IMPLEMENTING HIV TESTING IN CORRECTIONAL FACILITIES

Introduction

Section I: Background: HIV AIDS in Correctional Settings
A. Incarcerated Population at midyear 2006
B. HIV Testing policies and HIV/AIDS in US Prisons
C. Survey of Prison Inmates
D. Survey of Jail Inmates

Section II: Opt-out HIV Screening in Correctional Medical Clinics

Introduction
A. Benefits of adopting an opt-out HIV screening program
B. Tips for implementing opt-out HIV screening
C. Alternative approaches to routine opt-out HIV screening
   1. Risk-based screening
   2. Clinical screening
   3. Demographic screening
   4. Custody-based screening
   5. Multiple approaches
D. Repeat screening

Section III: Inmate Privacy and Confidentiality of HIV-Related Information in Correctional Settings

Introduction
Recommendations for ensuring privacy and confidentiality
1. Policies and procedures
2. Confidentiality and privacy considerations
3. Suggestions for providing HIV services
4. Medical records
5. Special recommendations for adolescents confined in adult correctional facilities

Section IV: HIV Testing Procedures

Introduction
A. Conventional HIV testing algorithm
B. Additional HIV tests currently available
   1. Oral Fluid HIV test
   2. Rapid HIV testing
C. Evolving rapid testing strategies
D. Other considerations for HIV testing in correctional settings
E. Interpretation of test results
F. Providing HIV testing results
   1. Principles of providing HIV test results
   2. Options to consider when providing HIV test results
   3. Prevention counseling
   4. Providing support for individuals who test positive for HIV

Section V: Linkage to Services

A. Immediate clinical management issues
   1. Medical evaluation
   2. Immunizations for inmates infected with HIV
   3. Special circumstances
B. Linkage to appropriate medical care
   1. During incarceration
   2. Upon release from custody
C. Linkage to HIV Case Management Services
D. Provision of HIV medications
E. Partner Services (PS) and disclosure

Section VI: Challenges and Solutions

A. Challenges and potential solutions when implementing routine HIV screening during a medical evaluation
   1. Challenges that could increase inmate refusal for routine testing
   2. Challenges associated with increased number of tests conducted

Section VII: HIV/AIDS reporting

1. Why HIV/AIDS case reporting is critical
2. HIV/AIDS case reporting requirements
3. Initiating HIV/AIDS case reporting

Section VIII: References

Section IX: Appendices

A. Glossary
B. Clinical indications of HIV/AIDS
C. Useful resources
D. Federal Bureau of Prison criteria for testing
IMPLEMENTING HIV TESTING IN CORRECTIONAL SETTINGS

Introduction
The implementation of HIV testing in correctional settings is an important consideration in reducing the annual number of new HIV infections occurring in the United States. This document provides background statistics on HIV/AIDS in correctional facilities, and covers issues relating to inmate privacy and confidentiality, opt-out HIV screening in correctional medical clinics, HIV testing procedures, and HIV/AIDS case reporting.

SECTION I. BACKGROUND: HIV/AIDS IN CORRECTIONAL SETTINGS
The issue of HIV/AIDS in correctional settings has received much research attention. This section contains statistics from some of the larger research projects.

A. Incarcerated Populations at midyear 2006
The Bureau of Justice Statistics (BJS) obtains data on State and Federal inmates from the department of corrections in 50 States and the Federal Bureau of Prisons. BJS also obtains data on local jails through a complete census or annual survey. At mid-year 2006 BJS reported:¹

- Approximately 2.2 million persons were incarcerated;
- 1,556,518 million inmates were under the jurisdiction of State or Federal prisons
- 766,010 inmates were held in jails; and,
- 91% of the prison and jail inmates were men.
- Between mid-year 2005 and mid-year 2006, the number of women under the jurisdiction of State and Federal prison authorities rose 4.6 percent (to 111,403), while the number of men rose 2.7 percent (to 1,445,115).
- At mid-year 2006, 40% of inmates in the custody of State or Federal prisons or in local jails were black and 20% were Hispanic.

B. HIV testing and HIV/AIDS policies in US Prisons
The Bureau of Justice Statistics (BJS) collects data on HIV testing policies and HIV infection among State and Federal inmates from records submitted by each State Department of Corrections and by the Federal Bureau of Prisons. Some correctional HIV testing policies are determined by state or federal statutes. Reporting of HIV/AIDS cases from the 50 States and the Federal Bureau of Prisons is by infection type, meaning that data are collected separately for those who are asymptomatic, symptomatic, or confirmed with AIDS. These data are also provided separately by gender. BJS reported the following regarding HIV testing policies and HIV/AIDS cases among State and Federal inmates at year-end 2005:²

- Less than half of State prison systems (22) reported testing all inmates for HIV at admission, while in custody, or upon release.
- Forty-six States and the Federal Bureau of Prisons reported testing inmates if they had HIV-related symptoms.
- Forty-three States and the Federal system tested inmates upon request.
- Thirty-nine States and the Federal system tested inmates after they were involved in an incident in which an inmate was exposed to possible HIV transmission.
- Thirteen States and the Federal system tested inmates who belonged to specific “high-risk” groups.
- 22,480 State and Federal prison inmates were known to be infected with HIV or
to have confirmed AIDS (1.7% of the total custody population).

- Among State inmates an estimated 1,935 (2.4%) of females and 18,953 (1.8%) of males were HIV-infected or had confirmed AIDS.
- From year-end 1999 to year-end 2005, the number of inmates who were infected with HIV or had confirmed AIDS decreased by 13%.
- In each year from 1999 to 2005, the prevalence of confirmed AIDS among the prison population was between 2.7 and 4.8 times higher than in the general U.S. population.

C. Survey of Prison Inmates

BJS conducted its most recent Survey of Inmates in State and Federal Correctional Facilities in 2004.\(^3\) In this nationally representative sample of the prison population, inmates were asked if they were ever tested for HIV, if they had been tested since their admission to prison, and the results of the test. In the 2004 survey

- 69% of State inmates and 77% of Federal inmates reported being tested for HIV since admission and reported a result.
- Of those tested since admission, 1.9% of State inmates, and 1.1% of Federal inmates reported being diagnosed with HIV infection.
- Among those tested for HIV, African American (2.0%) and Hispanic (1.8%) State inmates reported higher rates of HIV infection than white (1.0%) inmates in 2004.

D. Survey of Jail Inmates

BJS conducted its most recent Survey of Inmates in Local Jails in 2002.\(^4\) This survey collects data on HIV infection and testing in jails among a nationally representative sample of jail inmates. Jail inmates were asked if they were ever tested for HIV, if they had been tested since their admission to jail, and the results of the test. In the 2002 survey,

- 18.5% of inmates reported being tested for HIV since admission and reported a result.
- Of those tested since admission to jail, 2.5% reported being diagnosed with HIV.

Based on these statistics, it is apparent that the incarcerated population is an important population for HIV testing services.
SECTION II: OPT-OUT HIV SCREENING IN CORRECTIONAL MEDICAL CLINICS

There are benefits to the community as well as the individual when a person learns of their HIV infection. Many people reduce their HIV risk behaviors to prevent transmission to their partners after being diagnosed with HIV infection, and they can begin the process of accessing care, treatment and prevention services. Previous research has shown that men with a history of incarceration may avoid HIV testing while in the community, and that inmates are more likely to receive HIV testing when prisons routinely offer HIV testing to everyone during the intake medical evaluation as opposed to prisons that rely on inmate-initiated requests for testing. Recent studies demonstrate that voluntary HIV testing is as cost-effective as other screening programs in health-care settings in which HIV prevalence is as low as 0.1%. Since many incarcerated populations have a prevalence of undiagnosed HIV infection >1%. HIV screening in prisons and jails is a highly cost-effective public health strategy. With opt-out HIV screening, the inmate is informed that an HIV test will be performed unless he or she declines the test. This process preserves public health and medical staff resources and greatly increases the proportion of inmates tested due to the streamlined consent and counseling processes, opt-out screening helps normalize HIV testing by making it a routine instead of an exceptional aspect of healthcare. Opt-out HIV screening has been used in the Wisconsin prison system since at least 1986 and Rhode Island system since 1988 and may be feasible and acceptable in many other correctional settings. Opt-out HIV screening has the potential to identify many more HIV-infected individuals who are currently unaware of their HIV infection.

