HIV/AIDS in the Southern Region: An Epidemiological Profile

Colin Flynn, Chief
Center for HIV Surveillance & Epidemiology
Infectious Disease & Environmental Health Admin.
Maryland Department of Health & Mental Hygiene

March 31, 2011
To improve the health of Marylanders by reducing the transmission of infectious diseases, helping impacted persons live longer, healthier lives, and protecting individuals and communities from environmental health hazards.

We work in partnership with local health departments, providers, community based organizations, and public and private sector agencies to provide public health leadership in the prevention, control, monitoring, and treatment of infectious diseases and environmental health hazards.
National Data
At the end of 2006, an estimated 1.1 million Americans were infected with HIV.

It is also estimated that 21% of the infected were undiagnosed.

## 2009 Estimated AIDS Diagnoses, Ranked by Rates

<table>
<thead>
<tr>
<th>STATE/TERRITORY</th>
<th>Cases</th>
<th>Rate per 100,000</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. District of Columbia</td>
<td>718</td>
<td>119.8</td>
</tr>
<tr>
<td>2. New York</td>
<td>4,799</td>
<td>24.6</td>
</tr>
<tr>
<td>3. Florida</td>
<td>4,392</td>
<td>23.7</td>
</tr>
<tr>
<td>4. Maryland</td>
<td>1,134</td>
<td><strong>19.9</strong></td>
</tr>
<tr>
<td>5. Louisiana</td>
<td>869</td>
<td>19.4</td>
</tr>
<tr>
<td>6. Puerto Rico</td>
<td>735</td>
<td>18.5</td>
</tr>
<tr>
<td>7. Delaware</td>
<td>159</td>
<td>18.0</td>
</tr>
<tr>
<td>8. New Jersey</td>
<td>1,475</td>
<td>16.9</td>
</tr>
<tr>
<td>9. South Carolina</td>
<td>713</td>
<td>15.6</td>
</tr>
<tr>
<td>10. Georgia</td>
<td>1,391</td>
<td>14.1</td>
</tr>
<tr>
<td><strong>United States</strong></td>
<td>34,993</td>
<td><strong>11.2</strong></td>
</tr>
</tbody>
</table>

## 2009 Estimated AIDS Diagnoses, Ranked by Rates

<table>
<thead>
<tr>
<th>METROPOLITAN AREA</th>
<th>Cases</th>
<th>Rate per 100,000</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Miami, FL</td>
<td>2,061</td>
<td>37.2</td>
</tr>
<tr>
<td>2 Baton Rouge, LA</td>
<td>241</td>
<td>30.6</td>
</tr>
<tr>
<td>3 Jacksonville, FL</td>
<td>387</td>
<td>29.1</td>
</tr>
<tr>
<td>4 New York, NY-NJ-PA</td>
<td>5,153</td>
<td>27.0</td>
</tr>
<tr>
<td>5 Washington, DC-VA-MD-WV</td>
<td>1,455</td>
<td>26.6</td>
</tr>
<tr>
<td>6 Columbia, SC</td>
<td>175</td>
<td>23.5</td>
</tr>
<tr>
<td>7 Memphis, TN-MS-AR</td>
<td>305</td>
<td>23.3</td>
</tr>
<tr>
<td>8 Orlando, FL</td>
<td>485</td>
<td>23.3</td>
</tr>
<tr>
<td>9 New Orleans-Metairie-Kenner, LA</td>
<td>274</td>
<td>23.0</td>
</tr>
<tr>
<td>10 Baltimore-Towson, MD</td>
<td>614</td>
<td>22.8</td>
</tr>
</tbody>
</table>

**United States**

<table>
<thead>
<tr>
<th>Cases</th>
<th>Rate per 100,000</th>
</tr>
</thead>
<tbody>
<tr>
<td>34,981</td>
<td>11.2</td>
</tr>
</tbody>
</table>

State Data
Using data as reported through 12/31/2010
# Maryland HIV/AIDS Statistics

## Reported Diagnoses (during 2009)

<table>
<thead>
<tr>
<th></th>
<th>No.</th>
<th>per 100,000</th>
<th>1 in X</th>
</tr>
</thead>
<tbody>
<tr>
<td>HIV</td>
<td>1,521</td>
<td>26.7</td>
<td></td>
</tr>
<tr>
<td>AIDS</td>
<td>692</td>
<td>12.1</td>
<td></td>
</tr>
</tbody>
</table>

## Living Cases (on 12/31/09)

- HIV without AIDS: 12,373 (217.1)
- HIV with AIDS: 16,707 (293.1)
- Total HIV: 29,080 (510.2) 1 in 196

## Cumulative (through 12/31/10)

- Total HIV: 48,812
- HIV with AIDS: 34,809 (71.3% of HIV)
- AIDS Deaths: 17,741 (51.0% of AIDS)

Using data as reported through 12/31/2010
Maryland Living HIV Cases by Region, 12/31/09

N = 29,080

- Suburban
  - Washington: 29%
  - Baltimore: 15%
  - Eastern: 2%
  - Western: 2%
- Corrections: 5%
- Southern: 2%

Using data as reported through 12/31/2010
Regional Data
HIV/AIDS Trends
Southern Region

