National Survey of Infectious Diseases in Correctional Facilities

HIV and Sexually Transmitted Diseases

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Internal Review

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1. Key Findings

The following are the key findings on HIV/AIDS and STDs from the 10th National Survey of Infectious Diseases in Correctional Facilities.

Background

The 10th CDC/NIJ National Survey of Infectious Diseases in Correctional Facilities was carried out by Abt Associates during 2005 with support from the National Institute of Justice (NIJ) and the Centers for Disease Control and Prevention (CDC).

This series of national surveys was initiated in 1985 and conducted annually until 1990. Subsequent surveys were conducted in 1992, 1994, and 1996–97. Through 1992, the surveys covered only HIV/AIDS. From 1988 to 1992, some tuberculosis (TB) questions were included in the HIV/AIDS survey and, in 1994, sexually transmitted diseases (STDs) were added to the HIV/AIDS survey and a separate TB survey was carried out (with a separate TB report issued). The 1996–97 survey covered HIV/AIDS, STDs, and TB in the same survey and one omnibus report was issued. In 2005 a section on hepatitis A, B and C was added as was a section on disease reporting and surveillance capabilities; the 2005 results will be presented as a set of disease-specific reports and one separate report on surveillance and reporting.

From 1985 through 1990, the survey was funded entirely by NIJ. Beginning in 1992, CDC became a co-funder of the work. The 1996–97 update report also included the results of the Bureau of Justice Statistics' (BJS) 1996 survey of HIV/AIDS in prisons and jails.

HIV Testing Policies

- From the 1996–1997 to the 2005 survey, there was a small increase (from 31% to 33%) of state/federal prison systems with mandatory HIV testing. No responding city/county jail systems have mandatory testing.
- The major shift among state/federal systems was from passive (on request) to more aggressive (offered) voluntary testing policies.

Notification of HIV Test Results

- Between the two surveys, there was a decline in the percentage of state/federal systems in which correctional management staff (from 37% to 17%) or line correctional officers (from 12% to 2%) are notified of inmates' HIV test results, but a slight increase in the percentage of city/county systems that disclose results to correctional officers (from 7% to 9%).

Sexually Transmitted Disease Testing Policies

- The percentage of state/federal systems with mandatory or routine syphilis testing for incoming inmates increased to from 28 percent to 76 percent, but it declined (from 41% to 25%) in city/county systems.
- Much smaller percentages of both types of systems do mandatory or routine testing for chlamydia (20% of state/federal and 4 % of city/county systems) or gonorrhea (17% of state/federal and 4% of city/county systems).
- Many systems, particularly city/county jail systems, are failing to take advantage of the opportunity to identify and treat inmates with STDs.

Results of STD Testing

- Few systems reported results of STD testing, especially for diseases other than syphilis.
- Among reporting systems, positivity rates for these diseases were generally quite low.

HIV/STD Education and Prevention

- Most systems continue to provide instructor-led education (82% of state/federal systems and 75% of city/county systems), audio-visual programs (84% of state/federal and 58% of city/county), and printed materials on HIV (100% of state/federal and 81% of city/county), but fewer systems provide peer education (41% of state/federal and 30% of city county) and multi-session prevention counseling (48% of state/federal and 58% of city/county).
- Even fewer state/federal systems were providing comprehensive programs (all five types in all their facilities) in 2005 than in 1996–1997 (2% v. 10%); in city/county systems, the proportion increased very slightly but remained very low (5% to 6%).

Provision of Condoms

- Since 1996–1997, there has been no change in the small handful (about 7) of correctional systems that make condoms available to inmates for use in correctional facilities.

Housing Policies

- Increased percentages of state/federal systems house inmates with HIV (non-AIDS) (from 61% to 80%) and inmates with AIDS (from 33% to 60%) in the general population with no restrictions. Little change occurred among city/county systems: 75% for inmates with HIV (non-AIDS) and 27% for those with AIDS.

Contracting for Health Services

- More than two-thirds of responding state/federal systems (70%) and just under two-thirds of city/county systems (64%) contract out health services. Of state/federal systems with contracted health services, 61 percent include in the contracts specific requirements or for HIV testing and treatment, but health services contracts in only 29 percent of city/county systems include such requirements.

HIV Treatment

- All responding systems provide antiretroviral treatment for HIV.
- Many systems have more aggressive criteria for initiating treatment than those in national treatment guidelines.
- Most systems employ either "pill lines" or keep-on-person methods for administration of HIV medications.

Support Services for Inmates with HIV

- Between 1996–1997 and 2005, the proportion of correctional systems offering support groups for inmates with HIV declined to about one-third.

Discharge Planning

- Almost all correctional systems continue to provide some discharge planning for inmates with HIV.
- The most common methods of linking soon-to-be-released inmates to community-based services are provision of referral lists or specific appointment for HIV medical treatment. The level and breadth of linkages are more limited in city/county jail systems than in state/federal prison systems.

2. Background, Survey History and Methodology

2.1. Background

In 1983, the Centers for Disease Control reported in the *Morbidity and Mortality Weekly Report* that 16 prisoners in New York and New Jersey had AIDS (Wormser, 1983). The next year, the same group published a paper in the *Annals of Internal Medicine* (Wormser, 1984) concerning seven New York State prisoners with AIDS. In both reports, the inmates were apparently heterosexual men with long histories of injection drug use. These papers helped to establish the causal link between injection drug use and AIDS and began to draw attention to the problems associated with AIDS in correctional facilities. In 1985, as more correctional systems began to identify inmates with AIDS and request guidance on policy options for dealing with this problem, the National Institute of Justice (NIJ) commissioned Abt Associates to conduct the first national survey of AIDS in correctional facilities. This, and subsequent surveys covered the major policy issues in handling HIV/AIDS in correctional settings: education and prevention programs, testing, confidentiality, housing and correctional programming, and medical treatment.

