The Future of the AIDS Epidemic in New York State

Dan O’Connell
Director, AIDS Institute
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Number of Diagnosed HIV Cases Reported to the CDC by the Top Six Reporting States, 2011*

<table>
<thead>
<tr>
<th>State</th>
<th># of Cases Diagnosed in 2011</th>
<th># persons living with diagnosed HIV</th>
<th>Proportion of 2011 diagnoses to total living with HIV</th>
<th>Population in 2011**</th>
<th>Rate of 2011 Diagnoses Per 100,000 Population</th>
<th>HIV Reporting Start Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Florida</td>
<td>5,124</td>
<td>96,614</td>
<td>5.3</td>
<td>19,082,262</td>
<td>26.9</td>
<td>July 1997</td>
</tr>
<tr>
<td>California</td>
<td>4,785</td>
<td>112,555</td>
<td>4.3</td>
<td>37,683,933</td>
<td>12.7</td>
<td>April 2006</td>
</tr>
<tr>
<td>Texas</td>
<td>4,399</td>
<td>65,625</td>
<td>6.7</td>
<td>25,631,778</td>
<td>17.2</td>
<td>Jan 1999</td>
</tr>
<tr>
<td>New York</td>
<td>4,132</td>
<td>130,255</td>
<td>3.2</td>
<td>19,501,616</td>
<td>21.2</td>
<td>June 2000</td>
</tr>
<tr>
<td>Georgia</td>
<td>1,957</td>
<td>34,913</td>
<td>5.6</td>
<td>9,812,460</td>
<td>19.9</td>
<td>Dec 2003</td>
</tr>
<tr>
<td>Illinois</td>
<td>1,705</td>
<td>32,410</td>
<td>5.3</td>
<td>12,859,752</td>
<td>13.3</td>
<td>Jan 2006</td>
</tr>
<tr>
<td>Total US</td>
<td>41,455</td>
<td>876,485</td>
<td>4.7</td>
<td>310,968,796</td>
<td>13.3</td>
<td></td>
</tr>
</tbody>
</table>

*Data from CDC HIV Surveillance Report Vol. 23, 2011, representing 50 states., p.68 -72
**Source: U.S. Bureau of the Census
Accomplishments in NYS

- 40% reduction in newly diagnosed HIV cases in the last decade;
- The near elimination of mother-to-child transmission (MTCT), with a drop in the rate of MTCT from 25% to 40% in 1990 to 0.8% - just three cases -- in 2012; prelim data shows only 2 (+) births for 2013;
- A reduction in the proportion of injection drug users among newly diagnosed cases from 54% in the 1990s to just 4%;
- Universal access to HIV medications and care for New York’s PLWHA through grant-funded HIV Uninsured Care Programs - which bridge the gap between Medicaid coverage and private insurance.

Notable 5-year changes (2007-2012)

- Diagnoses decreased statewide (-28%), in NYC (-30%) and in NYS excluding NYC (-16%)
- Diagnoses decreased among males (-23%) and females (-41%)
- Diagnoses decreased among Whites (-20%), Blacks (-31%) and Hispanics (-28%), Asian/PI (-17%)
- Diagnoses decreased in age 13-19 (-39%), 25-29 (-14%), 30-39 (-32%), 40-49 (-41%), 50-59 (-31%), and 60+ (-20%)
- Diagnoses decreased among IDU (-63%), MSM/IDU (-41%), heterosexual (-47%) and FPHC (-31%)
- Diagnoses decreased slightly among MSM (-8%)
Reducing HIV Transmission Rates

- **Eradication** worldwide there are zero occurrences of infection caused by a specific disease agent
  - Smallpox

- **Elimination** of disease or infection in a defined geographic area there are zero occurrences of a given disease

- **Control** new and existing cases as well as disease morbidity and mortality are within locally acceptable levels

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### Potential Goals Toward the Elimination of HIV Transmission