A. Benefits of adopting an opt-out HIV screening program

- Increases diagnosis of HIV infection;
- Preserves staff resources by streamlining the process;
- Reduces stigma associated with testing;
- Potentially diagnoses HIV infection earlier for the inmate; and
- Improves access to HIV clinical care and prevention services.

B. Tips for implementing opt-out HIV screening

- HIV testing should be voluntary and free from coercion;
- Screening should be performed only after notifying the inmate that an HIV test will be performed unless he or she declines (opts-out);
- General informed consent or other legal authorization for medical care should be considered sufficient to encompass informed consent for HIV testing;
- Separate written consent should not be required for HIV testing, unless required by state law; and
- Appropriate clinical care and support services to inmates diagnosed with HIV infection should be provided.

C. Alternative approaches to routine opt-out HIV screening

While opt-out HIV screening during a routine medical assessment is the CDC-recommended optimal approach to providing HIV testing, the logistics, security, and financial demands of routine opt-out HIV screening may make it necessary to implement alternative approaches. For example, the constant inflow and rapid turn over of inmates in jails may make it difficult for some jails to implement universal screening for all inmates who are booked into their systems.
Recognizing the need for alternative approaches, this section is provided as a guide to assist correctional facilities in determining the approach that will efficiently identify the most previously undiagnosed cases of HIV among their inmate population, while minimizing the burden to correctional staff and resources. Opt-out testing should still remain the ultimate goal when possible.

1. Risk-based screening
Risk-based screening would routinely offer HIV screening to inmates with one or more of the following HIV behavioral risk characteristics:

- Injection drug user (IDU);
- Men who have sex with men (MSM);
- Sex with an IDU, MSM, or HIV-infected partner;
- Multiple sexual partners;
- History of exchanging sex for money, drugs or other goods;
- History of another sexually transmitted infection (STI).

When implementing this strategy, the medical evaluation process should include risk-based questions to determine which inmates should be routinely offered screening. Medical staff must be trained in eliciting sensitive information in a non-judgmental manner.

Recent studies in jail settings, however, indicate that risk-based or opt-in screening strategies may still miss identifying a significant number of HIV-infected persons. Two recent studies indicated that substantial portions of previously undiagnosed HIV-infected inmates did not report any HIV risk factors when screened. In a study by Harawa, et al.,\textsuperscript{13} the prevalence of HIV infection did not differ between females responding yes to one or more HIV risk indicators and those responding no to all risk indicators. In a study by MacGowan et al.,\textsuperscript{14} 42% of the jail inmates who were newly diagnosed with HIV reported none of the following HIV risk behaviors: MSM; injection drug use (IDU); sex in exchange for drugs, money or other items; history of an STI; having been sexually assaulted, and sex with a partner who injected drugs, was HIV-positive, or was an MSM.

2. Clinical screening
A number of clinical indicators may indicate higher risk of HIV co-morbidity or have severe implications if HIV infection goes undiagnosed and untreated. It has been estimated that 16% to 41% of prison inmates had serologic evidence of hepatitis C (HCV) infection and 13% to 47% had serologic markers for hepatitis B (HBV).\textsuperscript{15} Both HBV and HCV may be indicative of potentially risky blood-borne or sexual exposures increasing the likelihood of possible HIV coinfection. Treatment for HCV and HBV may need to be modified in the setting of HIV and therefore, diagnosis of HIV infection is of utmost importance. Individuals with other active STIs are also at risk for HIV co-infection. There is substantial evidence that the presence of STIs increases the likelihood of both acquiring and transmitting HIV infection,\textsuperscript{16,17} and screening and treatment of STIs has been shown to lower the incidence of HIV infection.\textsuperscript{18,19} There is a strong association between risky sexual behaviors and the use of illicit drugs (especially, injection drugs,
For review only – please do not distribute

stimulants, and ecstasy) and alcohol abuse which leads to an increased risk for HIV infection.

Undiagnosed HIV infection may also cause additional complications. For example, persons co-infected with *Mycobacterium tuberculosis* (MTB) and HIV are at increased risk of progression to active TB disease and pregnant women who are infected with HIV but not diagnosed cannot take advantage of therapies that could reduce their risk of passing the virus on to their unborn child.

Clinical indicators for screening:
- Pregnancy;
- A diagnosis or history of sexually or parenterally transmitted infections (e.g., HBV or HCV, syphilis, genital herpes, gonorrhea, chlamydia, trichomonas infection);
- MTB infection or active tuberculosis;
- Track marks indicative of illicit drug injection;
- Signs or symptoms suggestive of HIV infection or acute retroviral syndrome (see Appendix 2).

3. Demographic screening
Demographic factors, which include such factors as area of residence, age, gender, and race/ethnicity, may be associated with HIV infection among incarcerated populations. AIDS rates have been reported to be higher among inmates from residential areas with high poverty rates and relatively low median household incomes compared to the general population.\(^{20, 21}\) The bulk of estimated HIV/AIDS cases in the United States involve individuals ages 35-44 years, with the next highest number of cases (and potentially a larger number of undiagnosed cases) occurring in those ages 25-34 years\(^ {22}\) available at http://www.cdc.gov/hiv/topics/surveillance/resources/reports/index.htm. The highest self-reported HIV prevalence among prison inmates involves inmates aged 35 years and older.\(^8\) In State and Federal prisons in the Southern and Northeastern United States, the HIV prevalence is 35% to 100% higher among female inmates than male inmates.\(^8\) Transgender inmates also have high HIV prevalence levels.\(^ {23, 24, 25}\)

HIV infection is also associated with race and Hispanic ethnicity; however, given many political sensitivities regarding race within both correctional and medical settings, using race or ethnicity as the sole HIV screening criterion may create barriers to implementing routine testing.

Jail and prison systems interested in using demographically based screening criteria should identify factors for targeting HIV screening based on an evaluation of epidemiology data from their incarcerated population and the residential communities which feed their custody population.

Potential demographic screening criteria:
- Residence in low-income areas/zip codes;
- Residence in known high-HIV prevalence areas/zip codes;
• Female sex;
• Age 25-44 years;
• Transgender identity.

4. Custody-based criteria for screening
Custody-based information may also help to identify inmates at risk for HIV. A few studies indicate that inmates who have been incarcerated multiple times, particularly parole offenders, are more likely to be infected with HIV than inmates who have not. Preliminary data indicate that specific criminal charges may also be associated with higher HIV prevalence levels. Analyses of data from both State and Federal prisons and specific jails indicate variations in HIV prevalence by criminal charge with HIV infection most consistently associated with property offenses and drug offenses. In a 2003-2004 study of newly arrested Los Angeles jail inmates, drug-related arrest charges were associated with undiagnosed HIV infection in female but not male inmates.

5. Multiple Approaches
Given the limitations of each of the alternatives to universal opt-out HIV screening, we suggest that incarceration systems that do not elect to implement a routine opt-out approach should collaborate with local public health entities to develop strategies for integrating multiple approaches in order to identify the greatest number of undiagnosed HIV infection. One strategy could be to routinely offer opt-out HIV testing to all inmates with HIV clinical indicators, all women under the age of 45 years, and men who report specific characteristics not based on reported risks behaviors. State and local HIV/AIDS surveillance data, information from HIV testing programs in prisons or jails in the region, and data from similar populations, including public STD clinic attendees, individuals receiving publicly funded HIV testing services, and National HIV Behavioral Surveillance data, can inform the development of alternative HIV screening strategies in correctional settings.

