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# Houston/Harris County STD Trends, 2000-2010

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Bureau of Epidemiology  
March 2011



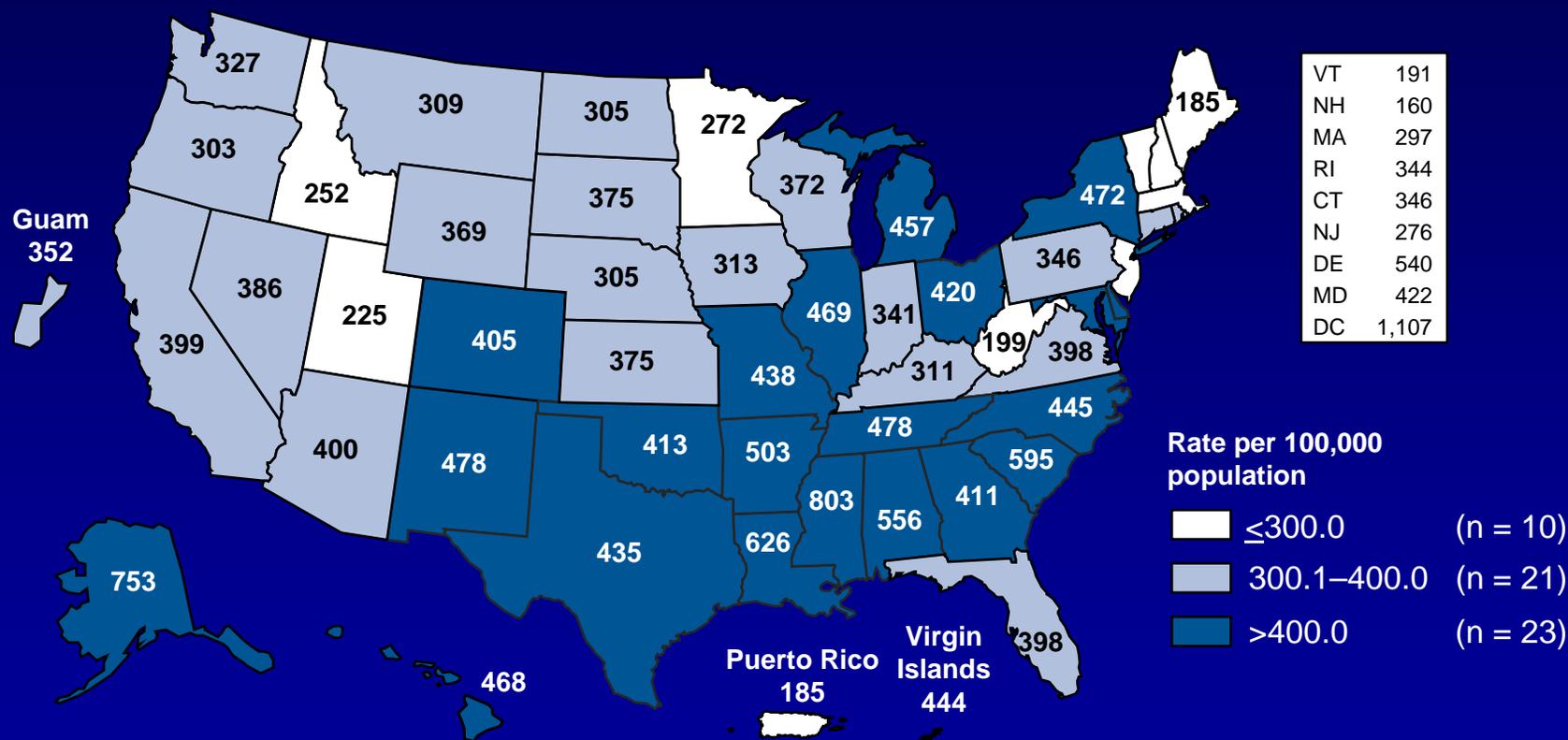
# Background: National Reporting

- 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

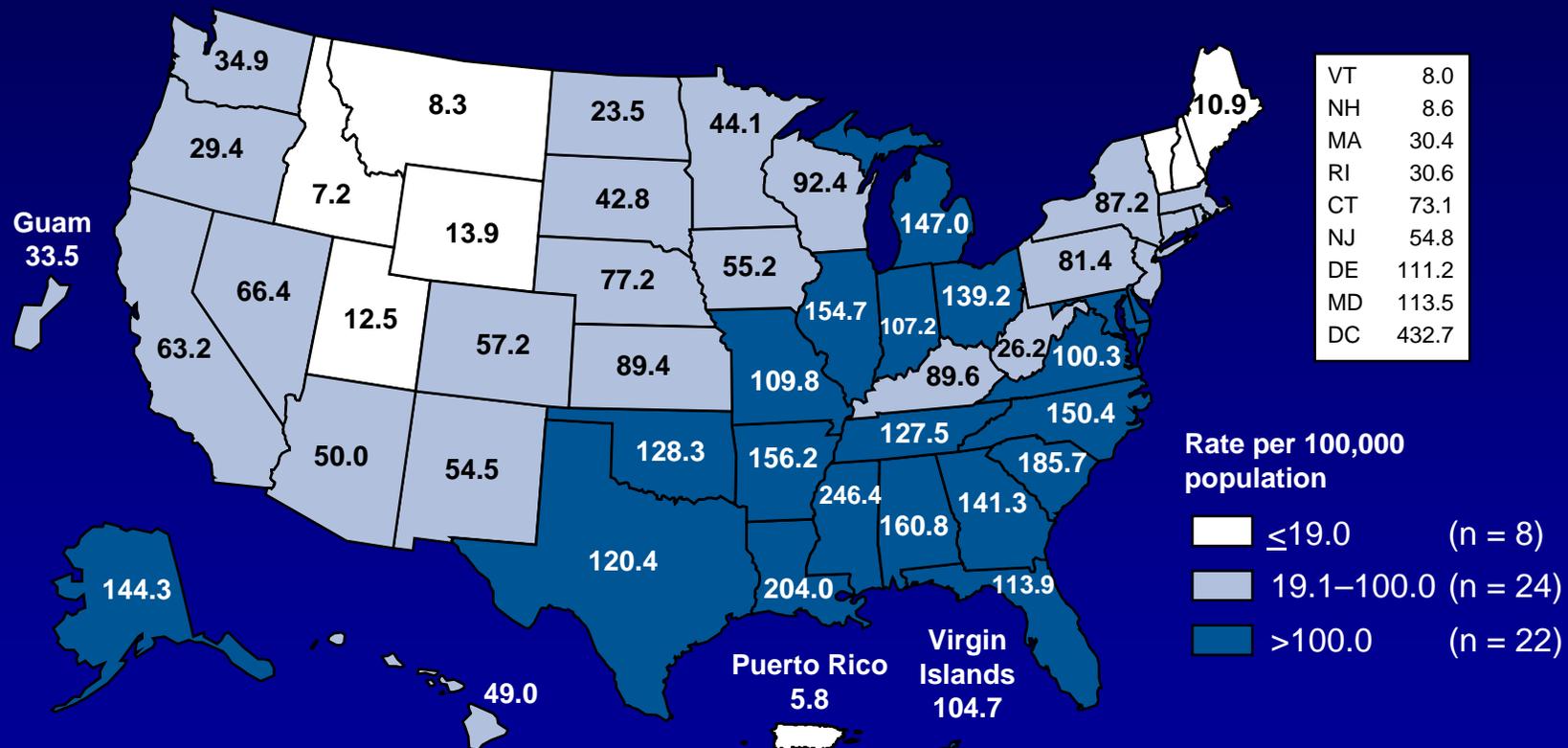
- Case reports originate from:
  - Public Institutions
    - HDHHS STD Clinics
    - Harris County Sheriff's Dept. Jail
    - Harris County Hospital District hospitals & community health clinics
  - Laboratories
  - Private Health Care Providers & Hospitals

