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Editorial: Improving HIV/AIDS Prevention in Prisons Is Good Public Health Policy

Prisons are growing rapidly in this country. In 1993, 4.9 million people—or 2.6% of the total adult population aged 18 and older—were under some form of correctional custody: in prisons and jails, on parole, or on probation.¹ Policies that mandate confinement for drug-related offenses primarily are responsible for these dramatic increases in imprisonment.² The concentration of injection drug users in correctional institutions is associated with a high prevalence of human immunodeficiency virus (HIV) infection among inmates.³ As of December 1994, there were 5279 reported cases of acquired immunodeficiency syndrome (AIDS) in the prison population, which, at 5.2 per 1000, is almost 6 times the total US adult population rate of 0.9 per 1000.⁴ By this time, at least 4588 inmates had died of AIDS.⁴

Indeed, the second wave of the AIDS epidemic, which is building among injection drug users, their sexual partners, and their children, appears to disproportionately affect prison and jail populations.⁵ Typically in prison populations, high HIV seropositivity rates are found for injection drug users who inject drugs frequently and who have been in prison more than once.⁶

In a 1991 national survey of 1400 state inmates, it was determined that 1 in 4 inmates had used cocaine or crack in the month prior to confinement, and 1 in 10 had used heroin or other opiates.⁷ In fact, many inmates with AIDS are addicted to alcohol and illicit drugs (particularly crack cocaine) and contracted HIV prior to incarceration through sex trading, needle sharing, and unprotected sex with multiple partners.⁸ Large numbers of prison AIDS cases occur in the Northeast, where seroprevalence rates among injection drug

users are high.⁹ New York State has the highest seroprevalence rates among incarcerated populations in the country: 10% for men and 16% for women.^{10,11}

For some prisoners, incarceration may be their first opportunity to receive medical care and risk-reduction information. Before confinement, many inmates struggle to cope with poverty, powerlessness, homelessness, and poor access to preventive and primary health care services. Moreover, ex-offenders often are unable to get from their communities the long-term support and services needed to sustain difficult behavior changes. Thus, incarceration provides an opportune intervention period, amenable to the voluntary reception of HIV prevention information, risk-reduction training, and access to medical care. Consequently, jails, prisons, and juvenile confinement represent a compelling window of opportunity and setting for HIV prevention. However, many correctional systems have yet to take advantage of such access to the diverse groups of people at risk for HIV to reduce the spread of infection.⁴

Annual surveys of prison administrators have shown a preference for HIV prevention sessions that are facilitated by an instructor or trainer rather than through such passive modes of communication as written materials and audiovisual presentations.⁸ Yet, despite increasing need, the number of correctional systems that provide peer-led and interactive programs for inmates have declined.⁴ Furthermore, many of the HIV prevention efforts that do exist rely on providing general information about HIV transmission, even though

Editor's Note. See related article by Mahon (p 1211) in this issue.

levels of knowledge do not correlate with changes in behavior.¹²

Correctional systems lack information about the HIV prevention programs that are most likely to be effective. Inmate populations are diverse, comprising men and women, adolescent gang members, commercial sex workers, and injection drug users. Knowledge of inmates' diverse needs and their beliefs, attitudes, and perceptions of HIV/AIDS prevention is essential to effective interventions. The increasing number of women, adolescents, and people of color in detention calls for behavioral interventions that are correspondingly gender-specific, developmentally appropriate, and culturally competent. In short, successful prevention planning for prison populations requires an understanding not only of specific risk behaviors but also of the contexts and conditions that sustain them. No standardized format is likely to meet the needs of all risk groups. In this issue of the *Journal*, Mahon's descriptive pilot study reports findings from inmate focus groups as a first step toward understanding types of inmate risk behaviors and levels of knowledge about HIV prevention in New York State prisons and New York City jails.¹³

Many more HIV prevention and education programs must be developed for jails, prisons, and youth correctional facilities. High levels of knowledge about HIV transmission will not necessarily dispel inmates' misconceptions and misinterpretations about how HIV prevention information applies to their own behavior. Specific information on how to avoid risky behaviors and consistently available prevention education and counseling offer the best means of alerting inmates to the risks that they may encounter during imprisonment and after they are released.¹⁴ Furthermore, the majority of inmates return to their home communities, and they require community support to sustain difficult risk reduction. Indeed, prevention work with inmates affords opportunities to address prevention in the larger community outside of prisons through the education of family members and friends and through the subsequent diffusion of messages. Pre-release counseling is a final critical opportunity to reinforce and remind those about to be released of ways to reduce risk when they return to familiar, risky environments. The provision of HIV prevention messages and behavioral interventions for inmates is an important mission for correctional facilities.¹⁴ A vital adjunct is

HIV education for correctional officers, other prison staff, and visitors.

According to a national survey, a major barrier to effective HIV education and prevention in correctional institutions is the lack of explicit information about specific preventive behaviors. In the United States, regulations prohibit explicit messages.⁸ In Mahon's inmate focus group, both men and women inmates reported that a range of sexual behaviors occurs between prisoners as well as between prisoners and guards. Many of the women inmates regarded prison policies that prohibit sexual activity between inmates as "unrealistic and inhumane." Others felt that potential exposure to HIV infection and other sexually transmitted diseases "should not be a de facto form of punishment for engaging in prohibited sexual behavior."¹³ In some correctional facilities, HIV counseling, testing, and partner notification programs have been implemented for adults. However, few programs make available the means for reducing risk by distributing condoms, dental dams, exchanging needles, or providing bleach for cleaning needles.⁸

According to participants in Mahon's study, both consensual and nonconsensual sex occur between correctional staff and inmates. At this time, 14 states have laws that prohibit sexual acts between corrections staff and inmates. In New York State, a bill introduced by a former commissioner of the New York City Department of Corrections would make it easier to prosecute prison employees for engaging in sexual acts with inmates. Senator Catherine M. Abate, who drafted the bill, said that "female inmates have no capacity to say 'no'. There is the fear of retribution and they may lose privileges." Connecticut and New Jersey have statutes that criminalize sexual activity between correctional staff and inmates.¹⁵ Other states should consider such legislation.