D. Repeat testing
It is recommended that persons at high risk for HIV (e.g., injection drug users and men who have sex with men) should be tested for HIV at least annually. In correctional facilities, this recommendation should also be followed for persons known or suspected to have engaged in drug use or sexual activity while incarcerated. Repeat HIV testing should also be available upon request to all inmates because inmates may not be forthcoming about risk behavior in prisons and medical staff may not ask about risk behaviors during incarceration.
SECTION III: INMATE PRIVACY AND CONFIDENTIALITY OF HIV-RELATED INFORMATION IN CORRECTIONAL SETTINGS.

Inmates have a right to privacy and providers have a duty to protect the confidentiality of all medical information. However, protecting confidentiality is especially challenging in correctional facilities because of the tension that exists between maintaining optimal security and safety and maintaining confidentiality of inmate medical information. Therefore, health services and custody staff must work as a team to achieve these dual goals. Further, disclosure of an inmate’s HIV status may be legally required in certain instances in accordance with the Occupational Safety and Health Administration’s Standard for Occupational Exposure to Bloodborne Pathogens (Standard Number 1910.1030 at http://www.osha.gov/pls/oshaweb/owadisp.show_document?p_table=STANDARDS&p_id=10051), and state or local laws requiring reporting to public health authorities, community corrections (e.g., parole), spouses, or sexual partners (http://www.ucsf.edu/hivcntr/StateLaws/Index.html). Facility staff should be familiar with their local and state public health confidentiality laws and incorporate them into the HIV testing program.

Recommendations for ensuring privacy and confidentiality
The following recommendations are intended to help facilities meet the challenges of protecting privacy and confidentiality while maintaining security of inmates and staff.

1. Policies and procedures
Correctional facilities should have written policies and procedures on:
- Maintaining privacy and confidentiality of protected health information;
- Training correctional personnel on maintaining privacy and confidentiality;
- Obtaining confidentiality agreements with personnel providing medical services;
- Monitoring and evaluating how confidential policies and procedures are being followed;
- Addressing breaches in confidentiality;
- Obtaining inmate consent for medical screening tests, including HIV;
- Disclosing of medical test results and identifying persons authorized to access medical information;
- Informing inmates of the right to privacy and confidentiality;
- Maintaining auditory and visual privacy when providing medical services;
- Providing medical test results to inmates who have been released.

2. Confidentiality and privacy considerations
Measures to protect confidentiality should be incorporated into all health care services for inmates, including HIV prevention services.
- All medical clinics should inform inmates of their right to privacy and confidentiality of medical information and on the routine voluntary nature of medical screening tests using handouts, posters, or videos. Provide information in language appropriate to the population at a 6th grade reading level or below.
- Inmate flow should be controlled to prevent healthcare provider conversations from being overheard by other inmates. If inmates hear medical staff talking about other
inmates, they will not feel assured about the confidentiality of their own medical information. To achieve this:

- Discuss inmate’s medical services and health care in private;
- Provide medical test results, including HIV, in a private area, within security constraints;
- Place supplies in locations to avoid interruptions during a clinic visit;
- Place phones and fax machines in common staff areas away from inmate access;
- Discontinue the interview or examination if an unauthorized person is present;
- Close the door to examining room, when possible;
- Schedule inmate janitorial services during hours when inmate clinic visits are not conducted.

- All healthcare information should be kept inaccessible to non-healthcare personnel and provisions should be made to prevent unauthorized persons from viewing inmate health care data on computer screens, desk counter tops, or logbooks.
- Avoid identification of HIV-related clinic visits.
  - Have generic waiting area for medical unit; do not have separate waiting area for HIV clinic.
  - Train several staff members to provide general HIV prevention services to avoid inmate being seen by the “HIV doctor, nurse, or counselor”.
  - HIV testing should be conducted in areas where other screening tests are conducted.
  - Use universal precautions during all clinical encounters
  - Keep inmate’s health information inaccessible to non-health care personnel.
  - Requests for sick call or medical follow-up should not disclose reason. Minimize information posted on cell-outs (e.g. diagnosis, provider name, special locations to report).
- Ensure privacy for inmates prescribed HIV medications.
  - Dispense HIV medications in private and confidential manner; avoid separate “pill lines” for HIV medications.
- Use professional interpreters or services as needed. All interpreters should have a signed confidentiality agreement on file.

3. Suggestions for providing HIV services
- Provide medical information and HIV education to all inmates during intake and at other times during incarceration (written, verbal, or video format).
- Provide brochures on a variety of medical topics (e.g., HIV, Hepatitis, TB, STD, Harm Reduction, Domestic Violence, Mental Health) in medical waiting areas, so inmates feel comfortable accessing HIV-related information.
- Conduct HIV testing as part of routine medical services.
- Disclose medical information only to personnel involved in providing care, treatment and prevention services to inmate, and as required by legislation. Inform inmates specifically who will have access to their medical information.
4. Medical records
   • Keep medical records in a locked, secure location.
   • Limit access to authorized staff.
   • Secure medical records during inmate transport or transfer.
   • Do not color-code or separate storage of charts based on disease or condition.
   • Use identification number system so that inmate names are not on HIV test specimens or in HIV databases or logbooks.
   • Use dedicated fax and phone lines to send all medical test results, including HIV viral loads, CD4 counts, and confirmatory test results.
   • Clearly record delivery of HIV test result to the inmate in the medical record to prevent inadvertent disclosure during medical visits for inmates unaware of their HIV status.

5. Special recommendations for adolescents confined in adult correctional facilities
   • Know that incarcerated adolescents may be unaware of their rights concerning medical care, privacy, and confidentiality.
   • Inform adolescents that the medical information, including HIV test results will not be disclosed without their consent except as required by law. For State Policies on Minor’s access to STI services see http://www.guttmacher.org/statecenter/spibs/spib_MASS.pdf.
   • Inform adolescents that their HIV status will not adversely affect their medical care or legal rights.
   • Obtain consent for health care services from his/her parent or legal guardian (subject to state and local regulations or policies), unless the adolescent is an emancipated minor.
SECTION IV: HIV TESTING PROCEDURES

Correctional settings have several available HIV testing strategies from which to choose. Two HIV tests are typically used in combination with the second test providing confirmation of an initial reactive screening test. In this section, available HIV testing algorithms are reviewed, as well as a description of the advantages and disadvantages of specific testing algorithms for use in correctional systems.

A. Conventional HIV testing algorithm
The conventional HIV testing algorithm consists of two tests: an HIV enzyme immunoassay (EIA) capable of identifying HIV-1 and HIV-2 antibodies and an HIV-1 Western blot or immunofluorescence assay (IFA) used for confirmation. This is the “gold standard” HIV testing algorithm and is the most widely used in the U.S. If the initial EIA is positive, the Western blot or IFA is performed by the laboratory in order to confirm the EIA result. The disposition of the test results are reported as positive, negative, or indeterminate. A “window period” exists during early HIV infection when the EIA may be non-reactive but true HIV infection is present, which may result in a false-negative test result. This window period is typically during the first 8-12 weeks following infection with HIV. However, the period during which false negative tests occur has decreased with newer generation EIAs. Conventional HIV tests can be performed with plasma or serum specimens.

Advantages for the correctional setting: This “gold standard” for HIV antibody testing very accurately detects established HIV infection. Confirmation is built into the testing algorithm without need for further specimen collection. This conventional HIV testing is relatively inexpensive and commonly available.

Disadvantages for the correctional setting: The turn-around time for obtaining conventional test results range from several days to weeks. This may limit the opportunity to deliver HIV test results to inmates who are released from the facility within two weeks.

