 2 F	0 M 0 F	0.0 M 0.0 F
	Ontario, CANADA	10/88-10/89	1 M	1 M	100.0 M
Voluntary (Made Available to All): Incoming	Minnesota	1/86-10/89	1,700 M 20 F	24 M 1 F	1.4 M 5.0 F
	New Mexico	10/88-10/89	1,818 M 145 F	9 M 0 F	0.5 M 0.0 F
	Maricopa County, (Phoenix) Arizona	6/89-11/89	357 M 121 F	19 M 7 F	5.3 M 5.8 F
	Sacramento County, California	9/89-10/89	17 M	3 M	17.6 M
	Orange County, California	1983-10/89	1,024 M 1,784 F	40 M 55 F	3.9 M 3.1 F

Figure 8 (continued)

AVAILABLE DATA FROM HIV ANTIBODY TESTING OF OTHER INMATE CATEGORIES[a]

	Correctional System	Dates	Number Tested	Number Seropositive	% Seropositive
Voluntary (Made Available to All): Incoming (Continued)	Broward County, Florida	1/89-9/89	137 M 120 F	42 M 25 F	31.0 M 21.0 F
	Marion County, (Indianapolis) Indiana	1/87-10/89	21 F	0 F	0.0 F
	Suffolk County, (Boston) Massachusetts	11/88-11/89	364 M	59 M	16.2 M
Voluntary (Made Available to All): Current	Idaho	1987-10/89	500 M 10 F	0 M 0 F	0.0 M 0.0 F
	Indiana	1986-10/89	5,000 M 300 F	30 M 1 F	0.6 M 0.3 F
	Maricopa County, (Phoenix) Arizona	6/89-11/89	50 M 20 F	13 M 1 F	26.0 M 5.0 F
	Sacramento County, California	9/89-10/89	2 M 9 F	0 M 0 F	0.0 M 0.0 F
	Broward County, Florida	1/89-9/89	30 M 15 F	15 M 8 F	50.0 M 53.3 F
	Jefferson County, (Louisville) Kentucky	1/89-11/89	3 M	3 M	100.0 M
	Yukon, CANADA	5/89-10/89	2 M	0 M	0.0 M
Inmate Request	Massachusetts (state prisons)	10/87-10/89	2,401 M 429 F	231 M 98 F	9.6 M 22.8 F
	Massachusetts (county jails)[c]	1/89-6/89	1,878 M+F	278 M+F	14.8 M+F
	Minnesota	1/86-10/89	1,700 M 20 F	24 M 1 F	1.4 M 5.0 F
	Montana	1/89-11/89	1 M	0 M	0.0 M

Figure 8 (continued)

AVAILABLE DATA FROM HIV ANTIBODY TESTING OF OTHER INMATE CATEGORIES[a]

	Correctional System	Dates	Number Tested	Number Seropositive	% Seropositive
Inmate Request (Continued)	Nebraska	10/87-10/89	1 M	1 M	100.0 M
	Oregon	11/88-10/89	354 M 76 F	3 M 2 F	0.8 M 2.6 F
	Washington	10/85-10/89	1,445 M 46 F	34 M 2 F	2.4 M 4.3 F
	Santa Clara County, California	10/85-10/89	47 M 24 F	8 M 3 F	17.0 M 12.5 F
	Ventura County, California	1/88-10/89	300 M 50 F	3 M 0 F	1.0 M 0.0 F
	Fulton County, (Atlanta) Georgia	1/88-12/88	8 M 3 F	2 M 0 F	25.0 M 0.0 F
	Jackson County, (Kansas City) Missouri	9/88-10/89	14 M 2 F	2 M 0 F	14.3 M 0.0 F
	Cuyahoga County, (Cleveland) Ohio	1/89-11/89	21 M 5 F	12 M 3 F	57.1 M 60.0 F
	Harris County, (Houston) Texas	7/87-10/89	1,048 M 1,070 F	163 M 48 F	15.6 M 4.5 F
	Saskatchewan, CANADA	10/88-10/89	12 M 4 F	0 M 0 F	0.0 M 0.0 F
Clinical Indications	Oregon	11/88-10/89	14 M	11 M	78.6 M
	Maricopa County, (Phoenix) Arizona	6/89-11/89	7 M 2 F	2 M 1 F	28.6 M 50.0 F
	Fulton County, (Atlanta) Georgia	7/88-12/88	142 M 26 F	46 M 10 F	32.4 M 38.5 F

Figure 8 (continued)

AVAILABLE DATA FROM HIV ANTIBODY TESTING OF OTHER INMATE CATEGORIES[a]

	Correctional System	Dates	Number Tested	Number Seropositive	% Seropositive
Other Categories: IV Drug Users	Montana	1/89-11/89	67 M	2 M	3.0 M
	King County, (Seattle) Washington	11/87-9/89	786 M 324 F	22 M 4 F	2.8 M 1.2 F
	Orange County, California	1/88-12/88	766 F	12 F	1.5 F
	Sacramento County, California[d]	1987-88	422 M+F	15 M+F	3.5 M+F
Other Categories: All Inmates Presenting at Sick Call	South Carolina[e]	1988	1,034 M 185 F	25 M 2 F	2.4 M 1.1 F
Category Breakdown Not Available[f]	Arkansas	1/85-10/89	5,847 M 173 F	42 M 42 F	0.7 M 24.3 F
	Nebraska (Incoming, Releasees, "High-Risk Groups," and Clinical Indications)	3/87-10/89	4,473 M+F	17 M+F	0.4 M+F
	Texas ("High-Risk Groups," Clinical Indications, Incident Involvement, and Inmate Request)	9/89	412 M 138 F	17 M 5 F	4.1 M 3.6 F
	West Virginia (Incoming, "High-Risk Groups," Clinical Indications, Incident Involvement, and Inmate Request)	10/88-3/89	411 M 14 F	0 M 0 F	0.0 M 0.0 F
	Maricopa County, (Phoenix) Arizona (Unspecified "High-Risk Groups")	6/89-10/89	340 M 119 F	16 M 5 F	4.7 M 4.2 F
	Hennepin County, (Minneapolis) Minnesota (All "High-Risk Groups," Clinical Indications, Inmate Request)	1/89-12/89	266 M 266 F	4 M 0 F	1.5 M 0.0 F

Figure 8 (continued)

AVAILABLE DATA FROM HIV ANTIBODY TESTING OF OTHER INMATE CATEGORIES[a]

	Correctional System	Dates	Number Tested	Number Seropositive	% Seropositive
Category Breakdown Not Available[f] (continued)	Jefferson County, (Louisville) Kentucky (Incoming, IV Drug Users, and Homosexuals)	1/89-11/89	13 M 6 F	13 M 6 F	100.0 M 100.0 F
	King County, (Seattle) Washington (IV Drug Users, Prostitutes, Individuals with Multiple Sex Partners, Inmate Request)	11/87-9/89	786 M 324 F	22 M 4 F	2.8 M 1.2 F
	Quebec	3/87-12/88	248 F	19 F	7.7 F

[a]The table does *not* present overall seroprevalence rates. Except for the "Incident Involvement" category, the figures in this table represent self- or clinically-selected inmates, and therefore represent selection bias. For example, inmates who have engaged in high-risk behaviors may be more likely to want to be tested and are more likely to be HIV seropositive than those who have not. Therefore, the figures in this table are likely higher than seroprevalence rates in these total correctional populations.

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

[b]This category includes inmates tested because of their involvement in an incident where blood and/or body fluid exposure is suspected or definitely occurred. This could include sexual contact, needle-sharing, blood exposure in a fight or assault, among other incidents.

[c]Massachusetts Sheriffs Association Task Force on AIDS, "AIDS: The Current Situation in County Corrections: An Update," October 1989.

[d]"Coordinated Community Programs for HIV Prevention Among IVDUs - California, Massachusetts," *MMWR*, June 2, 1989; 38: 370.

[e]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.

[f]In this table, "High-Risk Groups" includes identifiable IV drug users and homosexual men.

Source (unless otherwise noted): NIJ Questionnaire Responses.

the results inapplicable to the overall population. However, such results can be suggestive of interesting patterns.

Testing in response to incidents may be prompted by a wide variety of incidents including sexual contact, needle sharing, needlesticks, fights or assaults. Our data do not permit breakdown by type of incident and, in any case, most of the numbers are quite small.

Voluntary and on-request testing results are difficult to interpret because the direction and magnitude of the selection bias are unclear. That is, which individuals are most likely to desire testing—those who feel they are at high risk of HIV infection, or those who feel they are at low risk? Indeed, different people will have different motivations. Some who are at high risk may desire to know their HIV antibody status while others also at high risk may wish to avoid knowing. Some of the seropositivity rates for voluntary and on-request testing are quite high—for example, Broward County (Florida), Suffolk County (Boston, Massachusetts), Massachusetts (state), Harris County (Houston, Texas), and Maricopa County (Phoenix, Arizona)—while many others are very low.

Seropositivity rates from testing in response to clinical indications are predictably high. Testing of incarcerated IV drug users may also provide reasonable estimates of seroprevalence among this group in the community. The results of such testing in Montana, King County (Seattle, Washington), and Orange County (California) suggest that seroprevalence rates among IV drug users in these places are still much lower than those found in the Northeast and Middle Atlantic regions. Rates from the remaining groupings of inmates are generally moderate to low; however, this miscellaneous category is particularly hard to interpret.

HIV Transmission Among Prison Inmates

The extent to which HIV infection has been and is being transmitted among correctional inmates remains a subject of widespread concern. Available data from Maryland and Nevada suggest, however, that transmission rates among inmates are quite low.[17] In addition, seroprevalence rates for Federal Bureau of Prisons (FBOP) releasees continue to be lower than for FBOP incoming inmates (Figure 6), suggesting little if any transmission. Results of the first systematic study of HIV transmission among prisoners, being conducted by the Illinois Department of Corrections and Abt Associates under the sponsorship of the Centers for Disease Control, should be available by the fall of 1990.

Endnotes

1. CDC, *HIV/AIDS Surveillance Report*, November 1989; Federal Centre for AIDS (Canada), "Surveillance Update: AIDS in Canada," January 2, 1990.

2. CDC, *HIV/AIDS Surveillance Report*, November 1989.

3. Ibid.; Federal Centre for AIDS (Canada), "Surveillance Update: AIDS in Canada," January 2, 1990.

4. CDC, "AIDS and HIV Infection in the United States: 1988 Update," *MMWR* May 12, 1989; 38: No. S-4, p. 3.

5. GAO, *AIDS Forecasting: Undercount of Cases and Lack of Key Data Weaken Existing Estimates* (Washington, GAO/PEMD-89-13, June 1989); see also CDC, "Update: AIDS Associated with Intravenous Drug Use," *MMWR* March 17, 1989; 38: 165-170; CDC, "AIDS and HIV Infection in the United States: 1988 Update," *MMWR* May 12, 1989; 38: No. S-4, pp. 4-6; CDC, "Update: Heterosexual Transmission of AIDS and HIV Infection—United States," *MMWR* June 23, 1989; 38: 423-424, 429-434.

6. CDC, "AIDS and HIV Infection in the United States: 1988 Update," *MMWR* May 12, 1989; 38: No. S-4, pp. 4-6.

7. Michael Specter, "Treatment Greatly Delaying AIDS in Gay Men," *Washington Post*, February 6, 1990, pp. A1, A6.

8. CDC, "Update: AIDS Associated with Intravenous Drug Use," *MMWR* March 17, 1989; 38: 165-170.

9. CDC, "AIDS and HIV Infection in the United States: 1988 Update," *MMWR* May 12, 1989; 38: No. S-4, pp. 2, 7-8; CDC, *HIV/AIDS Surveillance Report*, November 1989; John Newmeyer, "The IV Drug User and the Secondary Spread of

AIDS," *Journal of Psychoactive Drugs* April-June 1988; 20: 169-172.

10. CDC, *HIV/AIDS Surveillance Report*, November 1989; CDC, "AIDS and HIV Infection in the United States: 1988 Update," *MMWR* May 12, 1989; 38: No. S-4, p. 11; CDC, "Update: AIDS Associated with Intravenous Drug Use," *MMWR* March 17, 1989; 38: 165-170.

11. CDC, "AIDS and HIV Infection in the United States: 1988 Update," *MMWR* May 12, 1989; 38: No. S-4, p. 1.

12. CDC, "AIDS and HIV Infection in the United States: 1988 Update," *MMWR* May 12, 1989; 38: No. S-4, pp. 6-13.

13. CDC, "Guidelines for Prevention of Transmission of HIV and Hepatitis B Virus to Health-Care and Public Safety Workers," *MMWR* June 23, 1989; 38: No. 5-6, p. 8.

14. The incidence rate per 100,000 population is a standard measure used to facilitate comparisons. The incidence rates for the population at large were calculated as follows: Incidence rate = Total number of AIDS cases reported to CDC in the year ending October 31, 1989 x 100,000 / Total U.S. population.

15. Incidence rates for correctional inmates were calculated as follows: Incidence rate = Current AIDS cases in system x 100,000 / Current inmate population of system. The reported number of current AIDS cases may slightly underestimate the total number of cases reported in the year since the 1988 survey, but most correctional systems do not keep statistics on AIDS cases by year reported. Using the current case figure may slightly underestimate the real annual incidence rate in a correctional system.

16. These data are from the following: Illinois Department of Corrections, "Cumulative AIDS/ARC Experience in the Illnois Department of Corrections," November 1988; Georgia Department of Corrections, "Inmates with HIV Infection: A Five Year Summary," memorandum dated October 4, 1989; New York State Department of Health, Bureau of Communicable Disease Control, "AIDS Surveillance Monthly Update for Cases Reported Through August 1989," August 1989; Virginia Department of Corrections and Virginia Department of Health, "HIV Seropositivity Study," November 17, 1989; U.S. Department of Justice, Federal Bureau of Prisons, "Research Bulletin: HIV Infection Among Bureau of Prisons Inmates," August 1989.

17. T.F. Brewer et. al., "Transmission of HIV-1 Within a State-Wide Prison System," *AIDS 88*, October 1988; C.R. Horsburgh et. al., "Seroconversion to HIV in Prison Inmates," *American Journal of Public Health* February 1990; 80: 209-210.

Chapter 3

Tuberculosis and HIV Infection

The TB-HIV Link

A resurgence of tuberculosis (TB) has shadowed the rise of HIV infection in the United States. The link between the two has been clearly established. Persons with HIV infection are more susceptible to progression from asymptomatic tuberculous infection to active TB disease. The linked increase of TB and HIV has been particularly severe in the Northeast, although the phenomenon has been widely noted in the nation.

