HIV Infection among Incarcerated Communities: Persons without Hope

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Why does it matter?
THE INMATE NATION
What Are Prisons For?
The U.S. imprisons more people per capita than any other country in the world. In the 1990s alone, our inmate population grew by 239%.

Source: International Centre for Prison Studies, www.prisonstudies.org
Epidemic of Incarceration

In 2010, 2.3 million persons are incarcerated in the U.S.
Adults under correctional supervision by race, 1986-97

Percent of adults
Percent of Total Burden of Infectious Disease passing through Corrections, 1997

- AIDS 16%
- Total HIV/AIDS 20-26%
- Chronic Hepatitis B 12-16%
- Hepatitis C 29-32%
- TB Disease 38%

Hammett et al AJPH 2002
## Share of HIV Borne by Releasees

<table>
<thead>
<tr>
<th>Variable</th>
<th>Revised Estimate for 1997</th>
<th>Estimate for 2006</th>
<th>Variable</th>
</tr>
</thead>
<tbody>
<tr>
<td>Share, HIV/AIDS</td>
<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>14.8%</td>
<td>10.2%</td>
<td>31% decline</td>
</tr>
</tbody>
</table>

### 1997
- **HIV/AIDS in US = 775,000**
- **HIV/AIDS in 1997 = 153,450**

### 2005
- **HIV/AIDS in US = 1,095,812**
- **HIV/AIDS in 2005 = 154,509**

Different percentages but numbers roughly equal!
Stigma magnifies the challenges of working with marginalized communities

- Normal support from families, friends, church or community is not as present.
- Stigma and the sense of hopelessness and worthlessness make it doubly hard for the marginalized to seek support.
- *How hard it is to give hope to those who have lost hope!*
HIV testing and treatment are cornerstones of prevention

Without HIV testing, prevention is almost impossible
Without treatment and support, HIV testing is almost impossible

It Is Time to Implement Routine, Not Risk-Based, HIV Testing

Curt G. Beckwith,¹ Timothy P. Flanigan,¹ Carlos del Rio,² Emma Simmons,¹ Edward J. Wing,¹ Charles C. J. Carpenter,¹ and John G. Bartlett²

¹Brown Medical School and the Lifespan/Tufts/Brown Center for AIDS Research (CFAR), Providence, Rhode Island; ²Emory University School of Medicine and Emory University CFAR, Atlanta, Georgia; and ³Johns Hopkins School of Medicine and Johns Hopkins University CFAR, Baltimore, Maryland
Think Global_Act Local
A Novel HIV Testing Campaign in Philadelphia

Engaging African American Religious Leaders

We Have Been Tested for HIV. Have You?

Get Tested for HIV

To Find A Testing Center Near You Call:

1-800-985-AIDS

Billboard to be displayed throughout the city
Why Are Correctional Institutions Important Targets for HIV?

- Large reservoir of people living with HIV
  - 1.5% or males and 1.9% of females are HIV infected (5 times the general population 0.3%)
  - Florida, New York, and Texas house 46.5% of all inmates known to be HIV infected
- Most HIV-infected prisoners have not engaged in routine primary care in community settings
- Prisons may be an important site for initiating the complex behavior of health promotion

Available at: http://bjs.ojp.usdoj.gov/content/pub/pdf/hivp08.pdf.
## Expansion of HIV Testing within US Jails

<table>
<thead>
<tr>
<th>City</th>
<th>Testing Period</th>
<th>Test used</th>
<th>% detainees tested (#)</th>
<th>% newly diagnosed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Washington, DC</td>
<td>2 years (6/06-5/08)</td>
<td>rapid (oral)</td>
<td>68% (22,550)</td>
<td>0.8% (191)</td>
</tr>
<tr>
<td>NYC</td>
<td>9 months (1/08-9/08)</td>
<td>rapid (wholeblood)</td>
<td>26% (16,166)</td>
<td>0.5% (85)</td>
</tr>
<tr>
<td>Baltimore</td>
<td>6 months (5/08-10/08)</td>
<td>rapid (oral)</td>
<td>84% (4959)</td>
<td>0.3% (17)</td>
</tr>
<tr>
<td>Philadelphia</td>
<td>6 months (1/08-6/08)</td>
<td>rapid (oral)</td>
<td>32% (6499)</td>
<td>0.7% (47)</td>
</tr>
</tbody>
</table>
How to start working with those that are marginalized and at risk?
New HIV Diagnoses from RIDOC, 2000-2007

