# Young Incarcerated Men's Perceptions of and Experiences With HIV Testing

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We analyzed incarcerated men's perceptions of and experiences with HIV testing. Interviews were conducted with 105 men, aged 18 to 29 years, in 4 states. Most men had received an HIV test while incarcerated because it was convenient or free or because they thought it was mandatory. At most sites, men believed they were HIV-negative because they never received test results. Some men did not know the diseases for which they had been tested. Some men avoided HIV testing outside prison because they lacked time, lacked resources, feared knowing the results, or perceived themselves to not be at risk.

HIV testing programs for young men inside or outside prison should address barriers to HIV testing, communicate the meaning and extent of testing, and improve notification of those with HIV-negative results. (*Am J Public Health*. 2007; 97:1209–1215. doi:10.2105/AJPH.2006.085886)

Since 1980, the number of people incarcerated in US prisons and jails has quadrupled, exceeding 2.1 million in 2004.1 Overall, prisons and jails in the US incarcerate 1 in 138 US residents, the highest rate of any nation. Policies mandating the increased use of incarceration as a penalty for drug-related offenses, Truth-in-Sentencing laws requiring a longer proportion of sentences served before parole, and Three Strikes laws have accelerated the growth of the US prison population. US prisoners include a substantial number of persons who are at risk for HIV and sexually transmitted infections (STIs) because of unsafe drug use and sexual behaviors. The AIDS rate in US prisoners is nearly 3.5 times higher than the rate for the nonincarcerated population.2 Epidemiological studies also report high rates of STIs for incarcerated men.<sup>3,4</sup> Moreover, incarcerated persons face numerous barriers to accessing health care services in their communities, including cost, before imprisonment and after release, and lack of health insurance coverage.5,6,7

Increasing access to HIV and STI prevention and care services for incarcerated men and women has important public health benefits. It can help avert the spread of HIV infection and STIs among incarcerated persons and to their sexual partners and drugusing partners after their release. <sup>4,8,9</sup> With highly active antiretroviral therapy now

available to treat people with HIV infection and improve the quality and duration of their lives, the potential benefits of knowing one's HIV status are substantial. As a result, strategies for early diagnosis and treatment of HIV infection among imprisoned individuals who may have faced barriers to health care while outside prison have received increased attention. <sup>10–12</sup> In Rhode Island, for example, routine HIV testing in the state correctional system identified 32% of the new reported HIV cases in the state between 1989 and 1999. <sup>13</sup>

All US prison systems provide HIV testing to prisoners, but policies and specific procedures differ. 14 Prisoners in most systems may voluntarily request an HIV test, or systems may order a test if clinically indicated. Differences in HIV testing and treatment policies across correctional systems may have implications for primary and secondary HIV prevention. These different policies may also shape incarcerated men's perceptions and experiences of HIV testing. For example, in 2000, 19 state systems tested all incarcerated persons for HIV upon entry or during incarceration. Four state systems routinely tested prisoners for HIV upon release.<sup>14</sup> Given the type of testing policy, some systems have the potential to identify more people who become infected prior to or during incarceration than do others.15

Epidemiological studies have identified incarceration history as an important predictor of HIV testing among heterosexual men at high risk for HIV infection 16 and injection drug users in community settings. 17 Among incarcerated persons, injection drug use and fear of HIV infection in prison are associated with HIV testing while incarcerated. 18,19 Although there have been epidemiological studies of HIV infection among incarcerated populations and extensive policy debate about how best to implement HIV testing for populations at risk of HIV infection, these studies do not adequately address prisoners' perceptions of HIV testing. Young incarcerated men are key stakeholders in HIV testing programs in prison, yet little is known about their perceptions of and experiences with HIV and STI testing. In addition, there is increasing interest in incorporating structural and environmental context into HIV prevention theory and programs.<sup>20</sup> It is critical to understand men's experiences of HIV and STI testing inside and outside prison to develop effective HIV and STI counseling and testing programs for this population and to protect their health and the health of their communities. We describe young incarcerated men's perceptions of HIV testing, perceived barriers to testing, and experiences obtaining HIV test results and counseling