B. Additional HIV tests currently available

1. Oral Fluid HIV Test
The oral fluid HIV test identifies HIV-1 antibodies from an oral fluid specimen (oral mucosal transudate collected using an OraSure collection device), thus eliminating the need for venipuncture. After specimen collection, the oral fluid collection device is placed into a vial containing a preservative and is sent to a central laboratory where an EIA is performed. If reactive, confirmatory testing is performed. The results, reported as positive, negative, or indeterminate, are then sent from the central laboratory to the clinical site where the testing was performed. As with conventional HIV testing, the “window period” applies to OraSure testing too. Test results are typically available in 3-5 business days.

Advantages for the correctional setting: This is an accurate HIV testing algorithm for established HIV infection (similar to conventional HIV testing) with a built-in confirmatory test. The test is less hazardous because blood collection is not required and
no laboratory infrastructure is required. These factors may be significant advantages to small correctional facilities that have limited medical services.

Disadvantages for the correctional setting: OraSure® is more expensive than the conventional blood sample HIV testing, and it is slightly less sensitive during early seroconversion.

2. Rapid HIV Testing
Currently six FDA-approved rapid HIV tests are available in the United States, including OraQuick Advance Rapid HIV-1/2 Antibody Test, Reveal G3 Rapid HIV-1 Antibody Test, Uni-Gold Recombigen HIV Test, Multispot HIV-1/HIV-2 Rapid Test, Clearview HIV 1/2 Stat Pak, and the Clearview Complete HIV 1/2. These tests differ with respect to:

- ability to detect HIV-2 antibodies;
- the specimen required to perform the test (whole blood, serum, plasma, oral mucosal transudate);
- CLIA-(Clinical Laboratory Improvement Amendments) categorization;
- ancillary equipment needed to perform the test; and,
- time for test to develop.

Details regarding each of these rapid tests can be obtained from the CDC web site at “General and Laboratory Considerations: Rapid HIV Tests Currently Available in the United States” http://www.cdc.gov/hiv/topics/testing/resources/factsheets/rt-lab.htm.

Rapid HIV tests can be performed at the point-of-care and results are generally available within 10-30 minutes. These tests are simple to perform and require minimal equipment. The rapid test detects HIV-antibodies analogous to the conventional HIV antibody testing and therefore, the “window period” applies to rapid testing as well. Rapid test results are reported as reactive (also called preliminary positive), non-reactive or invalid. Repeat rapid testing is required if an invalid result is obtained. Preliminary positive rapid HIV tests must be confirmed with either an HIV Western blot or IFA. Therefore, testing sites that conduct rapid HIV testing should have the capability to obtain blood or oral fluid samples for confirmatory testing.

Advantages for the correctional setting: Rapid testing provides real-time, point-of-care testing for inmates that facilitates delivery of rapid test results to the inmate. Inmates can be provided the result (negative or preliminary positive) of the rapid test while waiting in the medical unit. Confirmatory HIV testing can be initiated for inmates with a preliminary positive result, therefore eliminating additional staff time. Studies have shown that Rapid HIV tests can be used in jails.\(^{34,27}\)

Disadvantages for the correctional setting: Additional samples must be collected to conduct confirmatory testing for persons with preliminary positive results. Results from confirmatory testing are usually available in 3 to 10 business days during which time some inmates will be released. The initial testing process is more time intensive compared to conventional HIV testing because the rapid test is performed and results are
obtained and can be delivered within the initial testing encounter. Rapid HIV testing requires greater material costs compared to conventional blood testing, and this may not be justified if rapid turn-around time is not required.

C. Evolving rapid testing strategies
Performing a combination of rapid tests from different manufacturers can be a strategy to increase the positive predictive value of the initial reactive rapid test. For example, if a Uni-Gold® rapid HIV test is performed and the result is a preliminary positive, an OraQuick® rapid test could then be performed. If both rapid tests are preliminary positive, there is an increased likelihood that the inmate is HIV-infected. However, the second rapid test does not replace the need for confirmatory testing with an HIV Western blot or an IFA. Confirmatory testing still needs to be completed. The benefit of performing a second rapid test is to estimate the likelihood of true HIV infection which can impact subsequent referral. While awaiting confirmatory test results, an inmate with a reactive rapid test could be immediately referred for counseling and scheduled for a clinical evaluation with an HIV clinical care team. For jail inmates who are to be released, appropriate evaluation with delivery of confirmatory test results could be scheduled in the community.

Correctional HIV testing algorithms:

<table>
<thead>
<tr>
<th>Correctional Facility</th>
<th>Recommended Testing Strategy</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prison</td>
<td>Conventional blood testing, oral fluid, or rapid testing with conventional/oral fluid confirmation</td>
</tr>
<tr>
<td>Jails</td>
<td>Rapid testing with conventional/oral fluid confirmation</td>
</tr>
<tr>
<td>Facilities with limited laboratory capacity</td>
<td>Rapid testing with oral fluid confirmation or oral fluid testing alone</td>
</tr>
</tbody>
</table>

D. Other considerations for HIV testing in correctional settings
Routinely providing opt-out HIV screening to jail inmates upon intake provides the most comprehensive HIV testing strategy. However, not all jails provide medical screening tests to all incarcerated inmates. In addition, at intake, inmates may be under the influence of drugs or alcohol use or withdrawal, or emotional distress. These may limit the inmates’ ability to make an informed decision regarding consent for medical screening, including HIV testing. Providing screening during the initial comprehensive medical evaluation is an alternative strategy and may address some of the challenges of obtaining informed consent, but some inmates will have been released before undergoing such an evaluation. In prisons, where inmates are typically incarcerated for a year or longer, HIV testing should be completed during the initial medical evaluation to facilitate referral to HIV care.

Correctional medical staff and HIV clinical care providers should be included in the discussions of when and how to test for HIV in the correctional setting.

E. Interpretation of HIV test results
The conventional HIV-1 testing algorithm consists of initial screening with an EIA to detect antibodies to HIV-1. If the EIA is negative, the result is reported as negative and no further
testing is conducted. Specimens with a reactive (positive) EIA result are tested again in duplicate in the laboratory. When the result of either duplicate test is reactive, the specimen undergoes confirmatory testing.

Rapid HIV tests are highly sensitive (very few false negatives) and highly specific (very few false positives). However, rapid testing may not be as sensitive as conventional testing during early HIV infection. Rapid HIV tests yield a non-reactive (negative) result or a reactive (preliminary positive) result. When the test result is negative, no further testing is needed and the result is reported as negative to the individual. A reactive rapid HIV test result is considered preliminary positive and confirmatory testing must be conducted to provide a definitive diagnosis.

Confirmatory HIV Testing:
Tests used to confirm HIV infection are the Western blot and IFA. These confirmatory tests are more specific than screening tests and are reported as negative, positive or indeterminate.

Inmates with a preliminary positive rapid HIV test or EIA and a negative HIV confirmatory test should be offered repeat confirmatory testing approximately 30 days after the date of the initial confirmatory test. Inmates with two negative confirmatory test results 30 days apart after a preliminary positive rapid test or EIA without risk in the past 90 days are considered HIV negative. A negative confirmatory test may occur after a preliminary positive rapid test for several reasons: the inmate has been recently infected with HIV and is in the process of developing antibodies to HIV; the inmate could have Acute HIV Infection (AHI), as identified by Nucleic Acid Amplification Testing (NAAT); the inmate is not HIV-infected, but may have an underlying health condition that is affecting the HIV screening test result; the inmate is not HIV-infected and the screening test was a false positive result; or a specimen mix-up could have occurred. The following site contains information on Acute HIV Infection: http://www.idsociety.org/HIVMA_Template.cfm?Section=Home&CONTENTID=16684&TEMPLATE=/ContentManagement/ContentDisplay.cfm.