Moreover, TB and, increasingly, HIV strike hardest among poor blacks and Hispanics and IV drug users.[1] Of course, these groups are dramatically over-represented in correctional inmate populations. Therefore, it comes as no surprise that American prisons and jails are witnessing sharp increases in HIV-associated TB.

Correctional administrators should pay particular attention to TB because, alone among the opportunistic diseases associated with HIV infection, it is transmissible through the air. This may be a particular problem in cramped correctional facilities where ventilation is often poor.

Prevalence of TB in Correctional Populations

As shown in Figure 9, there were at least 809 inmates under treatment for active tuberculosis in U.S. state and federal correctional systems as of October 1989. Responding city and county jail systems report 231 cases, while Canadian systems report 17 cases. The distribution of these cases is similarly uneven to the distribution of current AIDS cases, except that more state and federal systems report having no TB cases than no AIDS cases. The systems with the largest numbers of AIDS cases are those with the largest numbers of TB cases.

Figure 9 also displays the range of percentages of inmates testing positive for tuberculous infection in the three categories of correctional systems. Two facts stand out. First, almost one-half of U.S. state/federal systems, almost one-third of responding city/county systems, and almost two-thirds of Canadian systems did not know what percentage of their inmate population was TB-positive. This underscores the need for improved TB screening or maintenance of data on such screening in correctional facilities.

Second, ten state and federal systems reported that more than 10 percent of their inmates were positive for tuberculous infection. Indeed, information from survey responses and other sources suggests that rates of 10-20 percent are not uncommon in correctional populations. Georgia has reported rates of 11-12 percent, Texas 14 percent, New Mexico 14 percent, New Jersey 16 percent, and New York 18 percent.[2] These data suggest that in some systems TB positivity rates are probably much higher than HIV seroprevalence rates.

Tuberculosis Screening and Treatment

In May 1989, CDC issued guidelines for the prevention and control of TB in correctional institutions. These guidelines recommend early case-finding, reporting of all TB cases to public health authorities, periodic screening (using the intracutaneous Mantoux tuberculin test and *not* the multiple puncture—e.g., tine—method) and careful medical monitoring of inmates and staff (including chest x-rays for those with positive tuberculin tests and those at risk for HIV infection, and HIV antibody tests for all inmates with active TB and

Figure 9

ACTIVE TUBERCULOSIS (TB) AND TUBERCULOUS INFECTION AMONG INMATES, OCTOBER 1989

	Number of Active TB Cases Under Treatment							
	U.S. State/Federal Prison Systems (N=51)				U.S. City/County Jail Systems (N=31)			
Range of Cases	Number of Systems	%	Number of Cases	%	Number of Systems	%	Number of Cases	%
Unknown	6	12%	—	—%	2	6%	—	—%
0	20	39	0	0	7	23	0	0
1-3	12	24	25	3	10	32	15	6
4-10	4	8	25	3	6	19	39	17
11-24	2	4	45	6	3	10	47	20
25-50	2	4	59	7	2	6	65	28
51-100	3	6	157	19	1	3	65	28
>100	2	4	498	62	0	0	0	0
Total	51	101%[a]	809	100%	31	99%[a]	231	99%[a]

	Percentage of Inmates Confirmed TB-Positive					
	U.S. State/Federal Prison Systems (N=51)		U.S. City/County Jail Systems (N=31)		Canadian Systems (N=11)	
Range of Percentages	Number of Systems	%	Number of Systems	%	Number of Systems	%
Unknown	23	45%	11	35%	7	64%
0	1	2	15	48	1	9
1-10	17	33	3	10	3	27
11-25	10	20	2	6	0	0
26-50	0	0	0	0	0	0
51-100	0	0	0	0	0	0
Total	51	100%	31	99%[a]	11	100%

[a]Due to rounding.

Source: NIJ Questionnaire Responses.

positive tuberculin tests), contact investigations (identification of others who may have been exposed to inmates with tuberculosis) medical isolation of inmates with active TB to prevent spread, and careful adherence to appropriate medication protocols for prophylaxis and treatment.[3]

Figure 10 summarizes correctional systems' policies and practices on TB screening and treatment. CDC recommends that all new inmates (and staff) be screened for tuberculous infection and retested at least annually. More frequent retesting may be indicated if increasing cases of TB or HIV infection are noted in the population. These recommendations are qualified for jail systems where rapid turnover may make them difficult or impossible to implement. In such systems, the guidelines recommend, sputum smears and cultures and/or chest x-rays should be done on any prisoners with TB symptoms. CDC also recommends immediate screening of close contacts of active TB cases.[4]

Figure 10 shows that virtually all state and federal systems screen all intakes for TB, and three-quarters screen all close contacts, but only one-half conduct annual re-screening as recommended by CDC. The percentages of responding city/county jail systems with extensive TB screening programs are predictably lower.

CDC recommends that all tuberculin-positive inmates, be provided prophylactic treatment with isoniazid (INH) or its equivalent. Highest priority candidates for INH prophylaxis are recent tuberculin skin test converters and inmates who have both tuberculous infection (i.e., are TB skin test positive) and known or suspected HIV infection. Recommended dosages are 300mg daily or 900mg twice per week. Careful monitoring is necessary to insure that the medication is taken as scheduled and to identify any symptoms or adverse reactions. Figure 10 shows that many correctional systems in all categories have not adopted the CDC recommendations regarding prophylactic treatment for TB. Only 27-36 percent of systems provide treatment to all tuberculin-positive inmates, while only 18-55 percent provide it to all HIV-infected prisoners.

In sum, 1989 NIJ survey data reveal that while there is fairly extensive TB screening at least in state/federal systems, data maintenance on TB-positive rates is uneven, and provision of prophylactic treatment to tuberculin-positive and HIV-infected inmates is very spotty. Correctional systems should consider giving more attention to tuberculosis and to the HIV-TB link in their inmate populations. Tuberculosis can be an explosive and extremely serious problem in correctional facilities if adequate control measures are not instituted.

Endnotes

1. D.E. Snider and M.D. Hutton, "Tuberculosis in Correctional Institutions" (editorial) Journal of the American Medical Association, January 20, 1989; 261: 436-437.

2. M.D. Hutton, "Why TB Control Now?", presentation at the 12th National Conference on Correctional Health Care, Lake Buena Vista, Florida, October 31, 1988; B.I. Truman et al., "HIV Seroprevalence and Risk Factors Among Prison Inmates Entering New York State Prisons," presented at the Fourth International Conference on AIDS, Stockholm, June 1988; S. Spencer and A. Morton, "Tuberculosis Surveillance in a State Prison System," *American Journal of Public Health* April 1989; 79: 501-509; NIJ survey questionnaire responses.

3. "Prevention and Control of Tuberculosis in Correctional Institutions: Recommendations of the Advisory Committee for the Elimination of Tuberculosis," *MMWR* May 12, 1989; 38: 313-320, 325.

4. Ibid.

Figure 10

TUBERCULOSIS (TB) SCREENING, PROPHYLAXIS AND TREATMENT OF INMATES, OCTOBER 1989

	U.S. State/Federal Prison Systems (N=51)		U.S. City/County Jail Systems (N=31)		Canadian Systems (N=11)	
Procedure	Number of Systems	%	Number of Systems	%	Number of Systems	%
Screening Conducted: (*not* mutually exclusive)	49	96%	23	74%	4	36%
At Intake	48	94	14	45	4	36
Annually	26	51	7	23	3	27
After Exposure to Active TB Case	39	76	15	48	8	72
TB Prophylactic Medication Provided to the Following Categories of TB Skin Test Positive Inmates:						
All Regardless of Age	16	31	11	36	3	27
All Under Age 35	33	65	18	58	3	27
All HIV-Infected	28	55	15	48	2	18
Those Recently In Contact with a TB Case	21	41	17	55	4	36
Recent Skin Test Converters	36	71	15	48	5	45

Source: NIJ Questionnaire Responses.

Chapter 4

AIDS Education and Training

Abatement of the Crisis Atmosphere Around AIDS

The original crisis atmosphere around AIDS in prisons and jails seems to be dissipating. In the 1989 NIJ survey, three-quarters (76%) of state/federal and over one-half (58%) of city/county systems reported decreased or stable levels of inmate concern about AIDS since 1988. Over three-quarters (80%) of state/federal and nearly two thirds (64%) of city/county systems report similar patterns of staff concern. However, survey responses represent the perception of one or a few central office staff members. A number of studies of individual correctional systems reveal continued and substantial concern. AIDS education influences attitudes about infected individuals and about the disease itself, thereby shaping staff and inmates' behavior and the formulation of policy. HIV/AIDS education for inmates and staff remains a critical part of correctional policy.

A 1988 survey of Federal Bureau of Prisons staff found that almost 40 percent were "bothered a great deal" by the presence of HIV-infected prisoners in the institution, and 14 percent considered leaving their jobs due to the presence of such inmates.[1] Almost two-thirds of surveyed South Carolina prison inmates believed that "AIDS is a health problem in this prison system." The South Carolina survey respondents seemed to be well-informed about means of HIV transmission and risk reduction,[2] but this is not true of staff and inmates in all jurisdictions.

In Virginia, many incoming inmates were ignorant of basic facts about AIDS. Over one-third of men and about one-fifth of women respondents believed that it was unsafe to work or live with an infected prisoner or were not sure whether it was safe or unsafe. Over 90 percent of these incoming inmates thought it was unsafe to have a blood transfusion (and almost 50% believed donating blood was unsafe). Many were uncertain about mechanisms of sexual transmission (for example, 20% did not know that HIV is transmitted through semen), and 25-50 percent of respondents thought HIV to be transmissible by the sharing of eating or drinking utensils, by mosquito bites, and through contact with sweat, tears, saliva, or urine.[3] Lower levels of concern are desirable if they reflect adoption of rational risk reduction practices and precautionary measures and abandonment of extreme responses or demands. However, decreased concern may also indicate complacency which, in turn, can breed carelessness.

Surveys show a continued prevalence of high-risk behaviors among correctional inmates. Over 40 percent of surveyed South Carolina inmates reported personal knowledge of needle sharing in the institution in the past year and over 60 percent had personal knowledge of sexual activity among inmates. Almost 20 percent reported themselves having had homosexual contact in the past year. On the other hand, three-fourths of these inmates stated that they had changed their drug using behaviors by terminating or reducing frequency of injection or needle sharing, and/or by cleaning works to reduce their chances of being infected. Two-thirds reported changes in sexual activity, particularly by reduction in number of partners. Women surveyed in the San Francisco county jail had a good knowledge of AIDS. However, many did not know if their sexual partners were drug users, and two-thirds of the sample reported either never or almost never using condoms.[4]

The new National Commission on AIDS, in its first report to the President, noted that "There is a dangerous, perhaps even growing complacency in our country toward an epidemic that many people want to believe is over. Far from over, the epidemic is reaching crisis proportions among the young, the poor, women and many minority communities. In fact, the 1990s will be much worse than the 1980s."[5] Since HIV

infection is steadily spreading among IV drug users and members of minority communities who are overrepresented in prisons and jails, correctional AIDS education programs are even more necessary now than before. AIDS education is clearly a "long-haul" need, not something that can be forgotten or discontinued when the panic recedes.

Live Education/Training

Live sessions should be the foundation of AIDS education programs in correctional facilities. They may take a variety of forms. Many systems offer lectures to all inmates (with brief question and answer periods at the end). Others conduct on-going, small group discussions for HIV-infected inmates. Still others hold comprehensive communicable disease workshops during which AIDS and other diseases are discussed. A few that have the staff to do so conduct intensive individualized counseling sessions. Some systems define live education as the showing of an AIDS videotape with an instructor present to answer questions. At a minimum, "live" education involves the participation of a knowledgeable educator/trainer during the session. This is "active" teaching, as opposed to the more "passive" instruction provided by written materials and audio-visual materials.

As Figures 11 and 12 show, the majority of U.S. and Canadian correctional systems provide at least some live AIDS education/training for inmates and staff. However, there remains significant unevenness in the provision of live education within systems. Only about two thirds (63%) of state/federal systems and of city/county systems (61%) provide live education to inmates at *all* institutions in the system. Indeed, ten fewer states/federal systems reported live education in all institutions in 1989 than in 1988.

In the 1989 survey, correctional systems were asked to estimate what percent of their inmates and staff had received at least one hour of live AIDS education in the past year. Less than half of prison systems (41%), responding jail systems (32%), and Canadian systems (45%) answered 50 percent (or more) of inmates. On the other hand, over one-half of all categories of systems so answered for staff.

Inmate attendance at education sessions is "always mandatory" in less than half (45%) of state/federal systems and in only a very small percentage (3%) of city/county systems. However, in a number (39%) of state/federal systems, inmate attendance is "sometimes voluntary and sometimes mandatory." Thus, it appears that in over three-quarters (84%) of prison systems there is at least some mandatory inmate AIDS training. Jail systems' attendance policies are probably determined by the high turnover rates in jails and the resulting reduced control over inmate AIDS education.

Staff attendance requirements in state/federal systems follow a similar pattern to those regarding inmate attendance, but in city/county systems, attendance is mandatory in about one-third (35%) and "sometimes voluntary and sometimes mandatory" in another one-third (32%) of responding systems. Jails are clearly making more of an effort to educate their staff than their inmates. All of these findings suggest that many prison and jail inmates are not receiving mandatory, regular, live AIDS training during incarceration.

Pre-release AIDS education represents an important opportunity to arm inmates with risk reduction information and strategies as they return to the community. It is also a time to counsel HIV-infected inmates about their obligations to inform their sexual partners of their HIV status and advise them to take steps to avoid infecting others through sexual contact or needle sharing. Ideally, live AIDS education should be provided to all inmates just prior to their release.

Educators/Trainers

Many correctional systems use a combination of types of professionals to lead their AIDS education session. The majority of session leaders for both inmate and staff AIDS education programs are correctional medical staff. A number of systems also use non-medical correctional training staff, and some use outside medical staff. Only a handful of prison or jail systems use public health or other trainers. It is interesting to note that seven (14%) of state/federal systems employ inmate trainers in some live education programs. This is a promising strategy that deserves to be tried in more correctional settings. In New York State and California, prisoners have provided AIDS education in institutions. According to a New York State inmate who worked to initiate peer AIDS education, such programs "are doubly important in prisons, where there is a gut distrust of authorities and professionals, and where the very activities that must be discussed frankly—sex and drugs—are against prison rules. Peer education is also an effective way to

Figure 11

LIVE AIDS EDUCATION FOR INMATES, OCTOBER 1988 AND OCTOBER 1989[a]

	U.S. State/Federal Prison Systems				U.S. City/County Jail Systems				Canadian Systems			
	October 1988 (N=51)		October 1989 (N=51)		October 1988 (N=28)		October 1989 (N=31)		October 1988 (N=12)		October 1989 (N=11)	
Live Education	Number of Systems	%	Number of Systems	%	Number of Systems	%	Number of Systems	%	Number of Systems	%	Number of Systems	%
Provided[b]	48	94%	46	90%	19	68%	21	68%	9	75%	9	82%
In All Institutions	39	77	34	67	18	64	15	48	7	58	7	64
Mandatory	37	74	23	45	4	14	1	3	3	25	3	27
Sometimes Voluntary and Sometimes Mandatory	—	—	20	39	—	—	4	13	—	—	1	9
Session Leaders (not mutually exclusive):												
Outside Medical Experts	—	—	18	35	—	—	5	16	—	—	5	45
Correctional Medical Staff	—	—	44	86	—	—	18	58	—	—	7	64
Correctional Training Staff (Non-Medical)	—	—	27	53	—	—	2	6	—	—	3	27
Inmates	—	—	7	14	—	—	0	0	—	—	0	0

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

[b]Includes programs in operation and under development.