- 169 new diagnoses
  - 15.3% of all new diagnoses within RI

<table>
<thead>
<tr>
<th>Sex</th>
<th>RIDOC data</th>
<th>CDC Data (2003-2006)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>90%</td>
<td>73%</td>
</tr>
<tr>
<td>Female</td>
<td>10%</td>
<td>27%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Age-group</th>
<th>RIDOC data</th>
<th>CDC Data (2003-2006)</th>
</tr>
</thead>
<tbody>
<tr>
<td>20-29</td>
<td>8%</td>
<td>23%</td>
</tr>
<tr>
<td>30-39</td>
<td>33%</td>
<td>32%</td>
</tr>
<tr>
<td>40-49</td>
<td>46%</td>
<td>29%</td>
</tr>
<tr>
<td>50-59</td>
<td>13%</td>
<td>12%</td>
</tr>
<tr>
<td>60+</td>
<td>&lt;1%</td>
<td>4%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Race &amp; Ethnicity</th>
<th>RIDOC data</th>
<th>CDC Data (2003-2006)</th>
</tr>
</thead>
<tbody>
<tr>
<td>White (non-Hispanic)</td>
<td>27%</td>
<td>30%</td>
</tr>
<tr>
<td>Black (non-Hispanic)</td>
<td>35%</td>
<td>50%</td>
</tr>
<tr>
<td>Hispanic</td>
<td>37%</td>
<td>18%</td>
</tr>
<tr>
<td>Asian/Pacific Islander</td>
<td>1%</td>
<td>1%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>HIV Exposure Category</th>
<th>RIDOC data</th>
<th>CDC Data (2003-2006)</th>
</tr>
</thead>
<tbody>
<tr>
<td>MSM</td>
<td>16%</td>
<td>48%</td>
</tr>
<tr>
<td>IDU</td>
<td>26%</td>
<td>14%</td>
</tr>
<tr>
<td>Heterosexual risk</td>
<td>7%</td>
<td>33%</td>
</tr>
<tr>
<td>Risk not specified</td>
<td>48%</td>
<td>&lt;1.0%</td>
</tr>
</tbody>
</table>
New HIV Diagnoses at the Rhode Island Department of Corrections (RIDOC), 2000-2009

<table>
<thead>
<tr>
<th>Year</th>
<th>Total # of detainees newly diagnosed with HIV infection upon entry to RIDOC</th>
</tr>
</thead>
<tbody>
<tr>
<td>2000</td>
<td>33</td>
</tr>
<tr>
<td>2001</td>
<td>26</td>
</tr>
<tr>
<td>2002</td>
<td>23</td>
</tr>
<tr>
<td>2003</td>
<td>27</td>
</tr>
<tr>
<td>2004</td>
<td>23</td>
</tr>
<tr>
<td>2005</td>
<td>14</td>
</tr>
<tr>
<td>2006</td>
<td>10</td>
</tr>
<tr>
<td>2007</td>
<td>13</td>
</tr>
<tr>
<td>2008</td>
<td>6</td>
</tr>
<tr>
<td>2009</td>
<td>5</td>
</tr>
</tbody>
</table>
Delivery of HIV Services to Jail Detainees

- **Challenges:**
  - Jails are tough
  - Short incarcerations
  - Overcrowding
  - Health services low priority
Drug arrests by age, 1970-2007

- Adult
- Juvenile

Year: 1970 to 2007
Who’s Incarcerated?

- 44% men and 52% women prisoners meet criteria for alcohol/drug dependence (Karberg & James, 2005)
  - 39% men, 80% women nonviolent or drug offenders

- 60-83% were either under the influence during offense; committed offense to support drug addiction; or charged with a drug/alcohol related crime (Belenko & Peugh, 1998)

Substance abuse is a huge challenge

- Multiple sexual partners is associated with cocaine use
- Cocaine use and heavy alcohol use is associated with much higher rates of HIV
- Cocaine and heavy alcohol use results in decreased adherence to treatment and higher rates of “lost to follow-up”
Partnership is key...both with professionals and with those in the community that are sympathetic...and with those at risk.
When working in challenging settings, the unexpected happens...be flexible!...and be sure that you have the help of your mentor!
HIV interventions can have a huge impact among even drug users

- Early in the epidemic 50% of HIV infections in Rhode Island were among injection drug users
- Widespread HIV testing, treatment among those that were +, and being able to buy new syringes which decreased reuse and sharing of needles resulted in drops in new infections
- Now less than 5% of new HIV infections are among IDUs
New Cases of HIV related to IDU fell by over 80% in RI from 1990 to 2003

Figure 1
Newly Diagnosed Cases of HIV Reported to the Rhode Island Department of Health by Year of Diagnosis. The number of newly diagnosed cases of HIV in Rhode Island and the number of new HIV diagnoses related to injection drug use from 1990–2003. The implementation of specific HIV prevention interventions targeting injection drug users is noted in boxes.
Language is very, very important