A confirmatory test result may be indeterminate after a preliminary positive rapid test or EIA. This result might represent either an incomplete antibody response to HIV in specimens from infected persons or nonspecific reactions in specimens from uninfected persons. Although IFA can be used to resolve an indeterminate Western blot sample, this assay is not widely used. Generally, 30 days after the initial Western blot a second specimen should be collected and tested. Although much less commonly available, nucleic acid testing (e.g., viral RNA or proviral DNA amplification method) could also help resolve an initial indeterminate Western blot. A small number of tested specimens might provide inconclusive results because of insufficient quantity of specimen. In these situations, a second specimen should be collected and tested for HIV infection. If the test result is repeatedly indeterminate, the inmate should be referred for further medical evaluation. An inmate with a positive confirmatory HIV test on re-analysis (Western blot or IFA) is confirmed to be HIV-infected.

Additional testing procedures:
After rapid HIV testing, providers may choose to obtain a CD4 count at the same time a specimen is sent for confirmatory HIV testing. If the expected length of stay is greater than 48
hours, it may be advantageous to order a CD4 count test as this allows for early linkage to care. In addition, appropriate prophylactic medications can be initiated in a timely manner. Another option is to perform a second rapid HIV test from a different manufacturer immediately after a preliminary positive rapid HIV test result. If this test is also positive, initiation of staging with CD4 count testing (if available at the facility) and linkage to care may be considered. However, a confirmatory test still must be performed based on the result of the first rapid test and irrespective of the result of the second rapid test.

If conventional HIV testing is done, most laboratories reflexively do confirmatory testing with the initial blood sample if the EIA is positive. Therefore, the CD4 cell count and other baseline testing can be sent as a separate order as soon as the results of the positive confirmatory test are obtained.

F. Providing HIV test results

1. Principles of Providing HIV Test Results
   - Provide HIV test results in a confidential and timely manner.
   - Communicate results in a manner similar to other serious diagnostic/screening tests. Clearly explain test results to the inmate.
   - *Inmates with a negative result* may receive information in person or through confidential written notification. Review this process on a regular basis to ensure the appropriate test result information is received in a timely manner, the results are understood by the inmates, and that confidentiality is maintained.
   - *Inmates with positive results* should be notified only in person in a private setting. During this confidential encounter, the inmate must be allowed time to address the meaning of the positive test result, next steps in their clinical management, and the provision of mental health or social services support.
     - Follow all applicable State and local laws and regulations related to reporting of HIV/AIDS cases. For specific requirements about reporting HIV/AIDS cases contact your state or local health department’s HIV/AIDS surveillance section.

2. Options to consider when providing HIV test results
   Practical mechanisms of providing HIV test results to inmates vary by correctional setting. In prisons, those who test positive for HIV should be scheduled to see a trained health care provider for notification and counseling in a confidential setting. To notify inmates who are HIV-negative, correctional systems may consider written notification to inmates when all medical reception lab tests are normal. This can be accomplished by staff providing a notice that indicates “your test results are normal” without specifying any tests, including HIV tests. This approach presumes other medical test results are also normal. The disadvantage to this approach is that there is no confirmation that the inmate received written test results or an opportunity for individualized prevention counseling. However, opt-in counseling can be available upon request.

High turnover of inmates in jail settings present challenges to ensuring that inmates are notified of test results prior to their release. Therefore, procedures should be
developed, and inmates informed of how to receive test results following release. Use of rapid HIV tests offers the opportunity for immediate notification, counseling and referral to community resources, ensuring that a greater number of inmates are aware of their diagnosis prior to release.¹⁴,³⁰

3. Prevention counseling:
Prevention counseling is an interactive process between the counselor and an individual. The goal of prevention counseling is to help the persons assess his or her risk, recognize HIV risk behaviors, and develop a plan to take actions to reduce risk behaviors.³¹

In prisons, prevention counseling can be provided when providing the inmate with their test results or at a later time. Prevention counseling can be provided in one or several sessions. In jails, prevention counseling should be provided at the time of result notification because of the short duration of incarceration. Additional guidance on prevention counseling can be obtained from CDC “Revised Recommendations for HIV Testing of Adults, Adolescents, and Pregnant Women in Health-Care settings” at http://www.cdc.gov/mmwr/PDF/rr/rr5514.pdf.³²

Steps to aid in prevention counseling.
- Provide technical information about HIV testing to the inmate through a brochure or other means.
- Assess inmate’s understanding about HIV/AIDS.
- Explain availability of medical care and future HIV testing for the inmate.
- Review HIV reporting requirements and partner notification procedures.
- Provide client-centered prevention counseling.
- Provide HIV medical information in the jail or prison library and medical clinics.
- For inmates infected with HIV:
  - Discuss modes of transmission and natural history of HIV.
  - Discuss importance of routine medical care.
  - Discuss Partner Services options.
  - Provide female inmates with HIV infection information on family planning, contraception, prenatal care, and breastfeeding.

4. Providing Support for Individuals Who Test Positive for HIV
Individuals who receive a positive HIV test should receive support in managing this information. For example:
- Provide education to patients about HIV infection, AIDS-related symptoms and the significance of any laboratory testing done.
- Inmates diagnosed with HIV infection may require short-term mental health support.
- Inmates with mental health conditions may require increased monitoring and intervention for these conditions.
- Inmates may be reluctant to access or possess HIV educational materials
due to concerns about disclosing their HIV infection. Strategies to provide HIV education and counseling for HIV-infected inmates can include HIV educational sessions and support groups.

- Facilities should have HIV medical information and periodicals available in prison libraries and medical clinics.
- Facilities should have chronic disease management programs for inmates infected with HIV.
- Facilities should have a discharge planning program for inmates infected with HIV.
SECTION V: LINKAGES TO SERVICES
A. Immediate Clinical Management Issues

Inmates newly diagnosed with HIV infection should be provided with the following as soon as possible.

• HIV prevention counseling.
• Referral for mental health support as indicated.
• Medical evaluation including staging of HIV infection and diagnosis of co-morbidities and opportunistic infections.
• Referral to an HIV provider or specialist depending on the HIV provider’s experience, the stage of HIV and complexity of medical issues.
• Expedited care may be necessary for special clinical circumstances including acute HIV infection, HIV infection with an acute opportunistic infection, and HIV infection during pregnancy.

1. Medical Evaluation
The medical evaluation should begin immediately by the medical provider, prior to the first appointment with an HIV provider. Start the evaluation promptly upon diagnosis, so that information related to HIV stage and the presence of other co-morbidities can be gathered to expedite the appropriate care of the individual.

A list of the diagnostic and screening tests that should be considered on an individual newly diagnosed with HIV infection is available from the HIV Medicine Association of the Infectious Diseases Society of America. (See HIV Practice Guidelines: Management of HIV-Infected Persons http://www.hivma.org/Content.aspx?id=1922.33

At a minimum, the medical provider should order a CD4 count and an HIV viral load to allow for staging of HIV infection. These results will determine the need for antiretroviral therapy and for prophylaxis against opportunistic infections. Review the test results, in conjunction with an HIV provider if necessary, prior to the inmate’s evaluation by the HIV provider in order to identify and address any immediate clinical needs and determine if a referral to an HIV specialist is needed.

2. Immunizations for HIV-infected inmates
The current CDC published Recommended Adult Immunization Schedule – United States, October 2007-September 2008 includes recommendations for adults with HIV infection. The recommendations can be accessed at http://www.cdc.gov/mmwr/pdf/wk/mm5641-Immunization.pdf.34

Initiate the hepatitis B immunization series for persons who are non-immune to facilitate completion of the vaccination series. Consider an accelerated schedule if the inmate will be released in less than six months.