The series of national survey reports, later jointly sponsored by NIJ and CDC, pointed to the much higher prevalence of HIV in inmates than in the total population. Subsequent analysis showed that about one-fourth of all people living with HIV in the U.S. in a given year pass through a correctional facility that same year (Hammett, 2002). Figures of this type drew attention to prisons and jails as important settings for HIV prevention and treatment interventions and led to descriptions of correctional health care as a public health opportunity (Glaser and Greifinger, 1992).

Despite the growing realization that HIV/AIDS among inmates represented an important public health as well as correctional or criminal justice problem, many of the issues surrounding HIV/AIDS in correctional populations have been almost from the beginning and still remain controversial. These include the extent of HIV transmission among inmates and related policy choices, the acceptability and advisability of mandatory or routine HIV testing, the appropriateness of making condoms available to inmates for use in correctional facilities, access to medical treatment and related HV/AIDS services, and the importance and elements of discharge planning and transitional programs for inmates with HIV being released to the community (Hammett, 2006).

Somewhat later than the emergence of the HIV/AIDS problem among inmates, it became clear that correctional populations also had abnormally high rates of sexually transmitted diseases (CDC, 2003). Moreover, correctional facilities, and particularly jails with their rapid population turnovers, came to be seen as important settings for STD diagnosis and treatment. Much of this testing and treatment can be done in a short time, even before most jail inmates return to the streets (Arriola, 2001; Kahn, 2002; Mertz, 2002; Kraut-Becher, 2004).

This report presents findings on HIV/AIDS and STDs from the 10th National Survey of Infectious Disease in Correctional Facilities.

2.2. Survey History

The 10th CDC/NIJ National Survey of Infectious Diseases in Correctional Facilities was carried out by Abt Associates during 2005 with support from the National Institute of Justice (NIJ) and the Centers for Disease Control and Prevention (CDC).

This series of national surveys was initiated in 1985 and conducted annually until 1990. Subsequent surveys were conducted in 1992, 1994 and 1996–97. Through 1992, the surveys covered only HIV/AIDS. From 1988 to 1992, some tuberculosis (TB) questions were included in the HIV/AIDS survey. In 1994, sexually transmitted diseases (STDs) questions were added to the HIV/AIDS survey; and a separate TB survey was carried out (with a separate TB report issued). The 1996–97 survey covered HIV/AIDS, STDs and TB in the same survey and one omnibus report was issued. In 2005 a section on hepatitis A, B and C was added, as was a section on disease reporting and surveillance capabilities; the 2005 results are presented as a set of disease-specific reports and one separate report on surveillance and reporting. From 1985 to 1994, the NIJ/CDC survey collected data on numbers of cases of AIDS and AIDS-related deaths among correctional inmates. However, the Bureau of Justice Statistics began conducting surveys of HIV/AIDS in prisons and jails in 1993 and so, as of 1996–97, the NIJ/CDC survey no longer collected data on numbers of HIV or AIDS cases to avoid duplication of effort. Beginning in 1989, the NIJ/CDC survey sought aggregate data on numbers of cases of TB disease and latent TB infection, and, beginning in 1994, aggregate STD testing data. For the first time in 2005, the NIJ/CDC survey requested aggregate data on hepatitis cases among correctional inmates. (See Appendix 1 for 2005 survey instrument.)

From 1985 through 1990, the survey was funded entirely by NIJ. Beginning in 1992, CDC became a co-funder of the work. The 1996–97 update report also included the results of the Bureau of Justice Statistics' (BJS) 1996 survey of HIV/AIDS in prisons and jails.

2.3. Methods

The CDC/NIJ surveys have, from the beginning, gathered data on policies and practices in prison and jail systems related to the covered infectious diseases. The major areas of policy and practice addressed in the surveys have changed somewhat over time, but the primary domains include:

- education and behavioral interventions;
- precautionary and preventive measures;
- testing, diagnosis, counseling, confidentiality, and disclosure of test results;
- housing and correctional management;
- medical care and psychosocial services;
- discharge planning; and
- legal and legislative issues.

The NIJ/CDC survey has always been sent to the Federal Bureau of Prisons and all 50 state correctional systems, and the 50 largest city/county jail systems in the US. The 50 largest jails changed only slightly from 1996-97 to 2005, seven systems were different in 2005 (see Appendix 2 for 1996-96 and 2005 50 largest jails).

Beginning in 1994, we also conducted a parallel validation survey in which we sought responses to subsets of the questions related to policies and practices from samples of individual facilities in some

states and the Federal system. All 50 state systems and FBOP were stratified by size and a set number of facilities was randomly selected within each.

In 2005 a non-random convenience sample of five tribal, five small city jails and ten regional/rural systems were added to the sample to provide an indication of the practices and challenges faced by smaller facilities. As the small numbers suggest, the responses from this new group were intended to provide material for a more qualitative discussion of infectious disease management in these jails, and were not intended to be generalizable.

The 2005 survey was mailed to the director of health services and responses were requested to cover all adult facilities in the system. Respondents were asked to provide data for the most recently completed 12–month period (for the 2005 survey this was most commonly June 2003–June 2004). Abt Associates staff followed-up by telephone to obtain surveys from non-responding systems and to inquire about missing or unclear response in completed questionnaires. From 1985 through 1996–97, we were able to obtain 100 percent response from the 51 state/federal prison systems and an average response rate of 80 percent from the city/county jail systems. However, ever increasing amounts of follow-up by telephone were required to obtain these high response rates. Even with many hours of telephone follow-up work in 2005, we were not able to achieve the previously high response rates.

2.3.1. 2005 Survey Response

Table 1 breaks down the response rates for each system type. The 2005 survey had a response rate of 79 percent for the three main respondent types (FBOP, state departments of corrections and large city/county systems), 45 percent for the three new respondent types (tribal, regional/rural and small city jails), and 16 percent for the validation survey. The discussion of prison and jail systems' policies in this report is, of course, limited to the activities of survey respondents.