- So that we can understand what is really going on...
- So that we do not further stigmatize our patients which will drive them away from HIV testing and treatment...
- So that we can treat them with care and dignity that every person deserves...
Many marginalized persons and communities are highly vulnerable

- They do not have family and community support---isolation is common...
- Often mental health and substance abuse are ongoing challenges
- Confidentiality is highly important
- It’s necessary to think through before beginning a research project, ways in which care and support can be given
You have to meet the patient or study participant “where they’re at”

- Maybe they are less concerned about HIV, than about having a safe place to spend the night where they will not be beaten up or raped
- Maybe they are more concerned about their child, than about themselves
- Maybe Hep C or other chronic medical illness is causing them greater suffering…
Reentry: But They All Come Back

- 95% of prisoners are released to their communities.²
- 735,000 individuals released from state and federal prisons in 2008.³
- Approximately 9 million individuals are released from jail each year.⁴

West, Sabol, & Cooper., 2009.
Prisoners have significantly higher rates of infection with HIV, hepatitis B and C, TB, STDs, and other related diseases as well as addiction, mental illness, hypertension, asthma, cirrhosis and other diseases.

It is a whole person….One person with multiple diseases….not multiple diseases that happen to be in one person
Key Strategy: Continuity of Care

- **Step 1: Identify HIV and begin treatment**
  - Screening incarcerated populations
  - Initiation of treatment

- **Step 2: Maintain continuous care**
  - Discharge planning and linkage to care in the community
  - Prevent transmission
Accessing HAART Following Release From Prison

- Retrospective cohort study (2004-2007)
  - All HIV-infected inmates released from Texas Department of Criminal Justice prison system (n=2112)
  - Texas ADAP program
    - ADAP program not convenient
- >90% of the former inmates experienced a treatment interruption
  - Treatment interruptions lasting
    - ≥30 days: >70%
    - ≥60 days: >60%

### Table 4. Referrals made for HIV-infected ex-offenders in Project Bridge, Rhode Island, 1997–2000

<table>
<thead>
<tr>
<th>Referrals</th>
<th>Expressed need and received referrals, % (n)</th>
<th>Kept referral appointment (of those needing one), % (n)</th>
</tr>
</thead>
<tbody>
<tr>
<td>HIV Specialty care</td>
<td>100 (97)</td>
<td>100 (97/97)</td>
</tr>
<tr>
<td>Housing</td>
<td>95 (92)</td>
<td>76 (70/92)</td>
</tr>
<tr>
<td>Drug treatment</td>
<td>44 (43)</td>
<td>67 (29/43)</td>
</tr>
<tr>
<td>HIV/AIDS medications: AIDS Drug Assistance Program</td>
<td>32 (31)</td>
<td>100 (31/31)</td>
</tr>
<tr>
<td>Mental health treatment</td>
<td>95 (92)</td>
<td>48 (44/92)</td>
</tr>
<tr>
<td>Employment</td>
<td>94 (91)</td>
<td>37 (34/91)</td>
</tr>
<tr>
<td>Shelter</td>
<td>18 (17)</td>
<td>76 (13/17)</td>
</tr>
<tr>
<td>Food</td>
<td>37 (36)</td>
<td>75 (27/36)</td>
</tr>
<tr>
<td>Pharmaceuticals (other than for HIV/AIDS)</td>
<td>28 (27)</td>
<td>96 (26/27)</td>
</tr>
<tr>
<td>Dental treatment</td>
<td>28 (27)</td>
<td>59 (16/27)</td>
</tr>
<tr>
<td>SSI</td>
<td>26 (25)</td>
<td>84 (21/25)</td>
</tr>
<tr>
<td>Medical specialists (other than for HIV/AIDS)</td>
<td>33 (32)</td>
<td>75 (24/32)</td>
</tr>
<tr>
<td>Medicaid</td>
<td>32 (31)</td>
<td>81 (25/31)</td>
</tr>
<tr>
<td>Other social services</td>
<td>71 (69)</td>
<td>88 (61/69)</td>
</tr>
</tbody>
</table>
Continuity of Care for Released Prisoners is Critical

- HIV-infected prisoners who leave correctional facilities engage in high-risk behaviors and may transmit HIV to others
- Substance abuse treatment, including medication-assisted therapies, should be implemented prior to release
- Post-release priorities include
  - Antiretroviral therapy, social and medical entitlements, housing, substance abuse and mental health treatment, childcare, and transportation

While lecturing to students at Harvard in the fall of 1925, Francis Peabody noted, “...the secret of the care of the patient is in caring for the patient.”

This maxim is not taught in a lecture, but it is lived and taught by example...