Source: NIJ Questionnaire Responses.

Figure 12

LIVE AIDS EDUCATION FOR CORRECTIONAL STAFF, OCTOBER 1988 AND OCTOBER 1989[a]

	U.S. State/Federal Prison Systems				U.S. City/County Jail Systems				Canadian Systems			
	October 1988 (N=51)		October 1989 (N=51)		October 1988 (N=28)		October 1989 (N=31)		October 1988 (N=12)		October 1989 (N=11)	
Live Education	Number of Systems	%	Number of Systems	%	Number of Systems	%	Number of Systems	%	Number of Systems	%	Number of Systems	%
Provided[b]	49	96%	48	94%	25	89%	24	77%	10	83%	10	91%
In All Institutions	42	82	32	63	19	68	19	61	9	75	8	73
Mandatory	47	94	26	51	16	7	11	35	4	33	5	45
Sometimes Voluntary and Sometimes Mandatory	—	—	19	37	—	—	10	32	—	—	2	18
Session Leaders (not mutually exclusive):												
Outside Medical Experts	—	—	29	57	—	—	14	45	—	—	7	64
Correctional Medical Staff	—	—	45	88	—	—	17	55	—	—	9	82
Correctional Training Staff (Non-Medical)	—	—	26	51	—	—	10	32	—	—	5	45

[a]Live education involves the participation of a trained leader in some substantial part of a session.
[b]Includes programs in operation and under development.
[c]Figures include systems that specified centralized training for staff.
Source: NIJ Questionnaire Responses.

ease fears of casual transmission among prisoners and to promote support among inmates for people with AIDS..."[6]

Most county jails, and many state prison systems, collaborate with public health departments on correctional AIDS education programs. Often, the staff trained in these programs train other trainers. For example, selected non-medical staff in Hawaii attended an intensive one and a half day workshop to be trained as AIDS educators. The workshop leaders included the Department of Correction's Health Care Director and Department of Health AIDS educators. The trained educators, who may attend refresher sessions every six months, were made responsible for tailoring an inmate program to the needs of their particular facilities in terms of curriculum, schedule, and class size.

Evaluations of Programs

Survey responses indicate that few systems have conducted a formal evaluation of their inmate or staff AIDS education programs. Evaluation can be a valuable tool for improving programs. Those systems which have assessed their programs offer useful suggestions regarding trainers and education/training content. For example, an internal evaluation of Hennepin County, Minnesota's AIDS education program for offenders concludes that "correctional administrators should consider investing in AIDS education that includes interaction with a trained AIDS educator who can effectively communicate with this population."[7] An evaluation of an AIDS education program for Illinois police patrol officers found that using trainers with a matter-of-fact and open attitude about sexual behaviors pertaining to AIDS allowed the audience to ask personal questions. The evaluation also found that the program benefited from having a trainer present to supplement a video or slide presentation with updated facts. An evaluation of AIDS education among female inmates in San Francisco County jails concluded that "women, unlike men, need more than safe sex skills; they need skills of empowerment and negotiation so that they can make demands on their partners which will in turn save their lives."[8]

Content of Education Sessions

AIDS education for inmates and staff usually covers a range of topics, from the workings of the virus to antibody testing to modes of exposure/transmission to risk reduction practices. Successful AIDS education focuses on personalizing risk and on encouraging appropriate risk reduction practices.[9]

Approximately three-quarters of prison system (78%) and jail system (71%) inmate and staff AIDS education programs discuss, demonstrate or provide literature on safer sex practices, such as the use of condoms. Less than half (43%) of prison system inmate education programs cover methods of cleaning drug injection equipment, such as the use of bleach, while about two-thirds (64%) of jail system inmate education programs do so.

While sexual activity and possession of needles and syringes remain illegal in prisons and jails, some systems do address risk reduction methods for these behaviors in their AIDS education programs. Cook County, Illinois' AIDS educators tell inmates that during incarceration, they can clean needles with soap and water as a substitute for bleach. The educators give this advice on the assumption that forbidden acts occur within jails and on the belief that lessons are best learned when advice can be immediately applied.[10] San Francisco County's AIDS educators advise inmates that condoms are available but emphasize that sexual activity in jail is a felony.[11]

While inmates need to know the context for risk reduction, they should not be overwhelmed with information on AIDS. As noted earlier, the best education for most inmates focuses on personalizing risk and on inculcating specific and manageable risk reduction practices. The results of one AIDS prevention study indicate that educators would do well to encourage changes "consistent with an individual's existing values and beliefs, [propose only] incremental changes, [offer] alternative courses of behaviors from which an individual can choose, [and] [provide] skills training [as well as] support."[12] While this advice is more easily applied outside the correctional setting than within it, it deserves consideration and may be adaptable to correctional conditions.

Inmates must be reassured that only a small number of behaviors transmit HIV and that almost all of these are completely within an individual's control. Clear education in this regard should also help to prevent discrimination against and mistreatment of HIV-infected prisoners in correctional facilities.

AIDS education for HIV infected inmates or those with AIDS can be even more focused. Georgia's HIV-infected inmates participate in a carefully conceived education and risk reduction program that addresses questions such as, "Will getting infected with HIV again [make] disease develop faster?" The response is: "Possibly...If a person already infected with HIV gets infected again, the immune system has an even harder time fighting off infection." The curriculum also guides instructors in providing sensitive answers to questions such as "Will I die in prison?" by refocusing the issue to how an inmate can make the most of living each day.[13]

Programs for correctional staff generally focus on preventing on-the-job infection. However, such programs should also cover risk reduction practices for staff to apply in their private lives. Maryland Division of Correction trainers emphasize in their sessions for staff that "it's not who you are but what you do that puts you at risk for a Blood-borne Infectious Disease." They also discuss the need for officers to conduct "a thorough Visual Search" before making physical contact with an inmate.[14] Other AIDS education/training topics for correctional staff differ according to the needs of particular staff. For example, both security and medical staff require information regarding the application of universal precautions. Counseling staff require training in counseling techniques and in fielding questions regarding test results.

Written and Audio-Visual Materials

As shown in Figure 13, many systems supplement live AIDS education sessions with written and audio-visual materials. Jail systems are more likely to rely completely on these two modes of education. For example, Dallas County, Texas shows AIDS videotapes to inmates on closed circuit television. Ninety-six percent of prison systems and 87 percent of responding jail systems distribute written AIDS education materials, such as pamphlets or comic books. Ninety-six percent of prison systems and 61 percent of responding jail systems use audio-visual materials such as videotapes or audiotapes. Some prison and jail libraries have books on AIDS. An extensive range of AIDS brochures, booklets, audiotapes and videotapes is in use by correctional systems. AIDS comic books may offer a partial solution to the problem of educating illiterate or low-literacy prisoners. One comic book which is popular in correctional systems is "The Works: Drugs, Sex and AIDS," published by the San Francisco AIDS Foundation.

Cook County (Chicago) Illinois AIDS educators have employed a number of videotapes in their inmate AIDS education program and have found a few particularly successful with their population. These include: AIDS in the Black Community; The Best Defense; Don't Forget Sherrie; 48 Hours in AIDS Alley; Not Who You Are But What You Do; S.I.D.A.; and 'Til Death Do Us Part. "S.I.D.A." is in Spanish, and Spanish versions of several of the others are also available.[15]

Spanish and Special Needs Programming

Twenty-two percent of prison systems and 39 percent of jail systems provide some inmate AIDS education sessions in Spanish. About two-thirds (64%) of prison and half (51%) of responding jail systems provide inmates with brochures and booklets in Spanish. These are undoubtedly the systems with the largest numbers of Spanish-speaking inmates in their populations.

There is a growing body of literature on AIDS prevention among Hispanics, who are disproportionately represented among AIDS cases and HIV seropositives in certain geographic areas. Researchers believe that AIDS education, like other public health education, must be culturally sensitive. For example, Gerardo Marin urges that programs promoting condom use among Hispanics first consider the "association of condoms with...uncleanliness and perceived diminished sensation." Among other things, he recommends that educators should use geographically-appropriate Spanish colloquialisms for terms such as anal or oral sex and consider the prevalence of injection of legal substances such as vitamins and antibiotics, which may involve needle sharing. Cook County (Chicago) Illinois inmate AIDS educators similarly advise that inmate education programs consider the social importance and context of tattooing, ear-piercing, and other such inmate needle use activities where blood-to-blood contact is likely. They also note that the same considerations apply to much sexual activity in prisons and jails, where sex may be a medium of exchange.[16]

Twenty-three percent of state/federal and 10 percent of responding city/county systems provide special AIDS education programming for hearing—

Figure 13

AIDS EDUCATION IN CORRECTIONAL FACILITIES, OCTOBER 1989

	For Inmates						For Staff					
	U.S. State/Federal Prison Systems (N=51)		U.S. City/County Jail Systems (N=31)		Canadian Systems (N=11)		U.S. State/Federal Prison Systems (N=51)		U.S. City/County Jail Systems (N=31)		Canadian Systems (N=11)	
Procedures	Number of Systems	%	Number of Systems	%	Number of Systems	%	Number of Systems	%	Number of Systems	%	Number of Systems	%
Distribute Written Materials	49	96%	27	87%	10	91%	47	92%	25	81%	10	91%
Use Audio-Visual Materials	49	96	19	61	8	73	45	88	24	77	8	73
Topics Covered in Education Program:												
Safer Sex Practices	40	78	22	71	9	82	40	78	21	68	10	91
Cleaning Techniques for Drug Injection Equipment	22	43	20	64	8	73	20	39	16	52	9	82
Spanish Language Education Available	11	22	12	39	0	0	2	4	7	23	0	0
Distribute Spanish Written Materials	26	51	20	64	0	0	12	23	13	42	0	0
Education for Individuals with Special Needs (e.g., hearing- or visually-impaired)	12	23	3	10	3	27	--	--	--	--	--	--

Source: NIJ Questionnaire Responses.

or visually—impaired inmates or those with other special needs. The Kansas prison system provides information in Braille and makes a sign language interpreter available for hearing-impaired prisoners. Although no correctional system responding to the NIJ survey explained how mentally retarded inmates are taught about AIDS, the special education needs of this population should be considered.

Towards Comprehensive HIV Education

As knowledge about AIDS education increases, educational strategies become more sophisticated. For example, there is a growing recognition that much more than a one-time lecture, question-and-answer period, or counseling session is necessary if sexual and drug-using behaviors are to change. Thus, some correctional systems are moving to develop and implement more comprehensive educational strategies which may involve counseling, HIV antibody testing, ongoing support groups, drug treatment opportunities and other components. Two programs initiated by consortia of organizations are attempting to reach IV drug users in jails and other settings in Worcester County, Massachusetts and Sacramento County, California. The consortia include universities, public health departments, community-based organizations, AIDS advocacy groups, and drug treatment programs. These have all worked closely with the correctional administrations to bring the programs to jail inmates.[17]

Several projects funded by the National Institute on Drug Abuse are developing group-based HIV education programs with IV drug users and other inmates in jails in Maricopa County (Phoenix, Arizona) and Baltimore. The WARN project in Phoenix works with female prostitutes in the jail, while a project being conducted by The Circle, Inc. primarily targets male IV drug users in the Phoenix and Baltimore jails. The Forensic AIDS Project in San Francisco has special education and counseling programs for pregnant women inmates.[18]

Where AIDS education and counseling fail to inculcate safer sex and injection practices, it is possible that HIV antibody test results may serve as a strong motivator for behavior change among inmates. This is a topic about which there is much controversy but inconclusive empirical data. However, some correctional systems are exploring this topic.

For example, the Oregon Department of Corrections, working with staff from the Centers for Disease Control and the Oregon Health Division, conducted a controlled study of the effect of AIDS education on inmates' decisions to be tested. They found that providing interactive, individualized AIDS education/counseling to inmates led to 21 percent more inmates accepting the offer to be tested. Especially among inmates designated (through questionnaire responses) as "high-risk," more of those inmates counseled accepted testing than those not counseled. Oregon estimates that the 30-minute individual counseling sessions costs a reasonable $13 per inmate.[19]

All AIDS education is an uphill struggle. In prisons and jails, coaxing changes in firmly entrenched social, sexual, and addictive behaviors is a particularly difficult task. Still, correctional administrators, in collaboration with agencies and organizations beyond the walls, must be continually evolving and employing new and more comprehensive educational strategies.

Endnotes

1. U.S. Department of Justice, Federal Bureau of Prisons. "Research Bulletin: HIV Infection Among Bureau of Prisons Inmates," August 1988, p. 7.

2. 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," December 1988, pp. 5-8.

3. Virginia Department of Corrections and Virginia Department of Health. "HIV Seropositivity Study," November 1989, p. 15.

4. Monroe, et. al. "Studies of HIV Seroprevalence and AIDS Knowledge, Attitudes, and Risk Behaviors in Inmates in the South Carolina Department of Corrections," December 1988, pp. 9-13; Ralle Greenberg and L. Frattaroli, "Women and AIDS: A Study on Education and Implementation of Knowledge," San Francisco Department Health, Forensic AIDS Project.

5. P. Hilts. "AIDS Panel Says U.S. Lags on Health Care Policy." *New York Times* December 7, 1989; Knox, R., "AIDS Panel, in Unscheduled Report, Blasts Lack of U.S. Policy." *Boston Globe* December 7, 1989, p. 14.

6. B. Abplanalp-Gaede, A. Goodgian, P. Quattrini. "Prisoner Peer Counseling on AIDS and Support for HIV-Symptomatic Prisoners." 13th National Conference Commission on Correctional Health Care, Chicago, Illinois, November 9-12, 1989; "Views from Inside: Prisoners Offer Perspectives About AIDS," *Focus: A Guide to AIDS Research and Counseling*, University of California (San Francisco), AIDS Health Project, May 1989, 4 (6): 2.