Table 1

Survey Response Rates Across Systems

Respondents Type	Total	Surveys Submitted N	%
Federal Bureau of Prisons (FBOP)	1	1	100%
State Departments of Corrections	50	46	92%
Large City & County Jail Systems	50	33	66%
Subtotal	101	80	79%
Tribal Facilities	5	2	40%
Regional/Rural Jails	10	5	50%
Small City Jails	5	2	40%
Subtotal	*20*	*9*	*45%*
Validation (State Facilities)	50	8	16%
Total	171	97	56%

The distribution of the17 nonresponding jails was slightly skewed to the smaller jails; there were three jails in each of the top four quintiles (based on system size) and five jails in the fifth quintile. None of the four nonresponding state systems was among the largest quarter of systems, two were in the top half and two in were among the smaller half of systems (two were located in the south, one in the southwest and one in midwest). The final status of the 32 nonrespondents from the state departments of correction, the city/county systems and the tribal, regional/rural and small city jails is summarized in Table 2.

Table 2

Status of Survey Non Respondents: State Departments of Correction, the City and County Systems and the Tribal, Regional/Rural and Small City Jails (n=32)

Status	n	(%)	Description
Hard Refusal	4	18%	• Did not get approval to complete it. • The survey is voluntary. • "It's not important to us!"
Soft Refusal	12	35%	• The survey is voluntary. • We are very understaffed. • We are very busy / see a large number of inmates. • Health care vendor changed (data not available). • The survey is too long / difficult.
"Working on it"	7	21%	• Respondents reported that they were working on it up to the last round of follow-up calls.
No Contact With Respondent	5	16%	• Despite numerous calls, respondents could not be reached and did not return phone calls.
Exclude/Exempt	4	18%	• 2 facilities were in areas affected by Hurricane Katrina and were exempted from the survey. • 2 facilities were discovered to be operated by FBOP and excluded.

3. HIV and STD Testing Policies

3.1. HIV Testing Policies

The Survey requested information about correctional systems' HIV testing policies, characterized as six mutually exclusive categories as shown in Table 3.

Table 3

Definitions of Disease Testing Policies

Testing Policy	Definition
Mandatory	Inmates must be tested.
Routine	Inmates are tested unless they specifically refuse.
Offered	Inmates are regularly and routinely offered the opportunity to test, and those with risk factors are encouraged to be tested.
On Request	Inmates are not tested unless they specifically request testing.
No Testing	Testing is not offered.
No Policy	System does not have a policy regarding testing this category of inmate.

Table 4 compares the mutually exclusive categorization of HIV testing policies from the 1996–1997 and 2005 surveys, suggesting only modest change in testing policies over this period. In both the 1996–1997 and 2005 surveys, just under one-third of state/federal prison systems reported having mandatory HIV testing of all incoming inmates.

Table 4

HIV Testing Policies For All Inmates at Intake

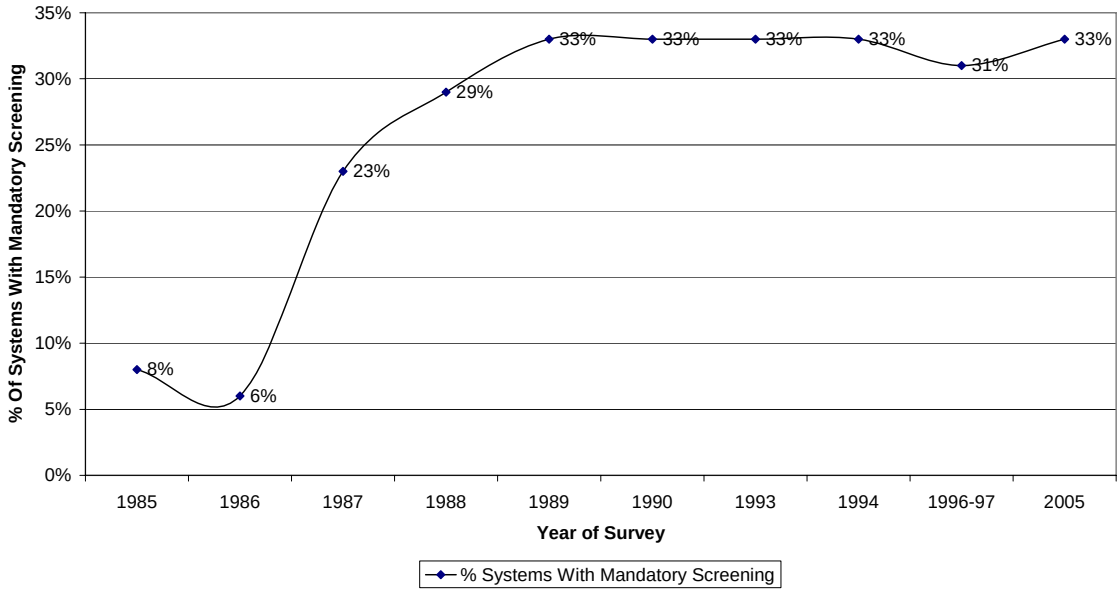
	State & Federal		City & County	
	2005 (n = 47)	1997 (n=51)	2005 (n=33)	1997 (n=41)
Mandatory	32%	31%	0%	0%
Routine	7%	2%	0%	2%
Offered	45%	35%	36%	34%
On Request	16%	31%	48%	46%
No Policy	0%	0%	0%	17%
No Testing	0%	0%	15%	NA
Total	100%	99%	99%	99%

Four state systems moved to mandatory or routine testing during this interval (South Carolina, Indiana, and Ohio to mandatory and Arkansas to routine) and three (Alabama, Mississippi, and Nebraska) of the four systems that did not respond to the 2005 survey have mandatory testing, based on these systems' responses to the 2004 BJS survey (Maruschak, 2006). The number of state/federal systems with mandatory HIV testing appears to have increased from 16 to 17 (31% to 33% of the 51 state/federal prison systems) while those with routine testing jumped from 1 to 4 (2% to 8%). As shown in Figure 1, between the first NIJ

survey in 1985 and 1989 the number of state/federal correctional systems with mandatory HIV testing increased from 8 percent to 29 percent and has remained fairly stable since then.

Figure 1

Proportion of State/Federal Prison Systems Conducting Mandatory HIV Screening at Intake 1985–2005 (n=51)



Note: 2005 total includes three state systems that they did not respond to 2005 survey but are known to have mandatory testing.