# Chlamydia — Rates by State: United States and Outlying Areas, 2009



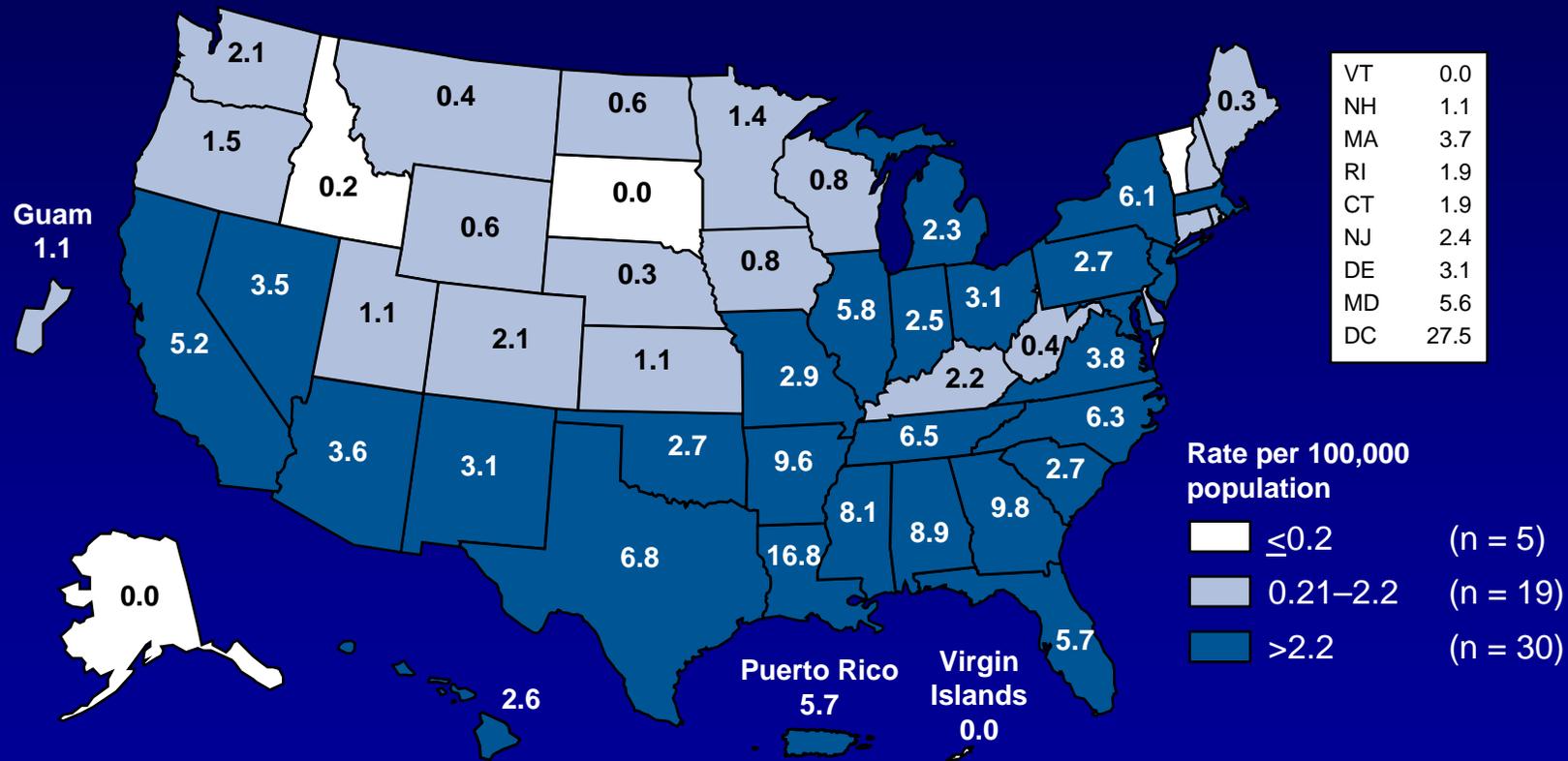
**Texas ranked 16 of 50 states based on rate**

# Gonorrhea — Rates by State: United States and Outlying Areas, 2009



**Texas ranked 14 of 50 states based on rate**

# P&S Syphilis — Rates by State: United States and Outlying Areas, 2009



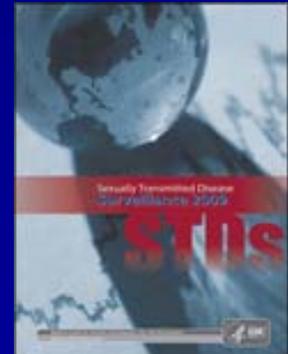
**Texas ranked 6 of 50 states based on rate**

Source: CDC STD Surveillance Report, 2009

# Nationwide Comparison to Other Counties, 2009

- Chlamydia: Harris Co. ranked 7<sup>th</sup>
  - 2008- ranked 6<sup>th</sup>
  - 2007- ranked 7<sup>th</sup>
  
- Gonorrhea: Harris Co. ranked 4<sup>th</sup>
  - 2008- ranked 4<sup>th</sup>
  - 2007- ranked 4<sup>th</sup>
  
- P&S Syphilis: Harris Co. ranked 5<sup>th</sup>
  - 2008- ranked 5<sup>th</sup>
  - 2007- ranked 2<sup>nd</sup>

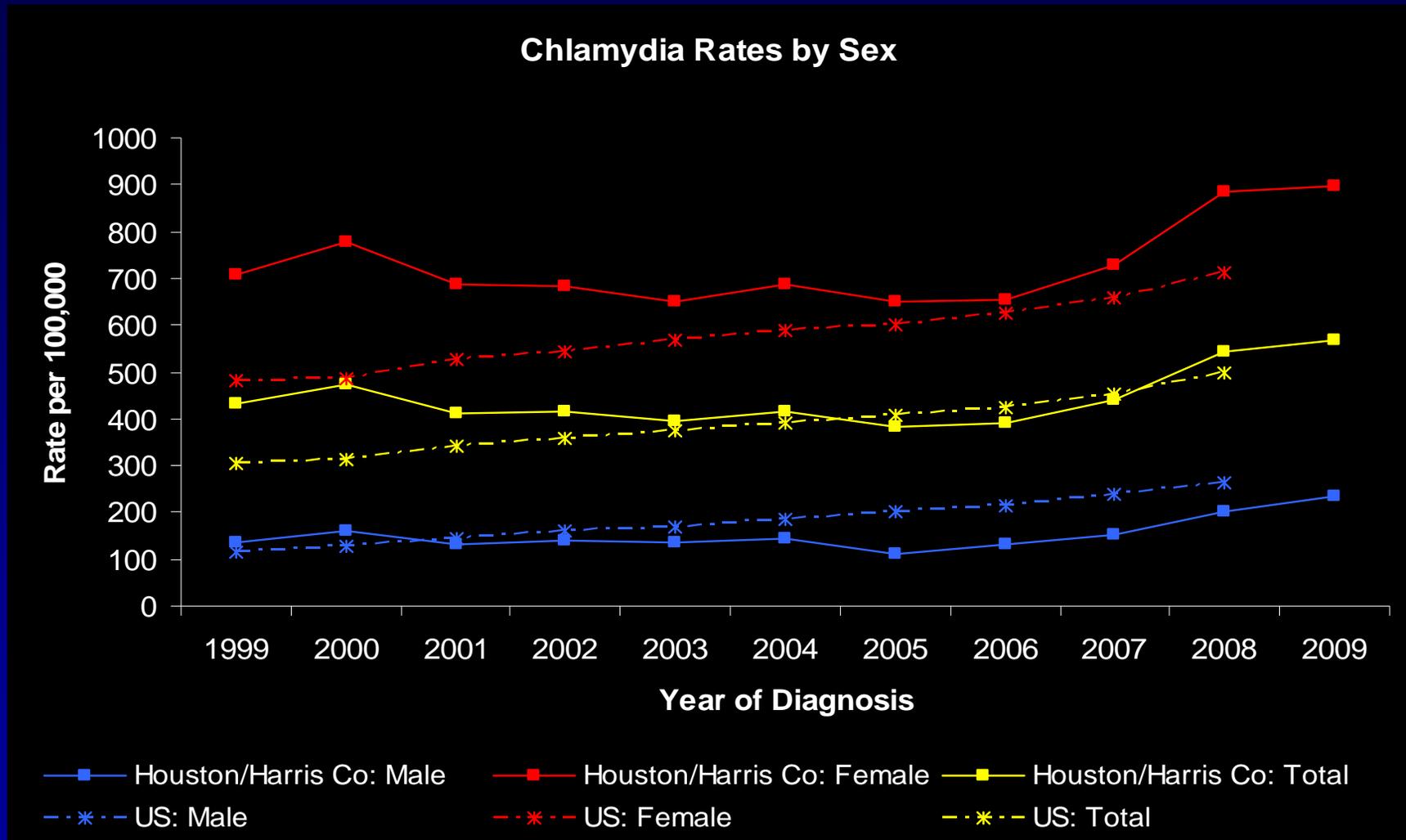
Ranking Based on Number of Reported Cases



# 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

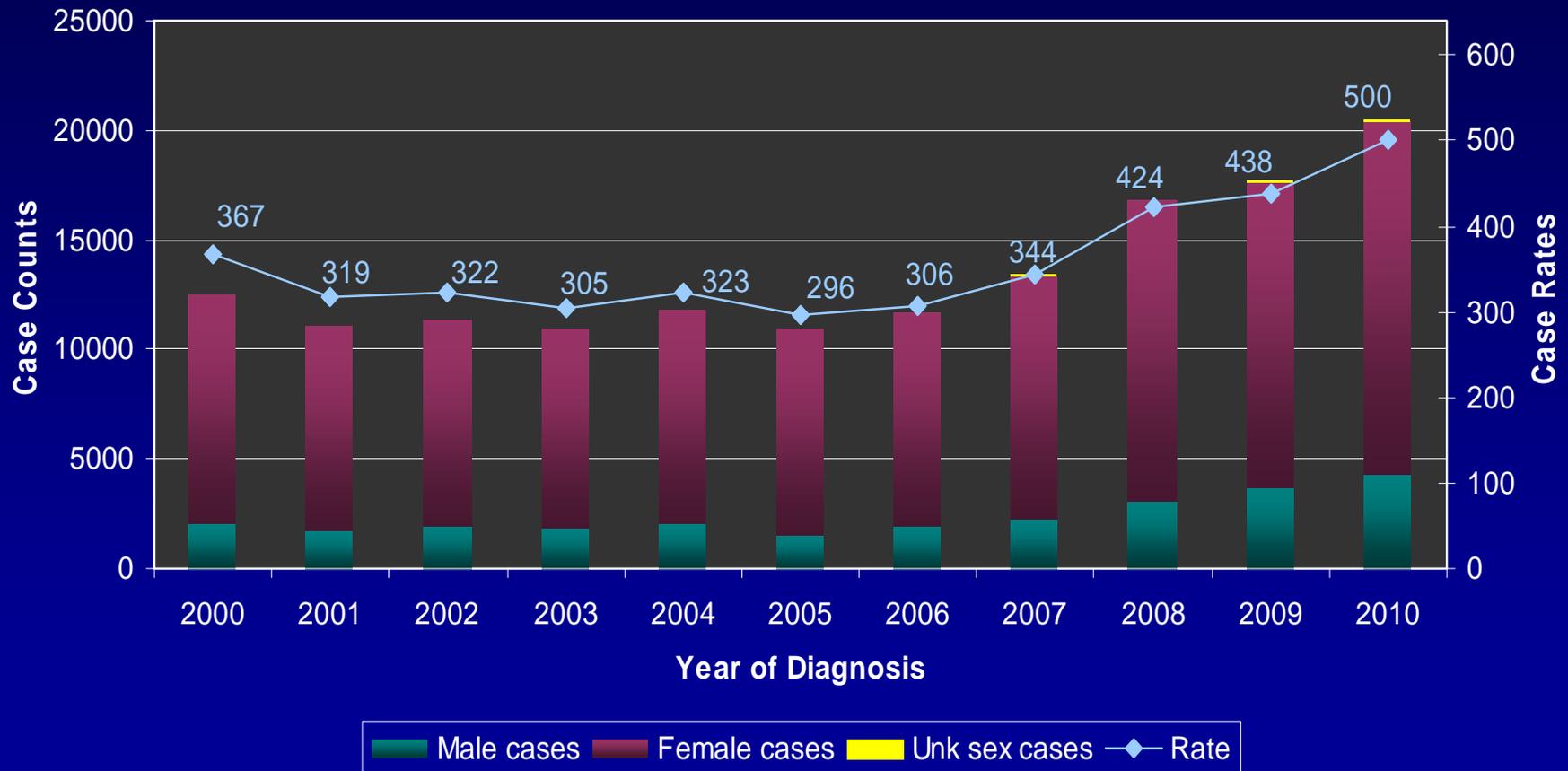
# Chlamydia Rates: National and Local Trends