3. Special Circumstances
Medical providers need to be aware of several clinical circumstances that warrant expedited medical evaluation by an HIV provider or specialist. These may include:

- **Acute HIV infection**
  Acute infection can present diagnostic challenges since antibody tests may be negative or indeterminate. Persons with acute HIV infection may present with symptoms of “acute retroviral syndrome” which is often characterized by fevers, pharyngitis, and lymphadenopathy although the symptoms can vary and many persons with acute infection may be asymptomatic. HIV nucleic acid testing (e.g., plasma viral load) can be used to assist in the diagnosis of acute HIV infection when antibody testing is negative or indeterminate. It is important for clinicians to recognize acute HIV infection given the increased infectiousness of person during this time. During the acute phase, circulating levels of HIV are many times greater compared to a person with chronic infection. High levels of circulating virus lead to increased rates of HIV transmission between the inmate and sexual and needle-sharing partners. If an inmate is suspected of having acute HIV infection, the physician should immediately refer the inmate to an HIV provider or specialist to confirm the diagnosis and for further evaluation. (See HIVMA Guide to Recognizing Acute Infection for additional information: website link [http://www.idsociety.org/HIVMA_Template.cfm?Section=Home&CONTENTID=16684&TEMPLATE=/ContentManagement/ContentDisplay.cfm].

- **Acute opportunistic infection**
  Inmates may already have advanced HIV disease, which puts them at risk for opportunistic infections. If there is evidence of an opportunistic infection, the physician should refer the inmate to an HIV provider as soon as possible.

  Signs and symptoms of HIV opportunistic infections may include (but are not limited to): shortness of breath, cough, diarrhea, swollen lymph nodes, focal neurological signs, altered mental status, visual complaints, pain or difficulty upon swallowing, and abdominal pain.

- **Pregnancy:**
  All females diagnosed with HIV should have a pregnancy test completed at the initial evaluation. Pregnant inmates who are infected with HIV must be referred to an HIV specialist. Initiation of antiretroviral therapy is indicated (regardless of the inmate’s CD4 count at the time) to minimize the risk of mother-to-child HIV transmission. Prevention counseling should be initiated and the inmate should be linked with custody-based or community-based HIV care.
B. Linkage to appropriate medical care

1. During incarceration:

Healthcare, including access to antiretroviral medications, should be made available to all HIV-infected inmates. After the immediate clinical issues are addressed, the inmate should be scheduled with a provider with HIV experience for initial assessment and to provide routine follow-up. If possible, the initial visit with an HIV provider should be face-to-face. Depending on the inmate’s medical complexity, the stage of HIV infection, the need for antiretroviral therapy, and the initial HIV provider’s level of expertise, referral to an HIV specialist with more advanced training may be warranted initially or later in the course of disease as clinical circumstances change.

HIV specialists may not be available on-site in every facility, so arrangements may have to be made for specialized HIV care when needed. The HIV specialist can be a correctional system employee, a contract provider, or a provider within the community. Consultations with the inmate and specialist can be conducted face-to-face, or via telephone, telemedicine or video conferencing depending on clinical need and available resources. Since many facilities do not have an HIV specialist on-site, it remains important that all health care providers have HIV resources and ongoing education available.

2. Upon release:

When HIV-infected inmates are released to the community, it is important to link them to medical services in the community. The transition for prisoners from confinement to community is often chaotic and difficult, and health care concerns often assume a lower priority than housing and food, employment, mental health and substance abuse treatment and childcare. If such immediate needs are not met, there is less chance that HIV-infected inmates will make it to or stay engaged in follow-up medical care, much less maintain any of the health advances achieved during confinement. There is also evidence that discharge planning programs may reduce the rate of recidivism. Although there are inherent challenges and resource limitations, efforts should be made by both custodial and medical staff, ideally as a joint team, to address as many re-entry needs as possible.

- Develop a list of medical providers in the community to which the inmates will be returning.
  - Many States have resource manuals listing HIV care providers.
  - Contact your local or State Health Department for assistance with locating providers who are willing to accept uninsured persons.
  - Most HIV-infected inmates will qualify for free or low-cost medical treatment at clinics federally funded though the Ryan White HIV/AIDS Treatment Modernization Act of 2006.
- Assist the inmate with scheduling an appointment with the community care provider. If possible, allow the community care provider to visit the inmate before release. Research has shown that face-to-face contact before release results in increased likelihood of continuity in the community.
appointments cannot be made in advance, make walk-in arrangements with clinical providers.

- Provide the inmate with date, time, and location of first post-release appointment in writing. Stress to inmates the importance of attending their first scheduled appointment in the community, and the appointment should be as early as possible after release.
- Provide the inmate with a copy of relevant medical record or clinical summary free of charge. Alternatively send information to the community provider after obtaining written consent for release of information from the inmate.
- Collaborate with state and local offices administering benefit and entitlement programs to facilitate pre-release applications and benefit reinstatements. Some correctional systems have arranged partnerships to allow processing of Social Security Administration (SSA) and Medicare applications before release, as recommended by the SSA and the Centers for Medicare and Medical Services.
- Complete applications for medical services in conjunction with the inmate.

C. Linkage to HIV Case Management Services

Some communities will have agencies that provide HIV case management services to inmates. These agencies can help HIV-infected inmates with accessing services after they are released, and may be able to assist with pre-release planning as well.

- Collaborate with local agencies to develop a list of available agencies that provide HIV case management for released inmates.
- Provide inmates with contact information for local AIDS service organizations and the local health department.
- Assist inmates with making appointments with case manager before release from custody. If possible, arrange for the inmate to meet the case manager before release, or as soon as possible after release.
- Complete applications for other services following release in conjunction with the inmate.

D. Provision of HIV medications:

Inmates who are taking HIV medications should continue taking their medications after release from custody, unless a community HIV care provider advises otherwise.

- Follow your State’s regulations concerning provision of HIV medications to released inmates. This will allow inmates to continue on their medications until they are able to access services in the community.
- Explore with state agencies or drug manufacturers the feasibility of accepting applications for provision of HIV medications before release. This will facilitate continuation of access to medications in the community.
- Inform inmates that all medications should be taken as prescribed.
- Inform inmates how to get emergency supply of medications.

E. Partner Services (PS) and disclosure
PS is the process of informing past and present sexual and/or needle-sharing partners of HIV-infected individuals that they may have been exposed to HIV. It is a confidential service created for persons who are infected with HIV to have their partners notified of a possible exposure. PS activities for persons with HIV include assessing medical and social service needs, facilitating linkages to community resources, eliciting partners, developing a plan to locate and notify partners, and offering testing to the partners. Benefits for notified partners include education on HIV/AIDS prevention, risk behavior and risk reduction strategies, and referral and access to HIV testing so that they may learn their HIV status. If a partner tests positive for HIV, he or she can take advantage of health-extending therapies, learn to protect themselves from further exposure to HIV and other STDs, and learn how to prevent exposing others to HIV.

PS has three main purposes:
- To prevent HIV transmission;
- To identify new infections;
- To assist persons with HIV and their partners in accessing needed services.

PS, which is usually carried out by the state or local health department, plays a vital public health role in breaking the cycle of HIV transmission. In many states, a state health department disease intervention specialist (DIS) will meet with the individual after an HIV diagnosis to gather information concerning sex and drug-using partners. In some states, prior to any partner notification, screening for domestic violence for each partner is conducted to ensure the safety of the individual who is infected with HIV. DIS officers attempt to locate all identified partners in order to notify them of a possible exposure to HIV, and to offer HIV counseling, education, and testing. Some states have mandatory reporting of known partners and statutes in most states provide PS programs confidential access to persons with HIV and other sexually transmitted diseases. Consult with your state or local health department on how to refer HIV-infected inmates to PS. In correctional facilities that permit conjugal visits, PS and partner notification can be incorporated into the program.

Special considerations for correctional settings.
- HIV-infected inmates may be unwilling to reveal their sex and drug partners to health care staff who are employed by the correctional facility. Therefore, inform inmates verbally or via written material about partner notification options that are available.
- Provide private space for PS staff to conduct interviews with inmates for partner elicitation and counseling to take place.
- If the inmate is transferred or released from the facility before their confirmatory tests results are available, PS program staff can assist in notify the inmates of their test results.
SECTION VI: CHALLENGES AND POTENTIAL SOLUTIONS
Challenges and potential solutions when implementing routine HIV screening in correctional facilities.
Challenges may arise in prisons and jails for administrators and health care providers who would like to implement routine HIV screening for inmates. The challenges may arise from perceptions held by inmates, costs associated with testing, and policies that may discourage acceptance of testing by inmates.