## **METHODS**

We used data from the formative research phase of Project START (STD and AIDS Risk Reduction Trial), a study funded by the Centers for Disease Control and Prevention (CDC) to develop and test an intervention to prevent HIV, hepatitis, and other STI risk behavior among young men upon their release from prison in California, Mississippi, Rhode Island, and Wisconsin. The methods of this phase of the study have been described in detail elsewhere. <sup>21–23</sup>

The study recruited men from five minimumand medium-security state prisons in 1999: 1 prison each in California, Mississippi, and Rhode Island, and 2 prisons in Wisconsin. Men were eligible to participate if they were (1) aged 18 to 29 years, (2) incarcerated for at least 90 days, (3) scheduled for release within 30 to 60 days, (4) being released to site-specific catchment areas, (5) able to provide informed consent, (6) able and willing to provide basic personal postrelease contact information, and (7) able to verbally communicate in English (English or Spanish in Rhode Island and California).

Of the 170 men who were invited to participate in the study, 42 were ineligible and 16 declined. Of the 112 men who were enrolled in the study, 6 were dropped by study personnel from the study because of changes in their eligibility before release. A total of 106 men were eligible for postrelease follow-up interviews; of these, 105 men answered questions about HIV and STI testing.

HIV testing and pretest and posttest counseling policies differed across the participating facilities.<sup>24</sup> In Mississippi, HIV testing was mandatory for all incarcerated persons upon entry into prison. In Rhode Island and Wisconsin, HIV testing was voluntary but routine for all men during entry into the correctional system. In Rhode Island, however, HIV testing was mandatory for all sentenced people. HIV testing was voluntary and not routine in the California facility. Peer educators at the California site led orientation classes for incoming men and addressed prevention and transmission of HIV, STIs, and other infectious diseases. After the class, men received offers of HIV testing. In Rhode Island, Wisconsin, and California, men signed informed consent forms before their HIV tests. At all sites, men could request an HIV or other STI test. Clinicians also had discretion to order these tests. In California and Wisconsin, but not in Mississippi and Rhode Island, the policy was to provide pretest and posttest counseling to all men receiving testing. At all sites, individual posttest counseling was required for persons who had positive HIV test results.

## **Data Collection**

Participants completed quantitative and qualitative face-to-face interviews at 5 time

points: before release and at 1 week, 1 month, 3 months, and 6 months after release. At each time point, the 30-minute quantitative interview preceded the 1–2 hour qualitative interview. A team of trained, ethnically diverse men and women conducted the interviews. All sites used the same semistructured interview guide for the qualitative interviews, which interviewers audiotaped; when taping was not possible, interviewers took detailed notes. Interviews took place in private, confidential locations. Participants received reimbursement for each interview.

Our analyses used data from the prerelease and 3-month interviews, which included questions on HIV testing experiences. The prerelease quantitative interview assessed the participants' lifetime testing frequency for HIV, having a history of STIs, having an incarceration history, and demographic characteristics. The prerelease qualitative interview elicited contextual information about HIV testing, including the location and circumstances of the most recent HIV test, reasons for being tested, deterrents to testing for men who did not receive testing, and circumstances surrounding the notification of results and posttest counseling. The 3-month quantitative interview included questions about HIV testing since release from prison. The qualitative interview assessed whether participants received HIV testing since their release from prison, reasons for being tested, and details of testing experiences.

#### **Data Analysis**

To describe the characteristics of the sample, we used SAS software, version 8 (SAS Institute Inc, Cary, NC) to calculate basic frequencies from the prerelease quantitative interview data, including frequency of HIV testing, history of STIs, incarceration history, and demographic characteristics.

We analyzed the data from qualitative preand postrelease interviews to investigate how incarcerated men perceived and experienced HIV testing (including barriers to testing, their reasons for being tested, and circumstances surrounding testing), counseling, and notification of test results. We also examined men's frequency of HIV and STI testing and where testing took place (e.g., inside prison, outside prison, or both). Before we analyzed the qualitative interview data, we used a combination of paraphrasing and direct quotes to capture participants' main points and to adequately represent their own words. Senior researchers monitored these interview summaries to ensure that they logically and systematically represented the raw data. Five study investigators circulated approximately 10% of the summaries among themselves for review and critique.