*Only includes those cases 15+ years of age*

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

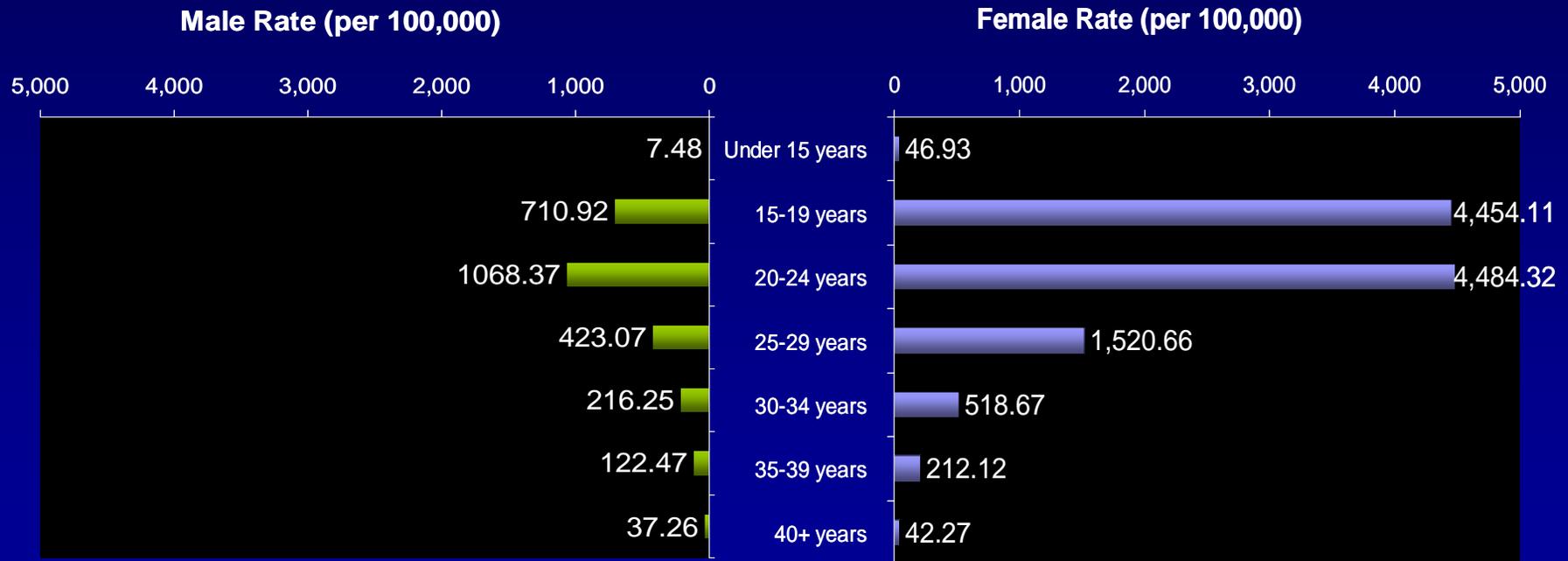
# Chlamydia Cases and Rates Houston/Harris County, 2000-2010