7. J.R. Godes et al., "Evaluation of an AIDS Education Program for Offenders," Fifth International Conference on AIDS, Montreal, June 5, 1989, Abstract M.E.P.6., p. 834.

8. K. Sheridan et al., "Effects of AIDS Education on Police Officers' Perceptions of Risk" *Public Health Reports* September-October 1989; 104: 521-522; Greenberg and Frattaroli, "Women and AIDS."

9. H. Feinberg, "Education to Prevent AIDS: Prospects and Obstacles." *Science* February 5, 1989, 239:592-6.

10. A. Hamb and L. Watts, "Strategies for Implementing an Effective AIDS/HIV Educational Program in a Correctional Setting." 13th National Conference on Correctional Health Care, Chicago, Illinois, November 9-12, 1989.

11. "San Francisco Okays Program to Give Condoms to Prisoners." *AIDS Policy & Law* August 9, 1989, p. 5.

12. S. Landers, "AIDS Study Stresses Need to Focus on Teens."*American Psychological Association Monitor* April 1989, 20 (4): 28-29.

13. J. Carr, et. al. Georgia Department of Corrections and Division of Public Health, "An Education and Risk Reduction Program for HIV-infected Inmates at Correctional Institutions," (Revised) August 1989.

14. Maryland Division of Correction, "Lesson Plan for Blood-borne Infectious Diseases," July 1988.

15. Extensive information on audiovisual materials is maintained by the National AIDS Information Clearinghouse (NAIC) (800) 458-5231, the National Clearinghouse for Alcohol and Drug Abuse Information (301) 468-2600, and the National Institute of Justice AIDS Clearinghouse (301) 251-5500.

16. G. Marin, "AIDS Prevention Among Hispanics: Needs, Risk Behaviors, and Cultural Values." *Public Health Reports* September-October 1989, 104 (5) 411-15; Hamb and Watts, "Strategies."

17. "Coordinated Community Programs for HIV Prevention Among IVDUs—California, Massachusetts," *MMWR* June 2, 1989; 38: 369-374.

18. NIDA, "National AIDS Demonstration Research Project: NADR/ATOM Program Orientation Book," January 1989; Jan Kenney, Phoenix WARN Project, unpublished data; San Francisco Department of Health, Forensic AIDS project, "Forensic AIDS Training and Education Program for San Francisco County Jails."

19. J. Andrus, et al., "The Effect of Mandatory AIDS Education on Voluntary Testing in Prisons." Fifth International Conference on AIDS, Montreal, June 8, 1989. Abstract Th.E.P. 32, p. 878.

Chapter 5

Precautionary Measures

Correctional systems continue to face the challenge of protecting their staff and inmates from HIV infection without raising suspicions or exacerbating fears through extreme precautionary measures. To address the issue, many systems have developed lengthy and detailed infection control guidelines. Some of these cover not only HIV infection but also hepatitis B and other infectious diseases. While most systems have instituted infection control measures to help staff and inmates protect themselves, only a handful have taken the much more controversial step of making condoms available to inmates in institutions.

Infection Control Measures for Staff and Inmates

As noted earlier, staff and inmate concerns about AIDS appear to be diminishing or at least leveling off in many jurisdictions. In this situation, complacency becomes a potentially serious problem. It is essential that correctional systems continue to provide appropriate training and equipment for the application of precautionary measures when a possibility exists of contact with blood or body fluids contaminated with blood. CDC's revised guidelines, published in 1988, state that universal precautions need no longer be applied for contact with saliva, tears, sweat, vomitus, urine or feces, unless they contain visible blood. Universal precautions (that is, precautions to be applied to all individuals) are still recommended for exposure to blood, semen, vaginal secretions, tissues, other fluids visibly containing blood, and a few rarely encountered body fluids.[1]

Governmental guidelines, of course, do not alleviate all fears, particularly in high-stress settings such as prisons and jails, nor do they eradicate all risks of infection. Attention to the protection of staff and inmates remains important for correctional systems. In 1989, the Occupational Safety and Health Administration (OSHA) proposed standards requiring employers to implement "personal protective equipment and engineering controls to reduce the risk of exposure" to blood and those body fluids identified by CDC as potentially infectious.[2]

In June 1989, CDC published extensive guidelines for prevention of HIV transmission to health-care and public safety workers, including correctional officers.[3] These guidelines stress universal precautions, but note that since "public-safety workers work in environments that provide inherently unpredictable risks of exposures, general infection-control procedures should be adapted [more specifically for] these work situations."

Many correctional officers and other public safety workers demand more aggressive measures such as identification and segregation of all HIV-infected prisoners because they do not believe "universal precautions" are workable in the particular situations they face. CDC's guidelines implicitly counter these suggestions and urge adaptation of universal precautions to correctional and public-safety situations. For example, the guidelines suggest that when "public-safety workers encounter body fluids under uncontrolled, emergency circumstances in which differentiation between fluid types is difficult, if not impossible, they should treat all body fluids as potentially hazardous." The CDC guidelines also provide detailed procedures for responding to biting incidents, documenting exposure, disposing of needles and sharp instruments, handwashing, cleaning up spills, and handling infectious waste. Recommendations for use of protective equipment such as gloves and CPR masks are also included, as are procedures for body and cell searches.[4]

Since the 1988 NIJ survey, 10 state/federal and 12 responding city/county systems have added or changed precautionary measures for AIDS or infectious diseases.

Several prison and jail systems have instituted provision of protective equipment such as airways, gloves, alcohol wipes, infectious waste receptacles, and spill kits. The Texas Department of Corrections has found it more practical and economical to provide a commercial disinfectant rather than bleach (sodium hypochlorite solution) for use in cleaning up spills.[5] A few systems have expanded or improved existing protections, now, for example, supplying staff with thicker gloves or glove pouches. Others have established new policies stressing the importance of "universal precautions." Administering CPR has been a concern of staff who believe this may present a risk of HIV infection. One jail system has chosen to equip its control rooms with MTM Ventilator masks, which are designed to prevent "vomit and exhalation from spraying the rescuer."[6] New York City's jail system reports instituting annual TB screening for health staff due to the HIV-TB connection.

The North Carolina correctional system uses imaginative role-playing to train staff in implementing precautionary measures. The training presents scenarios followed by a set of standard questions. For example: "You are asked to assist in the search of one of the inmates and his cell. He is suspected of having drugs and an IV needle in his possession. When you arrive on the scene...and try to handcuff him, he bites you, drawing blood from your hand. At the beginning of your shift, what personal protective clothing and equipment should be in your [possession] to protect you? Why? What can you do to protect yourself...if you do not have all of this clothing or equipment with you? What follow-up actions must be taken after an incident or [possible] exposure?"[7] Although biting, spitting, and other such contacts have been determined to present extremely low risk for HIV transmission, staff may require repeated training about such encounters to quell any apprehensions that might interfere with their work. At the same time, staff should be updated on findings regarding routes of transmission and non-transmission of HIV. As discussed earlier, needlesticks rather than non-parenteral contact account for the vast majority of on-the-job exposures among infected health-care workers.

Availability of Condoms

Five correctional systems surveyed—one more than in 1988—report policies making condoms available to inmates during incarceration. These systems are Mississippi, Vermont, New York City, Philadelphia, and San Francisco County. San Francisco County is the most recent addition to the list of systems making condoms available. The Cook County (Chicago) jail system reports that "serious consideration is now being given to distribution of condoms on [the] homosexual dormitory. This dorm already receives extensive counseling." Correctional officers in Cook County vetoed a similar proposal in 1988. While providing condoms selectively to homosexual inmates is an effort to prevent the spread of HIV infection, it can also send the erroneous message to other inmates (and staff) that only openly homosexual inmates are at risk, when in fact any inmate may become infected through unprotected sexual activity. Preventive measures should be carefully evaluated for the messages they may unwittingly transmit.

Four of the five systems providing condoms do so in the larger context of AIDS education, counseling, testing and/or treatment. In Mississippi prisons, condoms are simply sold in the canteens. The issue of condom provision remains controversial with the public, correctional officers and managers, as well as among spouses of inmates and inmates themselves. One writer discussing the Philadelphia condom controversy described the complexity of the issue of providing condoms to inmates: "The issue has serious moral, administrative, medical, and philosophical ramifications that, sooner or later, most of America's jail and prison overseers will have to confront....Almost all correctional administrators will impose some form of inmate protection program to harness the AIDS virus. The jury is still out, however, on whether or not access to condoms will be part of that comprehensive AIDS protection package."[8]

The advent of AIDS has pitted exigencies of public health (and, in the longer run, budgetary constraints) against laws and regulations drawn up long before the epidemic began. Such a conflict existed in San Francisco County, since sexual activity among inmates, and the "aiding and abetting" of such behavior, are felonies under California law. As a result, San Francisco County's jail and public health staff requested the San Francisco Health Commission to support the condom provision plan, which the Commission did, unanimously. Despite the possible legal conflict,[9] the plan has now gone into effect.

The San Francisco County and New York City systems follow a multistep procedure for providing condoms, while the Philadelphia jails make condoms more readily available to inmates. New York City adheres to what it calls a "medical model" of condom provision, confidentially dispensing three condoms at a time and only

within its jail clinics. However, an inmate may return several times a week for more condoms.[10] New York City's policy is a response not only to HIV infection but also to gonorrhea and other sexually transmitted diseases, which studies have confirmed are being transmitted during incarceration.[11] San Francisco County's policy permits dispensing one condom at a time by a health educator or medical social worker and only after initial counseling. The counseling covers the proper use and disposal of a condom and "a reminder that sexual contact while incarcerated is a felony pursuant to the California Penal Code and...a violation of jail rules and regulations."[12]

Philadelphia jails, following a mayoral policy statement, make condoms available to inmates at intake, through sick-call (or "medication call") and through their AIDS education program. Some of the jails allow "for non-personal disbursal [for example, by leaving condoms in shoe boxes outside the dispensary,] to avoid embarrassment or identification with unallowed sexual activity" on the part of inmates.[13] A San Francisco County jails health educator notes that theirs is not a condom "distribution" plan, as such, but more of a limited availability plan.[14] While this may appear to be a minor distinction, it illustrates an important point: these systems are attempting to avoid violation of correctional regulations and state laws regarding sexual activity while at the same time making available protections considered essential to prevent HIV transmission when such activity occurs. Condom availability policies implicitly acknowledge that sexual behavior occurs in correctional facilities, whether it is prohibited or not. Some other systems provide inmates with condoms to use during family or "trailer" visits. Others allow spouses or visiting sexual partners of inmates to bring condoms with them to such visits.

No correctional systems provide bleach to inmates for cleaning drug injection equipment and few systems openly discuss the issue. Correctional officials resist bleach distribution not only because they believe that it might encourage prohibited behavior but also because they believe that inmates may use bleach as a weapon against each other and against security staff.[15] However, a small number of systems, acknowledging that needle sharing occurs in prisons and jails due to social factors and scarcity of needles,[16] address needle cleaning methods in their AIDS education programs. As noted, AIDS educators in Chicago jails advise inmates to use soap and water instead of bleach to clean needles. In the Philadelphia jail system, health educators inform inmates that disinfectants containing small amounts of bleach, which are readily available in the jails, may be used for cleaning razor blades and needles used in IV drug injection, tattooing or ear-piercing. Jail officials have consented to the delivery of these educational messages.[17]

Endnotes

1. Centers for Disease Control, "Update: Universal Precautions for Prevention of Transmission of HIV, Hepatitis B Virus, and Other Blood-Borne Pathogens in Health-Care Settings," *MMWR* June 24, 1988; 37:377-382.

2. "Unions Support OSHA Rule on Blood-Borne Disease," *AIDS Policy & Law* May 31, 1989, p. 2.

3. Centers for Disease Control, "Guidelines for Prevention of Transmission of HIV and Hepatitis B Virus to Health-Care and Public-Safety Workers," *MMWR* June 23, 1989; 38: No. S-6.

4. Ibid., pp. 9-27.

5. D. Zeller, "Universal Precautions: Meeting the AIDS Challenge," *Correct Care* Spring 1989, p. 10.

6. C. Felton and M. Fitzgibbons, "AIDS and CPR," *American Jails* Winter 1988, p. 64-5.

7. North Carolina Department of Corrections, "Health Care Procedures, AIDS and HIV Infection," July 1988.

8. A. Hornblum, "The Condom Wars—Should America's Jails/Prisons Distribute Condoms?," *American Jails* Fall 1988, p. 23-27.

9. "San Francisco Okays Programs to Give Condoms to Prisoners," *AIDS Policy & Law* August 9, 1989, p. 5.

10. New York City Department of Health, Prison Health Services, "Policies and Procedures: Condom Distribution: NYC—DOC Male Inmates," August 28, 1989.

11. New York City Department of Health, "Policies and Procedures"; W. Rooney, Jr. "Condom Distribution to New York Department of

Corrections Inmates—Medical Model." 13th National Conference on Correctional Health Care, Chicago, Illinois, November 9-12, 1989.

12. City and County of San Francisco, Department of Public Health "Policy and Procedure: Condom Distribution—Jail Medical Services," May 30, 1989.

13. The U.S. Conference of Mayors, "AIDS/HIV in Correctional Settings: The Philadelphia Experience," *AIDS Information Exchange* June 1989, (6) 4.

14. "San Francisco Okays Programs."

15. Hornblum, "The Condom Wars."

16. S. Magura et. al. "Determinants of Needle Sharing Among Intravenous Drug Users." *American Journal of Public Health* April 1989, 79 (4) 459-62.

17. The U.S. Conference of Mayors, "AIDS/HIV in Correctional Settings."

Chapter 6

HIV Antibody Testing, Counseling, and Notification Policies

Testing Policies for Inmates

Advances in treatment regimens for HIV infection have resulted in an increasing emphasis on early identification and early intervention. Therefore, in the world outside correctional institutions, there has been a transformation of attitudes toward HIV antibody testing. Once seen primarily as a means of preventing infection (either through protecting the blood supply or identifying infected people), testing is now increasingly viewed as an integral part of medical treatment. The situation is not quite the same in correctional facilities, where testing is still considered by some to be an infection control tool. But many correctional systems are now offering voluntary or on-request testing. This trend is at least in part responsive to the movement toward early therapeutic intervention.

Mandatory Mass Screening

As shown in Figure 14, sixteen state/federal prison systems conduct mandatory HIV antibody screening of all incoming inmates, all current inmates and/or all inmates at release. Fifteen of the sixteen systems screen all intakes. No responding city/county or Canadian systems have mass screening policies.