We extracted text pertaining to HIV testing experiences. D.K. coded each participant's text by assigning thematic coding categories based on the research question and then extracted illustrative quotes. Within these main coding categories, some of the subthemes included structural influences on testing as well as personal or individual influences on testing. For example "influences on testing," included "mandatory" and "convenient" as structural influences and "curiosity" as a personal or individual influence. C.C.F. and J. N.-M. double coded the data from all participants and discussed and resolved discrepancies in coding. We then created matrices merging each participant's quantitative and qualitative data, which made it possible to examine differences in thematic patterns according to the study site. We also sorted the interviews to examine the predominant themes regarding HIV testing for men who reported testing inside prison only, outside prison only, or both inside and outside prison.

#### **RESULTS**

#### **Sample Characteristics**

More than 80% of the 105 participants were African American or white, and more than 50% had graduated from high school (Table 1). Participants had been incarcerated an average of 2.9 years since the age of 18 years. More than a third reported a history of STIs. Nearly all (102) reported receiving HIV testing inside or outside prison, and a majority had been tested for HIV multiple times (median: 3, range: 0 to 23). Two men reported that they were HIV-positive.

#### **Testing for HIV Inside Prison**

Most participants reported having received their most recent HIV test while incarcerated. Predominant themes underlying their reasons

TABLE 1—Selected characteristics of young incarcerated men (N = 105) at baseline prerelease interview: Project START formative cohort study, 1999

Characteristic	Percentage
Race/Ethnicity	
Black	54
White	29
Latino	10
Other	7
Education	
Less than high school	40
High school diploma or GED	48
Vocational or technical certificate	4
Any college	9
Ever had a sexually transmitted infection	37
No. of times incarcerated	
1	17
2-4	33
≥5	50
Number of times tested for HIV	
0	3
1	12
2-4	52
≥5	33

*Note.* Totals may add up to greater than 100% as a result of rounding.

for receiving an HIV test while incarcerated included the perception that HIV testing in prison was mandatory, that testing in prison was convenient, or that testing was free. Some indicated that they had themselves tested out of curiosity or because they perceived the prison as a primary source of medical care. Many reported that prison was the only site where they received HIV testing. Of those who received an HIV test in prison because they perceived that it was mandatory, only 2 were incarcerated in Mississippi, the only site that mandated HIV testing for all incarcerated persons. Three participants altogether in Mississippi and Rhode Island reported that they risked punishment or substandard treatment inside prison if they refused to be tested. As 1 man, incarcerated for the first time, said,

I was forced into it . . . and if you don't get tested, you get booked . . . and you wind up doing more than a year.

Other men reported that they feared the loss of basic services if they refused to have an HIV test. For example, 2 men at a facility with mandatory testing that also segregated HIV-positive men believed that people who declined an HIV test would not be able to acquire a prison ID, which was necessary to obtain medical care while incarcerated. These men also perceived potential negative consequences of receiving a test for HIV in prison, including segregated housing inside prison for men with HIV. According to 1 man,

You get the results and everything. Then they give you a little TB shot and they take a little sample of blood. You can't have nothing when you are here. You can't have no STDs, no tuberculosis, no nothing. . . . "Here is the result; pack your stuff." Because they won't allow you to have anything and be here.

Another man in a prison with mandatory HIV testing and segregation of those with a positive test result noted,

If you got AIDS, they are coming to get you. 'Cause you got to be isolated for everybody's sake. If a guy has AIDS, he can't live with us. . . . I forgot what camp it was . . . but they got an AIDS camp where everybody over there has AIDS.

Frequently men expressed that they got tested for HIV while in prison because they were curious about their HIV status. Some men viewed this as a chance to learn their HIV status free of charge. These themes were particularly common among men in systems which offered HIV testing routinely, but where it was not mandatory. As 1 participant put it,

I always get tested here. I'm doing nothing else, might as well get tested; it's free. The least the state can do. Just took my blood, and within 10 days I got a response in the mail from the clinic. . . . Maybe the first time was uncomfortable. But this is my third time getting tested here. I guess it's routine, just the atmosphere. I could see for some people it might be traumatic, uncomfortable feeling, but for me, take the blood, cut and dry.

Another man who had received HIV testing for the first time in prison added,

It was free; might as well if the state's going to pay for it. Prior to that I was having sex with a few different people so—and yes, it was unprotected.