In 2005, 45 percent of state/federal systems (up from 35% in 1996–1997) reported that HIV testing was offered to all incoming inmates and 16 percent (down from 31%) said that HIV testing was provided on request. Thus, the major shift was from more passive on-request policies to more aggressive policies of offering testing to all inmates.

No responding city/county jail systems reported mandatory or routine HIV testing in 2005, and the percentages that reported offering testing (34–36%) and on-request testing (46–48%) remained virtually identical in the 1996–1997 and 2005 surveys. The percentage of responding city/county jail systems that reported having no HIV testing policy fell from 17 percent in 1996–1997 to 0 percent in 2005, but this may simply represent a shift to "no testing" which went from 0 percent to 15 percent.

Correctional systems' justifications for mandatory or routine HIV testing of inmates changed substantially from the early years of the epidemic in the 1980s to the era of highly active antiretroviral therapy (HAART) which began in the middle to late 1990s. In the first period, when there was no effective HIV treatment, mandatory testing was justified as a measure to prevent HIV transmission among inmates, especially when coupled with residential segregation of those found to be HIV-positive (Hammett, 1988).

3.1.1. Notification of HIV Positive Test Results

As shown in Table 5, in the 2005 survey far fewer state/federal systems reported notifying correctional management staff or correctional officers of inmates' HIV status than was the case in 1996–97. By contrast, in city/county systems, the percentage of systems notifying correctional management staff or correctional officers was a distinct minority in 2005, as it was in 1996-97.

Table 5

Policy/Practice Regarding Notification of HIV Positive Test Results

	State & Federal		City & County	
Policy/Practice is to Notify:	**2005 (n = 47)**	**1997 (n=51)**	**2005 (n=33)**	**1997 (n=41)**
Inmate	94%	100%	85%	97%
Correctional management staff	17%	37–41%[a]	15%	15%
Correctional officers	2%	12%	9%	7%
Parole or Community Corrections Agency	9%	29%	0%	0%
Spouses/Sex partners	11%	31%	0%	15%
Needle sharing partners	4%	27%	0%	10%
Local or state health department	91%	90%	85%	70%

[a] The 1997 Survey asked about "central–level" and "facility-level" management staff.

3.2. Sexually Transmitted Diseases (STD) Testing Policies

3.2.1. Results of STD Testing

As shown in Table 6, there was a substantial increase from 1996–1997 to 2005 in the percentage of state/federal systems that reported doing mandatory or routine syphilis testing of incoming inmates (28% to 76%), but some decline among city/county jail systems (41% to 25%). Most of the other jail systems either offered syphilis testing or provided it on request. This pattern indicates that many jail systems are not taking advantage of the opportunity to identify and treat syphilis in their rapid-turnover inmate populations. The same may be true for gonorrhea and chlamydia, as shown in tables HIV7 and HIV8, with again even fewer jail systems reporting mandatory or routine testing. Indeed, a minority of all responding correctional systems report mandatory or routine testing for gonorrhea or chlamydia with the majority relying on some form of voluntary testing. Almost a third of responding state/federal systems had no policies regarding gonorrhea or chlamydia testing. By contrast, 72 percent of state/federal systems, but only 13 percent of city/county systems, reported mandatory routine testing for pelvic inflammatory disease (Table 9). This is an area where public health departments could also become involved by coming into facilities to conduct STD screening directly, providing test kits, processes tests or conducting training.

Table 6

Syphilis Testing Policies For All Inmates At Intake

	State & Federal		City & County	
	2005 (n = 47)	1997 (n=51)	2005 (n=33)	1997 (n=41)
Mandatory	33%	28%[a]	9%	41%[a]
Routine	43%		16%	
Offered	7%		31%	
On Request	7%		31%	
No Policy	7%		0%	
No Testing	2%		13%	
Total	99%		100%	

[a] These were the only categories of testing asked about on the 1997 Survey.

Table 7

Gonorrhea Testing Policies For All Inmates At Intake

	State & Federal		City & County	
	2005 (n = 47)	1997 (n=51)	2005 (n=33)	1997 (n=41)
Mandatory	7%	28%[a]	4%	7%[a]
Routine	10%		0%	
Offered	20%		46%	
On Request	27%		39%	
No Policy	30%		0%	
No Testing	7%		14%	
Total	101%		103%	

[a] These were the only categories of testing asked about on the 1997 Survey.

Table 8

Chlamydia Testing Policies For All Inmates At Intake

	State & Federal		City & County	
	2005 (n = 47)	1997 (n=51)	2005 (n=33)	1997 (n=41)
Mandatory	7%	20%[a]	0%	4%[a]
Routine	13%		4%	
Offered	20%		50%	
On Request	23%		31%	
No Policy	30%		0%	
No Testing	7%		15%	
Total	100%		100%	

[a] These were the only categories of testing asked about on the 1997 Survey.

Table 9

PID Testing Policies For All Inmates At Intake 2005

	State & Federal (n=47)		City & County (n=33)	
	n	%	n	%
Mandatory	9	20%	1	3%
Routine	24	52%	3	10%
Offered	2	4%	3	10%
On Request	4	9%	4	14%
No Policy	5	11%	5	17%
No Testing	2	4%	13	45%
Total	46	100%	29	99%

3.2.2. Results of STD Testing

Table 10 shows summary results of mandatory and routine inmate testing for syphilis, broken down by type of correctional system and gender. The percentage of systems with mandatory or routine syphilis testing that were able or willing to report aggregate results varied by STD and type of system, and were generally low, so the results are not generalizable behind the reporting systems. Only 27 percent of state/federal systems with mandatory or routine syphilis testing (10/36) reported aggregate results and all but one of these systems had positivity rates below 5 percent. The other reported a rate between 5 percent and 10 percent. One-third of the city/county jail systems with mandatory or routine syphilis testing (3/9) reported aggregate results and all of these had positivity rates below 5 percent. While reported syphilis positivity rates were similar to figures reported to the 1996–1997 survey and while they were generally low for correctional settings, five percent prevalence in the community would be considered high.