<table>
<thead>
<tr>
<th>Year</th>
<th>Target Incidence</th>
<th>Decrease in new infections (%)</th>
<th>Annual transmission rate (%)</th>
<th>Incident cases per 1,000,000 population</th>
</tr>
</thead>
<tbody>
<tr>
<td>2011</td>
<td>3,640</td>
<td>--</td>
<td>2.4%</td>
<td>188</td>
</tr>
<tr>
<td></td>
<td>3,080</td>
<td>15%</td>
<td>2.0%</td>
<td>159</td>
</tr>
<tr>
<td></td>
<td>2,730</td>
<td>25%</td>
<td>1.8%</td>
<td>141</td>
</tr>
<tr>
<td></td>
<td>2,350</td>
<td>35%</td>
<td>1.5%</td>
<td>121</td>
</tr>
<tr>
<td></td>
<td>1,820</td>
<td>50%</td>
<td>1.2%</td>
<td>94</td>
</tr>
<tr>
<td></td>
<td>1,470</td>
<td>60%</td>
<td>1.0%</td>
<td>76</td>
</tr>
<tr>
<td></td>
<td>730</td>
<td>80%</td>
<td>0.5%</td>
<td>38</td>
</tr>
</tbody>
</table>

*Transmission Rate T(x) = (incidence*100)/prevalence of HIV-infected persons

### Reducing HIV Transmission Rates

#### AIDS Diagnoses among Persons with a non-Concurrent HIV Diagnosis, by Year of HIV Diagnosis - New York State, 2002-2011

![Graph showing cumulative percent with AIDS diagnosis over years after HIV diagnosis](image-url)
Proportion of HIV and AIDS Cases* by Risk and Year of Diagnosis
New York State, 1985-2012**

* AIDS Cases are shown for 1985-1999
HIV reporting started in June 2000 in New York State; HIV cases are shown for 2001-2012.
All HIV cases are counted regardless of concurrent or subsequent AIDS diagnosis.
1. MSM=men who have sex with men (includes bisexual men)  2. IDU=Injection drug users  3. MSM/IDU=men who have sex with men and inject drugs  4. Hetero=heterosexual  5. Female Presumed Heterosexual Contact

**Data as of January 2014
NYSDOH/AEHBIAE

Newly Diagnosed HIV Cases among by Transmission Risk:
New York State, 2002-2012

Blood Prod.
Pediatric
MSM/IDU
IDU
Unknown
Heterosexual
MSM

Percent of Newly Diagnosed (a) or PLWDDH (b)

- Linked to Care (a): 84% NYS Total, 2012; 81% NYS Black, 2012; 75% US Black, 2010
- Retained in Care (b): 56% NYS Total, 2012; 56% NYS Black, 2012; 48% US Black, 2010
- Virally Suppressed (b): 51% NYS Total, 2012; 48% NYS Black, 2012; 35% US Black, 2010

Source: BHHAAN/NYSDOH, April 2014
2011 Viral Load Suppression

- Statewide average for patients engaged in care and on ART always suppressed
- Clinic average Viral Load Suppression (VLS) for patients is 62% Statewide
- Clinic average VLS for newly treated patients on ART 66%.
- Similar results for 3 HIV SNPs of 67% always suppressed.
- IPRO review of 2 DOCCS hubs showed >90% viral suppression for HIV infected inmates accessing care
Key Policy Drivers

- Simplified consent for HIV testing
- Enhanced data sharing between health departments and health care providers
- 30% rent cap to maintain 10,000 HIV infected persons in stable housing
- MOU language change to include HIV/AIDS and sexual health
- NYS Sexual Health Plan for youth

Article 27F
Amends the State HIV testing law to support simplified consent for HIV testing

- There are up to 10,000 people living with HIV in New York State that are unaware of their HIV status.
- Expanded testing is needed to identify these individuals and link them to care and treatment.
- The proposed amendment removes the requirement for written consent [except in DOCS facilities] consistent with CDC guidelines.
- Amend PHL 2701 to read: In order for there to be informed consent, the person ordering the test shall, prior to obtaining informed consent, at a minimum advise the protected individual that an HIV-related test is being performed.
Article 21
Amends the State HIV testing law to expand authorization for data sharing

Surveillance data from 2012 shows that approximately 46,000 people, or 35% of the 132,000 persons living with diagnosed HIV infection, had no reported laboratory data documenting that they received HIV care.

