HIV and Corrections: Building Systems to Improve Care for Vulnerable Populations

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Division of Infectious Diseases
Learning Objectives

At the conclusion of this presentation, participants should be able to:

1. Support the development of corrections based testing and treatment programs in order to reduce the burden of undiagnosed HIV in the community.

2. Design a plan which focuses on the unique risks and care needs of persons with HIV who are released from corrections to the community that supports their successful reentry to HIV care.
Off-Label Disclosure

- This presentation will not discuss any non-FDA-approved or investigational uses of any products/devices.
## Changing Epidemiology of HIV

Table 1. Estimated numbers of cases of HIV/AIDS, by year of diagnosis and selected characteristics, 2004–2007—34 states and 5 U.S. dependent areas with confidential name-based HIV infection reporting

<table>
<thead>
<tr>
<th>Race/ethnicity</th>
<th>2004</th>
<th>2007</th>
</tr>
</thead>
<tbody>
<tr>
<td>American Indian/Alaska Native</td>
<td>177</td>
<td>228</td>
</tr>
<tr>
<td>Asiana</td>
<td>308</td>
<td>455</td>
</tr>
<tr>
<td>Black/African American</td>
<td>19,309</td>
<td>21,549</td>
</tr>
<tr>
<td>Hispanic/Latino</td>
<td>6,183</td>
<td>7,484</td>
</tr>
<tr>
<td>Native Hawaiian/Other Pacific Islander</td>
<td>39</td>
<td>46</td>
</tr>
<tr>
<td>White</td>
<td>10,836</td>
<td>12,556</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Transmission category</th>
<th>2004</th>
<th>2007</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male adult or adolescent</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male-to-male sexual contact</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Injection drug use</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male-to-male sexual contact and injection drug use</td>
<td></td>
<td></td>
</tr>
<tr>
<td>High-risk heterosexual contactc</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Otherd</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Subtotal</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Female adult or adolescent</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Injection drug use</td>
<td></td>
<td></td>
</tr>
<tr>
<td>High-risk heterosexual contactc</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Otherd</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Subtotal</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

- **African Americans disproportionately impacted**
- **IDU accounts for 9% new infections in men, 16% in women**
- **High risk heterosexual contact most common risk factor in women**

Dual Epidemics: HIV & Incarceration

- Incarceration & HIV are linked by:
  - **Causes:** behavior with legal and health consequences, e.g. substance abuse
  - **Catchment:** Poor, jobless, homeless, mentally ill
    - Inadequate legal representation
    - Inadequate access to healthcare
  - **Characteristics:** Lack of health insurance, education

Courtesy of Anne Spaulding, MD MPH
## Burden of HIV in Corrections

### By Region

<table>
<thead>
<tr>
<th>Region</th>
<th>2006</th>
<th>2008</th>
</tr>
</thead>
<tbody>
<tr>
<td>Northeast</td>
<td>6099</td>
<td>5484</td>
</tr>
<tr>
<td>Midwest</td>
<td>1574</td>
<td>1814</td>
</tr>
<tr>
<td>South</td>
<td>10953</td>
<td>11003</td>
</tr>
<tr>
<td>West</td>
<td>1829</td>
<td>2148</td>
</tr>
</tbody>
</table>

### Most Impacted States

<table>
<thead>
<tr>
<th>State/Terr</th>
<th>2006</th>
<th>2008</th>
</tr>
</thead>
<tbody>
<tr>
<td>NY</td>
<td>4,000</td>
<td>3,500</td>
</tr>
<tr>
<td>FL</td>
<td>3,412</td>
<td>3,626</td>
</tr>
<tr>
<td>TX</td>
<td>2,693</td>
<td>2,450</td>
</tr>
<tr>
<td>CA</td>
<td>1,155</td>
<td>1,402</td>
</tr>
<tr>
<td>GA</td>
<td>944</td>
<td>961</td>
</tr>
<tr>
<td>PA</td>
<td>697</td>
<td>727</td>
</tr>
<tr>
<td>NC</td>
<td>688</td>
<td>824</td>
</tr>
<tr>
<td>MD</td>
<td>612</td>
<td>588</td>
</tr>
<tr>
<td>NJ</td>
<td>612</td>
<td>520</td>
</tr>
</tbody>
</table>

- Small states may have less impetus to dedicate resources to treatment and to linkage to care.

http://bjs.ojp.usdoj.gov/index.cfm?ty=pbdetail&iid=1747
Figure 1. Current HIV/AIDS cases as a percent of the total custody population in state and federal prisons in 2002 is represented.