Some men mentioned that in prison they had time to reflect for the first time on their risk for HIV before and during their incarceration. This heightened awareness of risk was instrumental in their decision to seek an HIV test. According to 1 participant,

When I was first incarcerated, it was every 6 months. I'd write HSU [Health Service Unit] and request them to get a blood test done. I guess when I started sobering up after I was incarcerated, I realized that there was a few people out there that I had had sex with that I couldn't even remember their names, so I figured. better safe than sorry.

Some men incarcerated at the California site indicated that peer educators and other educational programs in the prison influenced their decision to seek HIV testing by raising their awareness of HIV risk and testing opportunities. One man said,

They had a big—when you came in here—orientation; they talk about AIDS, needles, how you get it [AIDS], getting tested. They offered it and most people went ahead, signed the consent. Like I said, they take blood anyway; you just got to sign a paper, so I did it.

In some cases, men's awareness of their risk for HIV and, in turn, their motivation to be tested, increased after learning that they had a STI. One man said,

I went down to the reception part, and the guy [peer educator who had HIV infection] was telling us how you get AIDS. He said whoever want to take the test can. I looked at him and I said, "I got to take it." They gave me my test results and it was negative. I was thinking about it, what would I do if I had AIDS. . . . I was worried about it 'cause when I came here, I found out I had chlamydia.

Not only was prison the sole source of HIV testing for some men, it was also their first opportunity to obtain preventive medical care. For a subgroup of men, prison served as their primary source of medical care. For some, the opportunity to obtain medical care and begin to take charge of their health became possible only after their incarceration. One man stated,

When you come into a state facility  $\dots$  they do a whole checkup on you.  $\dots$  I was doing what's right for my body  $\dots$  'cause I never had a checkup in my life  $\dots$  until  $\dots$  I came into the institution.

#### **HIV Testing Outside Prison**

Many men avoided HIV testing outside prison because they believed the test required a visit to a doctor or hospital. Men noted that their lack of health insurance, employment, and time interfered with opportunities to get an HIV test outside prison. Men also stated that before their incarceration, it had never occurred to them to get a health checkup or to think about their risk for HIV in the face of more pressing concerns, including struggles with work and substance use. Visits to hospitals were only for emergencies. In the words of 1 man:

The only time I went to the hospital was when I had an asthma attack.

Another man said that he did not seek HIV testing outside prison because,

I don't have no medical. I only go to the hospital when I absolutely need to, when I can't stand it anymore, that's when I go. . . . I can't afford nothing.

#### Another man said:

I was out there struggling . . . working crappy jobs, get high from peer pressure and go have sex . . and go drink . . . You don't think to go to the doctor. . . . Not a lot of things for particularly Black men . . . like our jobs don't cover us for no insurance. . . . I ain't got no doctor to go to for no physical. . . . When you get through paying child support and doing everything else, what you got money for to pay for a doctor . . . for a checkup?

Many men who had never received HIV testing before their incarceration perceived themselves to be at risk for HIV infection but avoided being tested outside prison because they feared knowing the results. When asked whether he had received an HIV test before incarceration, 1 man stated,

No, I wasn't [tested] . . . I didn't want to know the answer. 'Cause I know there were plenty of times where I took some chances and I was thinking, "The last thing I want to know is if I have AIDS." That would be the last thing. I think that is everybody's opinion. They really don't want to know, so that's why they won't go get tested. Other than that, just taking the time out. If I had to go get a blood test for if I had a baby, I'd take it then. I wouldn't hesitate.

Perceived risk for HIV was a theme among men who had never received an HIV test before incarceration. For some men, a major deterrent to HIV testing outside prison was that they felt there was no reason to get the test or they did not perceive themselves to be at risk for HIV infection. Conversely, many men perceived themselves to be at risk for HIV outside prison through unprotected sexual intercourse with multiple partners yet avoided testing for other reasons, including fear of knowing their HIV status and lack of health insurance.

Many men also described experiences with HIV testing outside prison. A few men reported seeking semiannual tests or checkups for HIV and other STIs, in some cases at mobile clinics. One man reported,

They used to come around [in a station wagon] and I went there  $\dots$  I went every few months.  $\dots$  I got tested 'cause the female I be messing with, they say you supposed to get it every 6 months or every year, so I go get me a test.

