HIV/AIDS in the Western Region: An Epidemiological Profile

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March 15, 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
U.S. HIV/AIDS Prevalence

- 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>19.9</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>United States</td>
<td>34,993</td>
<td>11.2</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><strong>5. Washington, DC-VA-MD-WV</strong></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><strong>10. Baltimore-Towson, MD</strong></td>
<td>614</td>
<td>22.8</td>
</tr>
<tr>
<td><strong>United States</strong></td>
<td>34,981</td>
<td>11.2</td>
</tr>
</tbody>
</table>

State Data
Maryland Living HIV Cases

Using data as reported through 12/31/2010

+21% Undiagnosed?
### Maryland HIV/AIDS Statistics

<table>
<thead>
<tr>
<th></th>
<th>No.</th>
<th>per 100,000</th>
<th>1 in X</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Reported Diagnoses (during 2009)</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<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>
<tr>
<td><strong>Living Cases (on 12/31/09)</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>HIV without AIDS</td>
<td>12,373</td>
<td>217.1</td>
<td></td>
</tr>
<tr>
<td>HIV with AIDS</td>
<td>16,707</td>
<td>293.1</td>
<td></td>
</tr>
<tr>
<td>Total HIV</td>
<td>29,080</td>
<td>510.2</td>
<td>196</td>
</tr>
<tr>
<td><strong>Cumulative (through 12/31/10)</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total HIV</td>
<td>48,812</td>
<td></td>
<td></td>
</tr>
<tr>
<td>HIV with AIDS</td>
<td>34,809</td>
<td>(71.3% of HIV)</td>
<td></td>
</tr>
<tr>
<td>AIDS Deaths</td>
<td>17,741</td>
<td>(51.0% of AIDS)</td>
<td></td>
</tr>
</tbody>
</table>

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

Using data as reported through 12/31/2010

N = 29,080

- Suburban Baltimore: 15%
- Suburban Washington: 29%
- Corrections: 5%
- Western: 2%
- Eastern: 2%
- Southern: 2%
- Baltimore City: 45%

Maryland Infectious Disease and Environmental Health Administration
March 15, 2011
Regional Data
HIV/AIDS Trends Western Region

2007-2008 HIV high, due to reporting transition

Number of Events

Year of Diagnosis or Death

Reported HIV Diagnoses

Reported AIDS Diagnoses

Reported AIDS Deaths

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

Using data as reported through 12/31/2010
## HIV Statistics
### Western 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>Western Region</td>
<td>32</td>
<td>631</td>
</tr>
<tr>
<td>Allegany</td>
<td>6</td>
<td>72</td>
</tr>
<tr>
<td>Frederick</td>
<td>13</td>
<td>266</td>
</tr>
<tr>
<td>Garrett</td>
<td>0</td>
<td>7</td>
</tr>
<tr>
<td>Washington</td>
<td>13</td>
<td>286</td>
</tr>
</tbody>
</table>

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

- Washington: 45%
- Frederick: 42%
- Allegany: 12%
- Garrett: 1%

N = 631

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

<table>
<thead>
<tr>
<th>County</th>
<th>Rate</th>
<th>Population on 7/1/09</th>
<th>Cases on 12/31/09 as reported through 12/31/10</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maryland</td>
<td>510</td>
<td>712,500</td>
<td>12/31/09</td>
</tr>
<tr>
<td>Western Region</td>
<td>133</td>
<td>147,000</td>
<td>12/31/09</td>
</tr>
<tr>
<td>Allegany</td>
<td>99</td>
<td>87,000</td>
<td>12/31/09</td>
</tr>
<tr>
<td>Frederick</td>
<td>117</td>
<td>101,000</td>
<td>12/31/09</td>
</tr>
<tr>
<td>Garrett</td>
<td>24</td>
<td>37,000</td>
<td>12/31/09</td>
</tr>
<tr>
<td>Washington</td>
<td>196</td>
<td>330,000</td>
<td>12/31/09</td>
</tr>
</tbody>
</table>
New HIV Mapping Tool
HIV Rates by ZIP Code

[Image of a map showing HIV rates by ZIP code in Maryland.]
Population and Living HIV Cases by Sex, Western 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 on 7/1/09, Cases on 12/31/09
as reported through 12/31/10
Reported HIV Diagnosis Trends by Race/Ethnicity Western Region

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

Population on 7/1/09, Cases on 12/31/09 as reported through 12/31/10
Reported HIV Diagnosis Trends by Age at Diagnosis Western 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
Western Region

N (with Risk) = 446 (71% of Total)

- MSM: 46%
- MSM/IDU: 4%
- IDU: 18%
- HetSex: 29%
- Other: 3%

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

Using data as reported through 12/31/2010
Reported HIV Diagnoses Exposure Category Trends, Western Region

Using data as reported through 12/31/2010
2009 Reported Adult/Adolescent HIV Diagnoses (N=32) Western Region

- Linkage to Care: 78% had a CD4 or VL test within 3 months of HIV diagnosis

- CD4 at Diagnosis: 88% had a CD4 test within 12 months of HIV diagnosis, and the median value was 370 cells/microliter

- Late HIV Diagnosis: 31% 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=13) Western Region

- Progression: The average time from HIV diagnosis to AIDS diagnosis was 3.2 years

- Late HIV Diagnosis: 69% 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 Western Region

- There were 631 living HIV cases at the end of 2009 and 32 reported HIV diagnoses during 2009.
- Washington (45%) and Frederick (42%) counties had the greatest share of living cases.
- Rates of living cases were 1.5 times higher in Washington County than the Western Region average.
- HIV was being diagnosed late (31% late, median CD4 370), contributing to many AIDS diagnoses (69% had late HIV diagnosis).
HIV/AIDS in the Western Region: Demographics

- Males were disproportionately affected (67% of cases vs. 50% of population), but the proportion female was increasing
- Non-Hispanic blacks were disproportionately affected (31% vs. 8%), but the proportion black was decreasing while the proportion white was increasing
- Persons 30-59 years old were disproportionately affected (80% vs. 42%), but the proportions were decreasing among 30-39 year olds while increasing among 20-29 and 50+ year olds
HIV/AIDS in the Western Region: Transmission Risk

- Sexual transmission predominates (>75%)
  - Homosexual and heterosexual transmission among men
  - Heterosexual transmission among women
  - Male homosexual transmission proportion was decreasing
  - Heterosexual transmission was increasing
- Injection drug use is an important route of transmission (>18%), and the proportion IDU was stable
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

Coming soon:
http://ideha.dhmh.maryland.gov