## Share of HIV Borne by Releasees

<table>
<thead>
<tr>
<th>Revised Estimate for 1997</th>
<th>Estimate for 2006</th>
<th>Variable</th>
</tr>
</thead>
<tbody>
<tr>
<td>Share, HIV/AIDS</td>
<td></td>
<td></td>
</tr>
<tr>
<td>19.8% [95%CI: 17.0-24.5%]</td>
<td>14.0%</td>
<td>29% decline</td>
</tr>
<tr>
<td>Share of AIDS</td>
<td></td>
<td></td>
</tr>
<tr>
<td>14.8%</td>
<td>10.2%</td>
<td>31% decline</td>
</tr>
<tr>
<td>Share HIV, black men</td>
<td>---</td>
<td>21.2%</td>
</tr>
</tbody>
</table>

- Total Population = 775,000
- Number with HIV/AIDS in 1997 = 153,450
- Total Population = 1,095,812
- Number with HIV/AIDS in 2005 = 154,509

Different percentages but numbers roughly equal!

Courtesy of Anne Spaulding, MD MPH
HIV in Corrections is Everyone’s Concern

[Diagram showing the spread of HIV, HBV, TB, and STDs]
Prisons vs. Jails

**Prisons**
- Longer duration stays
  - Opportunities for reiterating key educational messages over time
  - Ability to stabilize on treatment prior to release
  - Additional time for discharge planning

**Jails**
- Shorter duration, less predictable, stays & crowding
  - Limits scope of education possible
  - Less time to establish on treatment
  - Unpredictable release time limits ability for discharge planning
Seek and Treat Initiatives

- **Rapid testing key to success of programs**
- Testing and linkage programs for prisons established in multiple sites
- HRSA/SPNS Funded Initiatives began for jails in 2007
  - 10 sites
  - Focus on testing, education, comprehensive case management and release planning for linkage to care
Testing Models

- Opt-In
- Opt-Out

- Who is testing?
  - 23 states report routine testing of inmates
  - Additional 11 report testing high risk inmates
  - All the remaining report testing by inmate request and/or clinical indication

http://bjs.ojp.usdoj.gov/index.cfm?ty=pbdetail&iid=174
Education

• Key messages
  • Correct misunderstandings regarding prognosis
    • Power of the positive example!
  • Reinforce the importance of establishing long-term care
  • Availability of support resources in the community
  • How to avoid transmitting to others (and contracting other strains)
  • Need for mental health support and substance abuse treatment as part of comprehensive primary care

• Innovative projects
  • Compass video project
Are We Treating?

- Laws mandate care for prisoners comparable to that received in the community.
- Numerous published examples of treatment programs.
- Concern exists for lack of parity in HIV care between corrections and the community.
- No systematic reporting of availability of treatment programs, aspects of treatment programs, and treatment outcomes.

Springer et al. HIV Clinical Trials 2007; 8(4): 205-212
Opportunities and Challenges

Opportunities

- Stable living environment
- Period of sobriety
- Consistent access to medical care
- May represent a teachable moment!

Challenges

- Stigma
- Stigma
- Stigma
- Confidentiality concerns
- Lack of institutional mandate in some settings
- Inadequate resources for release planning
- Isolation of providers and lack of clinical resources
Addressing Stigma

- Educate corrections staff and other detainees
- Desegregate facilities
- Keep-on-person medication
- Avoid indirect disclosure of status for prisoners
- Educate patient to address self-stigma
Initiating Treatment

• Corrections represents an important opportunity to start patients on therapy in a controlled setting.

• Short-term successes in treatment may motivate broader changes in their life post release.

• *Risk of interruptions post release is not a reason to defer therapy!*
Release Planning

- Insurance?
- Identified care site?
- Transfer of records?
- Other ancillary care needs
  - Mental health treatment
  - Substance abuse treatment

- Gaps in care and barriers in systems of care in community make case management time intensive.
  - Need to address root causes if linkage efforts are to be sustainable!
Risks on Reentry

- Substance abuse relapse
- Homelessness
- Lack of insurance
- Social isolation
- Unemployment and lack of financial support

- TREATMENT INTERRUPTION
Impact on Patients and Communities

- In Texas sample, 5.8% seen in time to avoid interruption in treatment
- Significant drop in CD4 and increase in viral load when returning to care
- High rates of substance abuse relapse
- Increased in risky behaviors leading to potential for spread of HIV in the community

