AIDS & HIV in the Austin Area

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Outline

- Worldwide
- HIV/AIDS surveillance
- National
- Austin metro area
  - Prevalence
  - Trends
  - Disparities
  - Mortality
  - Modes of exposure
  - Risk factors / behaviors
  - Pediatric
HIV/AIDS Prevalence Worldwide

- 42 million people living with HIV/AIDS
- 7.6% were children (<15 years old)
- 49.7% of infected adults are women
- >70% of all infected individuals live in Africa

As of Dec 2002 – World Health Organization
Adults and children estimated to be living with HIV/AIDS as of end 2002

- North America: 980,000
- Caribbean: 440,000
- Latin America: 1.5 million
- Western Europe: 570,000
- North Africa & Middle East: 550,000
- South & South-East Asia: 6 million
- Eastern Europe & Central Asia: 1.2 million
- East Asia & Pacific: 1.2 million
- Sub-Saharan Africa: 29.4 million
- Australia & New Zealand: 15,000

Total: 42 million
A global view of HIV infection

40 million adults living with HIV/AIDS as of end 2001
HIV Incidence Worldwide

- 5 million people were infected with HIV in 2002
- 84% of new infections were among adults
- 48% of infections were among women
- 16% among children
<table>
<thead>
<tr>
<th>Region</th>
<th># of new infections-2002</th>
<th>Main modes of transmission</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sub-Saharan Africa</td>
<td>3.5 million</td>
<td>Hetero</td>
</tr>
<tr>
<td>N. Africa &amp; Middle East</td>
<td>83 000</td>
<td>Hetero, IDU</td>
</tr>
<tr>
<td>S. &amp; S.E. Asia</td>
<td>700 000</td>
<td>Hetero, IDU</td>
</tr>
<tr>
<td>E. Asia &amp; Pacific</td>
<td>270 000</td>
<td>Hetero, IDU, MSM</td>
</tr>
<tr>
<td>Latin America</td>
<td>150 000</td>
<td>MSM, IDU, Hetero</td>
</tr>
<tr>
<td>Caribbean</td>
<td>60 000</td>
<td>MSM, Hetero</td>
</tr>
<tr>
<td>E. Europe &amp; C. Asia</td>
<td>250 000</td>
<td>IDU</td>
</tr>
<tr>
<td>W. Europe</td>
<td>30 000</td>
<td>MSM, IDU</td>
</tr>
<tr>
<td>N. America</td>
<td>45 000</td>
<td>MSM, IDU, Hetero</td>
</tr>
<tr>
<td>Australia &amp; N.Z.</td>
<td>500</td>
<td>MSM</td>
</tr>
</tbody>
</table>
HIV/AIDS surveillance

The on-going and systematic collection, analysis, interpretation, dissemination, and evaluation of population-based information about persons infected with HIV or diagnosed with AIDS.
How data are collected

Active reporting (Texas)

State and local health department surveillance personnel collect information by contacting health care practitioners and reviewing medical records in hospital and clinics.
What data are collected?

- Demographic characteristics
  - Sex, race/ethnicity, age
- Mode of exposure to HIV
- Opportunistic illnesses & immunologic status
- Supplemental information
  - Prescription of antiretroviral & prophylactic therapies
  - Use of medical & substance abuse treatment services
  - Health insurance coverage
Confidentiality

- All data is kept confidential and private.
- Names and personal identifiers of both cases and physicians are not reported to CDC.
Limitations

- HIV surveillance data only include persons who have been tested confidentially.
- Not all states require HIV surveillance.
- AIDS surveillance data only represent persons with last-state HIV disease.
Representativeness of data

- Data only include persons who have been tested, and may not be representative of all HIV-infected persons.

- It is estimated that at least 2/3 of HIV-infected persons have been confidentially tested and would be included in the surveillance system.
Uses of data

- Monitor the incidence & prevalence of HIV infection and AIDS, and HIV-related morbidity and mortality in the population
- Identify changes in trends of HIV transmission & identify populations at risk
- Target prevention interventions and evaluate their effectiveness
- Allocate funds for social and health services
United States

- 850,000 – 900,000 people living with HIV/AIDS
- 25% don’t know they are infected
- 40,000 new HIV infections each year

- CDC
Cumulative U.S. AIDS Cases
as of 2/83  N~1,000

Each point = 30 cases
Cumulative U.S. AIDS Cases as of 5/85  N~10,000

Each point = 30 cases
Cumulative U.S. AIDS Cases
as of 7/89  N~100,000

Each point = 30 cases
Cumulative U.S. AIDS Cases
as of 12/95  N~500,000

Each point = 30 cases
Cumulative U.S. AIDS Cases
as of 9/97  N~626,334

Each point = 30 cases
<table>
<thead>
<tr>
<th>State/Territory</th>
<th># of Cumulative AIDS Cases</th>
</tr>
</thead>
<tbody>
<tr>
<td>New York</td>
<td>149,341</td>
</tr>
<tr>
<td>California</td>
<td>123,819</td>
</tr>
<tr>
<td>Florida</td>
<td>85,324</td>
</tr>
<tr>
<td>Texas</td>
<td>56,730</td>
</tr>
<tr>
<td>New Jersey</td>
<td>43,824</td>
</tr>
<tr>
<td>Pennsylvania</td>
<td>26,369</td>
</tr>
<tr>
<td>Illinois</td>
<td>26,319</td>
</tr>
<tr>
<td>Puerto Rico</td>
<td>26,119</td>
</tr>
<tr>
<td>Georgia</td>
<td>24,559</td>
</tr>
<tr>
<td>Maryland</td>
<td>23,537</td>
</tr>
</tbody>
</table>
Austin Metro Area
Austin metro area