Most of the men and women participants in Mahon's focus groups strongly advocated making condoms and dental dams available to inmates during incarceration and on their release. Some institutions do provide inmates with condoms upon release from custody, but only two state prisons and four city/county jails make condoms available to inmates during incarceration. One jail makes bleach available to prisoners.⁴ Critics of condom distribution argue that because sexual activity is prohibited in correctional institutions, the distribution of condoms would give implicit approval of sexual activity.

Concerns also have been expressed that condoms may be used as weapons or to hide contraband.⁸ However, the one New York City jail that distributes condoms has had few problems. It is a model that invites further study.

Continued limitations placed on prevention services in correctional institutions may lead to higher public health expenditures. On the other hand, greater public health involvement in the development of guidelines for HIV testing, counseling, medical care, and technical assistance in the provision of HIV/AIDS, sexually transmitted diseases, and infectious disease prevention in correctional institutions is likely to reduce future local, state, and federal expenditures for HIV/AIDS treatment.¹⁶

Effective HIV/AIDS prevention for prisoners requires a collaborative and comprehensive approach. This involves bringing together correctional systems, public health agencies, and community-based organizations to design an array of prevention and support services for inmates and ex-offenders. To ensure continued risk reduction, linkages must be established with communities. Those who are released from prison need assistance in gaining access to educational services, drug treatment, job training, and housing referral. Above all, communities have to work closely together to plan and formulate policies that are commensurate with their values and their specific needs. Research collaboration also is needed between federal agencies, correctional systems, and university investigators. More must be learned about risk behaviors and the contexts in which such behaviors are triggered and sustained. Also, we must find the intervention strategies that are effective for diverse groups of inmates.

Model programs include HIV/AIDS prevention and education, counseling and testing services for inmates, and discharge planning and supportive services in the community that assist ex-offenders in instituting and maintaining needed behavior changes.¹⁷ Among the successful programs are The Juvenile Court Health Services in Los Angeles County, which provides a school-based AIDS video program for incarcerated adolescents and trains high-risk adolescents to serve as peer AIDS educators.¹⁸ In Rhode Island, the HIV Clinic in the Adult Correctional Institution has a strong HIV counseling, testing, and medical management program, including discharge planning that links ex-offenders to Brown University's HIV/AIDS programs.¹⁹ Four Special Proj-

ects of National Significance (SPNS) in New York, Washington, DC, Rhode Island, and Maryland, funded by the Ryan White Comprehensive AIDS Resources Emergency Act of 1990, have been especially successful in discharge planning and in linking ex-offenders with HIV and AIDS to community services.¹⁷ These programs deserve to be carefully studied and replicated.

People who are incarcerated are only temporarily separated from their respective communities. For many of us, they are our neighbors, our children, and our friends. Protecting the health of communities must include protecting the health of prison communities, and meeting this challenge is good public health policy. □

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Annotation: Marine Waters and Nonenteric Illness—Matching the Degree of Analytical Rigor to the Biology of the Infectious Process

More than 40 years ago, Stevenson's seminal epidemiological study of the association between water quality and illness among swimmers appeared in the pages of this Journal.¹ In that work, an appreciably greater frequency of illness was detected in swimmers as opposed to nonswimmers in three different sites, but incidence did not always relate to water "quality." An increased coliform density was associated with greater incidence of illness in two of the three studies, and generally followed a dose-response relationship. Interestingly, over half of the reported illnesses comprised "eye, ear, nose, and throat" (nonenteric) ailments. The author concluded that even after "Admitting the difficulties of conducting studies in which nature rather than man controls many of the variables . . . some of the strictest bacterial quality requirements for natural bathing water might be relaxed without significant detrimental

effect on the health of bathers." The associations that he had uncovered mainly involved bacterial densities far greater than the American Public Health Association's standards for that time.

Since that time, epidemiological methods have become more sophisticated with respect to experimental design and data analysis. In this issue of the Journal, Fleisher and colleagues identify a dose-response relationship between degrees of bather exposure to markers of sewage contamination and the subsequent risk of acquiring a nonenteric illness.² The original randomized intervention follow-up studies, involving 1273 volunteers, were undertaken from 1989 to 1992 and are now being analyzed comprehensively.^{3,4} These studies clearly control more of the variables that Stevenson had lamented as potentially confounding. Of particular merit is that indicator organism density was directly measured proximal to each

"bathing" volunteer and within 10 minutes of when the subject was exposed, thereby circumventing the well-known temporal and spatial variation inherent in bacteriological sampling.

In the current analysis, thresholds of 60 fecal streptococci per 100 mL and 100 fecal coliform per 100 mL of water were identified by multiple logistic modeling as predictive of acute febrile respiratory illness and ear ailments, respectively. Accordingly, the authors conclude that the use of a single indicator organism or illness may not adequately represent the quality of marine recreational water. Neither of these conclusions is novel: Stevenson's 1953 study hinted at a dose-response relationship, and recommendations for the utility of measuring fecal streptococcal densities appeared in the

Editor's Note. See related article by Fleisher et al. (p 1228) in this issue.