Baillargeon et al. JAMA. 2009;301(8):848-857
Springer et al. Clinical Infectious Diseases 2004; 38:1754–60
Stephenson et al. Public Health Reports, 2005; 120(1) :84-88
### Challenges & Solutions

<table>
<thead>
<tr>
<th>Challenges</th>
<th>Solutions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Short-term stays are norm</td>
<td>Rapid HIV testing</td>
</tr>
<tr>
<td>Limited time to diagnose, treat</td>
<td>Work from self-reports</td>
</tr>
<tr>
<td>Unpredictable release</td>
<td>Communications with corrections</td>
</tr>
<tr>
<td></td>
<td>See post-release with test results</td>
</tr>
<tr>
<td>Limited program hours</td>
<td>Hire staff to work evenings, w/ends</td>
</tr>
<tr>
<td>Obtaining consent from potentially intoxicated individuals</td>
<td>Develop protocols to assess competence and re-approach later</td>
</tr>
<tr>
<td>Confidentiality</td>
<td>Build rapport with corrections, train officers/staff</td>
</tr>
<tr>
<td>Reincarceration</td>
<td>Revise Service Plans/ re-enroll</td>
</tr>
<tr>
<td>Post-release follow up tracking connections to care</td>
<td>Build on experience of other local projects; use FQHC/ Residential programs with EHR</td>
</tr>
</tbody>
</table>

Model Programs

- Need to learn from prior successes
  - Hampden County, MA
  - Project Bridge, RI
  - HRSA Opening Doors Project

- More to come
  - HRSA/SPNS Initiative for Improving Linkage to Care for HIV testing in Jails

http://hab.hrsa.gov/tools/openingdoors/index.htm
Evaluating Impact of Programs

- Need to link data from correctional care systems to that of community providers
- Key measures
  - Time to first visit
  - Time to receipt of antiretroviral therapy for those on treatment
  - Receipt of mental health, substance abuse and other comprehensive care services
- National reporting of client level data for quality improvement is important potential opportunity
What Can We Do?

- Support routine testing initiatives
- Be proactive in addressing stigma
- Advocate for institutional support of need for effective treatment and case management programs in corrections
- Recognize reentry as high risk period and develop programs to mitigate the risk
- Make continuity of care for persons linking to and from corrections a quality indicator for HIV programs

*The best program is the one that starts!*
Special Thanks

- Tim Flanigan, MD
- Josiah Rich, MD MPH
- Anne Spaulding, MD MPH
- Curt Beckwith, MD
- Amy Nunn, PhD
Resources

• http://www.prisonerhealth.org/
• http://hab.hrsa.gov/tools/openingdoors/index.htm
• http://www.enhancelink.org/sites/HivJailStudy/default.aspx
• http://www.aidsetc.org/aidsetc?page=cf-nw-corrections
ADDITIONAL SLIDES
### HIV in Corrections and General Population

Percent with confirmed AIDS among state and federal prisoners and the U.S. general population, 1999-2008

<table>
<thead>
<tr>
<th>Year-end</th>
<th>Percent of population estimated to have confirmed AIDS</th>
<th>Ratio of AIDS cases in prisons to cases in U.S. general population</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>State and federal prisoners</td>
<td>U.S. general population</td>
</tr>
<tr>
<td>1999</td>
<td>0.58%</td>
<td>0.12%</td>
</tr>
<tr>
<td>2000</td>
<td>0.51</td>
<td>0.13</td>
</tr>
<tr>
<td>2001</td>
<td>0.50</td>
<td>0.14</td>
</tr>
<tr>
<td>2002</td>
<td>0.45</td>
<td>0.14</td>
</tr>
<tr>
<td>2003</td>
<td>0.47</td>
<td>0.15</td>
</tr>
<tr>
<td>2004</td>
<td>0.46</td>
<td>0.15</td>
</tr>
<tr>
<td>2005</td>
<td>0.43</td>
<td>0.16</td>
</tr>
<tr>
<td>2006</td>
<td>0.46</td>
<td>0.17</td>
</tr>
<tr>
<td>2007</td>
<td>0.41</td>
<td>0.17</td>
</tr>
<tr>
<td>2008</td>
<td>0.39</td>
<td>...</td>
</tr>
</tbody>
</table>

http://bjs.ojp.usdoj.gov/index.cfm?ty=pbdetail&amp;iid=174
ARS Questions