*Includes all cases reported in Houston/Harris County*

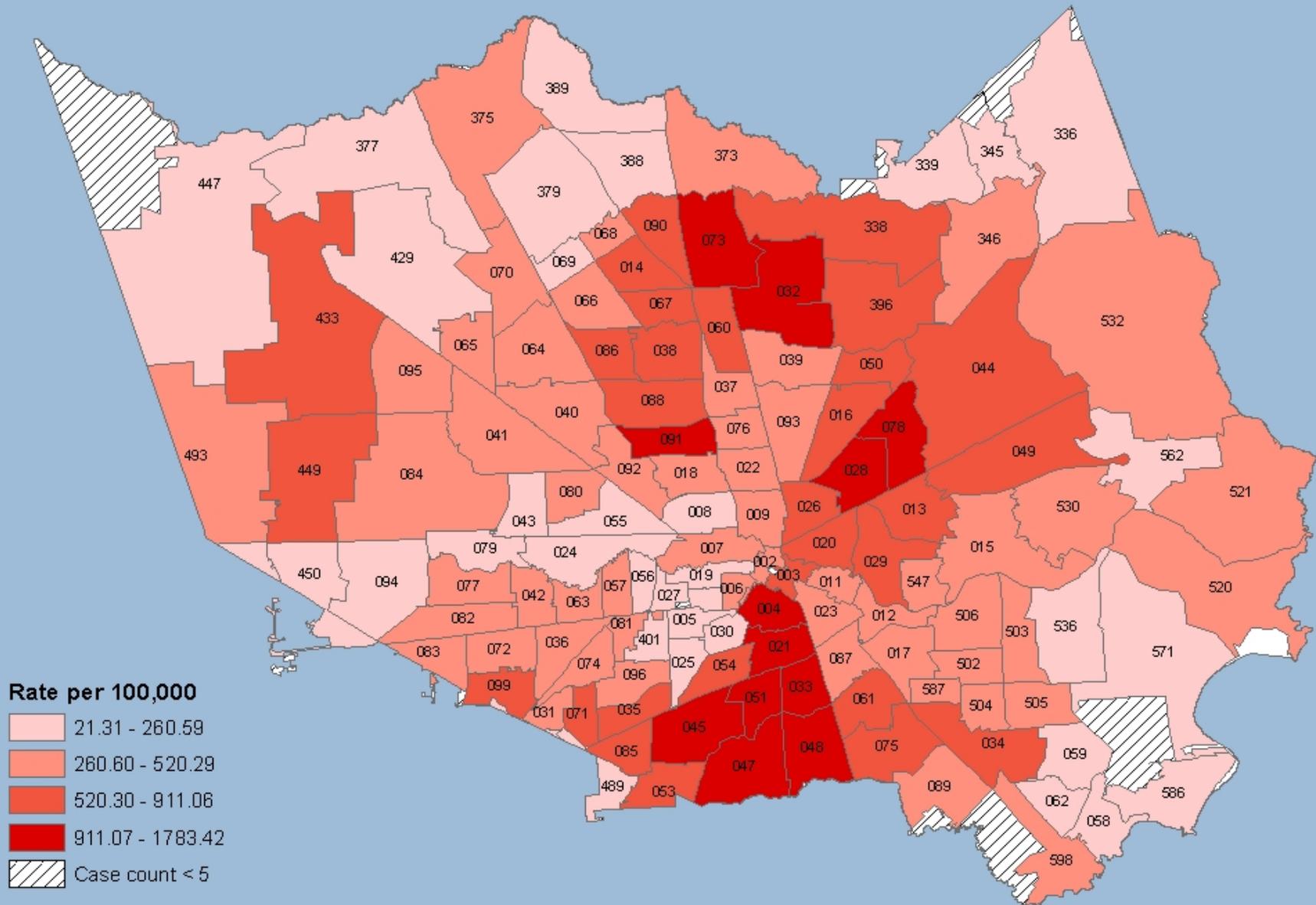
*All rates are per 100,000 persons*

# 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



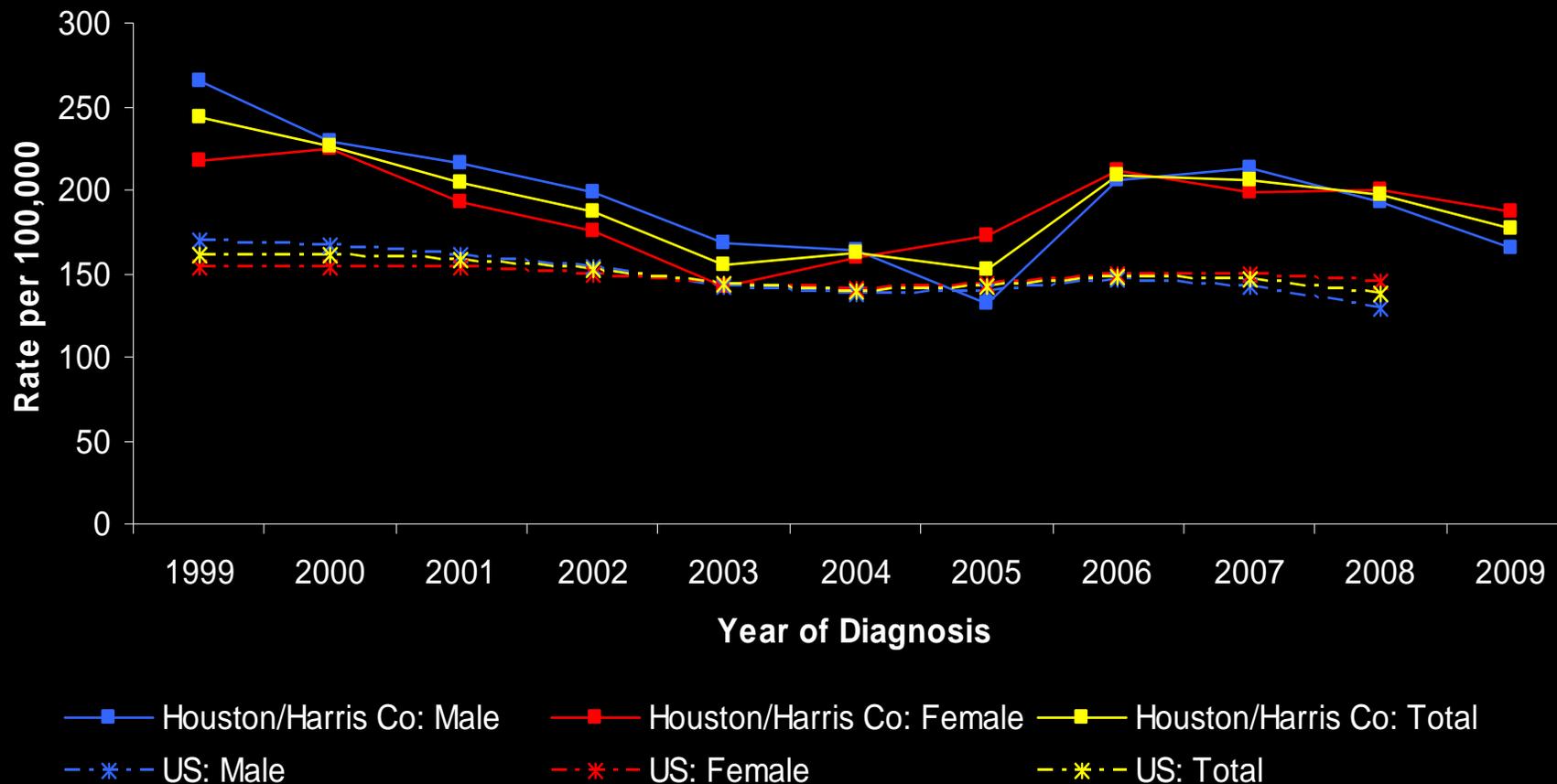
Note: Reflects zip code data available to City of Houston, 10.6% of zip code data missing

# National Gonorrhea Trends

- The national gonorrhea rate declined from 1975-1996. Rates then plateaued for 10 years. In 2009, rates decreased for the 3<sup>rd</sup> consecutive year.
- 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.”

# Gonorrhea Rates: National and Local Trends

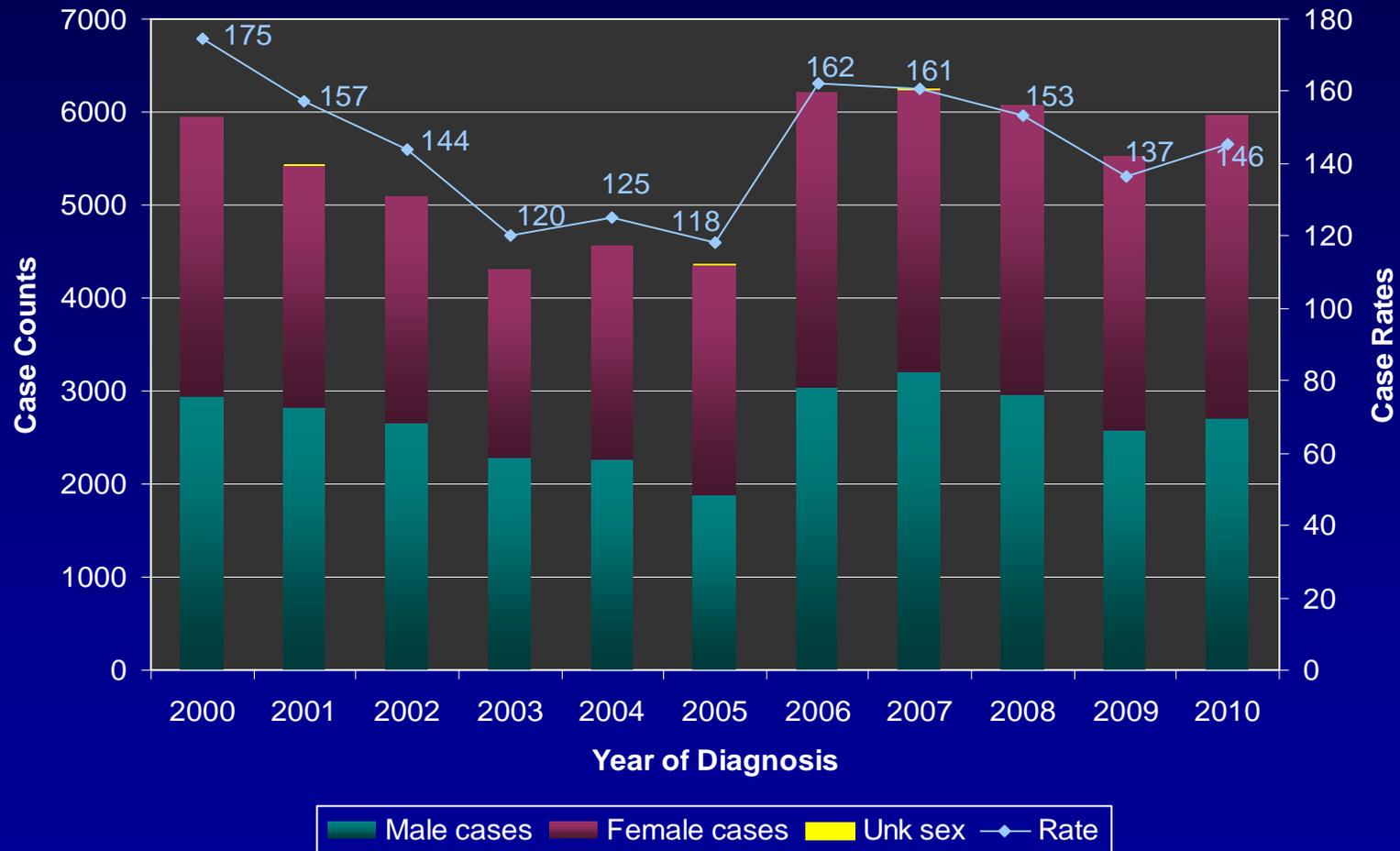
## Gonorrhea Rates by Sex



*Only includes those cases 15+ years of age*

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

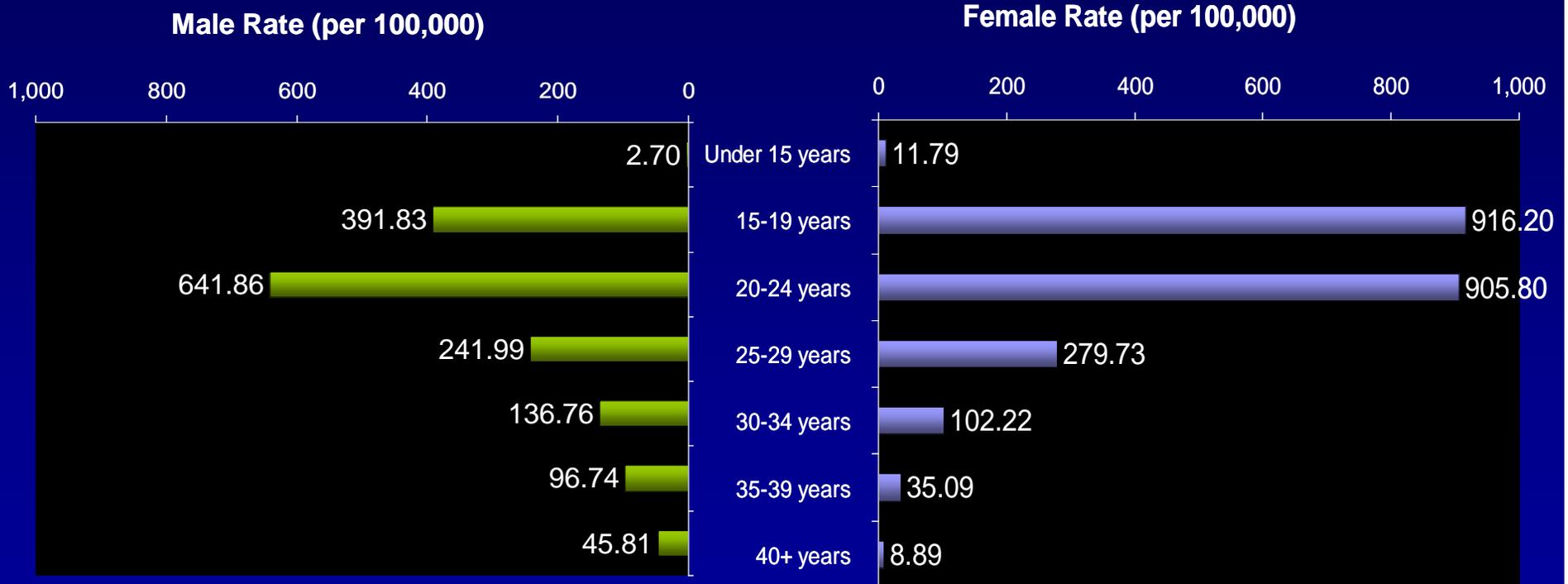
# Gonorrhea Cases and Rates Houston/Harris County, 2000-2010