The sixteen mass screening systems represent a net increase of one since the 1988 survey. Mississippi, North Dakota and Utah have been added to the list of mass screening states since 1988, while Rhode Island and West Virginia have left the list. These changes clearly do not represent a resurgence of the strong trend to mass screening seen between 1986 and 1987. However, as a result of funding shortages, and the realization that mass testing was creating more problems than it was intended to solve, several state systems have discontinued this policy. The West Virginia prison system no longer conducts mass testing, and, due to lack of funds, Rhode Island will not institute legislatively mandated mass screening of all inmate categories. Figures 15 and 16 summarize correctional systems' testing policies.

"Risk Group" Testing

Since the 1988 survey, four prison and eight jail systems have instituted screening of identifiable members of "high risk groups," most often IV drug users (including prostitutes) and homosexual men. In the past, several of these systems tested only in the presence of clinical indications (of HIV infection or AIDS), in response to involvement in an incident (such as a fight or sexual activity, where blood or body fluid exposure may have occurred), or for blinded epidemiologic studies. While "risk group" screening may be useful to assess infection rates in particular subpopulations, the results may be subject to selection bias, since it is difficult to identify all members of these groups. On the other hand, intensive counseling and testing programs for IV drug users may be valuable HIV prevention strategies if linked with drug treatment services.[1]

Voluntary Testing or Testing on Inmate Request

As shown in Figure 15, 37 state and federal prison systems and 28 responding jail systems offer voluntary testing and/or testing on inmate request. This actually

Figure 14

CORRECTIONAL SYSTEMS CONDUCTING MANDATORY MASS SCREENING OF INMATES, OCTOBER 1989[a]

U.S. State/Federal Prison Systems (N=51)	U.S. City/County Jail Systems (N=31)	Canadian Systems (N=11)
Federal Bureau of Prisons	None	None
Alabama		
Colorado		
Georgia		
Idaho		
Iowa		
Michigan		
Missouri		
Mississippi		
Nebraska		
Nevada		
New Hampshire		
North Dakota		
Oklahoma		
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 do or do not show clinical indications of HIV infection. In terms of correctional policy, this type of testing differs in purpose and method from blinded epidemiological studies. These studies are anonymous (*not* identity-linked) screenings intended to assess seroprevalence rates in a particular population.

Source: NIJ Questionnaire Responses.

Figure 15

SUMMARY OF CORRECTIONAL POLICIES ON HIV ANTIBODY TESTING OF INMATES, OCTOBER 1989[a]

Testing Policies	U.S State/Federal Prison Systems (N=51)		U.S. City/County Jail Systems (N=31)		Canadian Systems (N=11)	
	Number of Systems	%	Number of Systems	%	Number of Systems	%
Mandatory Screening of:						
All Incoming/New Inmates	15	29%	0	0%	0	0%
All Current Inmates	9	18	0	0	0	0
All Inmates Near Release	6	12	0	0	0	0
Screening of "High Risk Groups"[b]	17	33	15	48	6	54
Voluntary/Inmate Request Testing	37	73	28	90	11	100
Testing if Clinical Indications[c]	39	76	25	81	9	82
Testing if Involvement in Incident[d]	31	61	16	52	6	54
Testing for Epidemiologic Studies[e]	15	29	7	23	3	27
No Testing/Policy Unknown	1	2	0	0	0	0

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

[b]Testing identifiable inmates with histories of high-risk behavior (e.g., homosexuals and intravenous drug abusers), regardless of whether they do or do not show clinical indications of HIV infection or AIDS.

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

[d]Incident involving possibility of exposure to blood or certain body fluids.

[e]Seroprevalence or seroconversion.

Source: NIJ Questionnaire Responses.

Figure 16

HIV ANTIBODY TESTING OF INMATES, MUTUALLY EXCLUSIVE CATEGORIZATION, OCTOBER 1988 AND OCTOBER 1989[a]

	U.S. State/Federal Prison Systems				U.S. City/County Jail Systems				Canadian Systems			
	October 1988 (N=51)		October 1989 (N=51)		October 1988 (N=28)		October 1989 (N=31)		October 1988 (N=12)		October 1989 (N=11)	
Procedure	Number of Systems	%	Number of Systems	%	Number of Systems	%	Number of Systems	%	Number of Systems	%	Number of Systems	%
Mandatory Mass Screening (all incoming inmates, current inmates and/or inmates at release)	15	29%	16	33%	0	0%	0	0%	0	0%	0	0%
Screening of "High Risk Groups"	8	16	12	22	5	18	13	42	2	17	6	55
Voluntary/Inmate Request Testing	6	12	7	14	8	28	10	32	3	25	2	18
Testing if Clinical Indications,[b] Involvement in Incident or for Epidemiologic Studies	22	43	15	29	13	46	8	26	4	33	3	27
No Testing/Policy Unknown	0	0	1	2	2	7	0	0	3	25	0	0
TOTAL	51	100%	51	100%	28	99%[c]	31	100%	12	100%	11	100%

[a]Includes actual and planned policies. This is a *hierarchical* categorization. That is, jurisdictions that do mass screening are placed in that category, regardless of whether they also do testing for other purposes; jurisdictions that screen identifiable inmates with histories of high-risk behaviors, but do no mass screening, are placed in the "screening of high-risk groups" category regardless of whether they also do testing for diagnosis, incident involvement, or epidemiologic studies; and so on.

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

[c]Due to rounding.

Source: NIJ Questionnaire Responses.

represents a decline of two state/federal systems since 1988. On the other hand ten more responding city/county jail systems than in 1988 offered such testing. Two-thirds of state/federal prison systems and 90 percent of city/county systems have this type of testing policy.

Because of the recent findings regarding medical intervention for asymptomatic HIV-infected inmates, the importance of offering voluntary/on request testing has increased. Several studies have found that voluntary testing of inmates serves the needs of both inmates and correctional systems. In the Wisconsin prison system, a three-year study was conducted to assess seroprevalence and the acceptance of voluntary testing by incoming male inmates. Results based on antibody status and responses to a risk assessment questionnaire showed that voluntary testing captured a significant percentage of IV drug users and seropositive inmates. Few inmates with either of these characteristics declined the offer to be tested. Conversely, many of those inmates declining testing were, through anonymous blood samples and identity-linked questionnaire responses, discovered to be neither IV drug users nor seropositives.[2] In a similar study, the Oregon Department of Corrections found that two-thirds of newly incarcerated inmates opted for counseling and testing. These inmates included IV drug users, male homosexuals, and individuals with hepatitis B antibody—all those deemed by the corrections staff to be at highest risk for HIV infection.[3]

Re-Testing

Slightly over half (55%) of state/federal prison systems re-test initially seronegative inmates. Among these systems, circumstances under which re-testing occur vary widely. These include routine re-testing at specified intervals (as in the federal system), re-testing on request, re-testing in the presence of symptoms or identification of risk factors (as in Rhode Island), and re-testing only in response to possible exposure incidents. Only a handful of responding city/county systems re-test seronegatives.[4]

Pre- and Post-Test Counseling of Inmates

Most prison systems (90%) and jail systems (84%) provide inmates with individual counseling before and after HIV antibody testing. A few more do only post-test counseling, and a few others do so only for seropositives. It is essential that all inmates who are considering being tested and who are tested be provided with clear and sensitive counseling.

Pre-test counseling is no less important than post-test counseling. In fact, it is during pre-test counseling that information regarding confidentiality/notification and the meaning of results may be most readily absorbed by inmates. In nearly half (47%) of prison systems and nearly half (48%) of responding jail systems, pre-test counseling is 5-20 minutes long. Standard counseling protocols specify content that generally takes 15-30 minutes to cover adequately. Thus, the pre-test counseling sessions provided by some systems may not be of adequate length or content. The same may be true of post-test counseling, which is an important opportunity for explaining to seronegatives that their test result is by no means a guarantee of immunity from infection in the future. They must be told that if they engage in high-risk behaviors, they still may become infected. If the inmate is seropositive, post-test counseling must deal with the fears and anxieties such a result elicits, including suicidal reactions. The content specified in standard post-test counseling protocols generally requires 10-20 minutes for seronegatives and 30-60 minutes for seropositives. Post-test counseling in state/federal systems is 5-20 minutes long in a third (31%) and 21-45 minutes long in 41% of systems. In city/county jail systems, post-test counseling is 5-20 minutes long in about half (48%) the systems, while in about a third (29%), it is 21-45 minutes long. Here again, correctional systems should ensure that post-test counseling is of sufficient length to cover the necessary topics.[5]

Many correctional systems employ more than one type of professional in HIV test counseling. A number of both state/federal and city/county systems use nurses, nurse practitioners or licensed practical nurses (LPNs). An equal number report using doctors while a number of systems use physicians' assistants (PAs). Some systems also use clinical psychologists or psychiatric social workers, and some use health workers or AIDS educators from local agencies. About three-quarters (78%) of systems use counselors trained in HIV counseling, often by state or local public health departments and by regional AIDS organizations.

In the Texas Department of Corrections, counselors are extensively trained in HIV test counseling and also

in partner notification techniques. The training curriculum includes a comprehensive manual prepared by the state public health department. The manual is divided into several sections: Pre-test, Seronegative, Seropositive, Equivocal (test result), Notification, and Psychological. The first few sections include topics such as reflective listening, common questions and answers, and scenarios for role-playing. The section on notification of test results to inmates' recent partners (sex or needle sharing) notes that counselors should encourage inmates to give their consent to notification. It emphasizes that notification is voluntary for inmates as well as confidential from other correctional staff. The Department of Corrections cooperates with the local public health department in locating and notifying partners.[6]

Procedures for Staff Exposures

Correctional systems have been concerned about the possibility of job-related HIV infections of staff through exposure to inmates' blood or body fluids. Response procedures include assessing the exposure and testing the staff member and/or inmate(s). In the NIJ survey, a majority (88%) of prison systems and a majority of jail systems (81%) report a policy that includes first ascertaining if the "exposure" was "significant." The definition of what constitutes a "significant exposure" varies across systems. The Massachusetts Department of Correction lists three categories of "exposures of concern": puncture wounds, blood to blood contact, and mucous membrane contact.[7] The bulk of systems then test/re-test the staff member or refer the person to an outside physician. About half (53%) of prison systems and three quarters of responding jail systems (71%) report that they test/re-test the inmate(s) implicated in the accident or incident. Inmate consent to testing in these situations is required in some jurisdictions but not in others.

Disclosure/Notification of Inmate HIV Status

Policy-making regarding the confidentiality and disclosure/notification of an inmate's HIV status remains a controversial and difficult issue for correctional systems. Many states have laws protecting the confidentiality or the anonymity of individuals tested for HIV antibody.[8] Figure 17 shows that almost all state/federal and responding city/county correctional systems notify the inmate and the attending physician or health-care worker of test results. In over half the prison systems, other medical staff (community or correctional) and correctional management (central office and institutional) are also notified. Only a fraction (16%) of prison systems and a slightly larger number of responding jail systems (29%) have a policy of notifying correctional officers. These numbers apply only to actual disclosure policy, written or unwritten. It is apparent from lawsuits filed by inmates that news of a particular inmate's positive test results or seropositive status travels rapidly through an institution. Breaches of confidentiality are alleged to occur frequently.[9]

Correctional staff often claim a "need to know" inmates' HIV status. The emphasis on confidentiality may arouse suspicion and resentment among many staff who believe that protection of inmates' confidentiality should not outweigh measures to protect officers' safety. However, the fact that very few correctional systems officially give line officers access to HIV test results is presumably based on the view that "security concerns [do not] present a case for a 'need to know'. The only reasonably clear exception to that seems to be where an inmate is known to have tested positive and is also known to be aggressive."[10] In response to New York State's HIV confidentiality laws, the correctional department issued regulations stating that correctional officers who work directly with inmates are not considered to have a "need to know" those inmates' HIV status.[11] Continued staff education on the low-risk nature of most staff-inmate contacts and training on following universal precautions is necessary to ease staff concerns about transmission which prompt demands for widespread disclosure of inmate test results or HIV status. Disclosure of inmates' HIV status may, in fact, lull correctional officers into a false sense of security, leading them to believe that all infected prisoners have been identified. False negatives do occur on the antibody tests, and no testing program can guarantee the identification of all HIV-infected persons.

Figure 17

DISCLOSURE/NOTIFICATION OF INMATES' HIV ANTIBODY TEST RESULTS, OCTOBER 1989[a]

Party Notified[a] (during incarceration and/or at release)	U.S. State/Federal Prison Systems (N=51)		U.S. City/County Jail Systems (N=31)		Canadian Systems (N=11)	
	Number of Systems	%	Number of Systems	%	Number of Systems	%
Inmate	50	98%	28	90%	11	100%
Attending Physician or Health-Care Worker	51	100	27	87	11	100
Other Medical Staff (Community or Correctional)	31	61	12	39	8	73
Correctional Management—Central Office	29	57	6	19	6	55
Correctional Management—Institution	34	67	10	32	8	73
Correctional Officers (Security)	8	16	9	29	3	27
Public Health Department[b]	36	71	13	42	7	64
Spouse/Sexual Partner(s)	12	24	2	6	2	18
Victims of Inmate (in community and/or in prison/jail)	4	27	9	29	1	9
Parole Agency	18	35	2	6	2	18
Residential Placement[c]	4	8	1	3	3	27
Work Placement[c]	0	0	0	0	2	18
Other[d]	6	12	10	32	2	18

[a]Figures include both systems which 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 which 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 Questionnaire Responses.

Endnotes

1. "Coordinated Community Programs for HIV Prevention Among IVDUs—California, Massachusetts," MMWR June 2, 1989; 38:370-374.

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

3. Andrus, J. et. al. "HIV-Testing in Prisoners: Is Mandatory Testing Mandatory?" *American Journal of Public Health* July 1989; 79:840-2.

4. NIJ Questionnaire Responses, 1989.

5. For general guidelines and suggestions on pre- and post-test counseling, see Gabriele Dlugosch, Mark Gold and James Dilley, "AIDS Antibody Testing: Evaluation and Counseling" and "Diagnosis/Treatment: Disclosing AIDS Antibody Test Results," *Focus: A Guide to AIDS Research and Counseling* (San Francisco: The AIDS Health Project, University of California, July 1986; 1(8):1-3; Mark Gold, Neil Seymour and Jeffrey Sahl, "Counseling HIV Seropositives," in *What to Do About AIDS*, ed. Leon McKusick (Berkeley: University of California Press, 1986), pp. 103-110; Michael Helquist (ed.) *Working with AIDS: A Resource Guide for Mental Health Professionals* (San Francisco: The AIDS Health Project, University of California, 1987); and Jeffrey Kelly and Janet St. Lawrence, *The AIDS Health Crisis: Psychosocial and Social Interventions* (New York: Plenum Press, 1988).

6. Texas Public Health Department, AIDS Coordinating Office, "HIV Serologic Test Counseling and Partner Notification Techniques," October 2, 1989.

