Sexually Transmitted Diseases and Adolescents

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Objectives
- Describe trends in sexual behaviors that put youth at risk for negative sexual outcomes.
- Review STD statistics.
- Identify intervention strategies to address and improve sexual health in adolescents.

Knowledge About STDs Among Americans

<table>
<thead>
<tr>
<th>Percentage of Americans 18-64 years old</th>
<th>0</th>
<th>10</th>
<th>20</th>
<th>30</th>
<th>40</th>
<th>50</th>
<th>60</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unable to name any STDs</td>
<td>12</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Believe all STDs are curable</td>
<td>17</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Unaware that STDs increase risk of HIV infection</td>
<td>56</td>
<td></td>
<td></td>
<td></td>
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<td></td>
</tr>
</tbody>
</table>

Source: Kaiser Family Foundation, 1996

STDs of Concern
- Actually, all of them
- “Sores” (ulcers)
  - Syphilis
  - Genital herpes (HSV-2, HSV-1)
  - Others uncommon in the U.S.
    - Lymphogranuloma venereum
    - Chancroid
    - Granuloma inguinale

STDs of Concern (continued)
- “Drips” (discharges)
  - Gonorrhea
  - Chlamydia
  - Nongonococcal urethritis / mucopurulent cervicitis
  - Trichomonas vaginitis / urethritis
  - Candidiasis (vulvovaginal, less problems in men)
- Other major concerns
  - Genital HPV and Cervical Cancer

Chlamydia—Rates by County, United States, 2009

Rate per 100,000 population
- ≥ 285.0
- 200.1–284.9
- < 200.0

[Map showing rates by county]
Addressing Health Disparities of Chlamydia

Large Racial Disparities In Chlamydial Infection

Non-Hispanic Blacks

Non-Hispanic Whites

NOTE: In 2009, a total of 3,746 (0.3%) of 3,741 counties in the United States reported no cases of primary and secondary syphilis.

Primary and Secondary Syphilis—Rates by County, United States, 2009

Note: In 2009, a total of 3,746 (0.3%) of 3,741 counties in the United States reported no cases of primary and secondary syphilis.

Gonorrhea—Rates by County, United States, 2009

HIV/AIDS Data Highlighting Health Disparities in the Alabama

- As of July 1, 2011:
  - 7,793 HIV cases and 9,881 AIDS cases have been reported to the Alabama Department of Public Health.
  - Blacks/African Americans represent 26% of the state’s population;
  - however, 64.1% of all living HIV/AIDS cases in Alabama are from this group.

Genital Warts—Initial Visits to Physicians’ Offices, United States, 1966–2009

Genital Herpes—Initial Visits to Physicians’ Offices, United States, 1966–2009

Trichomoniasis and Other Vaginal Infections—Women—Initial Visits to Physicians’ Offices, United States, 1966–2009

Burden of STDs in the U.S.

- Teenagers/young adults at high behavioral risk for acquiring most STDs
  - More likely than other age groups to have:
    - multiple sex partners
    - to engage in unprotected sex
    - for young women, to choose sexual partners older than themselves
  - Young women also biologically more susceptible to chlamydia, gonorrhea and HIV

The Youth Risk Behavior Surveillance System (YRBSS): 2009

National, State, and Local Data
**Purposes of the YRBSS**
- Focus the nation on behaviors among youth causing the most important health problems
  - Violence
  - Alcohol and other drug use
  - Behaviors that contribute to unintentional injuries
  - Sexual behaviors
  - Tobacco use
  - Unhealthy dietary behaviors
  - Inadequate physical activity
- Assess how risk behaviors change over time
- Provide comparable data for the Nation, states, and large urban school districts

**Characteristics of the National, State, and Local School-Based YRBS**
- 9th – 12th grade students
- Probability samples of schools and students
- Anonymous
- Self-administered, computer-scannable questionnaire or answer sheet
- Completed in one class period (45 minutes)
- Conducted biennially usually during the spring

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**Percentage of High School Students Who Ever Had Sexual Intercourse, by Sex and Race/Ethnicity,** 2009

- Total: 46.0%
- Female: 45.7%
- Male: 46.1%
- White: 42.0%
- Black: 46.2%
- Hispanic: 49.1%


- 1991: 54.1%
- 2009: 46.0%

**Percentage of High School Students Who Had Sexual Intercourse for the First Time Before Age 13 Years, by Sex and Race/Ethnicity,** 2009

- Total: 5.9%
- Female: 2.1%
- Male: 8.4%
- White: 2.4%
- Black: 15.3%
- Hispanic: 6.7%

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* B > H > W
Percentage of High School Students Who Were Currently Sexually Active,* 1991 – 2009†

- 1991: 37.5%
- 1993: 37.5%
- 1995: 37.9%
- 1997: 34.8%
- 1999: 36.3%
- 2001: 33.4%
- 2003: 34.3%
- 2005: 33.9%
- 2007: 35.0%
- 2009: 34.2%

* Had sexual intercourse with at least one person during the 3 months before the survey.