Table 10

Results of Mandatory/Routine Syphilis Testing 2005

	Males		Females		Total	
State/Federal (n=47)						
Percent Positive	**n**	**%**	**n**	**%**	**n**	**%**
0%	1	2	1	2	1	2
<5%	8	17	10	21	11	23
5–9.9%	1	2	0	0	0	0
10–20%	0	0	0	0	0	0
>20%	0	0	0	0	0	0
Did not report/missing	26	55	25	53	24	51
No mandatory/routine screening	11	23	11	23	11	23
Total	47	100	47	100	47	100
City/County (n=33)						
Percent Positive						
0%	0	0	0	0	0	0
<5%	3	9	1	3	4	12
5–9.9%	0	0	2	6	0	0
10–20%	0	0	0	0	0	0
>20%	0	0	0	0	0	0
Did not report/missing	6	18	6	18	10	30
No mandatory/routine screening	24	73	24	73	19	58
Total	33	100	33	100	33	100

Only 10 percent (2/21) of state/federal and no city/county systems with mandatory or routine gonorrhea testing reported results. One of these prison systems was below 5 percent and the other was between 5 percent and 10 percent (data not shown).

Sixty percent of state/federal systems with mandatory or routine chlamydia testing (3/5), and only one city/county system, reported aggregate results. Of the three state/federal systems, two reported prevalences greater than 10 percent, and the only reporting city/county system was between 5 percent and 10 percent (data not shown).

Only two state/federal systems and no city/county systems reported data on mandatory or routine testing for non-specific urethritis/cervicitis. Both of these systems reported rates above 20 percent (data not shown).

The reliability of the figures reported to the survey is unknown. Salient points, however, remain the relatively small numbers of systems, and particularly jail systems, that conduct mandatory or routine STD testing and, of these, the low percentages able or willing to report aggregate results.

4. HIV and STD Education and Prevention Programs

As in previous surveys, we asked a series of questions about HIV and STD prevention programs. Table 11 gives the proportions of state/federal and city/county systems from 1992 to 2005 in which at least one facility offered instructor-led HIV education, peer-led HIV education, multi-session HIV prevention counseling, audiovisual materials on HIV, and written materials on HIV. Instructor-led HIV education continues to be offered in most systems, although the proportion of state/federal systems dropped from 94 percent to 82 percent between 1996–1997 and 2005. Thirty-four percent of state/federal systems and 50 percent of city/county systems said they provided instructor led HIV education in all of their facilities (data not shown). The results were similar for instructor-led STD and hepatitis education.

Table 11

HIV Education and Prevention Programs for Inmates, 1992–2005

	Percentage of State/Federal Prison Systems Providing in at Least One Facility				Percentage of City/County Jail Systems Providing in at Least One Facility			
Programs	1992 (n = 51)	1994 (n = 51)	1997 (n = 51)	2005 (n = 47)	1992 (n = 51)	1994 (n = 51)	1997 (n = 51)	2005 (n = 33)
Instructor-led education	86%	75%	94%	82%	58%	62%	73%	75%
Peer-led programs	33%	35%	41%	41%	10%	7%	7%	30%
Pre-/posttest counseling	N/A	N/A	96%	N/A	N/A	N/A	93%	N/A
Multisession prevention counseling	N/A	N/A	59%	48%	N/A	N/A	41%	59%
Audiovisual materials	96%	88%	84%	84%	90%	66%	78%	58%
Written materials	96%	94%	96%	100%	71%	72%	90%	81%

Sources: NIJ/CDC surveys.

The percentage of state/federal systems offering peer-led HIV education remained the same between 1996–1997 and 2005, while it increased sharply for city/county systems (from 7% percent to 30%). However, only 2 percent of state/federal systems and 13 percent of city/county systems reported providing peer-led programs in all of their facilities (data not shown).

A smaller percentage of state/federal systems offered multi-session HIV prevention counseling in 2005 compared to 1996–1997 (48% v. 59%), but this percentage increased to 59 percent among city/county systems. Thus, less that half of state/federal systems offer this more intensive intervention and only 7 percent offer it in all their facilities.

Audio-visual and written materials on HIV prevention are provided by a number of systems: 42 percent of both state/federal and city/county systems said they provide audio-visual programs on HIV/STDs in all facilities, and more than half of both types of systems reporting the provision of written materials in all of their facilities.

The low coverage of some types of programs, particularly peer-led education and multi-session prevention counseling, within correctional systems results in very low percentages of systems considered to provide comprehensive HIV and STD prevention programs. This is defined as providing all of the following in all of the system's facilities: instructor-led education; peer-led education; and multi-session prevention counseling. In 1996–1997, 10 percent of state/federal systems and 5 percent of city/county systems met this test; in 2005, the percentages were down to 2 percent of state/federal systems and 6 percent of city/county systems (data not shown). These results may indicate a reduced emphasis on the more intensive forms of HIV prevention programs in correctional facilities. This is regrettable, given the continued disproportionate burden of HIV and other infectious diseases among correctional inmates and releasees.

4.1. Condom Availability

As in 1996–1997, only a very small number of systems (1 responding state/federal system and 3 responding city/county systems) reported in 2005 that they make condoms available to inmates for use within their facilities. Based on other information, we believe that a total of two state/federal systems and five site/county systems have some form of condom availability for inmates. Those facilities that do provide condoms do so on a "targeted" basis (e.g., to "vulnerable populations" only), or through a sick call request process. No US system offers condom distribution to their general population.

5. Housing of HIV-positive Inmates

Comparing the surveys conducted in 1996–1997 and 2005, a larger percentage of state/federal systems reported housing inmates with asymptomatic HIV and AIDS in the general population with no restrictions while smaller percentages reported case-by-case determination of housing. By contrast, these percentages remained generally consistent across the two surveys for responding city/county systems (Table 12).