7. Commonwealth of Massachusetts Department of Correction, Health Services Division, "Handbook for Non-Medical Staff on Communicable Diseases—Exposure of Concern Information Sheet for DOC Employees," June 26, 1989.

8. "Recording Results of AIDS Tests Can be a Balancing Act," *Modern Healthcare* November 3, 1989.

9. State of Texas, Legislative Task Force on AIDS "Report to the Seventy-First Legislature—AIDS in Texas: Facing the Crisis," January 1989.

10. "AIDS, Confidentiality, and Disclosure: Issues in Conflict With No Clear Answers," *Correctional Law Reporter* May 1989; 1:19-24.

11. J. Gresham, Prisoners Legal Services of New York, Personal Communication, October 5, 1989.

Chapter 7

Housing and Correctional Management

Continuing Trend Away from Blanket Segregation Policies

Responses to the 1989 NIJ survey indicate a continuing movement away from blanket segregation of inmates with AIDS, ARC or asymptomatic HIV infection and towards general population housing or case-by-case determination. In systems that are changing their policies, the practice during transition to a less restrictive policy is usually one of returning inmates who have been housed separately into general population, sometimes in a stepwise manner (for example, temporarily maintaining segregated housing but instituting integrated programming) or transferring HIV-infected prisoners to new institutions where their status is not likely to be known by the population. Of course, individuals with severe symptoms may still be hospitalized or otherwise separated when medically required. Prisoners with particular behavior or security problems may also be separated on a case-by-case basis. It appears that the *presumptive* policy in many systems is moving away from segregation toward "mainstreaming"—that is, maintaining all categories of HIV-infected prisoners in the general population.

Carl Clements of the University of Alabama, who has written extensively on inmate classification policies, argues that blanket segregation of HIV-infected prisoners overrides offender classification schemes, in effect basing a new "classification" solely on HIV status. When HIV status dictates where and how an inmate should live, the very concept of risk and needs profiles, determined by a complex set of objective criteria, is completely undermined. Through segregation, inmates by default "lose the privileges and access [for example, for work release or mental health services] that would ordinarily accompany their particular custody rating." Clements suggests that if a system must consider HIV status at all, it should do so only as one among many other factors determining classification. Conversely, the determination of those factors should remain independent of HIV status. For example, if security risk is not a factor in an inmate's current classification, it seems unreasonable to consider it a factor only because of HIV status. Furthermore, in the absence of severe symptomatic illness, an inmate generally does not require in-patient medical care. Clements concludes that "to isolate and treat as a single entity this very diverse group of inmates appears to be counterproductive and certainly contrary to the professional standards and management tools of classification that have been developed over the last two decades."[1]

Figure 18 provides a breakdown of housing policies by HIV infection category and type of correctional system, while Figure 19 offers a mutually exclusive categorization of these housing policies. The shifts in housing policy are particularly dramatic for state/federal prison inmates with AIDS diagnoses. In the 1988 survey, no state/federal system reported housing inmates with AIDS in the general population without restrictions, such as single-celling. In this year's survey, by contrast, nine systems report doing so. For inmates with ARC (or lesser forms of symptomatic HIV infection) and with asymptomatic HIV infection, there has also been a substantial increase in state/federal systems adopting unrestricted general population housing. Asymptomatic seropositives in a number of systems are now being housed less restrictively than in 1988. Less than one-third (31%) of prison systems segregate all prisoners with AIDS, while only four prison systems (Alabama, California, Colorado,

Figure 18

HOUSING POLICIES FOR INMATES WITH AIDS, ARC, AND ASYMPTOMATIC HIV INFECTION, OCTOBER 1989[a]

Housing Policy	U.S. State/Federal Prison Systems (N=51)						U.S. City/County Jail Systems (N=31)						Canadian Systems (N=11)					
	AIDS		ARC[b]		Asymptomatic HIV Infection		AIDS		ARC[b]		Asymptomatic HIV Infection		AIDS		ARC[b]		Asymptomatic HIV Infection	
	Number of Systems	%	Number of Systems	%	Number of Systems	%	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* Restrictions	9	18%	19	37%	34	67%	1	3%	4	13%	16	52%	0	0%	1	19%	2	18%
All Remain in General Population with Restrictions/Precautionary Measures[c,d]	10	20	12	24	10	20	3	10	6	19	4	13	2	18	4	36	1	9
All Permanently Separated/ Segregated[e]	16	31	5	10	4	8	11	36	3	10	1	3	2	18	1	9	1	9
Case-by-Case Determination (based on medical and/or security or unspecified reasons)	12	24	12	24	3	6	12	39	14	45	7	23	6	55	5	46	7	63
No Policy/Policy Unknown	4	8	3	6	0	0	4	13	4	13	3	10	1	9	0	0	0	0
Total	51	101%[f]	51	101%[f]	51	101%[f]	31	101%[f]	31	100%	31	101%[f]	11	100%	11	100%	11	99%[f]

[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 category ARC is no longer used by some correctional systems. This year's NIJ Survey presented the category as "ARC or a lesser form of *symptomatic* HIV disease."
[c]The figures in this category *include* systems who hospitalize a patient during severe illness but upon improvement return the inmate to general population.
[d]This category includes single-celling.
[e]This category includes *presumptive* hospitalization, infirmary housing, and administrative separation in medical or non-medical units.
[f]Due to rounding.
Source: NIJ Questionnaire Responses.

Figure 19

COMBINATIONS OF HOUSING POLICIES FOR INMATES WITH AIDS, ARC, AND ASYMPTOMATIC HIV INFECTION, NOVEMBER 1985 AND OCTOBER 1989[a]

	U.S. State/Federal Prison Systems				U.S. City/County Prison Systems				Canadian Systems			
	November 1985 (N=51)		October 1989 (N=51)		November 1985 (N=33)		October 1989 (N=31)		October 1987[b] (N=12)		October 1989 (N=11)	
Housing Policy Combination	Number of Systems	%	Number of Systems	%	Number of Systems	%	Number of Systems	%	Number of Systems	%	Number of Systems	%
Separate/Segregate AIDS Cases; ARC Cases and Asymptomatics Maintained in General Population	3	6%	9	18%	3	9%	2	7%	0	0%	1	9%
Separate/Segregate AIDS and ARC Cases; Asymptomatics Maintained in General Population	10	20	1	2	3	9	2	7	0	0	0	0
Separate/Segregate All Three Categories	8	16	4	8	13	41	1	3	3	25	1	9
No Separation/Segregation of Any Category	2	4	18	35	0	0	4	13	0	0	1	9
Combinations Involving Case-by-Case Determination (for at least one category)	16	31	15	29	10	30	16	52	9	75	7	64
Other Policy Combinations, No Policy, or Policy Unknown	12	24	4	8	4	12	6	19	0	0	1	9
Total	51	101%[c]	51	100%	33	101%[c]	31	101%[c]	12	100%	11	100%

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

[b]October 1987 was the first year Canadian systems were included in the NIJ survey.

[c]Due to rounding.

Source: NIJ Questionnaire Responses.

and Nevada) segregate *all* categories of HIV infected individuals. In fact, Colorado has recently moved from a total segregation policy to one in which HIV-infected inmates live and eat separately from the general population, but have otherwise integrated programming.

Sixteen state and federal systems still segregate all AIDS patients. Conversely, the number of state/federal systems which do not presumptively segregate anyone with HIV infection jumped from two in 1985 to 18 in 1989. As shown in Figure 19, almost two-thirds of state/federal systems now make housing decisions for HIV-infected prisoners based on presumptive *mainstreaming* (35%) or case-by-case determination (29%).

Jail systems' housing policies, while also moving away from blanket segregation policies, have changed less dramatically than those of prison systems. Still, as Figure 19 shows, the fraction of responding city/county systems segregating inmates in *all* three HIV infection categories dropped from 13 in 1985 to only one in 1989, with compensating increases in mainstreaming and case-by-case policies. Eleven responding city/county systems still segregate all inmates with AIDS. However, some jail systems that currently separate inmates with AIDS or ARC report an intended move towards case-by-case decision making for such individuals. For example, the Los Angeles County jail system reports that it is re-examining the policy of hospitalizing all inmates with AIDS or ARC and, in the future, expects to house these individuals based on case-by-case review by a panel of three individuals from the medical, mental, and custody divisions.[2]

Canadian systems, as revealed in Figures 18 and 19, have shifted toward case-by-case decision making and slightly away from blanket segregation between 1987 and 1989. However, the change was not so dramatic as in the United States because the survey first included Canada in 1987 when the trend to case-by-case approaches was probably already in progress.

The changes in housing policy reflect a combination of factors, varying from system to system, including a less fearful and more compassionate attitude on the part of inmates and staff towards individuals with HIV infection or AIDS and increased costs of hospitalizing inmates. In Connecticut, California, and Colorado, class action lawsuits filed by segregated inmates have led to housing policy changes. These and other such lawsuits have resulted from grievances about several issues, including classification and violation of privacy rights. Grievances also center around exclusion from prison programming, such as education and work assignments, furlough and work release, recreational activities, religious services, library access and conjugal visits.

A major problem with blanket segregation policies is, of course, that segregated prisoners generally have only severely restricted, if any, access to programming and recreational activities. (As a result, policies that combine voluntary testing with segregation of all inmates testing antibody positive almost certainly discourage inmates from being tested.) Many HIV-infected persons, and even many with AIDS diagnoses, are able to lead perfectly normal lives for long periods. It can be very damaging psychologically to be isolated from one's peers and treated like a pariah. Mainstreaming and case-by-case approaches attempt to address some of these issues.

Less restrictive housing for all three infection categories also follows the realization among correctional systems that, due to the increasing numbers inmates with AIDS or HIV infection, segregation may be unfeasible. The Georgia Department of Corrections, after confronting the high seroprevalence rate in its inmate population, has gradually begun mainstreaming seropositive inmates previously segregated. This policy applies only to inmates not considered aggressive.[3] The Massachusetts Department of Correction is, for similar reasons, considering re-integrating inmates with AIDS, now indefinitely hospitalized.[4] Some of the changes reveal an ironic twist in the effects of correctional AIDS policies. Systems like Georgia's that instituted mandatory mass screening of inmates in order to separate those testing HIV-seropositive now face several difficult and unforeseen problems. In a few systems, however, reversals or modifications of mass screening and segregation policies have prompted lawsuits filed by uninfected inmates demanding strict segregation.

Basis of Case-By-Case Decisions

For the majority of systems following this policy, case-by-case determination of housing is based on security or medical reasons, or both. Security rationales for separating HIV-infected inmates from the general

population include the possibility of HIV transmission by infected inmates to other inmates. In the Illinois Department of Corrections, HIV-infected inmates deemed a "health-risk" to others may be placed in "medical isolation." However, the procedure requires a thorough review of statements made by the inmate, indications that the inmate may engage in sexual activity, needle sharing or assaultive behavior, psychological evaluations, staff recommendations, alternatives for managing the inmate's behavior, and/or counseling, before a final decision is reached.[5] The Federal Bureau of Prisons follows a similar policy.

Eighteen state/federal prison systems reported having housing procedures specifically for HIV-infected inmates found in violation of control measures. These violations are defined differently across systems but generally include sexual activity, predatory or assaultive behavior, IV drug use, or needle sharing. The procedures include single-celling, administrative segregation, and other forms of restricted housing.

Medical Furlough/ Compassionate Release

As yet, few correctional systems have formulated specific release or discharge policies for inmates with HIV infection or AIDS. Seventeen state/federal systems and five city/county systems have policies of early (or "compassionate") release or medical furlough for infected inmates. Several other systems have unwritten practices of this kind or consider AIDS-related releases within other, larger policy categories. Severely ill inmates in New Jersey may appeal for medical clemency. New York City has implemented an early release program for inmates who are terminally ill. At the time of the NIJ survey, 83 inmates, 90 percent of whom had AIDS, had been released under this New York City program. In most jurisdictions, release falls completely in the domain of parole boards or agencies. In Rhode Island inmates with AIDS may voluntarily sign a release of information form disclosing their medical status to the Parole Board.[6]

Discharge Planning Issues

Correctional systems face a number of discharge planning issues for HIV-infected inmates. Those issues most commonly mentioned in the NIJ survey include: short-notice releases making planning difficult, post-release medical care and costs, housing and hospice admission, balancing inmate confidentiality rights with notification rights of spouses/sexual partners or other parties, referrals to appropriate social service agencies or organizations, and frequently, a combination of these issues. While many of these issues apply to all inmates, they are particularly complex when applied to inmates with HIV infection or AIDS. For example, in Hawaii, some drug treatment programs will not accept inmates with AIDS.[7] Many correctional systems are developing drug treatment programs within institutions as well as referring releasees to programs in the community. However, the severe shortage of drug treatment slots for HIV-infected or non-infected inmates remains a problem.

Endnotes

1. C. Clements, "AIDS and Offender Classification: Implications for Management of HIV-Positive Prisoners," *Prison Journal* 1990 (in press).

2. NIJ Questionnaire Response, 1989.

3. "Georgia Inmates File Suit Asking Segregation For HIV," *AIDS Policy and Law* July 26, 1989, p. 4.

4. J. Bargmann, "Mainstreaming AIDS Inmates," *Boston Phoenix* August 4, 1989, p. 1.

5. Illinois Department of Corrections, "Administrative Directive: AIDS: Management of High Risk Inmates and AIDS/ARC Patients," 5/1/89.

6. NIJ Questionnaire Responses, 1989.

7. NIJ Questionnaire Responses, 1989.

Chapter 8

Medical Care and Psychosocial Services

Medical Care for Inmates with HIV Infection and AIDS

Legally, correctional medical care must meet community standards. That is, it must be equivalent to generally acceptable medical practice in the outside community. Prisoners may not be entitled to "state-of-the-art" treatment, but they should have access to all approved therapeutic drugs and generally employed treatment strategies. There have been, and continue to be, many lawsuits alleging substandard or inadequate medical care for various groups of prisoners, including those with HIV infection and AIDS.

Medical care costs have escalated dramatically in recent years and represent a major budget item for correctional systems. The increasing numbers of prisoners with HIV infection and AIDS have rendered medical care costs an even more severe financial strain for many correctional systems than was already the case. Since prisoners are statutorily ineligible for Medicaid, the costs of their care must generally be borne entirely by the jurisdiction in charge of the correctional system. States with large numbers of HIV-infected prisoners may be spending significant percentages of their total AIDS budgets for prisoner medical care. Three-quarters of New York State's non-Medicaid patient care funds are used for HIV-infected prisoners. Almost 80 percent of Georgia's state-provided AIDS funds are needed to pay for treatment of prisoners infected with HIV. Moreover, since the costs of care for prisoners and other institutionalized populations are "fixed" and required to be paid from certain limited budget accounts, there are bound to be increasingly difficult funding tradeoffs as the epidemic expands. HIV treatment and prevention programs for other populations may have to be cut in order to pay for prisoner care.[1]

In these constrained circumstances, correctional systems are, and will continue to be, under pressure to contain medical care costs. However, cost containment should not come at the expense of reducing standards of care for HIV-infected prisoners.