*Includes all cases reported in Houston/Harris County*

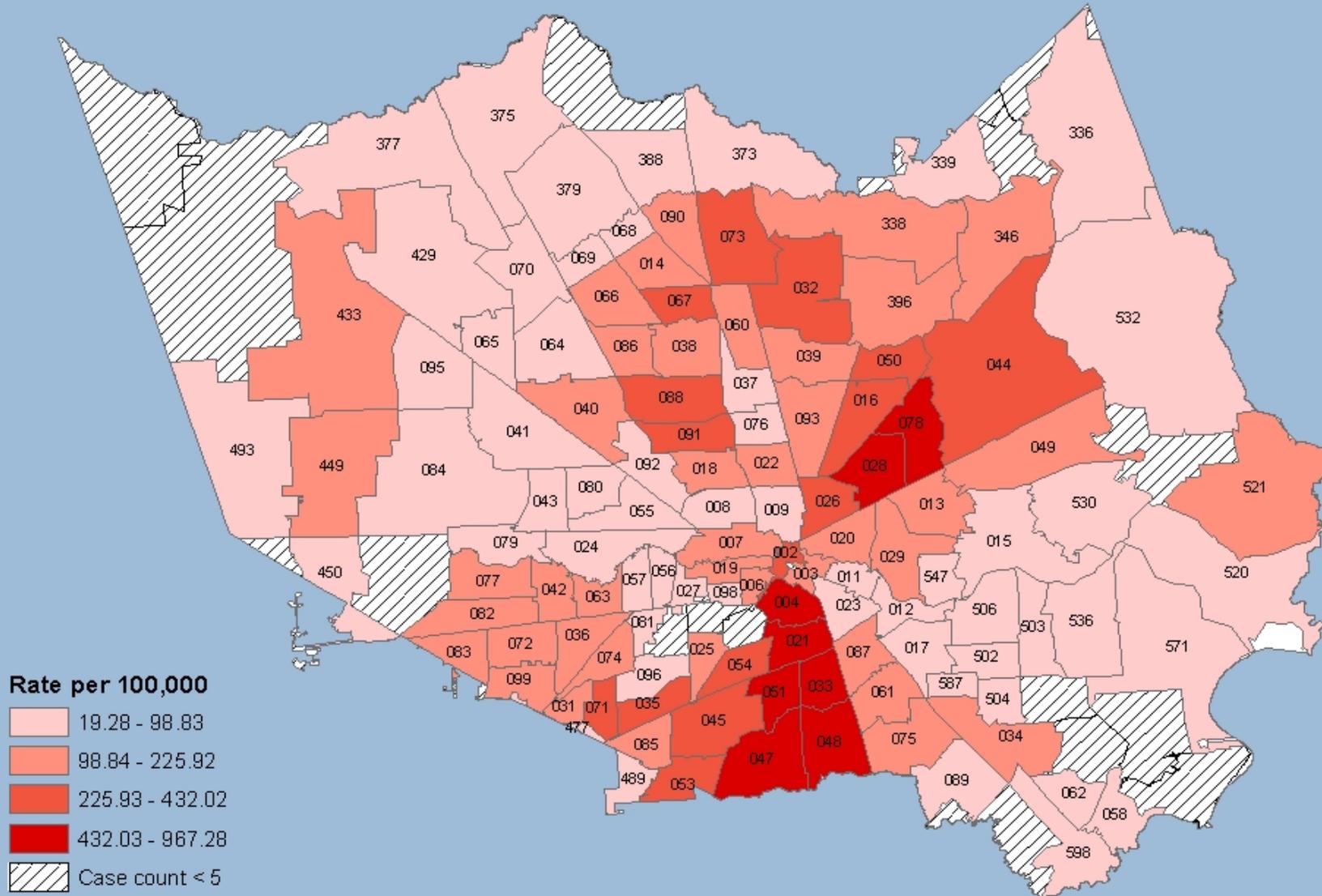
*All rates are per 100,000 persons*

# 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



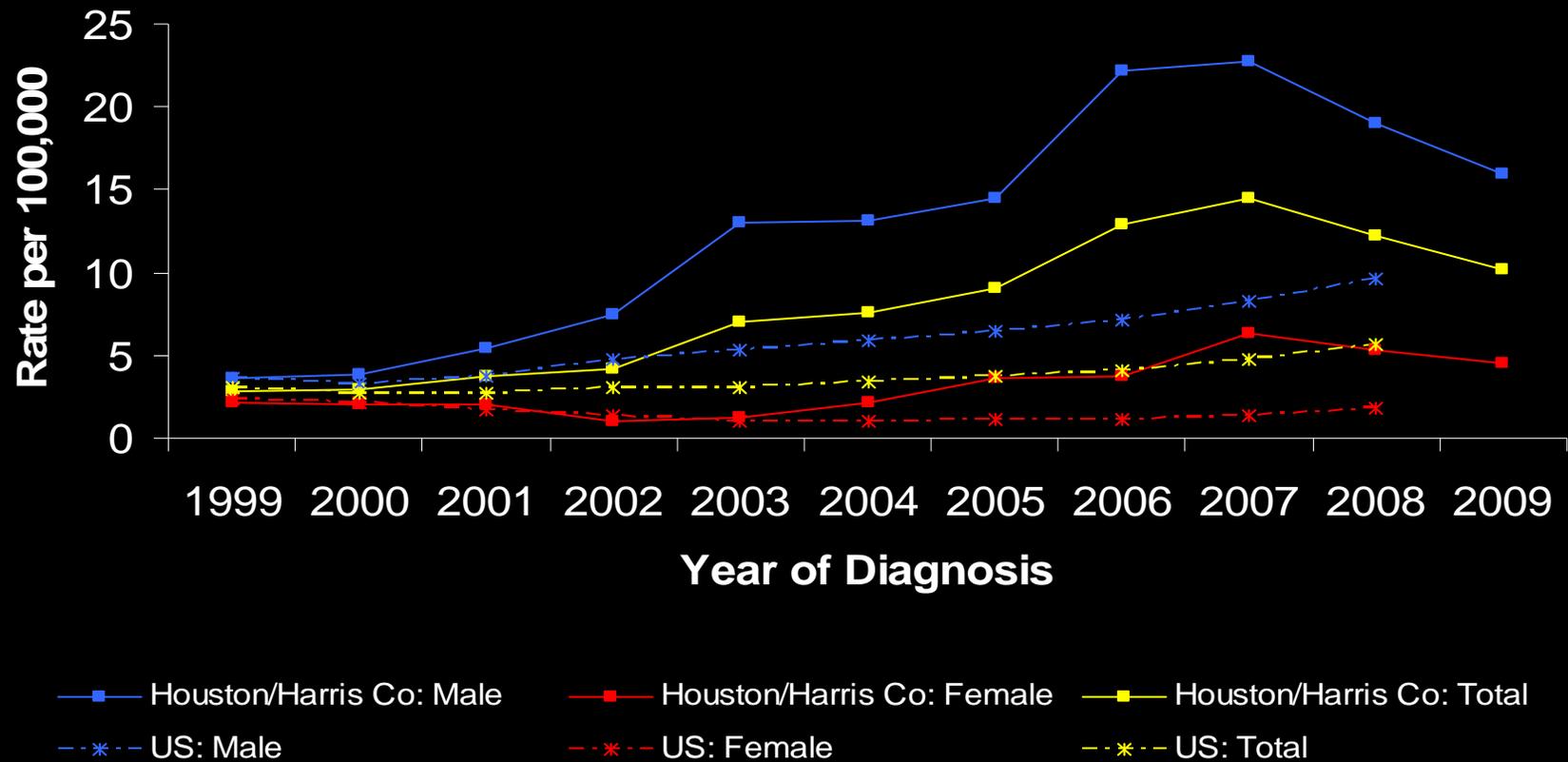
*Note: Reflects zip code data available to City of Houston, 11.7% of zip code data missing*

