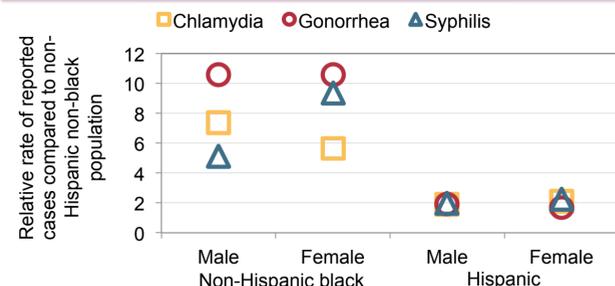


Background



Source: NCHHSTP Atlas, 2014 rates for all ages

- Racial/ethnic disparities exist in sexually transmitted infections in the United States
- Non-Hispanic black Americans experience a disproportionate share of overall STI burden

- Individual behaviors, sexual networks, and broader contextual factors may contribute to observed disparities
- Characterizing sexual behavior and mixing patterns is important for understanding STI dynamics and for planning and evaluating public health interventions

Objectives

- To analyze self-reported sexual partnership behaviors in adults aged 15-39 years
- To identify differences by race/ethnicity

Methods

Data

- 2011-2013 National Survey of Family Growth (NSFG)
- Ever sexually-active respondents aged 15-39 years (n=7511)
 - 84% of males and 85% of females aged 15-39 reporting ever had sexual intercourse
 - Categorized by age, race/ethnicity, and race/ethnicity of most recent opposite-sex sexual partner

Measures

- Self-reported data on sexual behavior and partner characteristics
- Sexual mixing: assessed propensity of individuals to preferentially form sexual partnerships with individuals of the same age or race/ethnic groups
 - Assortativity based on number of partners not number of partnerships

Analysis

- Survey weights used to account for complex sampling procedures used by NSFG
- Compared each measure using descriptive statistics
- Evaluated differences between groups using ANOVA and χ^2 tests

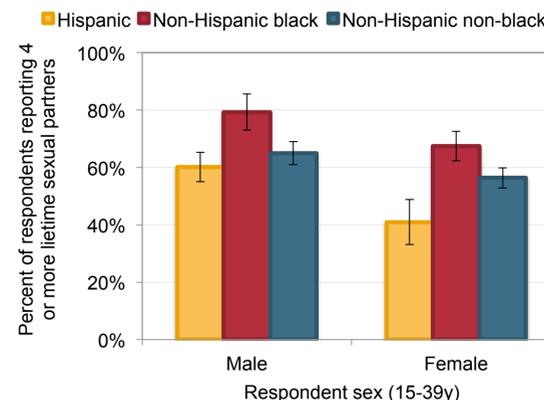
Results

Characteristics of ever sexually-active respondents of the 2011-2013 NSFG

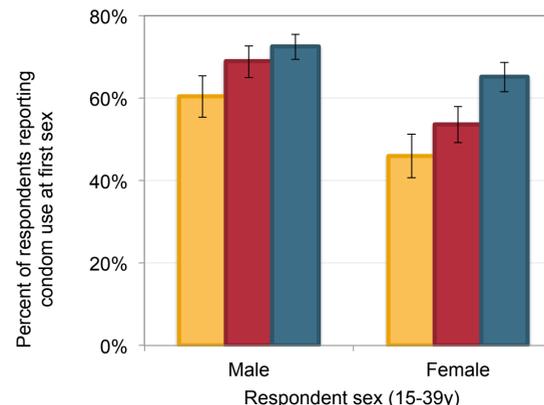
	Male		Female	
	n	Weighted %	n	Weighted %
Unweighted sample size	3386		4125	
Population total estimate	42.5 million		43.0 million	
Age				
15-24	1232	32.4	1334	30.5
25-39	2154	67.6	2791	69.5
Race/ethnicity				
Hispanic	1904	21.8	1089	20.5
Non-Hispanic black	652	12.7	884	14.3
Non-Hispanic non-black	830	65.5	2152	65.2

Individual sexual behaviors

- Non-Hispanic black males aged 15-39 more likely to report **4 or more lifetime sexual partners** than other males (p<0.001)
- Non-Hispanic black females more likely, and Hispanic females less likely, to report 4 or more lifetime partners than non-Hispanic non-black females (p<0.001)

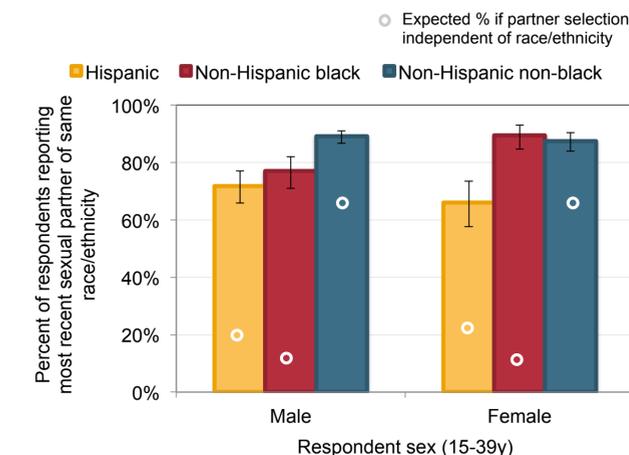


- Hispanic males less likely to report **use of a condom at first sexual intercourse** than other males (p<0.001)
- Non-Hispanic non-black females more likely to report condom use than other females (p<0.001)



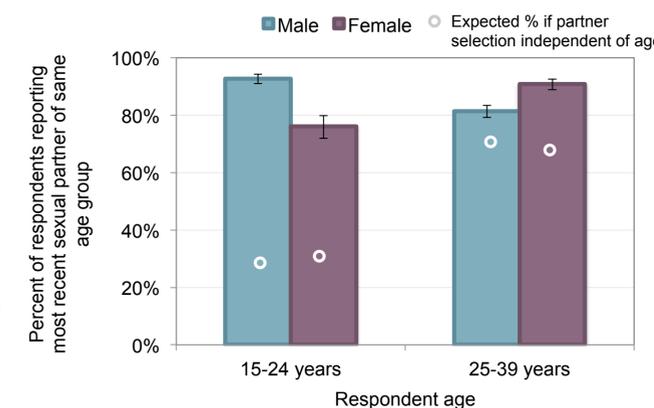
Propensity to select partners of the same race/ethnicity

- Black and Hispanic males less likely to report a recent sexual partner of the same race/ethnicity than non-Hispanic non-black males (p<0.001)
- Hispanic females less likely to report a partner of the same race/ethnicity than other females (p<0.001)



Age assortativity

- Age-assortative mixing more common among older females and younger males than among younger females and older males (p<0.001 for each sex)
- Trends did not differ by race/ethnicity



Conclusions and Future Directions

- Self-reported sexual behaviors and mixing patterns differ by race/ethnicity, age, and sex in the United States
- Can use this information to inform mathematical models of STI transmission and help illuminate behavioral drivers of observed disparities in STI burden
- Data currently being used to parameterize a mathematical model of gonorrhea transmission
 - Incorporating these data will allow us to capture both individual risk behaviors and risk associated with network characteristics to better understand observed trends in gonorrhea burden