As discussed in Chapter 1, there have been significant recent advances in medical treatment of HIV-infected persons. These include findings regarding the effectiveness of AZT in delaying disease progression in asymptomatic HIV-infected patients and of aerosolized pentamidine in preventing and treating *Pneumocystis carinii* pneumonia. These and other therapeutic advances have prompted optimism that HIV infection may be able to be managed as a chronic disease in many patients and that life expectancy for AIDS patients may increase.

Many of these improvements in treatment depend upon early identification and ongoing careful monitoring of HIV-infected persons. For this reason, it is important that all correctional systems offer HIV antibody counseling and testing to all inmates on request.

Figure 20 summarizes 1989 NIJ survey responses regarding provision of AZT. AZT is available to some inmates in virtually all (90%) prison systems and in three-fourths (77%) of responding jail systems. Only one-fourth of Canadian systems provide the drug. Data on eligibility criteria for AZT are incomplete, but suggest that less than one-third of correctional systems are providing AZT to all inmates with CD4 (T-4) counts below 500 which is the newly approved FDA criterion. Moreover, less than half of the systems in all categories have changed their AZT policies in response to the new data regarding the drug's efficacy in asymptomatic

Figure 20

PROVISION OF AND PAYMENT FOR AZT FOR INMATES, OCTOBER 1989

	U.S. State/Federal Prison Systems (N=51)		U.S. City/County Jail Systems (N=31)		Canadian Systems (N=11)	
	Number of Systems	%	Number of Systems	%	Number of Systems	%
AZT (Zidovudine) Provided	46	90%	24	77%	3	27%
If AZT Provided:						
Eligibility Criteria (mutually exclusive):						
CD4 (T-4) count < 200	14	27	4	13	0	0
CD4 (T-4) count < 500	16	31	8	26	0	0
By Doctor/Specialist's Orders (case-by-case)	6	12	1	3	1	9
Provided to *All* Who Qualify	40	78	22	71	2	18
Policy Changed, Reflecting Release of Information Regarding AZT and Seropositives[a]	25	49	11	35	1	9
Specific Changes (mutually exclusive):						
AZT to Asymptomatics with CD4 (T-4) Count < 500	5	10	3	10	0	0
Increased Antibody Testing and/or Provision of AZT	4	8	1	3	0	0
Increased Provision of AZT if Possibility of Exposure	2	4	3	10	0	0
Increased Chemoprophylaxis (unspecified) and/or Monitoring According to Eligibility Criteria	6	12	2	6	0	0
Payment by (*not* mutually exclusive):						
Corrections Department	36	71	12	39	2	18
Other State/Local Agency (including Public Health Department)	7	14	10	32	1	9

[a]Includes systems with policies under revision.

Source: NIJ Questionnaire Responses.

persons and only eight systems have begun providing AZT to asymptomatic patients with T-cell counts below 500 in response to these findings.

Some departments may be hesitant to change because these studies remain unpublished and the conclusions are preliminary and somewhat controversial. On the other hand, some systems have moved aggressively to implement new procedures based on the preliminary findings. The New Mexico correctional department, for example, ordered immediate CD4 (T-4) counts for all HIV seropositive prisoners. The new policy calls for CD4 (T-4) counts to be repeated at three-month intervals and for the administration of AZT to all asymptomatic inmates with CD4 counts below 500. The Philadelphia jail system has developed a plan to offer AZT to all asymptomatic HIV-seropositive prisoners.[2]

Expanded eligibility criteria represent only one part of the AZT policy. The other major issue is whether all who meet the criteria actually receive the medication. There have been anecdotal allegations that many eligible inmates are denied AZT treatment. Several lawsuits have been filed on this point. According to NIJ survey responses, 78 percent of federal/state systems, 71 percent of responding city/county systems, and 18 percent of Canadian systems provide AZT to all qualified inmates. These figures suggest that there may be many inmates eligible to receive AZT who are not receiving it.

Predictably, virtually all systems providing AZT report that the costs of treatment must be borne by the correctional department or other state agency. Because of the high cost of the drug, this may represent a serious budgetary strain for many jurisdictions.

Figure 21 summarizes correctional policies and practices regarding availability of aerosolized pentamidine (AP). Three-fourths (75%) of prison systems, but less than half (45%) of responding jail systems, and only one Canadian system provide AP to inmates. The U.S. Public Health Service, on the advice of a panel of experts convened by the National Institutes of Health, recommends that HIV-infected patients with CD4 (T-4) counts below 200 (or 20 percent of total lymphocytes) should receive AP to prevent the initial onset or recurrence of *Pneumocystis carinii* pneumonia. As shown in Figure 21, only about half of the prison systems and less than 40 percent of responding jail systems have adopted these eligibility guidelines. Some continue to provide AP on a case-by-case basis as determined by the attending physician. However, just over half of prison systems, less than half of responding jail systems, and only one Canadian system provide AP to all inmates who meet clinical criteria for the treatment. Again, many eligible inmates apparently are not receiving this medication. As with AZT, the costs of AP treatment are almost invariably borne by the correctional system or other state-level agency.

Access to Clinical Trials

A number of experimental drugs for the treatment of HIV infection and AIDS are in various stages of clinical trials. However, survey results show that only a handful of systems (eight state/federal, one city/county, and two Canadian) give prisoners access to experimental therapeutic drugs. Federal regulations, designed to protect inmates from research abuse, have been established which strictly limit use of prisoners in any form of medical research. In light of HIV/AIDS and the perceived importance of experimental drugs in "state-of-the-art" treatment, many prisoners and their advocates now wish to see the regulations liberalized to facilitate inmate access to these drugs.

Several conferences have been convened to address this complex and sensitive issue. A meeting sponsored by the National Institute of Corrections and New York's Montefiore Medical Center in June 1988 concluded that prisoners should be able to participate in clinical trials if strict informed consent and confidentiality protections were maintained. However, some contend that such protections can never be properly provided in a correctional environment. A conference to be held by the AIDS Action Council in January 1990 will further consider inmate access to clinical trials. The sponsors of the meeting suggest that inmate participation in trials makes sense for several reasons: it is the humanitarian course to take; it may help reduce HIV transmission (if therapies render patients less infectious); and it may be cost-effective (if drugs delay the onset of active disease and obviate expensive hospitalization).

Psychosocial Services

It is increasingly well-established that there is a close link between psychological and physiological health in HIV-infected persons. Therefore, it is critical that they be provided with a range of supportive services. Counseling and support groups for HIV-infected prisoners

Figure 21

PROVISION OF AND PAYMENT FOR AEROSOLIZED PENTAMIDINE (AP) FOR INMATES, OCTOBER 1989

	U.S. State/Federal Prison Systems (N=51)		U.S. City/County Jail Systems (N=31)		Canadian Systems (N=11)	
	Number of Systems	%	Number of Systems	%	Number of Systems	%
Aerosolized Pentamidine (AP) Provided	38	75%	14	45%	1	9%
If AP Provided:						
Eligibility Criteria (mutually exclusive):						
By Doctor/Specialist's Orders (case-by-case)	11	22	3	10	1	9
CD4 (T-4) Count < 200 and/or PCP (*Pneumocystis Carinii* Pneumonia)	10	20	4	13	0	0
CD4 (T-4) < 200	5	10	3	10	0	0
Provided to *all* Who Qualify	28	55	13	42	1	9
Payment by (*not* mutually exclusive):						
Corrections Department	31	61	7	23	0	0
Other State/Local Agency (including Public Health Department)	5	10	7	23	1	9

Source: NIJ Questionnaire Responses.

can help them increase their will to live with the disease as well as to address issues of death and dying. It is important that, where possible, family members be involved in such services as well.

Innovative peer supportive services for HIV-infected prisoners have been initiated in several New York State correctional facilities. Out of concern for friends and fellow inmates, non-infected prisoners at the Bedford Hills womens facility and the Greenhaven institution for men began "buddy" programs, regular support groups, and active advocacy for improved living conditions and medical care for those infected with HIV. One of the founders of the Greenhaven program wrote movingly of how the death of a close inmate friend "brought about a transformation of my beliefs" about AIDS and attitudes toward people with AIDS.[3]

Volunteers from outside the institutions also participate in these supportive programs for HIV-infected prisoners. Volunteers seek to reduce stigmatization and ostracism of infected prisoners by demonstrating that it is safe to touch them and share food with them. At Greenhaven, weekly support group sessions are held with no correctional staff present so participants feel comfortable having full and open discussion of risk behaviors and personal feelings. Inmate organizers of the program emphasize that compassionate and sensitive listening are essential to the success of these support groups. The Correctional Association of New York has also established support groups for family members and friends of prisoners with HIV infection and AIDS. Finally, Prisoners' Legal Services of New York publishes a quarterly newsletter for prisoners with HIV/AIDS. This covers legal developments and medical care issues, and provides information on supportive services.[4]

Correctional and public health officials, as well as AIDS advocacy groups, have established programs of supportive services for HIV-infected prisoners in several jurisdictions. The Worcester (Massachusetts) AIDS Consortium and AIDS Project Worcester, in cooperation with the county sheriff's department offers support services for HIV-infected prisoners in the county jail. In San Francisco, the Forensic AIDS Project of the city's public health department offers a range of services to inmates with HIV infection and AIDS. This includes individual counseling, family group sessions, advocacy for compassionate release, and referral of released inmates to resources in the community. In Wisconsin, all prisoners with positive HIV antibody tests are immediately linked with AIDS advocacy and support organizations from the community. Representatives of these organizations come into the institutions to provide supportive and other services to prisoners.[5]

Endnotes

1. M. Rowe and R. Keintz, "National Survey of State Spending for AIDS," George Washington University, Intergovernmental Health Policy Project, *Intergovernmental AIDS Reports* September-October 1989 (Special Issue); 2: 8, 12; "Non-Medicaid Funds for HIV Patient Care," *Intergovernmental AIDS Reports* October-November 1989; 2: 4-8.

2. New Mexico Corrections Department, "Additional Monitoring of HIV Seropositive Patients," briefing memorandum from Medical Director Steven Spencer to institutional physicians, August 29, 1989; "Philadelphia to Administer AZT," *CorrectCare* January-February 1990, p. 2.

3. "Views from Inside: Prisoners Offer Perspectives About AIDS," *Focus: A Guide to AIDS Research and Counseling* (University of California at San Francisco, AIDS Health Project), May 1989, 4(6): 3; B. Abplanalp-Gaede, A. Goodgion, and P. Quattrini, "Prisoner Peer Counseling on AIDS and Support Group for HIV Symptomatic Prisoners," presentations at the 13th National Conference on Correctional Health Care, Chicago, November 10, 1989; "Help from Within: Prisoners Prepare Against the AIDS Crisis," Prisoners' Legal Services of New York, *PWA Support: PWA Legal Assistance Newsletter* Summer 1989; 1: 1-2.

4. Prisoners' Legal Services of New York, *PWA Support*; Correctional Association of New York, *The CA Reporter* April 1989.

5. "Coordinated Community Programs for HIV Prevention among Intravenous Drug Users—California, Massachusetts," *MMWR* June 2, 1989; 38: 369-374; San Francisco Department of Public Health, Forensic AIDS Project, "Forensic AIDS Training and Education Program for San Francisco County Jails"; Judy Greenspan, ACLU National Prison Project, personal communication.

Chapter 9 Legal Issues

AIDS-related issues continue to produce substantial litigation involving correctional inmates and staff. Several major cases are moving toward decision or settlement, so some key issues are beginning to be clarified. Key developments this year include the first successful challenges to correctional systems' policies on segregation, medical care and AIDS education. However, there remains a good deal of uncertainty on the legal status of important correctional policies related to HIV infection and AIDS.

Issues Raised by Inmates

The major types of cases brought by inmates have involved challenges to mandatory HIV antibody testing, challenges to segregation of and conditions of confinement for persons with HIV infection or AIDS, allegations of inadequate medical care for persons with AIDS, allegations of breaches of confidentiality, and allegations of inadequate AIDS education.

Harris v. Thigpen, brought by Alabama inmates, challenged that state's policies of mass mandatory HIV antibody screening and segregation of seropositives and alleged that the medical care provided to prisoners with HIV infection and AIDS was inadequate. It represented the first challenge to mandatory HIV screening in a correctional setting. In January 1990, the case was decided in favor of the correctional department. The court held that the state's mandatory testing and segregation policies represented reasonable measures taken in pursuit of a legitimate penological interest. The court also concluded that the right of uninfected prisoners to be protected from potential exposure to HIV-infected prisoners outweighed the claims of the infected prisoners to be free from discrimination on the basis of their HIV status. The plaintiffs have appealed the decision. A similar case, which remains pending, has been brought by inmates in Georgia.[1]

Portions of two major Connecticut cases have been settled in the past year. *Smith v. Meachum* challenged the Connecticut correctional department's policy of segregating all AIDS-diagnosed prisoners in a closed hospital wing at the state's maximum security institution. The suit also alleged that medical care provided to these inmates was inadequate. In a settlement approved in March 1990, the state agreed to discontinue its blanket segregation policy and to hospitalize only inmates with a medical need. Such inmates, moreover, are not be placed in a separate hospital unit. Medical care for AIDS patients is to be brought up to "community standards."[2]

A second Connecticut case, *Doe v. Meachum*, charged that the correctional system's AIDS education and HIV counseling programs were inadequate and complained that the state's policies of placing "red circles" on the records of HIV-infected prisoners and circulating lists of the names of such prisoners constituted serious breaches of confidentiality. The confidentiality aspects of the case remain pending, although the state has apparently discontinued the "red circle" policy. The education and counseling issues were settled in May 1989. Under the terms of the settlement, the Department of Correction agreed to hire nine new AIDS educators and designate a departmental AIDS coordinator. Live AIDS education sessions must be provided for new inmates at least three days per week at every facility. In addition, a voluntary 1-2 hour AIDS education session must be provided every week at every department facility. HIV counseling standards were also upgraded by instituting minimum requirements for counselor training and certification and establishing the content of pre- and post-test counseling.[3]

A California case, *Gates v. Deukmejian*, challenged the state's policy of segregating all HIV-infected prisoners in a locked unit at the California Medical Facility, Vacaville. The access to programming and medical care provided to these prisoners were also alleged to be inadequate. A settlement has been negotiated and approved by the judge in this case. Under the terms of the settlement, a one-year pilot project has been established for 20-30 HIV-infected prisoners at Vacaville. The

prisoners in this project live in a separate, but not closed, unit of the institution and participate with general-population inmates in all programs and activities. This pilot policy will be evaluated to determine whether it should be applied to all HIV-infected prisoners. The settlement also calls for development of written protocols for medical treatment and institution of a uniform medical charting system. A court-appointed monitor will oversee implementation of all aspects of the settlement.[4]

In the meantime, a similar case has been brought by female HIV-infected prisoners at the California Institute for Women at Frontera. They seek improved medical and pyschological services and increased access to programming.[5] The California Department of Corrections may establish pilot programs similar to Vacaville's at Frontera and at the men's medical facility for southern California located in Chino.