- 1983
  - First cases reported in Austin Metro Area

- 2001
  - 2,444 known living cases in Austin Metro Area
  - CDC estimates the actual number to be >4,000
Texas Metro Areas with >500,000 population*

<table>
<thead>
<tr>
<th>Area</th>
<th>Cumulative AIDS cases</th>
</tr>
</thead>
<tbody>
<tr>
<td>Austin</td>
<td>4,073</td>
</tr>
<tr>
<td>Dallas</td>
<td>13,119</td>
</tr>
<tr>
<td>El Paso</td>
<td>1,194</td>
</tr>
<tr>
<td>Fort Worth</td>
<td>3,390</td>
</tr>
<tr>
<td>Houston</td>
<td>19,898</td>
</tr>
<tr>
<td>McAllen</td>
<td>430</td>
</tr>
<tr>
<td>San Antonio</td>
<td>4,157</td>
</tr>
<tr>
<td>Texas</td>
<td>56,730</td>
</tr>
</tbody>
</table>

*CDC 2001
Prevalence by sex & race/ethnicity, 2001*

Male n = 2031

- White: 55%
- AA: 22%
- Other: 2%

Female n = 413

- White: 32%
- AA: 51%
- Other: <1%

*Austin EMA
HIV/AIDS cases by age*, 2001

*Age at diagnosis, Austin EMA

- **Male n = 2031**
- **Female n = 413**
AIDS case rates, 1990-2001
HIV case rates, 1990-2001*

*Austin EMA
AIDS cases by gender, Austin

- Male
- Female

<table>
<thead>
<tr>
<th>Year</th>
<th>Male</th>
<th>Female</th>
</tr>
</thead>
<tbody>
<tr>
<td>1981</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>1983</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>1985</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>1987</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>1989</td>
<td>0</td>
<td>9</td>
</tr>
<tr>
<td>1991</td>
<td>4</td>
<td>16</td>
</tr>
<tr>
<td>1993</td>
<td>36</td>
<td>73</td>
</tr>
<tr>
<td>1995</td>
<td>27</td>
<td>44</td>
</tr>
<tr>
<td>1997</td>
<td>19</td>
<td>25</td>
</tr>
<tr>
<td>1999</td>
<td>16</td>
<td>21</td>
</tr>
<tr>
<td>2001</td>
<td>9</td>
<td>16</td>
</tr>
</tbody>
</table>
AIDS case rates by gender, Austin

Graph showing AIDS case rates by gender from 1990 to 2001. The x-axis represents the years from 1990 to 2001, and the y-axis represents the rate per 100,000. The graph shows a peak in 1993 for males followed by a rapid decrease. For females, the rates remain relatively low and consistent throughout the years.

Graph keys:
- Male
- Female
AIDS cases by race/ethnicity

- White
- African American
- Hispanic

*Austin EMA
AIDS case rates by race/ethnicity*

*Austin EMA
HIV case rates by race/ethnicity*

* Austin EMA
AIDS rates by sex & race/ethnicity, Austin EMA 2001

- White
- African American
- Hispanic

Rate per 100,000

- Male
- Female
HIV/AIDS mortality rates, Austin EMA

age adjusted mortality rate per 10000

White
African American
Hispanic
### HIV/AIDS Mortality*

<table>
<thead>
<tr>
<th></th>
<th>Male</th>
<th>Female</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>28.4</td>
<td>3.3</td>
</tr>
<tr>
<td>White</td>
<td>23.5</td>
<td>1.4</td>
</tr>
<tr>
<td>African American</td>
<td>91.7</td>
<td>22.2</td>
</tr>
<tr>
<td>Hispanic</td>
<td>23.6</td>
<td>2.4</td>
</tr>
</tbody>
</table>

*1990-1998 age adjusted mortality rate*
Proportions of AIDS cases, among adults & adolescents, by exposure category & year of diagnosis, Austin EMA
Living with HIV/AIDS by exposure category – 2001*

Male n = 2031
- Male to male sex: 56%
- Injection drug use: 32%
- MSM & IDU: 32%
- heterosexual contact: 18%
- Other / Unknown: 10%

Female n = 413
- Male to male sex: 36%
- Injection drug use: 32%
- MSM & IDU: 32%
- heterosexual contact: 3%
- Other / Unknown: 13%

*Austin EMA
Supplement to HIV & AIDS Surveillance Project

- Supplemental questionnaire to known HIV and AIDS cases in Travis County
- Centers for Disease Control & Prevention funded project administered by the Texas Department of Health
- Covers behaviors, risk factors and socioeconomic factors
% of HIV+ individuals with a diagnosed mental disorder
Syphilis

- Syphilis and other STDs are sensitive, early markers of behaviors associated with HIV transmission
- Syphilis increases transmission and acquisition of HIV
- Syphilis trends may provide an early warning of changes in sexual behaviors and HIV incidence
Ratio of syphilis* cases among men to cases among women

*Primary & Secondary, Travis County
Living pediatric HIV/AIDS cases by race/ethnicity, 2001*

- African American: 50.0%
- White: 30.8%
- Hispanic: 19.2%

*Austin EMA
Mother’s exposure category for perinatally acquired AIDS/HIV, cumulative cases, Austin EMA

- Mother sex w/HIV: 11%
- Mother sex w/hemophiliac: 2%
- Mother sex w/IDU: 11%
- Unknown: 7%
- Mother HIV/AIDS: 20%
- Mother IDU: 49%

2001
Summary

- Decreasing rates
- African Americans disproportionately affected by HIV/AIDS
- Modes of exposure are changing
Questions
Contact information

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