The proposed amendment allows the health department to share HIV surveillance information with current health care providers for purposes of patient linkage and retention in care.

Broader sharing of data will enable the State and health care providers to work together.

Amend PHL 2135 to read:
(d) when used for purposes of patient linkage and retention in care, patient specific identified information may be shared between local and state health departments and health care providers currently treating the patient as approved by the commissioner.

Pre-Exposure Prophylaxis (PrEP)

Expertise
- Known leader in biomedical interventions to prevent HIV infection
- NYS first to develop and distribute Clinical Guidance on the use of PrEP
  

Infrastructure
- PrEP pilot began February 1, 2014
- Six participating agencies: utilizing a broad network of community-based providers
- Foundation for statewide program implementation where PrEP is delivered as part of a comprehensive prevention plan

Existing Coverage
- NYS Medicaid will cover PrEP
Non-Occupational Post-Exposure Prophylaxis (nPEP)

**Expertise**
- Led collaborative effort to develop nPEP guidelines
- Developed partnerships with clinicians and community based prevention programs to promote patient access

**Infrastructure**
- Provider Education – delivered a series of education events and webinars across the state
- Consumer awareness – nPEP Brochure

**Existing Coverage**
- NYS Medicaid will cover PEP, no pre-authorization required

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Public Health and Antiretroviral (ARV) Drug Manufacturer Partnership

Ensure affordable, universal access to antiretroviral therapy

- To end the AIDS epidemic HIV-infected persons must achieve viral suppression
- Maximize the benefits of Medicaid expansion
- Utilize the New York State of Health Marketplace
- Get health care providers to prescribe ARVs and monitor viral load
Positive Pathways

NY Department of Corrections & Community Supervision (DOCCS)
NYS Department of Health AIDS Institute (DOH)
Community-Based Organizations (CBOs)
HIV Center at Columbia University
CUNY School of Public Health

Project made possible by CDC PS12_1201 Category G Funding
Rationale for Positive Pathways: The Public Health Challenge

- 52,000 inmates in NYS Correctional Facilities (CFs)

  Estimated 2.5% - 3.5% are HIV+ (1,500 – 2,000)

  As many as half (50%) of HIV+ inmates are not known to DOCCS Health Services (H.S.)

  Majority of HIV+ inmates unknown to H.S. are personally aware of their HIV status; choose not to disclose

Reasons for Non-disclosure (Focus Groups & Literature)

- Confidentiality & inadvertent disclosure concerns
- Stigma associated with being HIV+
- Perceptions of poor medical care in CFs
- Denial
- Other reasons (not ready to disclose, waiting until release to seek care, etc.)
Positive Pathways Objectives

- Reduce stigma associated with being HIV+ in the correctional setting
- Identify new & existing cases of HIV in DOCCS CFs
- Initiate HIV care & treatment during incarceration
- Ensure linkage to & continuity of HIV care & treatment upon & after release

Community Based Organizations Providing Positive Pathways Services

- WPA (Women's Prison Association)
- PathStone
- The Osborne Association
- AIDS Council of Northeastern New York
- Center for Community Alternatives
Positive Pathways
Training of Health Services (HS) staff
Training of Correction Officers (COs)
Supportive services 6 months post-release
Systematic HIV Testing
Evidence-based intervention with inmates
Education of inmates

Positive Pathways Activities
Evidenced based strategies

- Ensure effective responses to complex and intersecting health and social conditions

- Reduce health disparities among New York’s low-income and most vulnerable and marginalized residents

- Continued aggressive prevention
  - Mandatory offer of testing to all persons 13-64 years old
  - 4th generation testing
  - Syringe exchange
  - Linkage to care
  - Retention in care
  - High impact surveillance
  - PreP and nPEP
  - Housing for HIV-infected persons
  - Health insurance for persons at risk of infection

Reduction in new HIV diagnosis

- 730 infections

Reduction in total percentage of individuals progressing from HIV to AIDS within two years

- 50% reduction

The end of high numbers of new diagnoses and persons progressing from HIV to AIDS

Control: prevent new cases as well as disease morbidity and mortality
Dan O’Connell  
Director  
AIDS Institute  

dao03@health.state.ny.us  
518.474.6399