Houston/Harris County
STD Trends, 2000-2010

Bureau of Epidemiology
March 2011
Background: National Reporting

- Required reporting in all 50 states and DC
  - Chlamydia: since 2000
  - Gonorrhea: since 1941
  - Syphilis: since 1941

- Factors affecting interpretation of STD data:
  - Nationwide differences in surveillance systems
  - Variations in reporting completion
  - Possible reporting bias
    - Reporting usually more complete from publicly-funded providers/clinics
  - Changes in case definitions and screening protocols
  - Better diagnostic tools for detection
  - % of missing and unknown data
Sources of STD Data in Houston/Harris County

Case reports originate from:

- Public Institutions
  - HDHHS STD Clinics
  - Harris County Sheriff’s Dept. Jail
  - Harris County Hospital District hospitals & community health clinics
- Laboratories
- Private Health Care Providers & Hospitals
Chlamydia — Rates by State: United States and Outlying Areas, 2009

Texas ranked 16 of 50 states based on rate

Source: CDC STD Surveillance Report, 2009
Gonorrhea — Rates by State: United States and Outlying Areas, 2009

Texas ranked 14 of 50 states based on rate

Source: CDC STD Surveillance Report, 2009
P&S Syphilis — Rates by State: United States and Outlying Areas, 2009

Texas ranked 6 of 50 states based on rate

Source: CDC STD Surveillance Report, 2009
Nationwide Comparison to Other Counties, 2009

- Chlamydia: Harris Co. ranked 7th
  - 2008- ranked 6th
  - 2007- ranked 7th

- Gonorrhea: Harris Co. ranked 4th
  - 2008- ranked 4th
  - 2007- ranked 4th

- P&S Syphilis: Harris Co. ranked 5th
  - 2008- ranked 5th
  - 2007- ranked 2nd

Ranking Based on Number of Reported Cases

Source: CDC STD Surveillance Reports
National Chlamydia Trends

- In 2009, more Chlamydia cases were reported to CDC than for any other condition.
- Chlamydia rates in 2009 increased from 2008 by 2.8%. Rates have been increasing since the late 1980s.
- Trends from many jurisdictions are most likely reflective of increasingly sensitive diagnostic tools, expanded screening, more complete reporting practices, and better informational system integration.
- For 1999-2002, the National Health and Nutrition Examination Survey (NHANES) prevalence estimate in those 14-39 years old = 2.2%
  - NHANES is a nationally representative survey of the US civilian, noninstitutionalized population

Source: CDC STD Surveillance Report, 2009
Chlamydia Rates: National and Local Trends

Only includes those cases 15+ years of age
Source: CDC STD Prevention Data, Local STD*MIS data
Chlamydia Cases and Rates
Houston/Harris County, 2000-2010

Includes all cases reported in Houston/Harris County
All rates are per 100,000 persons

Includes all cases reported in Houston/Harris County
All rates are per 100,000 persons
Chlamydia — Age- and sex-specific rates
Houston/Harris County, 2010

Does not include the following: n=41 missing sex, n=38 missing age
Chlamydia — Rates by Zip Code: Houston/Harris County, 2009

Note: Reflects zip code data available to City of Houston, 10.6% of zip code data missing
National Gonorrhea Trends

- Gonorrhea rates in 2009 decreased from 2008 by 10.5%.
- Decreases have occurred in all age groups, all racial/ethnic groups, and in both sexes.
- “True increases or decreases in disease burden may be masked by changes in screening practices… tests with differing test performance, and changes in reporting practices.”

Source: CDC STD Surveillance Report, 2009
Gonorrhea Rates: National and Local Trends

Only includes those cases 15+ years of age

Source: CDC STD Prevention Data, Local STD*MIS data

Gonorrhea Rates by Sex

Year of Diagnosis

Houston/Harris Co: Male
Houston/Harris Co: Female
Houston/Harris Co: Total
US: Male
US: Female
US: Total
Gonorrhea Cases and Rates
Houston/Harris County, 2000-2010

Includes all cases reported in Houston/Harris County
All rates are per 100,000 persons

Includes all cases reported in Houston/Harris County
All rates are per 100,000 persons
Gonorrhea — Age- and sex-specific rates
Houston/Harris County, 2010

Does not include the following: n=12 missing sex, n=11 missing age
Gonorrhea — Rates by Zip Code: Houston/Harris County, 2009

Note: Reflects zip code data available to City of Houston, 11.7% of zip code data missing
National Syphilis (P&S) Trends

- In 2000, the P&S syphilis rate was the lowest since reporting began.
- Due to low rates in the 1990s, a National Plan to Eliminate Syphilis was announced in 1999.
- Since 2001, the P&S syphilis rate has increased every year. Overall increases in rates were predominantly among men who have sex with men (MSM) and black adolescents.
- The rate in 2009 was 4.5% higher than the rate in 2008.

