AIDS & HIV in the Travis County

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Outline

- Worldwide
- HIV/AIDS surveillance
- National
- Travis County
  - Prevalence
  - Trends
  - Disparities
  - Mortality
  - Modes of exposure
  - Risk factors / behaviors
  - Pediatric

Global estimates for adults & children end 2003

- People living with HIV/AIDS _ 40 million
- New HIV infections in 2003 _ 5 million
- Deaths from HIV/AIDS in 2003 _ 3 million

WHO

HIV incidence worldwide

- 5 million people were infected with HIV in 2003
- 4.2 million adults
- 700,000 children (<15 years old)

WHO

<table>
<thead>
<tr>
<th>Region</th>
<th># of new infections-2003</th>
<th>Main modes of transmission</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sub-Saharan Africa</td>
<td>3.0 million</td>
<td>Hetero</td>
</tr>
<tr>
<td>N. Africa &amp; Middle East</td>
<td>75 000</td>
<td>Hetero, IDU</td>
</tr>
<tr>
<td>S. &amp; S.E. Asia</td>
<td>850 000</td>
<td>Hetero, IDU</td>
</tr>
<tr>
<td>E. Asia &amp; Pacific</td>
<td>200 000</td>
<td>Hetero, IDU, MSM</td>
</tr>
<tr>
<td>Latin America</td>
<td>200 000</td>
<td>MSM, IDU, Hetero</td>
</tr>
<tr>
<td>Caribbean</td>
<td>52 000</td>
<td>MSM, Hetero</td>
</tr>
<tr>
<td>E. Europe &amp; C. Asia</td>
<td>360 000</td>
<td>IDU</td>
</tr>
<tr>
<td>W. Europe</td>
<td>20 000</td>
<td>MSM, IDU</td>
</tr>
<tr>
<td>N. America</td>
<td>44 000</td>
<td>MSM, IDU, Hetero</td>
</tr>
<tr>
<td>Oceania</td>
<td>5 000</td>
<td>MSM</td>
</tr>
</tbody>
</table>

WHO
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
Texas Counties with >500,000 population

<table>
<thead>
<tr>
<th>Area</th>
<th>Cumulative AIDS cases</th>
</tr>
</thead>
<tbody>
<tr>
<td>Travis</td>
<td>4,052</td>
</tr>
<tr>
<td>Bexar</td>
<td>4,438</td>
</tr>
<tr>
<td>Collin</td>
<td>383</td>
</tr>
<tr>
<td>Dallas</td>
<td>13,767</td>
</tr>
<tr>
<td>El Paso</td>
<td>1,417</td>
</tr>
<tr>
<td>Harris</td>
<td>22,040</td>
</tr>
<tr>
<td>Hidalgo</td>
<td>550</td>
</tr>
<tr>
<td>Tarrant</td>
<td>3,701</td>
</tr>
<tr>
<td>Texas</td>
<td>64,907</td>
</tr>
</tbody>
</table>

Number of new AIDS cases by year

AIDS cases by race/ethnicity
Why use rates

- Just using the number of new cases can be misleading
- It does not account for differences or changes in total population size
- Rate = # of new cases of disease during a year divided by the total population
Cumulative HIV/AIDS by race/ethnicity, Travis County as of 2004

<table>
<thead>
<tr>
<th>Race/ethnicity</th>
<th>No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hispanic</td>
<td>1,044</td>
</tr>
<tr>
<td>American Indian / Alaskan Native</td>
<td>9</td>
</tr>
<tr>
<td>Asian</td>
<td>18</td>
</tr>
<tr>
<td>Black non-Hispanic</td>
<td>1,364</td>
</tr>
<tr>
<td>Native Hawaiian / Pacific Islander</td>
<td>0</td>
</tr>
<tr>
<td>White non-Hispanic</td>
<td>2,702</td>
</tr>
<tr>
<td>Multiple race &amp; unknown</td>
<td>2</td>
</tr>
</tbody>
</table>

Persons living with HIV infection

- 1983
  - First cases reported in Travis County
- 2004
  - 2,894 known living HIV positive individuals in Travis County
  - Most likely much higher

Persons living with HIV Infection

<table>
<thead>
<tr>
<th>Year</th>
<th>Number of persons</th>
</tr>
</thead>
<tbody>
<tr>
<td>1999</td>
<td>500</td>
</tr>
<tr>
<td>2000</td>
<td>1,000</td>
</tr>
<tr>
<td>2001</td>
<td>1,500</td>
</tr>
<tr>
<td>2002</td>
<td>2,000</td>
</tr>
<tr>
<td>2003</td>
<td>2,500</td>
</tr>
<tr>
<td>2004</td>
<td>3,000</td>
</tr>
</tbody>
</table>

Source: HARS

People living with HIV infections by sex & race/ethnicity

- Men n = 2,458
- Women n = 436

- 54% White non-Hispanic/other
- 27% Black non-Hispanic
- 19% Hispanic

Living with HIV/AIDS by exposure category – 2004

- Male n = 2,458
- Female n = 436

- MSM: 32%
- IDU: 27%
- MSM & IDU: 11%
- Hetero: 11%
- Other/NIR: 11%
- Female: 54%

Prevalence of HIV/AIDS by zip code, 2004
Proportions of AIDS cases, among adults & adolescents, by exposure category & year of diagnosis, Travis County

Age adjusted HIV/AIDS mortality rates

Other data sources

- Use more than just HIV/AIDS surveillance data
- Use other data sources to:
  - Monitor risk behaviors
  - Track risk groups
  - Track co-morbidities
  - Track service needs

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

Past-year prevalence of substance use among adults

Source: Texas Commission on Alcohol and Drug Abuse, 2000
% of HIV+ individuals with a diagnosed mental disorder

Source: Supplement to HIV and AIDS Surveillance Survey

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 male to female P&S syphilis cases

Living pediatric HIV/AIDS cases by race/ethnicity, 2004

Summary
- Decreasing rates of AIDS, and HIV?
- African Americans disproportionately affected by HIV/AIDS
- Modes of exposure are changing