# 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.

# Syphilis (P&S) Rates: National and Local Trends

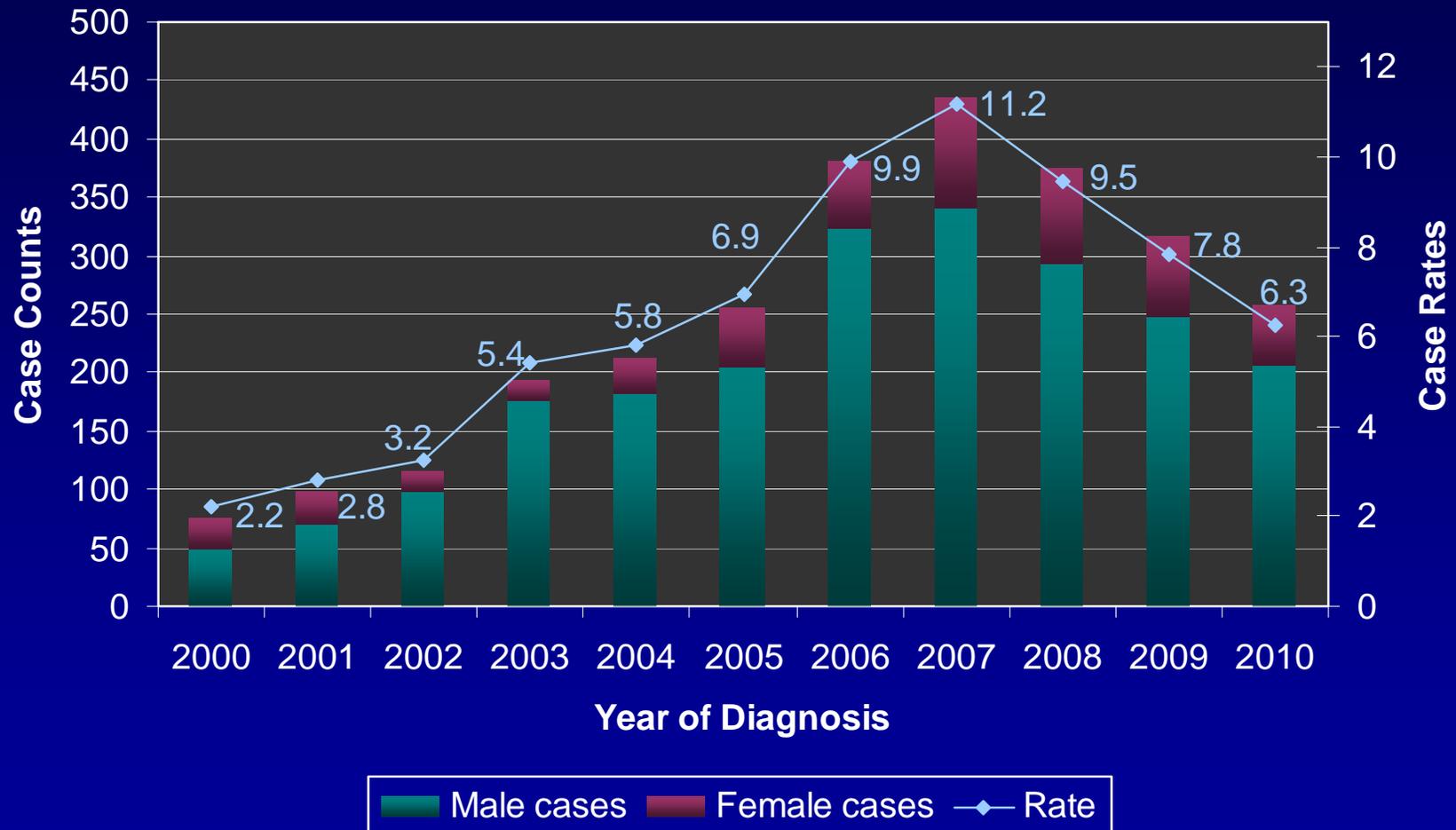
## Syphilis (P&S) Rates by Sex



Only includes those cases 15+ years of age

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

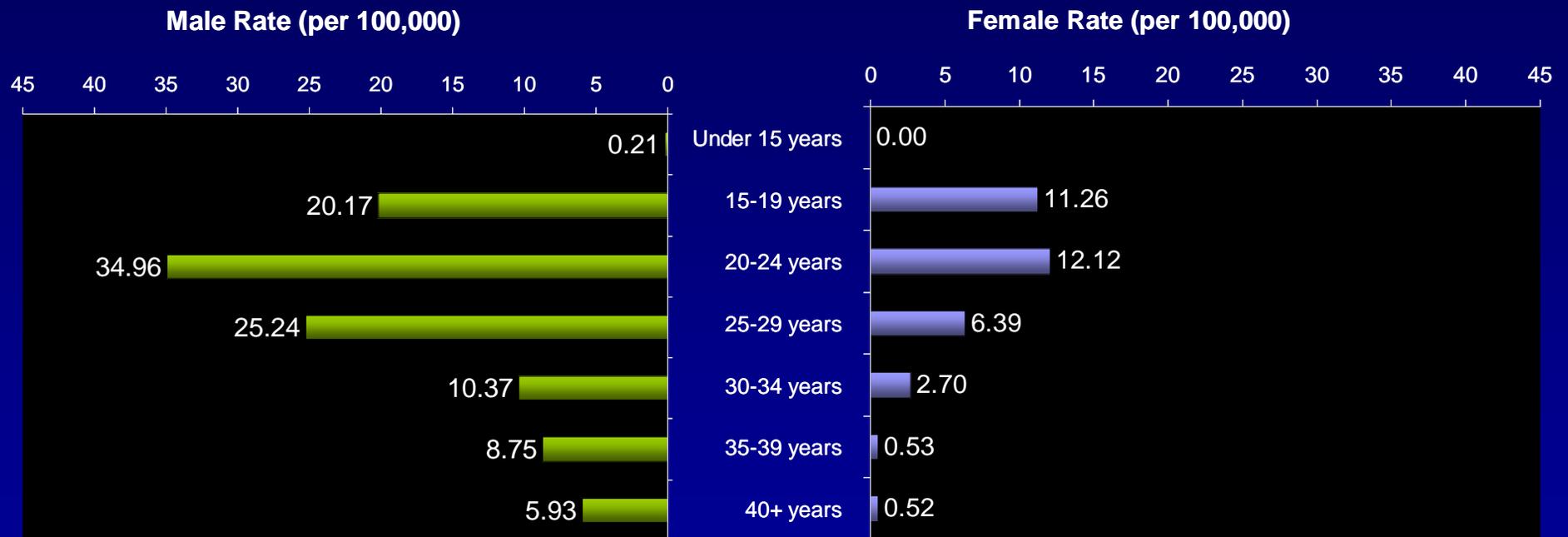
# Syphilis (P&S) Cases and Rates Houston/Harris County, 2000-2010



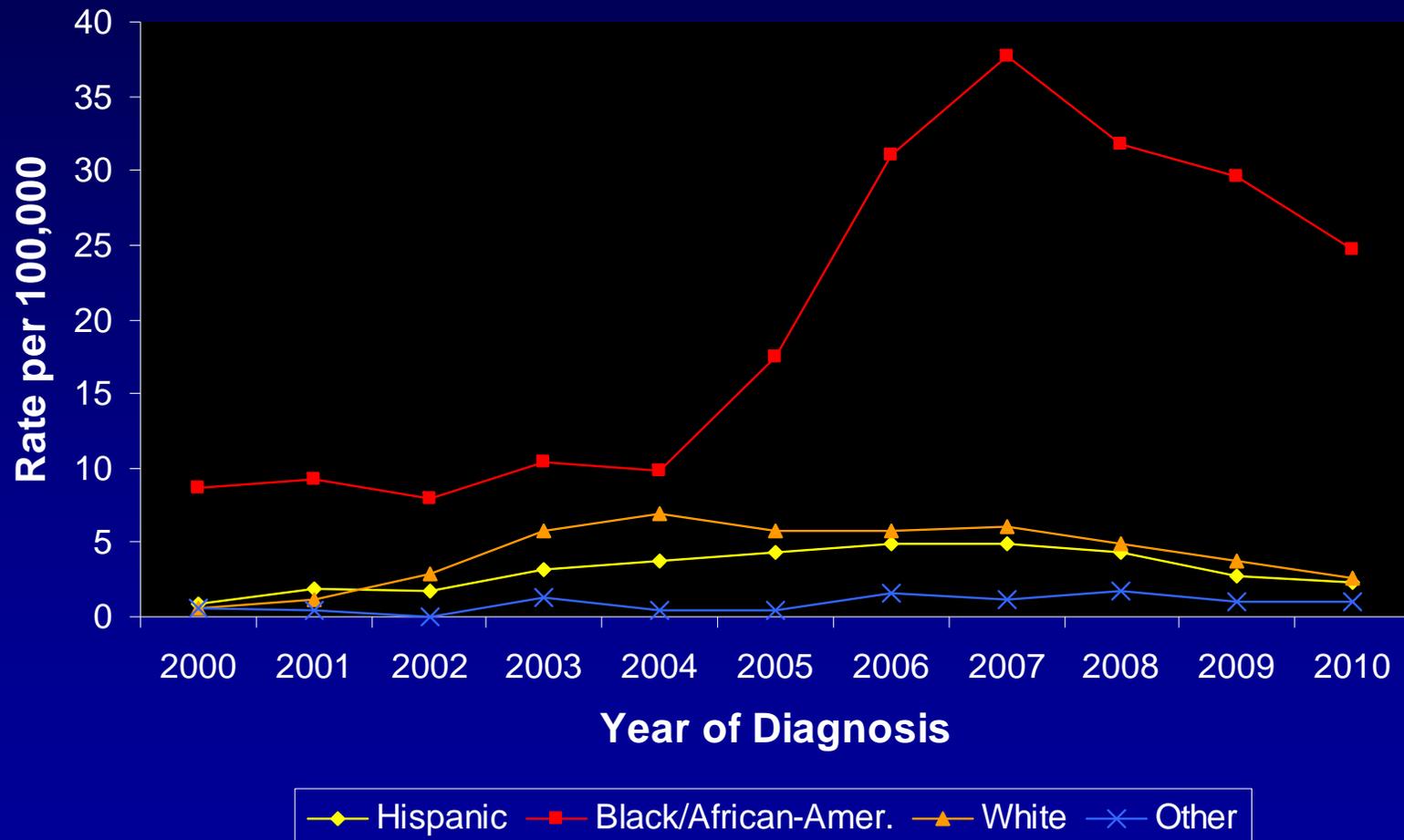
*Includes all cases reported in Houston/Harris County*

*All rates are per 100,000 persons*

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



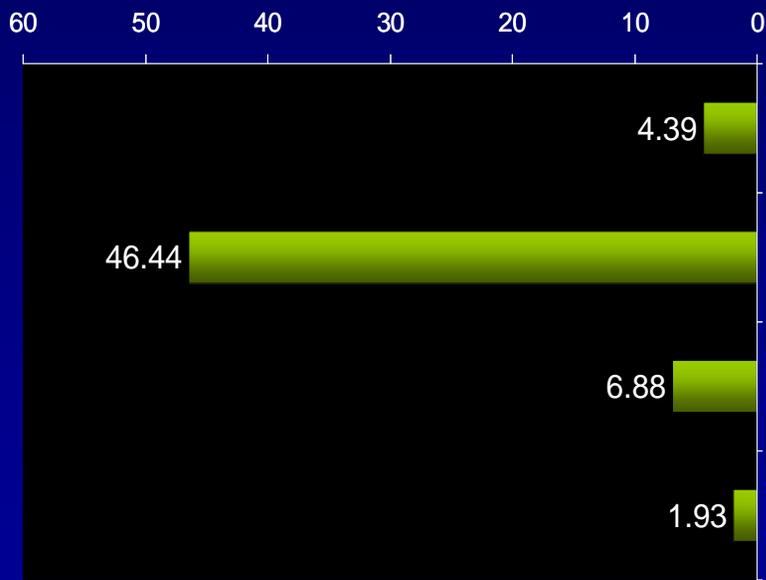
# Syphilis (P&S) — Rates by race/ethnicity Houston/Harris County, 2000–2010