Source: CDC STD Surveillance Report, 2009
Syphilis (P&S) Rates: National and Local Trends

Syphilis (P&S) Rates by Sex

Only includes those cases 15+ years of age

Source: CDC STD Prevention Data, Local STD*MIS data
Syphilis (P&S) Cases and Rates
Houston/Harris County, 2000-2010

Includes all cases reported in Houston/Harris County
All rates are per 100,000 persons

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Syphilis (P&S) — Age- and sex-specific rates
Houston/Harris County, 2010

Male Rate (per 100,000)
- Under 15 years: 34.96
- 15-19 years: 25.24
- 20-24 years: 10.37
- 25-29 years: 8.75
- 30-34 years: 5.93
- 35-39 years: 0.21
- 40+ years: 0.00

Female Rate (per 100,000)
- Under 15 years: 0.00
- 15-19 years: 11.26
- 20-24 years: 12.12
- 25-29 years: 6.39
- 30-34 years: 2.70
- 35-39 years: 0.53
- 40+ years: 0.52
Syphilis (P&S) — Rates by race/ethnicity
Houston/Harris County, 2000–2010

Percentages of missing values for race/ethnicity: 2000 = 0%, 2001 = 0%, 2002 = 0%, 2003 = .5%, 2004 = 0%, 2005 = 0%, 2006 = 0%, 2007 = 0%, 2008 = .5%, 2009 = 0%, 2010 = 0%
Syphilis (P&S) — Race/ethnicity- and sex-specific rates, Houston/Harris County, 2010

Male Rate (per 100,000)

<table>
<thead>
<tr>
<th>Ethnicity</th>
<th>Rate</th>
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<tbody>
<tr>
<td>Hispanic</td>
<td>46.44</td>
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<tr>
<td>Black/African-Amer.</td>
<td>6.88</td>
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<tr>
<td>White</td>
<td>4.39</td>
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<tr>
<td>Other</td>
<td>1.93</td>
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</tbody>
</table>

Female Rate (per 100,000)

<table>
<thead>
<tr>
<th>Ethnicity</th>
<th>Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hispanic</td>
<td>0.69</td>
</tr>
<tr>
<td>Black/African-Amer.</td>
<td>15.06</td>
</tr>
<tr>
<td>White</td>
<td>0.96</td>
</tr>
<tr>
<td>Other</td>
<td>0.00</td>
</tr>
</tbody>
</table>
Syphilis (P&S) — Race/ethnicity- and age-specific rates, Houston/Harris County, 2010

Black/African-Amer. Rates by Age

White Rates by Age

Hispanic Rates by Age

Other Race/Ethn. Rates by Age
Syphilis (P&S) — Rates by Zip Code: Houston/Harris County, 2009

Note: Reflects zip code data available to City of Houston
HIV, Chlamydia, Gonorrhea, and Syphilis (P&S) — Rates by Zip Code: Houston/Harris County, 2009

Note: Reflects zip code data available to City of Houston
HIV, Chlamydia, Gonorrhea, and Syphilis (P&S) — Rates by Zip Code: Houston/Harris Co., 2009

Note: Reflects zip code data available to City of Houston
Acknowledgements

- Bureau of HIV/STD and Viral Hepatitis Prevention, HDHHS
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- HIV/STD Surveillance Team and Bureau of Epidemiology, HDHHS
- TB/HIV/STD Epidemiology and Surveillance, Texas Dept. of State Health Services
Sources

- Population Estimates, Texas Dept. of State Health Services: http://soupfin.tdh.state.tx.us/pop2000a.htm
- National Trend STD Information and Data, CDC: http://www.cdc.gov/std/
- Houston/Harris County Data: Local STD*MIS