For other men, the most common reasons for seeking HIV testing outside prison included institutional factors in which an HIV test was mandatory upon entering drug treatment or the military, at a place of employment, or in order to donate blood. In addition, several men reported seeking an HIV test with significant people in their lives including girlfriends, relatives, and friends. Some men in this latter group reported that the initial reason for visiting the clinic was that their girlfriend had had an STI, but the clinic offered HIV testing in addition to STI testing and treatment and the men decided to be tested.

The theme of testing and getting regular checkups arose frequently in some men's accounts of their HIV testing experiences. Many men received multiple HIV tests because they perceived it as a preventive strategy, "to be safe" or "to be sure" of their negative HIV status. One man, incarcerated at a prison where he had conjugal visits, said,

I can't really count; a lot of times. Up here about every 6 months I get tested. Four times here. Last time it came up negative. . . . Just to make sure I didn't have it. I always want to make sure. I think for a while I had a phobia. That always wanted to make me take a test. I guess I was with my wife and having family visits. Just to be on the safe side. . . . I don't know, they told me to check it then check 6 months later 'cause it could be inactive in your system. Took a check and then another check.

And then I took one a couple of months later just to be sure.

At the California site, a few men reported that in addition to conjugal visits, unsafe tattooing practices inside prison also led them to seek HIV testing repeatedly. For example, 1 man noted,

'Cause I had got a tattoo. . . . I wanted to get tested 'cause I didn't know if that ink had blood in it, so I kept getting tested every 3 months.

# Notification of Test Results and Posttest Counseling

At all sites, men who sought frequent checkups often also received other tests. Whereas some men were certain that they received tests for HIV and 1 or 2 other STIs, other men were unsure of the diseases for which they had received tests. More than half of the men who reported that they had received an HIV test (55 of 96) stated that they had received their test results (18 of 25 from California, 9 of 20 from Mississippi, 13 of 27 from Rhode Island, 15 of 24 from Wisconsin). Among men who had an HIV test in prison and provided information on whether or not they had received test results, 32 of 52 stated that they had received their test results (16 of 22 from California, 1 of 8 from Mississippi, 1 of 7 from Rhode Island, 14 of 15 from Wisconsin), and 20 of 52 reported that they had not.

In places where it was common to notify only men who tested positive for HIV infection, a predominant theme about why men did not receive HIV test results was "no news is good news." As 1 man stated,

The way they do it here, if you hear something, you're in trouble. If you don't, you're fine. No news is good news.

Some men believed that if they did not receive results of their HIV test they must be HIV-negative, and in turn, they must not have any other diseases. One man, incarcerated at a prison that routinely offered HIV testing to all upon entry to prison, said,

I get arrested often enough to know I have a clean bill of health.

Among men who received their HIV test results, methods of notification varied, as did

men's understanding of their test results. Some men were confused and frustrated with the ways they received notification:

They said 6 months after your last risky behavior you'll be able to know. It had been 6 months since I'd been locked up . . . so I figured it's time to know. They tested me and anticipation killed me, and then when they called me down there to tell me the results, they said "positive." I guess the way that they were interpreting the test meant you weren't . . . you didn't have it if you were positive. The way they made it sound to me I thought I was positive, but I was negative.

#### Said another man,

They popped my cell one day. They called my name over the intercom . . . they said that you need to go to HSU [Health Services Unit] . . . my heart dropped. . . . She just wanted to check my TB test. . . . I said I was thinking the whole time . . . I had AIDS. . . . She said, "No, there's nothing bad." They sent [the results] in the mail . . . a week later.

Most men reported that they did not receive HIV posttest counseling. Fourteen men reported receiving posttest counseling, 8 of whom received it after being tested for HIV in prison. The content of posttest counseling varied; some men received a piece of paper that described ways to reduce HIV risk; others listened to advice from a counselor about reducing their HIV risk outside, and in some cases inside, prison. One man contrasted posttest counseling outside and inside prison:

On the outside, they explained, there was more AIDS education, how to contract it; it was pretty much an AIDS orientation when I got tested on the streets. Here I don't remember them saying nothing.