Several other cases have been brought challenging various types of mandatory HIV antibody testing. In *Dunn v. White*, a prisoner alleged that correctional officers had assaulted him and threatened to place him in disciplinary segregation for refusing to submit to an HIV antibody test. The court dismissed the complaint on the ground that the Fourth Amendment protection against illegal search and seizure does not prohibit state correctional authorities from requiring HIV antibody tests.[6]

On the other hand, an Illinois court struck down a state law requiring HIV antibody testing of persons convicted of sex-related crimes. The suit brought by two women convicted of prostitution alleged that the statute violated the Fourth Amendment as well as denying them equal protection of the laws as guaranteed by the Fourteenth Amendment.[7]

In a Pennsylvania case, *Brickus v. Frame*, the court held that segregation of HIV-infected prisoners served a legitimate correctional purpose and did not violate the Fourteenth Amendment's equal protection guarantee.[8] In a recent settlement, the Multnomah County (Portland, Oregon) jail system agreed to discontinue segregation of prisoners with AIDS and to eliminate the requirement that they wear red wrist-bands signifying the need for blood and body-fluid precautions. A number of other cases challenging segregation of and/or conditions of confinement for HIV-infected prisoners remain pending. These include another Pennsylvania case, as well as cases in Florida, Missouri, and Washington.[9]

Eligibility of HIV-infected prisoners for pre-release programs, conjugal visits, and other programs continue to be the subject of lawsuits. In a pending case, a Texas inmate seeks access to a pre-parole release program while the U.S. Supreme Court declined to review a New York appeals court decision upholding the state correctional system's exclusion of HIV-infected prisoners from conjugal visits.[10]

In November 1989, a U.S. District Court judge ordered the release on bond of a prisoner with AIDS from a federal prison in Miami on the ground that the prisoner could not receive adequate medical treatment in the institution. The ruling was upheld by the Circuit Court of Appeals. The inmate's suit alleging inadequate medical care is scheduled for trial in January 1990.[11]

In March 1990, a class action suit was filed by the HIV-infected prisoners of the New York State prison system alleging illegal and unconstitutional conditions of confinement, medical and mental health care, education and prevention services. The complaint contends that the state's policies in these areas as well as its "disregard of the right of privacy have caused and continue to cause an accumulation of class members' deaths, an inexcusable increase in their suffering, and a loss of their very humanity."[12]

Other cases on the adequacy of medical care center on provision of AZT and availability of HIV antibody testing on request. In a Georgia case, *Hawley v. Evans*, plaintiffs sought availability of AZT for *all* HIV-infected prisoners. As noted earlier, preliminary data suggest that AZT may be effective in retarding asymptomatic persons' progression to active HIV disease. However, in this case, the court held that the correctional system's current, more limited provision of AZT met current medical standards and was therefore "constitutionally acceptable." A similar Florida case reached the same conclusion. Another Florida case involving AZT policy is pending.[13]

Several cases have addressed the question of whether inmates should have access to HIV antibody testing on request. In a Pennsylvania case, *Fiegley v. Fulcomer*, the court held that a correctional system may not constitutionally withhold testing as this " 'involve[s] the unnecessary and wanton infliction of pain' by failing to relieve the anxiety which might accompany an inmate's uncertainty as to whether he or she has a fatal disease."[14] A case pending in Maryland seeks inmate access to HIV antibody testing on request.[15]

Several cases have been brought alleging that correctional systems breached confidentiality of HIV-related information on inmates. In *Doe v. Coughlin and Broaddus*, HIV-infected New York inmates successfully challenged mandatory assignment to a separate dormitory unit on the ground that such assignment would necessarily result in disclosure of their medical status to other inmates and staff. In granting a temporary injunction, the court held that inmates have a constitutionally protected right to privacy and confidentiality of their HIV status.[16] A similar right was upheld in another New York case, *Rodriguez v. Coughlin* and a Wisconsin case, *Woods v. White*. In *Rodriguez*, an HIV-infected prisoner was made to wear a "hygiene suit" for transfer to another institution, and inmates at his new institution were later explicitly informed of his medical status by correctional officers. The court held that these acts constituted impermissible invasion of the inmate's privacy rights.[17] In *Woods*, the court decided that the facts of the particular case did not constitute a breach of confidentiality but nevertheless held that inmates have a limited right to privacy, including privacy of medical records. Correctional officials, the court declared, do not have the discretion to disclose inmates' HIV status and may be held liable for damages if such disclosures should occur.[18]

On the other hand, the decision in a New York case, *Baez v. Rapping*, found that it was within the official duties and, indeed, possibly required of medical staff to report an inmate's HIV status to the prison officials.[19] Of course, it is important to draw the distinction between medical staff disclosing HIV status to prison officials (as in the disclosure approved in *Baez*) and disclosures by correctional officials to other staff or other inmates (as in *Doe*, *Rodriguez*, and *Woods*). Several other cases of alleged disclosure of HIV status to other prisoners remain pending.[20]

Issues Raised by Inmates and Staff

Legal issues raised by inmates and staff include demands that all inmates be tested for antibodies to HIV, that seropositive persons be segregated, and that more aggressive criminal and civil responses to potential HIV transmission incidents be taken.

In a series of cases, courts continued to uphold correctional systems' policy decisions not to institute mandatory HIV antibody screening or segregation of seropositives. In two Pennsylvania cases, courts dismissed complaints seeking mandatory testing of all incoming inmates and testing of all prisoners assigned to kitchen work.[21] In Idaho, a state court held that mandatory HIV screening of all inmates need not be instituted. The court stated that this did not constitute the "rare case" when medical procedures should be judicially mandated.[22] The Sixth Circuit held that the Tennessee correctional department's policy of not conducting mandatory HIV screening of inmates and its policy of double-celling all inmates did not constitute "deliberate indifference to serious medical need."[23] In a New Jersey case, the court dismissed plaintiffs' demands for expanded testing and segregation of HIV-positive inmates.[24]

Several cases seeking expanded testing, disclosure of results, and restrictions on HIV-seropositive prisoners are pending. In Colorado, general-population inmates successfully blocked a settlement that would end that state's mass screening and segregation policies.[25] In a pending Maryland case, inmates are seeking mandatory HIV antibody screening, disclosure of all positive test results of staff and inmates, segregation of all seropositive inmates, exclusion of seropositives from food service work assignments, elimination of double-celling, and provision of bleach to clean toilet seats.[26] Finally, two actions brought by correctional staff seeking mandatory screening and segregation of seropositives are also pending.[27]

Prisoners and staff have initiated both civil and criminal actions arising from incidents in which transmission of HIV could allegedly occur. As yet, however, there have been no cases in which a plaintiff asserted that he or she became infected with HIV as a result of the incident. In an Indiana case, *Cameron v. Metzcus*, an inmate claimed to have been bitten by an HIV-infected prisoner who was "known, or should have been known" by officials to be predatory. The victim of this incident sued for damages, claiming that the correctional department had been negligent in failing to segregate the predatory HIV-infected prisoner. The court, however, found that there had been no negligence in permitting the infected prisoner to remain in general population. Accordingly, correctional officials had not manifested "deliberate indifference" to the plaintiff's personal safety.[28]

An HIV-infected Alabama inmate's assault conviction for biting a correctional officer was reversed on the ground that there is insufficient evidence of HIV

transmissibility through human bites. In a Maryland case, a correctional officer is seeking the mandatory HIV antibody testing of a prisoner to whose blood the officer was allegedy exposed. This case is pending.[29]

Criminal cases arising from biting and other alleged transmission incidents have reached different outcomes. In *Brock v. Alabama*, the state appeals court reversed an HIV-infected inmate's first degree assault conviction for biting a correctional officer. The court based its judgement on the state's failure to prove that a bite could actually transmit HIV.[30] In *U.S. v. Moore*, by contrast, an HIV-seropositive prisoner's conviction for assault with a deadly weapon by biting two correctional officers was upheld. The court stated that it was unnecessary to prove and, in fact, the evidence did not support a finding, that a bite could transmit HIV. However, the court did not consider such a finding necessary since teeth could constitute a deadly weapon whether the perpetrator was HIV-infected or not.[31] Finally, in another Eighth Circuit case, *U.S. v. Kazenbach*, an HIV-infected prisoner's assault conviction for biting, scratching, spitting on, and swinging at three correctional officers was affirmed. The court decided the case on the basis of assault and battery principles in which HIV infection status was again considered irrelevant.[32]

Endnotes

1. *Harris v. Thigpen* (U.S.D.C., M.D. Alabama) CA-87-V-1109-N, opinion dated January 8, 1990; *Doe v. Evans* (U.S.D.C., N.D. Georgia) No. 1:88-cv-752-MHS. This case is pending.

2. *Smith v. Meachum* (U.S.D.C., D. Connecticut) Civil No. H-87-221 (JAC).

3. *Doe v. Meachum* (U.S.D.C., D. Connecticut) H88-562 (PCD), Consent Judgement on AIDS Education and Pre- and Post-HIV Test Counseling, May 16, 1989.

4. *Gates v. Deukmejian* (U.S.D.C., E.D. California) CIVS 87-1636.

5. *Doe v. California Department of Corrections* (U.S.D.C., C.D. California) No. SAC V89-598 JSL.

6. *Dunn v. White*, 880 F.2d 1188 (10th Cir. 1989).

7. *Illinois v. Madison* No. 87-281577; No. 123613 slip opinion (Cir. Ct., Cook County, Ill., 1989).

8. *Brickus v. Frame* (U.S.D.C., E.D. Pennsylvania) No. 89-2490, slip opinion, July 24, 1989.

9. Prisoners Legal Services of New York, *PWA Support*, Winter 1989, p. 4; *Murray v. Freeman* (U.S.D.C., M.D. Pennsylvania) Civil No. 88-0528; *Bithell v. Navarro* (U.S.D.C., S.D. Florida) 86-6944-CIV-Gonzales; *Macke v. Cowles* (U.S.D.C., W.D. Missouri) No. 86-4447-CV-C-5; *Doe v. Clark County* (U.S.D.C., W.D. Washington) No. C-89-460TB.

10. *Harrell v. Lynaugh* (U.S.D.C., E.D. Texas) TY-87-381-CA; *Doe v. Coughlin* 71 NY 2d 302 (N.Y. App., 1987), *cert.* denied, 109 S.Ct. 196. It was erroneously reported in the *1988 Update: AIDS in Correctional Facilities* that the Supreme Court had accepted this case for review.

11. "Federal Prisoners with AIDS Watch Landmark Case in Miami," *Boston Globe*, December 7, 1989, p. 14; *Gomez v. United States* (U.S.D.C., S.D. Florida) No. 89-1862-CIV-Spellman.

12. *Inmates of New York State with HIV v. Cuomo et al.* (U.S.D.C., N.D. New York) No. 90 Civ 252, filed March 7, 1990.

13. *Hawley v. Evans* 716 F.Supp. 601 (N.D. Georgia, 1989); *Wilson v. Franceschi* (U.S.D.C., S.D. Florida) No. 89-739-Civ-T-17c, February 5, 1990; *Bithell v. Navarro* (U.S.D.C., S.D. Florida) 86-6944-CIV-Gonzales.

14. *Fiegley v. Fulcomer* 720 F.Supp. 475 (M.D. Pennsylvania, 1989).

15. *Hensley v. Hopkins* (U.S.D.C., D. Maryland) Civil No. JFM-88-823, Plaintiffs' First Amended Complaint, October 28, 1988.

16. *Doe v. Coughlin and Broaddus*, 697 F. Supp. 1234 (U.S. D.C., N.D. New York, 1988).

17. *Rodriguez v. Coughlin* (U.S.D.C., W.D. New York) No. civ-87-1577 E, slip opinion, June 2, 1989, also in 1989 Westlaw 59607.

18. *Woods v. White* 689 F. Supp. 874 (U.S.D.C., W.D. Wisconsin, 1988).

19. *Baez v. Rapping* 680 F. Supp. 112 (U.S.D.C., S.D. New York, 1988).

20. *Doe v. Clark County* (U.S.D.C., W.D. Washington) No. C-89-460TB; *Doe v. Evans* (U.S.D.C., N.D. Georgia) No. 1:88-cv-1752-MHS.

21. *Fiegley v. Fulcomer* 720 F. Supp. 475 (M.D. Pennsylvania, 1989); *Fiegley v. Jeffes* 522 A.2d 179 (decided March 12, 1987).

22. *Hays v. Idaho Department of Corrections* (District Court, 4th Judicial Dist., Idaho), slip opinion, September 27, 1989.

23. *Holt v. Norris* (6th Cir.) slip opinion, February 24, 1989.

24. *Telepo v. Fauver* (U.S.D.C., D. New Jersey) No. 85-1742, slip opinion, January 9, 1989.

25. *Ramos v. Lamm* (U.S.D.C., D. Colorado), No. 77-C-1093. This is similar to an unsuccessful attempt made by Connecticut inmates to block the settlement in *Smith v. Meachum*.

26. *Hensley v. Hopkins* (U.S.D.C., D. Maryland) Civil no. JFM-88-823, Plaintiffs' First Amended Complaint, October 28, 1988.

27. *MCOA v. Hopkins* (Circuit Court for Washington County, Maryland) #15461, filed 1988; *PBA Local 105 v. Fauver* (Middlesex County, N.J.) C8289-87.

28. *Cameron v. Metzcus*, 705 F. Supp. 454 (U.S.D.C., N.D. Indiana, 1989).

29. *Brock v. State* 45 CrL 2447 (Ala. Ct. Crim. App., August 25, 1989, 1989 WL 118893; *Creek v. Herndon* (Circuit Court for Washington County, Maryland) #41295, filed 1988.

30. *Brock v. Alabama* (Alabama Court of Criminal Appeals) No. 8 Div. 235, slip opinion, August 25, 1989.

31. *U.S. v. Moore*, 846 F.2d 1163 (8th cir. 1988).

32. *U.S. v. Kazenbach* 824 F.2d 649 (8th cir. 1987).

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