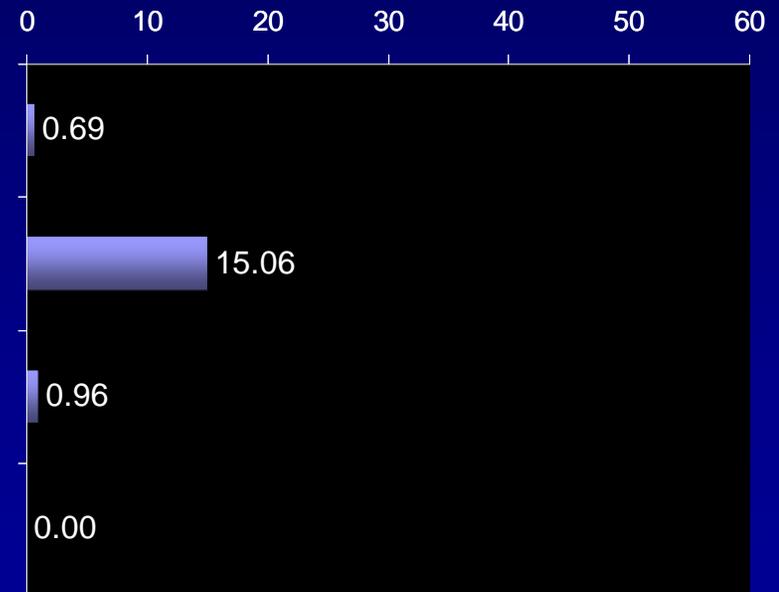
Percentages of missing values for race/ethnicity: 2000= 0%, 2001= 0%, 2002= 0%, 2003= .5%, 2004= 0%, 2005= 0%, 2006= 0%, 2007= 0%, 2008= .5%, 2009= 0%, 2010= 0%

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

Male Rate (per 100,000)

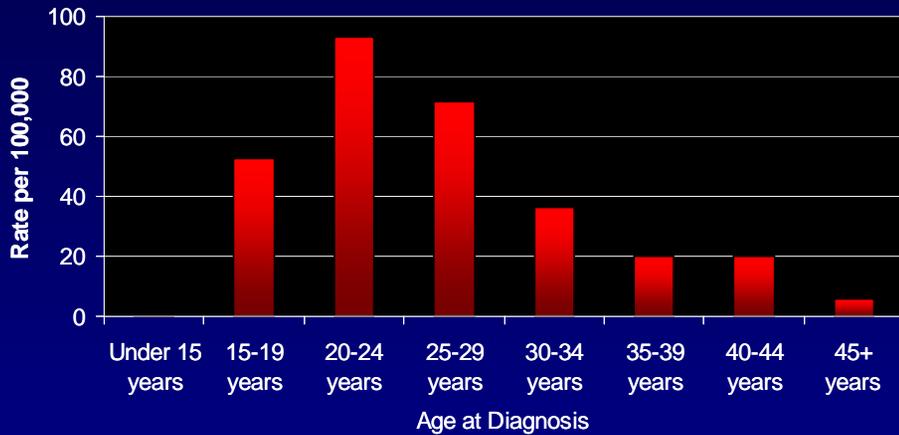


Female Rate (per 100,000)