Table 12

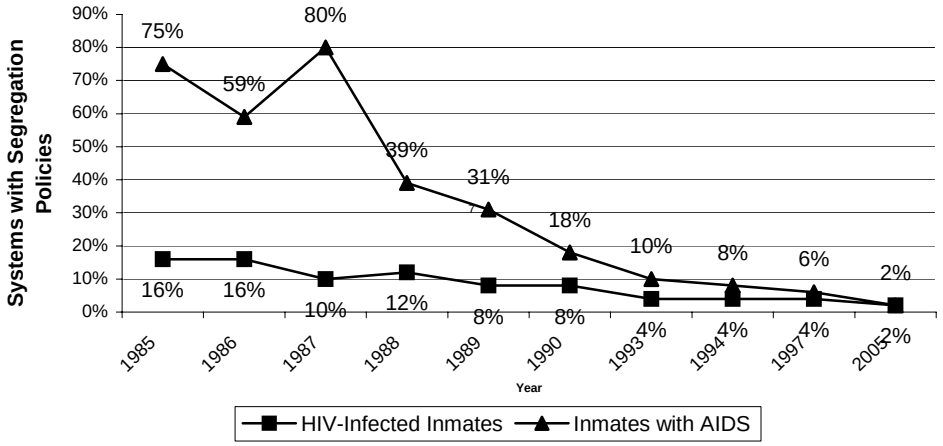
Housing Policies

	State & Federal				City & County			
	HIV		AIDS		HIV		AIDS	
	2005 (n=47)	1997 (n=51)	2005 (n=47)	1997 (n=51)	2005 (n=33)	1997 (n=47)	2005 (n=33)	1997 (n=47)
General Population								
No restrictions	80%	61%	60%	33%	75%	78%	27%	24%
Precautionary measures	2%	2%	2%	2%	0%	0%	0%	2%
All Permanently Segregated	2%	4%	2%	6%	0%	5%	3%	5%
Case by Case Determination	15%	33%	37%	59%	25%	17%	70%	68%
Total	99%	100%	101%	100%	100%	100%	100%	99%

As shown in Figure 2, the trend since the NIJ/CDC surveys began in 1985 has been away from residential segregation of inmates known to be infected with HIV and AIDS in state/federal prison systems, although there appears to have been an increase of one state system with a segregation policy between 1996 and 2005. This general trend away from segregation policies, in turn, reflects the declining belief that segregation represents an effective and justifiable strategy for preventing HIV transmission or of facilitating the delivery of HIV treatment. Increasingly, correctional systems, like the larger community, have come to realize that inmates with HIV disease can and should be presumptively housed in the general population.

Figure 2

Decline of Segregation Policies in State/Federal Systems 1985–2005 (n=51)



Note: 2005 total includes three state systems that they did not respond to 2005 survey but are known to have mandatory testing.

6. Delivery of Health Care Services

As shown in Table 13, more than two-thirds of responding state/federal systems (70%) and just under two-thirds of city/county systems (64%) contract out some or all of their health services. Of state/federal systems with contracted health services, 61 percent include in the contracts specific requirements or for HIV testing and treatment, but health services contracts in only 29 percent of city/county systems include such requirements. Only a very small number of systems in either category have separate capitation rates for inmates with HIV in their health services contracts.

Table 13

Systems that Contract for Health Care Services 2005

	State & Federal (n=47)		City & County (n=33)	
	n	**%**	**N**	**%**
No	14	30	12	36
Yes	33	70	21	64
Contract Includes Specific Requirements For HIV Testing and Treatment				
Included in Contract	20	61%	6	29%
HIV testing	*15*	*75%*	*6*	*100%*
HIV treatment	*11*	*55%*	*6*	*100%*
Neither	*2*	*10%*	*0*	*0%*
Not Included in Contract	6	18%	7	33%
Did Not Report	7	21%	8	38%
Contract Includes Separate Capitation Rates For Inmates With HIV				
Included in Contract	1	3%	1	5%
Not Included in Contract	26	79%	14	67%
Did Not Report	6	18%	6	29%

7. HIV Treatment

7.1. HIV Treatment Types

The 1996–1997 Survey was conducted just as highly active anti-retroviral treatment (HAART) was becoming available, so only a limited set of questions on this subject was included. These showed that at least 90 percent of both state/federal and city/county systems were making anti-retroviral treatment available to inmates. Additional research conducted by Gajewski-Verbanac (1999), however, showed that many correctional systems were using second-line or non-recommended treatment regimens.

The 2005 survey shows that all responding state/federal and city/county systems make HAART available. Less than a third of the systems in each category have specialty care facilities for HIV treatment, while most report having specialty care available in all facilities (Table 14). Table 15 shows that, if anything, many correctional systems report having more aggressive criteria for initiating HAART, in terms of CD4 counts, than recommended in national treatment guidelines. Fifty-nine percent of responding city/county systems and 71 percent of state/federal systems report initiating treatment based on CD4 counts of 300 or higher; the national guidelines give 200 as the level normally indicating treatment.

Table 14

Specialty Care Facilities 2005

	State & Federal (n=47)		City & County (n=33)	
	n	%	n	%
Specialty care facilities	14	30	8	25
No, specialty care available in all facilities	32	68	22	69
No, specialty care not available in any facility	1	2	2	6
Not applicable – no HIV+ inmates	0	0	0	0
Total	47	100	32	100

Table 15

Criteria for HAART 2005

	State & Federal (n=47)		City & County (n=33)	
	n	%	n	%
No HAART available	0	0	0	0
Symptoms suggesting HIV disease of HIV-related opportunistic infections	24	51	14	42
AIDS diagnosis	28	60	16	48
Asymptomatic, CD4 count*	27	57	18	55
Asymptomatic, HIV viral load*	24	51	16	48
Patient willingness/readiness for treatment	27	57	19	58
Clinician's judgment of likelihood of patient adherence	21	45	17	52
Other	11	23	11	33
Decisions made by clinician on a case by case basis	23	59	19	58
* For those who use CD4 count, threshold:				
200	7	29	8	41
300–350	2	8	2	12
350 or higher	15	63	8	47

As shown in Table 16, most systems offer a range of anti-retroviral regimens, but the range of available regimens tends to be broader in state/federal prison systems than in city/county jail systems.