A. Challenges that could increase inmate refusal for routine testing

Challenge: Breaches in confidentiality and privacy of medical information can arise from intentional or unintentional events and may result in distrust of medical staff by the inmates.
Solution: Ensure that all medical, correctional, and outside agency personnel comply with standard medical practices in maintaining inmates’ protected health information. (See Section 2 for more information.) Incorporate HIV testing into routine medical services to prevent inmates from being identified as seeking HIV testing. Conduct testing as part of routine medical screening process and disclose results privately. Unless required by policy or statute, an inmate’s HIV status should not be disclosed to correctional security or administrative staff.

Challenge: Correctional policies that deny HIV-infected inmates access to work assignments, educational or training programs, may result in disparate treatment for HIV-infected inmates. These policies are not supported by the medical literature, are contrary to State and Federal laws that govern access to employment for persons infected with HIV, and may disqualify an inmate from work release programs. These policies may result in an inmate not obtaining credit towards early release.
Solution: Review and revise correctional policies related to restrictions on access to programs and services that may discourage inmates from accepting voluntary HIV testing.

Challenge: Housing HIV-infected inmates in one or few correctional facilities in the State that provide medical care for HIV-infected inmates (medical centers of excellence) may improve access to specialized care. However, this may restrict access to educational and program opportunities available to inmates in other facilities, and it may compromise their confidentiality.
Solution: Develop policies that allow clinically stable inmates to be transferred to prisons that offer programs not available in the “medical center,” provide condensed programs in the “medical centers,” and, use telemedicine for remote locations to allow HIV-infected inmates more housing options.

Challenge: Conjugal visits may be permitted in the correctional system for inmates who are married or who is in a committed relationship and has a partner who has been registered with the correctional system. Policies may exist that do not allow conjugal visits for inmates infected with HIV.
Solution: Revise the policy to allow conjugal visits for inmates infected with HIV who have accepted PS or other means of partner notification. Prior to an approved conjugal visit, provide condoms and HIV prevention counseling to both partners.

Challenge: Inmates who are infected with HIV may be subjected to harsher punishments if they are found guilty of the willful exchange of body fluids.
**Solution:** Review policies related to willful exchange of bodily fluids. Ensure that policies are in accordance with State statutes.

**B. Challenges associated with increase number of tests conducted.**

**Challenge:** The time necessary to obtain and process even the fastest rapid HIV test sample might create logistical barriers.

**Solution:** Collect the specimen for HIV testing at the beginning of the encounter and then conduct other screening assessments while the test is processing or return the inmate to the waiting area while the test is being processed. Each facility should develop a protocol for incorporating HIV testing into their routine comprehensive medical evaluation procedures.

**Challenge:** Due to the high prevalence of HIV infection among inmates, prevention counseling should be available to inmates. However, prevention counseling should not be a barrier to providing routine HIV screening in medical settings.

**Solution:** Provide brochures or videos with HIV education material to all inmates upon entry. Provide prevention counseling to all HIV-infected inmates, and to HIV-negative inmates upon request. Determine if your State mandates the provision of prevention counseling to all inmates being screened for HIV. The clinician conducting HIV screening need not provide the prevention counseling. Prevention counseling can be provided by personnel from an outside agency or by other medical staff.

**Challenge:** Laboratory costs will increase due to processing more HIV EIA test results. Medical costs may increase if HIV rapid test kits are used to screen for HIV.

**Solution:** Negotiate cost-saving contracts with companies by obtaining a pricing advantage for large volume use. Collaborate with state or local health departments to cover cost of rapid test kits.

**Challenge:** Routine HIV testing may increase the workload of healthcare providers if testing must be explained, additional specimens (blood or oral fluid) are required, inmates are transported additional times to the medical unit, and all test results are provided in person by a counselor.

**Solution:** To prevent an increase in the workload of providers the following strategies could be implemented.

- Provide educational materials explaining HIV testing to all inmates upon intake;
- Collect blood or oral fluid when obtaining other lab specimens during routine medical intake evaluation;
- Provide only positive HIV test results to inmates in person;
- Provide written notification of negative HIV test results along with other lab test results in language that does not specify type of tests conducted, i.e., all results are normal;
- Educate inmates on HIV risk reduction in classes or use of videos in groups.
- Obtain medical information from inmates transferred from other correctional facilities.

**Challenge:** Although not all inmates with HIV will require or accept treatment for HIV infection, treatment costs may increase if routine HIV testing identifies more HIV cases among
inmates.

Solution: Negotiate contracts to pay lower drug prices based on volume consumption. Many inmates with HIV who are identified in jails will be released before treatment can begin and should be referred to services in the community.

Challenge: Inmate is unable to provide informed consent, due to factors such as inebriation. Solution: Delay medical evaluations for inmates under the influence of substances (e.g., drugs or alcohol) until they are capable of making decisions about their health care.
SECTION VII: HIV/AIDS REPORTING

Why HIV/AIDS Case Reporting is Critical
Accurate and complete reporting of HIV/AIDS cases to state health departments is critical to ensuring that surveillance figures capture the true burden of infection in local jurisdictions and nationally. Accurate surveillance numbers are vital to program planning and funding allocation decisions at the State, local, and Federal levels. Since data on reported HIV and AIDS cases are used in federal funding formulas, underreporting and incomplete case reports directly impact accurate funding allocation, and therefore, the ability of States to maximize Federal funding opportunities for local-level HIV prevention and care activities.

Correctional facilities can play a vital role in contributing to both State and national HIV and AIDS surveillance activities because facilities provide HIV testing to high-risk persons who may not have accessed these services in the community.

HIV/AIDS Case Reporting Requirements
Correctional facilities are required to follow all applicable State and local laws and regulations related to reporting of persons testing positive for HIV infection and individuals diagnosed with AIDS. Contact your State or local health department’s HIV/AIDS surveillance section for your reporting requirements.

Initiating HIV/AIDS Case Reporting
State or county health department personnel can assist correctional medical staff with understanding the significance of case reporting and should also have the capacity to conduct training on completing the appropriate case report forms. Opportunities for education and training of correctional medical staff can be facilitated in various forums including continuing education programs, in-services, and on-site programs. State or county public health officials may be able to assist correctional staff with the case reporting process.

Educational materials and training programs sponsored by State or county public health officials can help providers with completing case report forms accurately by providing step-by-step instructions, definitions of key terms, and by explaining specific information to include in different sections of the report form. It is critical that case report forms be completed accurately and that they include as much information as possible to enable State and local HIV/AIDS surveillance programs to capture trends in HIV transmission and to target prevention and care funds accordingly. Public health officials will likely stress the critical nature of receiving as much information as possible on the case report form since missing data can potentially result in an individual not being included as a case in an HIV/AIDS reporting system.

Possible strategies to increase case reporting:

- Designate a medical staff person responsible for HIV/AIDS case reporting. This allows for accountability and facilitates communication with public health authorities on HIV/AIDS surveillance issues.
- Select someone who is comfortable discussing risk behavior to obtain accurate risk histories from inmates. Notify health department of HIV-infected inmates released from custody to assist with notification of HIV test results, counseling and referrals.
SECTION VIII: REFERENCES


SECTION IX. APPENDICES

A. Glossary

Confidentiality. The duty of those who receive private information not to disclose it without prior consent.

CLIA. Clinical Laboratory Improvement Amendments (CLIA) establish quality standards for all laboratory testing to ensure the accuracy, reliability and timeliness of patient test results regardless of where the test was performed.

Diagnostic testing. Performing an HIV test for persons with clinical signs or symptoms consistent with HIV infection.