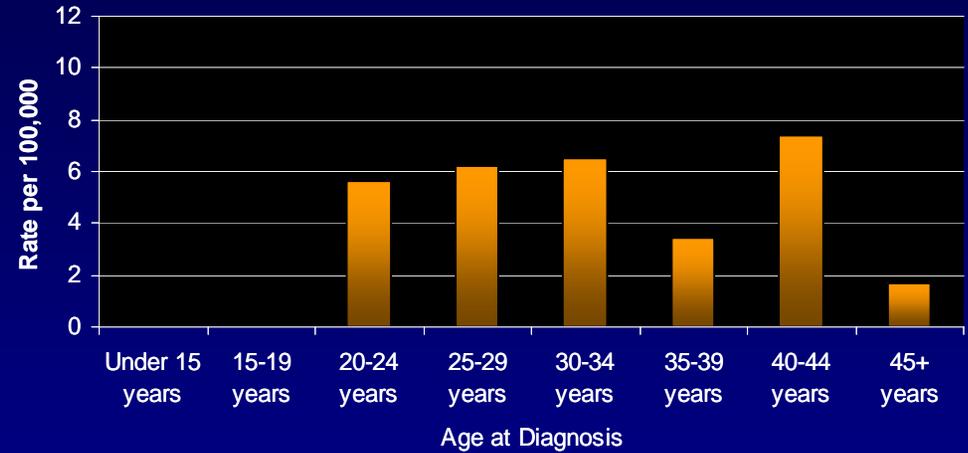


# Syphilis (P&S) — Race/ethnicity- and age-specific rates, Houston/Harris County, 2010

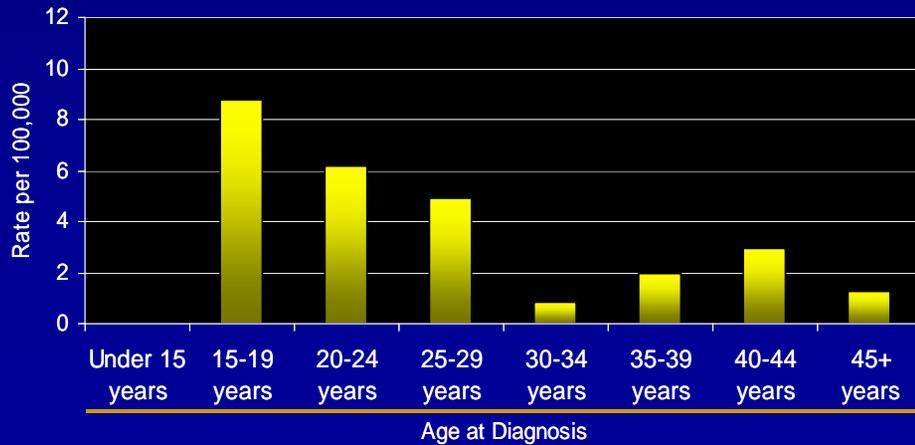
Black/African-Amer. Rates by Age



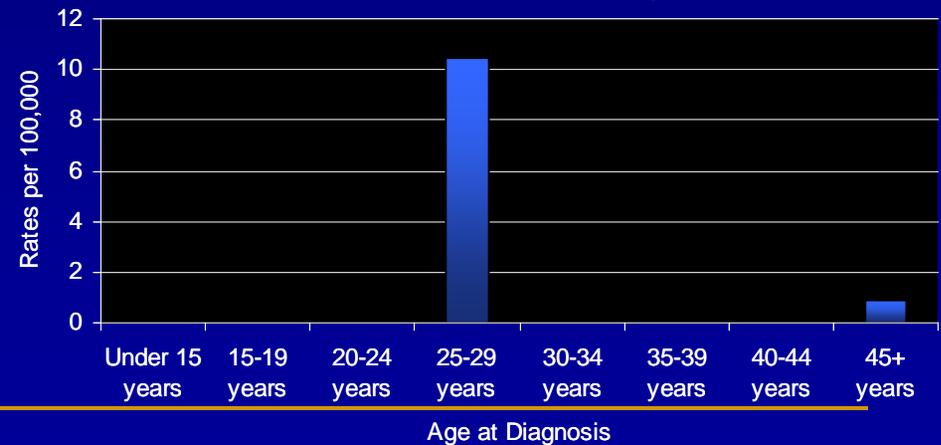
White Rates by Age



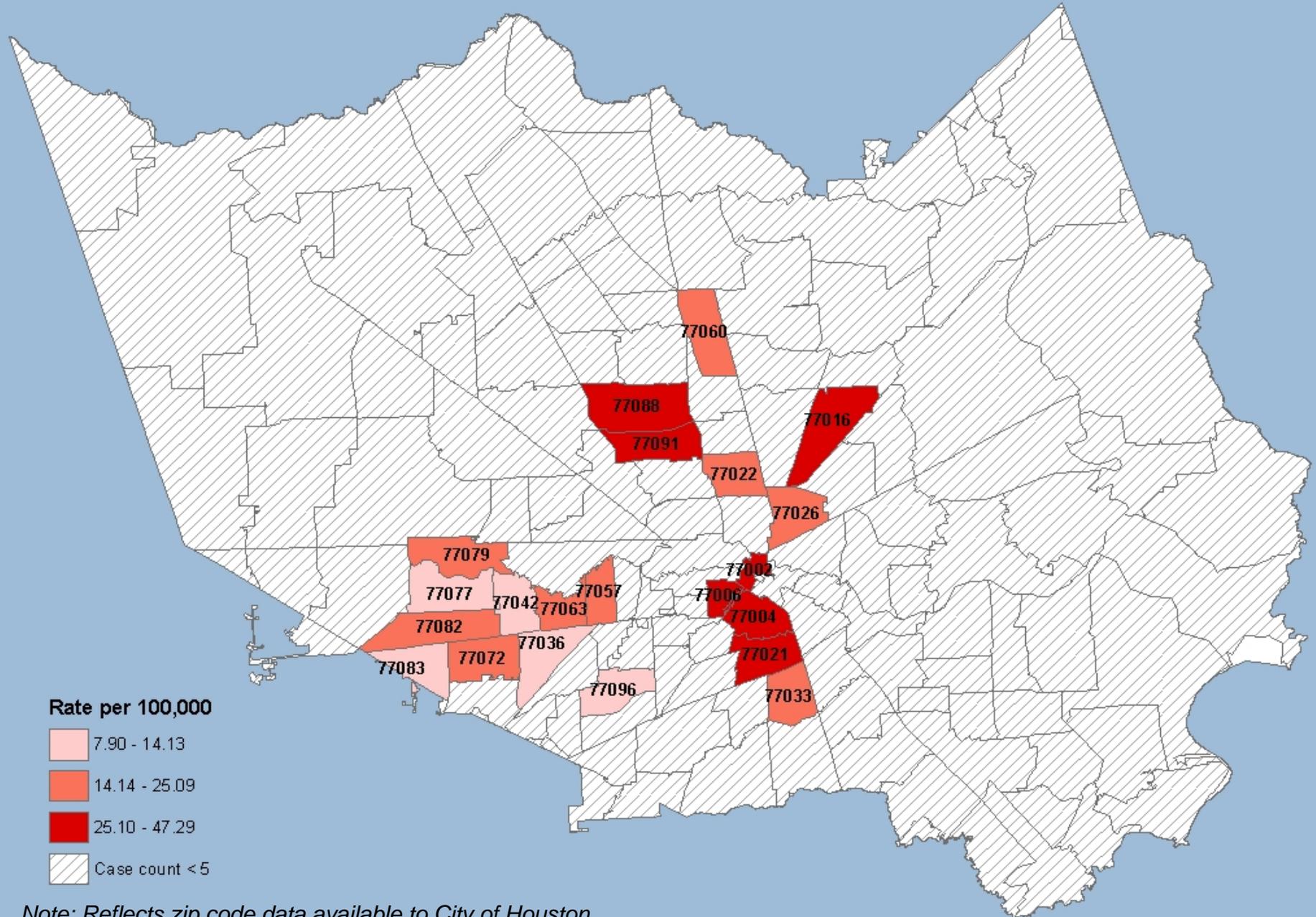
Hispanic Rates by Age



Other Race/Ethn. Rates by Age

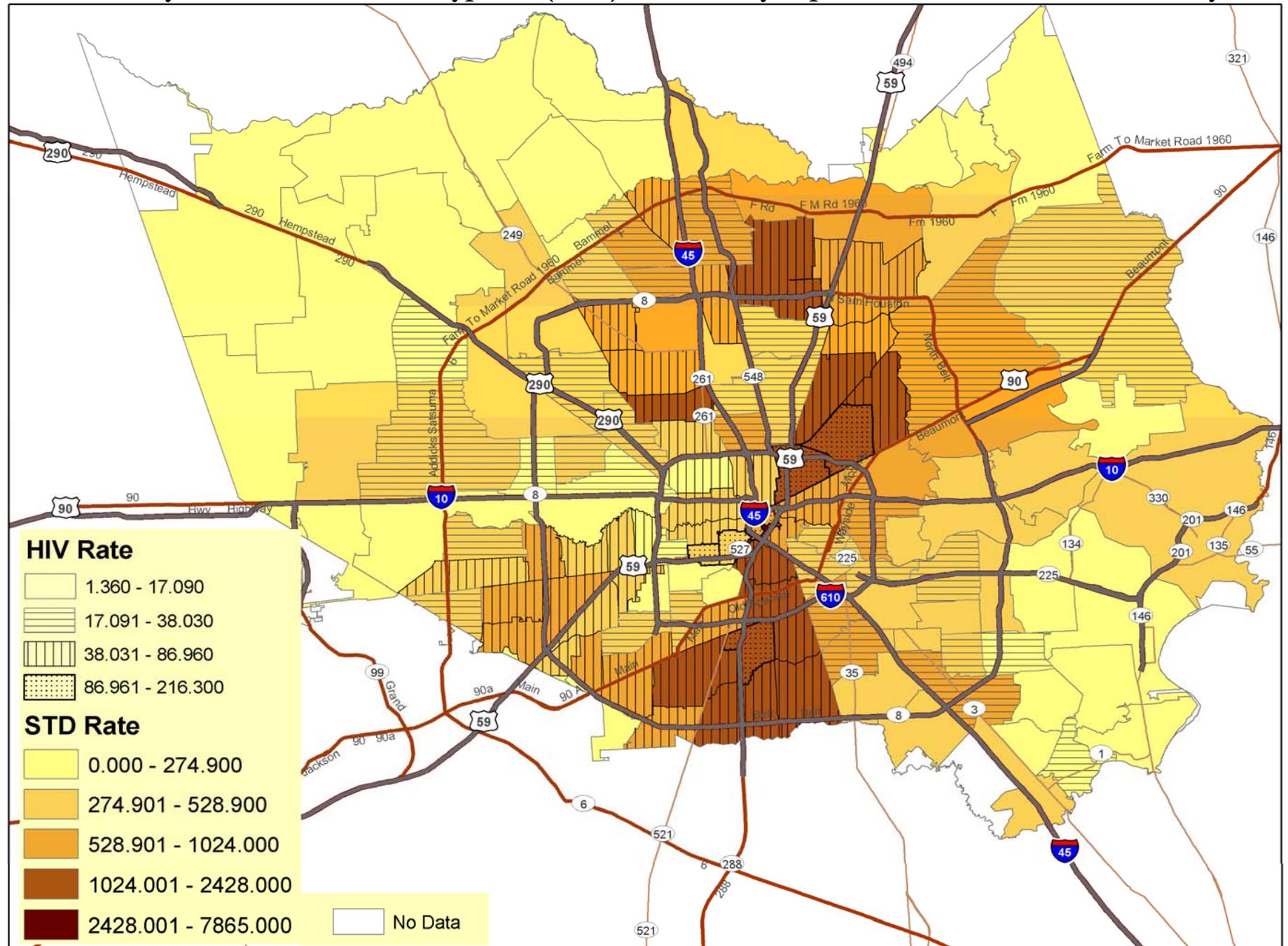


# Syphilis (P&S) — Rates by Zip Code: Houston/Harris County, 2009



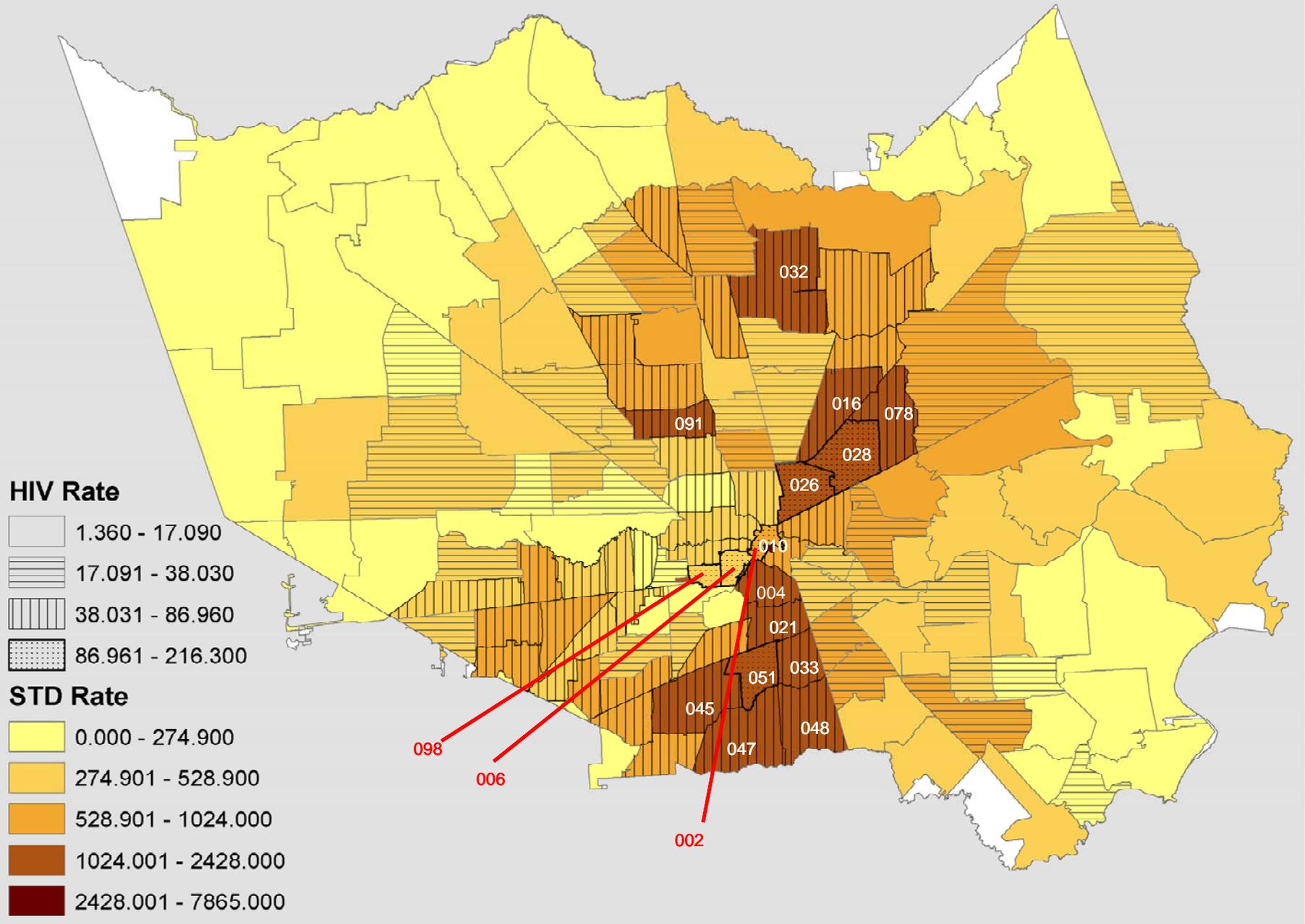
Note: Reflects zip code data available to City of Houston

# 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
- Community Health Statistics, HDHHS
- 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