Table 16

Types of HIV Treatment Offered in System 2005

	State & Federal (n=47)		City & County (n=33)	
	n	%	N	%
Protease inhibitor based (NNRTI-sparing)	34	72	17	52
NNRTI-based (PI sparing)	32	68	17	52
Triple NRTI (NNRTI and PI sparing)	30	64	15	45
Other regimens	14	30	6	18

7.2. Administration of HIV Medication

In terms of administration of medications, as shown in Table 17, state/federal systems tend to employ a combination of "pill line"—inmates must come to a central location to receive all their medications—and "keep on person" (KOP)—inmates are permitted to keep supplies of certain medications in their cells—policies (41%) or pill line only (33%), with another 18 percent have only KOP policies. A larger percentage of responding city/county systems (68%) employ only pill line administration, with 26 percent using a combination of pill line and KOP and 6 percent KOP only. On the other hand, among systems employing pill line, a larger share of city/county systems report employing direct observation including inspection

of mouth (71%) than state/federal systems (48%). Another 43 percent of state/federal systems report direct observation without inspection of the mouth.

Table H17

Policy for Administration of HIV Medications 2005

	State & Federal (n=47)		City & County (n=33)	
	n	%	n	%
Pill line/med window	13	33	21	68
KOP (keep on person)	7	18	2	6
Combination DOT/KOP	16	41	8	26
No system-wide policy	3	8	0	0
Total	39	100	31	100
For systems with a pill line				
Directly observed *with* inspection of mouth	11	48	17	71
Directly observed *without* inspection of mouth	10	43	7	29
Not directly observed	2	9	0	0
Total*	23	100	24	100

* Ns exceeded N for responses to H15 due to the "Combination" response.

As shown in Table 18, in both state/federal and city/county systems, the most common methods of monitoring inmates' adherence to HIV medications were pharmacy records and patient self-report with smaller percentages employing pill counts and other methods.

Table H18

Measurement of Adherence to HIV Regimens 2005

	State & Federal (n=47)		City & County (n=33)	
	n	%	n	%
Pill counts	16	34	7	21
Pharmacy records	30	64	21	64
Patient self-report	30	64	15	45
Medical Administration Records (MARs)	3	6	3	6
Lab Tests	5	11	1	2
DOT	1	2	4	9
Other clinical monitoring	3	6	4	9
Other	2	4	0	0
No system-wide policy	10	21	2	6

7.3. Payment for HIV Treatment

Table 19 shows that 81 percent of state/federal systems fund HAART from their own budgets and 23 percent report supporting the medications from health service contractors' budgets (some multiple responses were allowed for this question). Among responding city/county systems, 42 percent report funding HIV drugs from their own budgets.

Table 19

Payment for HIV Medications 2005

	State & Federal (n=47)		City & County (n=33)	
	n	%	n	%
Directly through correctional health services budget	38	81	14	42
Through contracted health provider's budget	11	23	9	27
Other	3	6	6	18

8. Support Services and Discharge Planning for HIV-Positive Inmates

8.1. Support Services for HIV-Positive Inmates

Table 20 shows that smaller percentages of correctional systems were providing support services for HIV-positive inmates in 2005 than was true in 1996–1997. In state/federal systems, the share providing peer support groups declined from 33 percent to 30 percent, support groups provided by correctional staff dropped from 63 percent to 36 percent, and support groups provided by outside organizations dropped from 67 percent to 28 percent. In city/county jail systems the percentage providing peer support groups remained very small and there were declines in the other two categories.

Table 20

Support Services Provided Within Correctional Facility

	State & Federal		City & County	
	2005 (n=47)	1997 (n=51)	2005 (n=33)	1997 (n=41)
Peer counseling groups/support groups	30%	33%	9%	5%
Counseling/support groups provided by correctional staff	36%	63%	15%	32%
Counseling/support groups provided by outside organizations	28%	67%	45%	61%
Mental health services (individual or group) by credentialed professionals	94%		79%	
Case management	26%		33%	

8.2. Discharge Planning Services for HIV-Positive Inmates

The percentage of state/federal systems offering any type of discharge planning for HIV+ inmates (from simple referrals to intensive case management) remained virtually the same in 2005 (87%) as in 1996–1997 (92%), as was also the case in responding city/county systems (76% in 1996–1997, 70% in 2005) (data not shown). We also asked in 2005 about discharge planning for inmates with TB and other infectious diseases and found that only slightly smaller percentages of systems provide discharge planning for inmates with TB disease (81%) and latent TB infection (68%) than for inmates with HIV disease. Even fewer offer discharge planning for inmates with hepatitis. More than 70 percent of state/federal systems reported providing discharge planning for all inmates with serious medical conditions while less than half of city/county systems report this policy.

As shown in Table 21, a majority of city/county systems report that they begin discharge planning for inmates with HIV at intake, because of the short average length of stay in jails. In state/federal systems, discharge planning typically begins about two to three months prior to release.

Table 21

Mean and Median Number of Days Prior to Release that DP Starts for HIV-Positive Inmates

	State & Federal (n=47)		City & County (n=33)	
	n	%	n	%
At intake	6	13	17	52
	# Systems	**# Days**	**# Systems**	**# Days**
If not at intake, mean number of days	23	74.7	2	7
If not at intake, median number of days	23	60	2	7

Table 22 summarizes community-based services for which HIV-positive releasees receive referral lists, referrals to specific providers, and specific appointments with providers. The largest percentages of both state/federal and city/county systems provide referral lists and make specific appointments for releasees to obtain HIV medical services, followed generally by mental health care, case management, substance abuse treatment, and housing. Overall, the level and breadth of linkages is more limited for people being released from city/county jails than state/federal prisons.