Percentage of High School Students Who Were Currently Sexually Active,* 2009

- Total: 27.4% - 32.6%
- Female: 2.7% - 35.3%
- Male: 35.4% - 37.7%
- White: 37.8% - 44.9%
- Black: No Data
- Hispanic: No Data

Percentage of High School Students Who Used a Condom During Last Sexual Intercourse,* by Sex† and Race/Ethnicity,‡ 2009

- Total: 61.1%
- Female: 53.9%
- Male: 68.6%
- White: 63.3%
- Black: 62.4%
- Hispanic: 54.9%

* Among the 34.2% of students nationwide who had sexual intercourse with at least one person during the 3 months before the survey.
† M > F
‡ W, B > H

Percentage of High School Students Who Used a Condom During Last Sexual Intercourse,* 1991 – 2009†

- 1991: 46.2%
- 1993: 52.8%
- 1995: 54.4%
- 1997: 56.8%
- 1999: 58.0%
- 2001: 57.9%
- 2003: 63.0%
- 2005: 62.8%
- 2007: 61.5%
- 2009: 61.1%

* Among students who had sexual intercourse with at least one person during the 3 months before the survey.

Percentage of High School Students Who Used Birth Control Pills to Prevent Pregnancy Before Last Sexual Intercourse,* by Sex† and Race/Ethnicity,‡ 2009

- Total: 19.8%
- Female: 23.0%
- Male: 16.5%
- White: 26.8%
- Black: 8.1%
- Hispanic: 10.8%

* Among the 34.2% of students nationwide who had sexual intercourse with at least one person during the 3 months before the survey.
† F > M
‡ W > B, H
Percentage of High School Students Who Drank Alcohol or
Used Drugs Before Last Sexual Intercourse,* 1991 – 2009†

<table>
<thead>
<tr>
<th>Year</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>1991</td>
<td>21.6</td>
</tr>
<tr>
<td>1993</td>
<td>21.3</td>
</tr>
<tr>
<td>1995</td>
<td>24.8</td>
</tr>
<tr>
<td>1997</td>
<td>24.7</td>
</tr>
<tr>
<td>1999</td>
<td>24.8</td>
</tr>
<tr>
<td>2001</td>
<td>25.6</td>
</tr>
<tr>
<td>2003</td>
<td>23.3</td>
</tr>
<tr>
<td>2005</td>
<td>22.5</td>
</tr>
<tr>
<td>2007</td>
<td>21.6</td>
</tr>
</tbody>
</table>

*Among students who had sexual intercourse with at least one person during the 3 months before the survey.
†Increased 1991–2001, decreased 2001–2009, p < 0.05.


Percentage of High School Students Who Drank Alcohol or Used Drugs Before Last Sexual Intercourse,* 2009

<table>
<thead>
<tr>
<th>Race/Ethnicity</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>White</td>
<td>14.6%</td>
</tr>
<tr>
<td>Black</td>
<td>19.5%</td>
</tr>
<tr>
<td>Hispanic</td>
<td>9.6%</td>
</tr>
<tr>
<td>No Data</td>
<td></td>
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</tbody>
</table>

State Youth Risk Behavior Surveys, 2009

Percentage of High School Students Who Were Ever Taught in School about AIDS or HIV Infection, by Sex* and Race/Ethnicity,† 2009

<table>
<thead>
<tr>
<th>Race/Ethnicity</th>
<th>Total</th>
<th>Female</th>
<th>Male</th>
<th>White</th>
<th>Black</th>
<th>Hispanic</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>87.0</td>
<td>87.8</td>
<td>86.3</td>
<td>88.6</td>
<td>86.1</td>
<td>83.2</td>
</tr>
</tbody>
</table>

*F > M
†W > H

National Youth Risk Behavior Survey, 2009

Percentage of High School Students Who Were Ever Taught in School about AIDS or HIV Infection, 1991 – 2009*

<table>
<thead>
<tr>
<th>Year</th>
<th>Percent</th>
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<tr>
<td>1991</td>
<td>83.3</td>
</tr>
<tr>
<td>1993</td>
<td>86.1</td>
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<tr>
<td>1995</td>
<td>86.3</td>
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<tr>
<td>1997</td>
<td>91.5</td>
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<tr>
<td>1999</td>
<td>89.0</td>
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<tr>
<td>2001</td>
<td>87.9</td>
</tr>
<tr>
<td>2003</td>
<td>89.5</td>
</tr>
<tr>
<td>2005</td>
<td>87.0</td>
</tr>
</tbody>
</table>


Percentage of High School Students Who Were Tested for HIV,* by Sex† and Race/Ethnicity,‡ 2009

<table>
<thead>
<tr>
<th>Race/Ethnicity</th>
<th>Total</th>
<th>Female</th>
<th>Male</th>
<th>White</th>
<th>Black</th>
<th>Hispanic</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>12.7</td>
<td>14.7</td>
<td>10.9</td>
<td>11.0</td>
<td>21.4</td>
<td>12.4</td>
</tr>
</tbody>
</table>

*Not counting tests done when donating blood
†F > M
‡B > W

National Youth Risk Behavior Survey, 2009
**Percentage of High School Students Who Were Tested for HIV,**

2005 – 2009†

<table>
<thead>
<tr>
<th>Year</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>2005</td>
<td>11.9</td>
</tr>
<tr>
<td>2007</td>
<td>12.9</td>
</tr>
<tr>
<td>2009</td>
<td>12.7</td>
</tr>
</tbody>
</table>

*Not counting tests done when donating blood.†No change 2005–2009, p < 0.05.


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**Intervention Strategies to Address and Improve Sexual Health in Adolescents**

- Of the 19,000,000 New STDs in the U.S. each Year, half are among people under 25
- Most STDs are curable and treatable
- Talking parents have ‘Healthy Teens’ - Parents need to promote adolescent sexual health
- Yes, they are having sex
- Yes, abstinence…
- Poor self worth by females? By males?
- Brain development research…teens value “reward” over “consequences”
- Get Tested

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**Thank You**

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