Enzyme Immunoassay (EIA). A test used to detect and quantify specific antigen-eliciting molecules involved in biological processes, specifically processes related to cancer and autoimmune disorders.

HIV provider: A provider with experience working with HIV-infected inmates who is able to provide routine HIV care and follow-up.

HIV specialist: A provider with specialized training in HIV care who is knowledgeable about the complicated clinical issues and medication management required to care for HIV-infected inmates.

Informed consent. A process of communication between an inmate and a provider through which the inmate decides to accept or decline a procedure. The communication typically includes providing oral or written information regarding HIV, the risks and benefits of testing, the meaning of HIV test results, how test results will be communicated, and the opportunity to ask questions.

Immunofluorescent Assay (IFA). A laboratory test that uses antibodies chemically linked to a fluorescent dye to detect antibodies in serum or other body fluid. The specific antibodies are labeled with a compound that makes them glow an apple-green color when observed microscopically under ultraviolet light.

Mandatory testing. Performing HIV testing as mandated by state or federal statute.

Opt-in HIV testing. Performing voluntary HIV testing at the request of the inmate.

Opt-out HIV screening. Performing routine voluntary HIV testing after notifying the inmate that the test will be performed and that the inmate may elect to decline or defer testing. Permission is inferred unless the inmate actively declines an HIV test.

Preliminary Positive Result. Interpretation of a rapid test result provided to person whose rapid HIV test is reactive. The result is preliminary because rapid testing does not provide a definitive diagnosis.

Privacy. The right and power to control the information about oneself that others possess.

Screening. Performing a test for all persons in a defined population without regard to the individual’s characteristics.

Targeted testing. Performing a test for subpopulations of persons at higher risk, typically defined on the basis of behavior, clinical, or demographic characteristics.

Window period. Period of time during early HIV infection when an HIV enzyme immunoassay test may be non-reactive, but when true HIV infection is present.
B. Clinical indications of HIV/AIDS

Signs and symptoms of HIV disease may include unexplained weight loss, fever, night sweats, diarrhea > 1 month; generalized lymphadenopathy, oral thrush, oral hairy leukoplakia, idiopathic thrombocytopenic purpura (ITP), peripheral neuropathy, herpes zoster, as well as AIDS-defining illnesses.

Signs and symptoms of Opportunistic infections may include shortness of breath, cough, diarrhea, swollen lymph nodes, focal neurological signs, altered mental status, visual complaints, pain or difficulty upon swallowing, and abdominal pain. (See website for Clinical Guidelines).

AIDS-defining illnesses
Candidiasis of the bronchi, trachea or lungs
Candidiasis, esophageal
Cervical Cancer, invasive
Coccidomycosis, disseminated or extrapulmonary
Cryptococcus, extrapulmonary
Cryptosporidiosis, chronic intestinal for > one month
Cytomegalovirus disease (other than liver, spleen or lymph nodes
Encephalopathy (HIV-related)
Herpes simplex: chronic ulcer(s) for more than 1 month or bronchitis, pneumonitis or esophagitis
Histoplasmosis
Isosporiasis
Kaposi’s sarcoma
Lymphoma, Burkitt’s, immunoblastic or primary brain
Mycobacterium Avium Complex
Mycobacterium, other species, disseminated or extrapulmonary
Pneumocystis jirovecii pneumonia (formerly Pneumocystis carinii)
Pneumonia (recurrent)
Progressive multifocal leukoencephalopathy
Salmonella septicemia (recurrent)
Toxoplasmosis of the brain
Tuberculosis
Wasting syndrome due to HIV
C. Useful resources

Web pages:


American Academy of HIV Medicine – www.aahivm.com

American Correctional Association - www.aca.org

American Jail Association- www.aja.org

Bureau of Justice Statistics – http://www.ojp.usdoj.gov/bjs/

Centers for Disease Control and Prevention, HIV/AIDS Prevention – www.cdc.gov/hiv/

Clinical Laboratory Improvement Amendments (CLIA) – http://www.fda.gov/cdrh/clia/


National Criminal Justice Reference Service - www.ncjrs.gov

National Commission on Correctional Health Care - www.ncche.org


Society of Correctional Physicians- http://www.corrdocs.org/

US Department of Health and Human Services. HIV/AIDS Treatment, Prevention, and Research: Clinical Guidelines Portal -

U.S. Department of Labor Occupational Safety & Health Administration, Occupational Safety and Health Standards, Toxic and Hazardous Substances, Bloodborne pathogens, 1910.1030.
D. Federal Bureau of Prison criteria for testing

<table>
<thead>
<tr>
<th>Condition</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>All inmates with the following (regardless of sentencing or duration of stay):</td>
<td></td>
</tr>
<tr>
<td>Unexplained signs/symptoms compatible with acute HIV infection</td>
<td>Including, but not limited to: fever, adenopathy, pharyngitis, rash, myalgias, and headache.</td>
</tr>
<tr>
<td>Signs/symptoms of HIV-related condition</td>
<td>Including, but not limited to: thrush, herpes zoster, oral hairy leukoplakia, severe seborrhea, unexplained lymphadenopathy, and opportunistic infections.</td>
</tr>
<tr>
<td>Pregnant women</td>
<td>Testing is recommended for all pregnant women as early as possible during pregnancy. Current antiretroviral therapy and obstetrical interventions markedly reduce the risk of transmitting HIV from infected mothers to their infants.</td>
</tr>
<tr>
<td>Recent exposures to HIV</td>
<td>Follow-up HIV-antibody testing should be performed at the following intervals after the exposure date: 6 weeks, 12 weeks, and 6 months (and 12 months for those who become infected with HCV after exposure to a source co-infected with HIV and HCV).</td>
</tr>
<tr>
<td>Active tuberculosis</td>
<td>HIV infection is a potent risk factor for developing active tuberculosis.</td>
</tr>
<tr>
<td>Positive tuberculin skin test</td>
<td>Persons who are co-infected with HIV and TB are high priority candidates for treatment of latent TB infection.</td>
</tr>
<tr>
<td>Otherwise clinically indicated</td>
<td>On a case-by-case basis.</td>
</tr>
<tr>
<td>Sentenced (6 months or more) inmates with the following risk factors:</td>
<td></td>
</tr>
<tr>
<td>• Injected illegal drugs and shared equipment</td>
<td></td>
</tr>
<tr>
<td>• (For males) sex with another man</td>
<td></td>
</tr>
<tr>
<td>• Had unprotected intercourse with a person with known or suspected HIV infection</td>
<td></td>
</tr>
<tr>
<td>• History of gonorrhea or syphilis</td>
<td></td>
</tr>
<tr>
<td>• Had unprotected intercourse with more than one sex partner</td>
<td></td>
</tr>
<tr>
<td>• From a high risk country (Sub-Saharan Africa or West Africa).</td>
<td></td>
</tr>
<tr>
<td>• Received blood products between 1977 and May 1985</td>
<td></td>
</tr>
<tr>
<td>• Hemophilia</td>
<td></td>
</tr>
<tr>
<td>• Percutaneous exposure to blood</td>
<td></td>
</tr>
<tr>
<td>• Or when the inmate requests to be tested</td>
<td></td>
</tr>
</tbody>
</table>

- Repeat testing is permitted every six months either by inmate request or clinician order.
Peer review Disclaimer:
This information is distributed solely for the purpose of pre-dissemination peer-review under applicable information quality guidelines. It has not been formally disseminated by the Centers for Disease Control and Prevention. It does not represent and should not be construed to represent an agency determination or policy.

Publication Disclaimer:
The findings and conclusions in this report are those of the authors and do not necessarily represent the views of the Centers for Disease Control and Prevention, the Bureau of Justice Statistics, Departments of Corrections, Health Departments, or other agencies by which the authors are employed.

Writing Team:

Acknowledgement:
We thank Bernard Branson, Timothy Dondero, Donna Hubbard-McCree, David Purcell, and Amy Stone for their assistance with critical reviews in developing this document.