Men may receive counseling before but not after their HIV test in prison. According to 1 man,

None. They counsel you before you get your results. They tell you if you don't get a ducat–[summoned out of your cell to the health unit]—in 5 to 6 days, then you negative. If you do [get a ducat], they come and get you and test you again. You sit up there sweating for 5 to 6 days.

#### **Men Who Had Never Been Tested for HIV**

Low perceptions of personal risk for HIV infection predominated among the 3 men who reported that they had never received a test for HIV infection. Each man stated that he never

felt a need to get tested or that he did not have HIV. Notably, all 3 reported a history of a gonorrhea or chlamydia diagnosis after they experienced symptoms or after a sexual partner with a STI referred them to medical care.

#### **DISCUSSION**

Prison is potentially an important setting for providing information about HIV status for people who may be at risk for HIV infection. For many men, it is their only method for learning their HIV status. Many men had never received an HIV test outside prison and had received their only HIV tests while incarcerated. A substantial number of young men in this study relied on prison programs as their sole opportunity for HIV testing.

In this study, three quarters of men had an HIV test in prison, and less than half were tested for HIV outside prison. Structural conditions directly related to the prison environment, including perceived prison policies (mandatory testing), convenience, and access to free testing were particularly salient themes driving men's decisions to have an HIV test in prison. Many men described low use of testing outside prison, owing to their lack of health insurance and to other economic and structural barriers. This study highlights how structural and institutional factors may shape incarcerated men's decisions and opportunities to receive an HIV test. The contribution of structural context and individual motivations to HIV testing should be addressed further in the development of theoretical models of HIV testing behavior, future research, and programs.

#### **Perceptions of HIV Testing**

A subgroup of men cited mandatory testing in prison as their main reason for receiving an HIV test. Notably, some men in prisons with voluntary testing perceived that testing was mandatory. The nature of prison environments, coupled with the crowded, rushed, and overwhelming aspects of the intake process itself, may fuel some men's beliefs that testing is mandatory and inhibit some men from refusing an HIV test. To minimize the risk of misperception, staff in prison settings that routinely offer HIV testing upon entry could assure incarcerated people that testing is voluntary and provide adequate, safe opportunities

for individuals to refuse testing. This may reduce the possibility that testing "routinely offered" is not, as other researchers have suggested, "routinely imposed," <sup>25(p100)</sup> becoming mandatory testing under a different name. <sup>25</sup>

In prisons that routinely offer HIV testing, some men decided to be tested because they were curious about their HIV status and testing was free. Some men received a test after they had been in prison for some time and were able to think about their risk for HIV infection. For these men, having HIV testing available after their entry into the correctional system was particularly useful.

Most of the men who had received an HIV test reported being tested multiple times. A minority of men reported that they were tested repeatedly inside prison after events that they perceived put them or others at risk (e.g., after tattooing, before or after conjugal visits). In 1 prison, information provided by peer educators-at 2 of the 4 sites in this study-spurred some men into seeking a test by making them aware of their risk. Peer education programs have been a particularly successful strategy for conveying HIV prevention information in prison settings.<sup>26</sup> Peer educators as well as other HIV education programs in prison have the potential to play a critical role in raising men's awareness about HIV transmission risks and opportunities for HIV testing, both in prison and after release.

#### **Barriers to Testing**

In addition to poor access to health care, fear about knowing their HIV status deterred many men from getting tested outside prison, as has been shown in studies of barriers to HIV testing in other populations. <sup>27</sup> Some men failed to be tested for HIV infection despite being aware that they were at risk because of having had multiple sexual partners or a prior STI. For these men, information and support from peer educators and prison medical staff, in addition to the offer of HIV testing, may be particularly useful in encouraging men to receive HIV testing, provided that they are not coerced into being tested and that steps to protect confidentiality are in place.