Table 22

Discharge Planning Connections to Community-based Services 2005

	State & Federal (n=47)					
	Referrals		Referrals to Specific Providers		Make Specific Appointment	
	n	%	n	%	n	%
Medical care	30	64	17	36	26	55
Cash benefits	17	36	6	13	11	23
Case management	21	45	13	28	13	28
Substance abuse treatment	18	38	8	17	7	15
Mental health care	22	47	10	21	15	32
Housing	19	40	9	19	12	26
Employment services	14	30	8	17	3	6
Education or vocational training	16	34	7	15	4	9
Basic needs	17	36	7	15	7	15
Other	2	4	1	2	3	6

	City & County (n=33)					
	Referrals		Referrals to Specific Providers		Make Specific Appointment	
	n	%	n	%	n	%
Medical care	17	52	10	30	11	33
Cash benefits	5	15	4	12	4	12
Case management	13	39	7	21	6	18
Substance abuse treatment	16	48	8	24	8	24
Mental health care	16	48	8	24	9	27
Housing	12	36	7	21	7	21
Employment services	7	21	2	6	2	6
Education or vocational training	7	21	2	6	2	6
Basic needs	13	39	2	6	3	9
Other	0	0	0	0	0	0

References

Arriola KR, Braithwaite RL, Kennedy S et al. A collaborative effort to enhance HIV/STI screening in five county jails. Public Health Rep. 2001;116:520-29.

Centers for Disease Control and Prevention. STDs in persons entering correctional facilities. Special focus profiles: STD Surveillance, 2002. Atlanta: Centers for Disease Control and Prevention, 2003.

Desai AA, Latta ET, Spaulding A, Rich JD, Flanigan TP. The importance of routine HIV testing in the incarcerated population: the Rhode Island experience. AIDS Educ Prev. 2002;14(suppl B):45–52.

Gajewski-Verbanac. Abstract 600, 39th Interscience Conference on Antimicrobial Agents (ICAAC), San Francisco, September 26–29, 1999.

Glaser J, Greifinger RB. Correctional health care: a public health opportunity. Ann Intern Med. 1993;118:139-45.

Hammett TM. HIV/AIDS and other infectious diseases among correctional inmates: transmission, burden, and an appropriate response. Am J Public Health. 2006;96:974-78.

Hammett TM, Harmon MP, Rhodes W. The burden of infectious disease among inmates of and releasees from U.S. correctional facilities, 1997. Am J Public health. 2002;92:189-94.

Hammett T, Moini S. AIDS in Correctional Facilities: Issues and Options. 3rd edition. Washington, National Institute of Justice, 1988.

Kahn RH, Scholl DT, Shane SM et al. Screening for syphilis in arrestees: usefulness for for community-wide syphilis surveillance and control. Sex Transm Dis. 2002;29:150-56.

Kraut-Becher JR, Gift TL, Haddix AC et al. Cost-effectivness of universal screening for Chlamydia and gonorrhea in U.S. jails. J Urban Health. 2004;81:453-71.

Maruschak LM. HIV in Prisons, 2004. Washington, Bureau of Justice Statistics, NCJ 213897, November 2006.

Mertz KJ, Schwebke JR, Gaydos CA et al. Screening women in jails for chlamydial and gonococcal infection using urine tests: feasibility, acceptability, prevalence, and treatment rates. Sex Transm Dis. 2002;29:271-76.

Wormser G, Duncanson F, Krupp L et al. Acquired Immune Deficiency Syndrome (AIDS) in prison inmates—New York, New Jersey. MMWR Morb Mortal Wkly Rep. 1983;31:700-01.

Wormser GP, Krupp LP, Hanrahan JP et al. Acquired Immunodeficiency Syndrome in male prisoners: new insights into an emerging syndrome. Ann Intern Med. 1983;98:297-303.

Appendix 1: Survey Instrument

See attached file.

Appendix 2: 50 Largest Jails in 1996-97 and 2005

Table A2.1:

1996-97 and 2005 50 Largest Jails Sample

1996-97 Survey	2005 Survey[a]
Los Angeles County Jail or Jail System	Los Angeles County Jail or Jail System
New York City Jail or Jail System	New York City Jail or Jail System
Cook County Jail or Jail System	Cook County Jail or Jail System
Harris County Jail or Jail System	Maricopa County Jail or Jail System
Dallas County Jail or Jail System	Harris County Jail or Jail System
Dade County Jail or Jail System	Dade County Jail or Jail System
San Diego County Jail or Jail System	Dallas County Jail or Jail System
Orleans Parish Jail or Jail System	Philadelphia City Jail or Jail System
Maricopa County Jail or Jail System	Orleans Parish Jail or Jail System
Shelby County Jail or Jail System	San Bernardino County Jail or Jail System
Orange County CA Jail or Jail System	Orange County CA Jail or Jail System
Philadelphia City Jail or Jail System	Broward County Jail or Jail System
Tarrant County Jail or Jail System	San Diego County Jail or Jail System
Santa Clara County Jail or Jail System	Shelby County Jail or Jail System
San Bernardino County Jail or Jail System	Orange County FL Jail or Jail System
Alameda County Jail or Jail System	Santa Clara County Jail or Jail System
Bexar County Jail or Jail System	Alameda County Jail or Jail System
Broward County Jail or Jail System	Baltimore County Jail or Jail System
Orange County FL Jail or Jail System	Hillsborough County Jail or Jail System
Baltimore County Jail or Jail System	Sacramento County Jail or Jail System
Sacramento County Jail or Jail System	Bexar County Jail or Jail System
Jacksonville County Jail or Jail System	Tarrant County Jail or Jail System
Wayne County Jail or Jail System	County of Milwaukee Jail or Jail System
County of Milwaukee Jail or Jail System	Riverside County Jail or Jail System
Hillsborough County Jail or Jail System	District of Columbia - CTF
Fulton County Jail or Jail System	Jacksonville County Jail or Jail System
PRINCE GEORGE'S COUNTY	Davidson County Jail or Jail System
King County Jail or Jail System	Pinellas County Jail or Jail System
Riverside County Jail or Jail System	**MARION COUNTY JAIL OR JAIL SYSTEM**
Palm Beach County Jail or Jail System	De Kalb County Jail or Jail System
San Francisco City & County Jail or Jail System	Essex County Jail or Jail System
Kern County Jail or Jail System	Franklin County Jail or Jail System