2001-2008 HIV high, due to reporting transition

Using data as reported through 12/31/2010
Living HIV Cases
Southern Region

Using data as reported through 12/31/2010
## HIV Statistics
### Southern Region

<table>
<thead>
<tr>
<th></th>
<th>Reported HIV Diagnoses during 2009</th>
<th>Living HIV Cases on 12/31/2009</th>
</tr>
</thead>
<tbody>
<tr>
<td>Southern Region</td>
<td>35</td>
<td>473</td>
</tr>
<tr>
<td>Calvert</td>
<td>4</td>
<td>95</td>
</tr>
<tr>
<td>Charles</td>
<td>27</td>
<td>282</td>
</tr>
<tr>
<td>Saint Mary’s</td>
<td>4</td>
<td>96</td>
</tr>
</tbody>
</table>

Using data as reported through 12/31/2010
Southern Region Living HIV Cases by County, 12/31/09

- Charles: 60%
- St. Mary's: 20%
- Calvert: 20%

N = 473

Using data as reported through 12/31/2010
Living HIV Cases Rates per 100,000 Population by County, Southern Region, 12/31/09

Population on 7/1/09. Cases on 12/31/09 as reported through 12/31/10
New HIV Mapping Tool

[Image of a map showing HIV data with various markers indicating different statistics]
HIV Rates by ZIP Code
<table>
<thead>
<tr>
<th></th>
<th>Population</th>
<th>Living HIV Cases</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Female</strong></td>
<td>50.8</td>
<td>40.0</td>
</tr>
<tr>
<td><strong>Male</strong></td>
<td>49.2</td>
<td>60.0</td>
</tr>
</tbody>
</table>

Population and Living HIV Cases by Sex, Southern Region

Population on 7/1/09, Cases on 12/31/09 as reported through 12/31/10
Using data as reported through 12/31/2010
Population and Living HIV Cases by Race/Ethnicity
Southern Region

Population on 7/1/09, Cases on 12/31/09 as reported through 12/31/10
Reported HIV Diagnosis Trends by Race/Ethnicity Southern Region

Using data as reported through 12/31/2010
Population and Living HIV Cases by Age, Southern Region

Population on 7/1/09, Cases on 12/31/09 as reported through 12/31/10

Maryland Infectious Disease and Environmental Health Administration
March 31, 2011
Reported HIV Diagnosis Trends by Age at Diagnosis
Southern Region

Using data as reported through 12/31/2010
Risk Categories

**MSM**: Men who have Sex with Men

**IDU**: Injection Drug Use

**MSM/IDU**: Men who have Sex with Men **AND** Inject Drugs

**HetSex**: Heterosexual Contact with a Person that has or is at Risk for HIV Infection
Living HIV Cases 12/31/09 by Exposure Category
Southern Region

N (with Risk) = 295 (62% of Total)

- MSM: 39%
- MSM/IDU: 2%
- IDU: 16%
- HetSex: 41%
- Other: 2%

Using data as reported through 12/31/2010
Living HIV Cases 12/31/09 by Risk and Sex at Birth Southern Region

Using data as reported through 12/31/2010
Using data as reported through 12/31/2010
2009 Reported Adult/Adolescent HIV Diagnoses (N=35) Southern Region

- Linkage to Care: 49% had a CD4 or VL test within 3 months of HIV diagnosis

- CD4 at Diagnosis: 54% had a CD4 test within 12 months of HIV diagnosis, and the median value was 258 cells/microliter

- Late HIV Diagnosis: 23% had an AIDS diagnosis within 12 months of their HIV diagnosis

Using data as reported through 12/31/2010
2009 Reported Adult/Adolescent AIDS Diagnoses (N=14) Southern Region

- Progression: The average time from HIV diagnosis to AIDS diagnosis was 2.6 years

- Late HIV Diagnosis: 64% were diagnosed with AIDS within 12 months of their HIV diagnosis

Using data as reported through 12/31/2010
Regional Summary
HIV/AIDS in the Southern Region

- There were 473 living HIV cases at the end of 2009 and 35 reported HIV diagnoses during 2009.
- Charles County had the greatest share of living cases (60%).
- Rates of living cases were 2 times higher in Charles County than the other counties.
- HIV was being diagnosed late (23% late, median CD4 258), contributing to many AIDS diagnoses (64% had late HIV diagnosis).
HIV/AIDS in the Southern Region: Demographics

- Males were disproportionately affected (60% of cases vs. 49% of population), and the proportion male was increasing.
- Non-Hispanic blacks were disproportionately affected (68% vs. 25%), and the proportion was stable.
- Persons 30-59 years old were disproportionately affected (80% vs. 44%), but the proportions were decreasing among 30-39 year olds while increasing among 20-29 and 40-49 year olds.
HIV/AIDS in the Southern Region: Transmission Risk

- Sexual transmission predominates (>80%)
  - Homosexual and heterosexual transmission among men
  - Heterosexual transmission among women
  - Male homosexual transmission proportion was increasing
  - Heterosexual transmission was decreasing

- Injection drug use is an important route of transmission (>16%), but the proportion IDU was decreasing
New Epidemiological Products Coming to the New IDEHA Website

- New Epi Profiles for State, Regions, Counties
- New Indicators
  - Linkage to care
  - Late HIV diagnosis
  - CD4 counts at HIV diagnosis
  - Disease state: CD4 and VL levels for living cases
  - Progression: HIV to AIDS, AIDS to death
  - Presumed female heterosexual exposure category
- New HIV Mapping Tool
- New Query-able Database
Maryland
Infectious Disease and Environmental Health Administration

http://ideha.dhmh.maryland.gov