# **Experiences with HIV Test Result Notification**

Our results also underscore that methods of notifying men of their HIV test results may

be inadequate. Some men received their test results through oral or written communication; however, inside and outside prison, only half of the men received their test results and most received no posttest counseling. These findings echo those of an earlier Project START analysis of in-prison service providers' (e.g., health services personnel, prison social workers) perceptions of HIV testing in prisons. Service providers reported that the practice of "no news is good news" prevails—they notified incarcerated men only if the men's test results were positive.<sup>24</sup>

Although this may reduce the work burden on staff, it may have a number of harmful consequences. For example, when a man does not receive test results, it is unclear whether he is HIV negative or whether he has yet to receive notification. This could possibly increase anxiety around HIV testing and reduce the likelihood that men will seek testing. The "no news is good news" policy may also encourage passivity among incarcerated persons, discouraging them from actively seeking out test results inside or outside prison. A study of out-of-treatment drug users found that those who had been incarcerated were less likely to have returned for their test results when they were tested outside prison.<sup>28</sup> Finally, because incarcerated men in this study assumed that they were negative for HIV when they did not receive their test results, they might also assume they were negative for all STIs. This could create a false sense of security and confidence in their health, which might perpetuate risky sexual behavior and become a barrier to seeking testing for HIV and other STIs at other times.

Our results should be interpreted in light of several limitations. Our understanding of barriers to testing for HIV in prisons is limited because most men in this sample had been tested for HIV while incarcerated, and at 1 site, HIV testing was mandatory. Data from people who had not received an HIV test while incarcerated were limited. It is possible that we underestimated men's use of HIV testing services after release from prison because the study examined testing only in the 3 months following release from prison. However, data from the interviews conducted prerelease also revealed the use of HIV test services outside prison prior to incarceration.

Results of this study cannot be generalized to all men in the participating prisons or to men in other prisons or jails.

#### **Program and Policy Implications**

Our findings have important programmatic and policy implications. Inside and outside prisons, HIV prevention programs for young men need to address barriers to HIV testing and communicate the benefits of early HIV detection and treatment. All persons who receive HIV tests should receive test results. Given that many men entering prison are at high risk for HIV and STIs, it is critical that correctional facilities provide voluntary HIV counseling, testing, and referral services.

The "no news is good news" policy misses an important window of opportunity to provide HIV test results, risk reduction information, counseling, and service referral to men with negative test results. Although the "no news is good news" policy for men with negative HIV test results may conserve resources and reduce the work burden on staff, it should be reconsidered because of its potential negative consequences.

HIV services should be of the highest quality, and substandard programs should be improved.24 The use of rapid HIV testing in prisons is 1 possible strategy that would enable prison medical staff to provide counseling and test results within a single visit. In light of the fact that many incarcerated men receive HIV testing exclusively in prison, prison-based HIV counselors should maximize opportunities to provide risk-reduction counseling and clearly inform men of the diseases for which they are receiving tests. Counselors could also educate incarcerated men about strategies for reducing HIV risk while in prison, provide information on reducing risk outside prison, and highlight the availability of low-cost or no-cost opportunities for HIV and STI testing outside prison at the time of release from prison.

Collaborations between correctional systems and health departments or community-based organizations to provide HIV education, counseling, and testing could reduce the work burden on prison medical personnel. Finally, because many men reported that prison was the only place where they received preventive and health care, future research

should investigate the reasons why there is not more use of HIV preventive health care in community settings.

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Note. The findings and conclusions of this report are those of the authors and do not necessarily represent the views of the Centers for Disease Control and Prevention.

#### **Contributors**

D. Kacanek conducted the data analysis and led the writing. J. Nealey-Moore, R. J. MacGowan, and C. C. Fitzgerald conducted the analyses. D. Kacanek, G. D. Eldridge, J. Nealey-Moore, R. J. MacGowan, D. Binson, C. C. Fitzgerald, T. P. Flanigan and J. M. Sosman conceptualized the article, interpreted the analysis, and contributed to its writing and editing. Principal investigators and investigators of the Project START Study Group worked together to design the study, develop questionnaires, and plan data analyses for the overall study. Principal investigators and some investigators supervised research activities. Members of the research staff contributed to the development of study procedures and were responsible for study implementation.

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#### **Human Participant Protection**

All sites used a common study protocol approved by the institutional review boards at the Centers for Disease Control and Prevention and each participating institution. The study obtained a federal certificate of confidentiality, and local program review panels at each site approved all study materials.

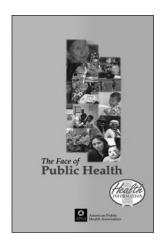
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