

PRECONCEPTION HEALTH IN MICHIGAN

DOMAIN: INFECTIONS

SUB-DOMAIN: SEXUALLY TRANSMITTED INFECTIONS (STIs)

INDICATOR: RATES OF CHLAMYDIA, GONORRHEA, AND SYPHILIS (CASES PER 100,000)^A

SUMMARY

DATA SOURCE: MICHIGAN DISEASE SURVEILLANCE SYSTEM (MDSS)

LIMITATION: POSSIBLE UNDERREPORTING¹ & 45% OF RECORDS MISSING RACE/ETHNICITY

MISSING RACE/ETHNICITY

HP 2020 OBJECTIVE: STD-8 MULTIPLE OBJECTIVES REGARDING RATES AND SCREENING DEPENDENT ON POPULATION DEMOGRAPHICS

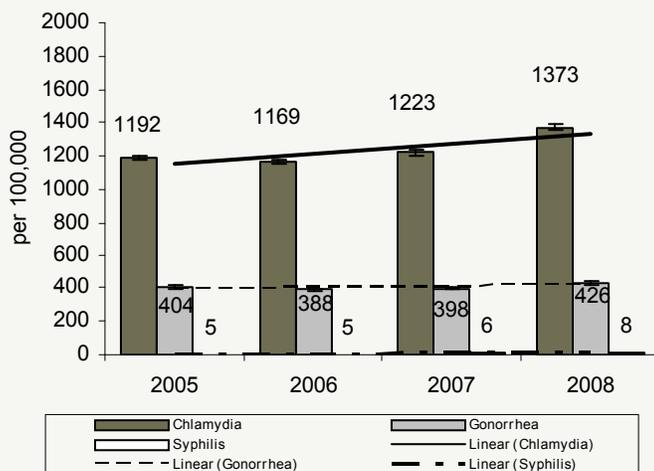
STIs can impact a woman's reproductive health, as well as pregnancy-related outcomes.² In addition, both gonorrhea and chlamydia can be asymptomatic and can cause infertility if not treated. Therefore, preconception screening for STIs can identify a number of potential risks to a woman's

Table 1. Prevalence of STIs^{ab} by age group and race/ethnicity, MDSS 2008

Demographic Characteristics	Chlamydia		Gonorrhea	
	per 100,000	95% Confidence Interval	per 100,000	95% Confidence Interval
Total	1373	(1357-1390)	426	(417-435)
Age				
18 - 24	4356	(4297-4415)	1230	(119-162)
25 - 34	826	(805-848)	305	(292-318)
35 - 44	127	(119-135)	67	(61-73)
Race				
White	366	(356-375)	67	(63-71)
Black	2773	(2715-2832)	1143	(1105-1181)
Hispanic	757	(691-822)	151	(122-180)

reproductive health and allows for those risks to be addressed before conception.² From 2005 to 2008, the prevalence of chlamydia, gonorrhea and syphilis increased among Michigan women of reproductive age (Figure 1). Significant disparities based on demographic characteristics were evident (Table 1, Figures 2-4).

Figure 1. Trend of prevalence of STIs^{ab} among women 18-44: Michigan, MDSS 2005-2008



The prevalence of gonorrhea is:

- 17 times higher among Black women compared to White women; and
- 18 times higher among 18 to 24 year olds compared to 35 to 44 year olds.

The prevalence of Chlamydia is:

- 34 times higher among 18 to 24 year olds compared to 35 to 44 year olds.

Racial disparities in the prevalence of STIs are not explained by risky sexual behaviors or sociodemographic factors alone.³ Reducing these disparities requires a coordinated and multi-disciplinary approach that addresses broad social inequalities.

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Figure 2. Prevalence of **chlamydia**^{ab} among women by race/ethnicity and age, MDSS 2008

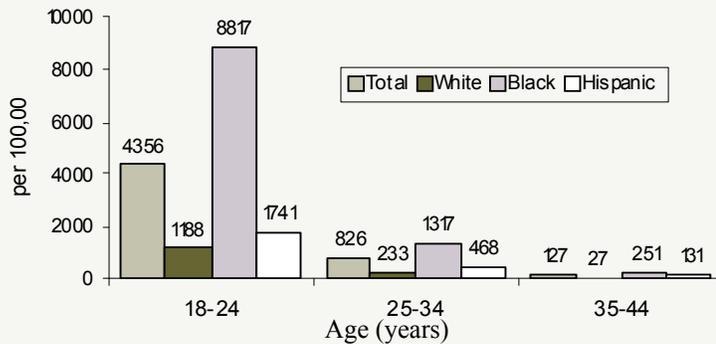


Figure 3. Prevalence of **gonorrhea**^{ab} among women by race/ethnicity and age, MDSS 2008

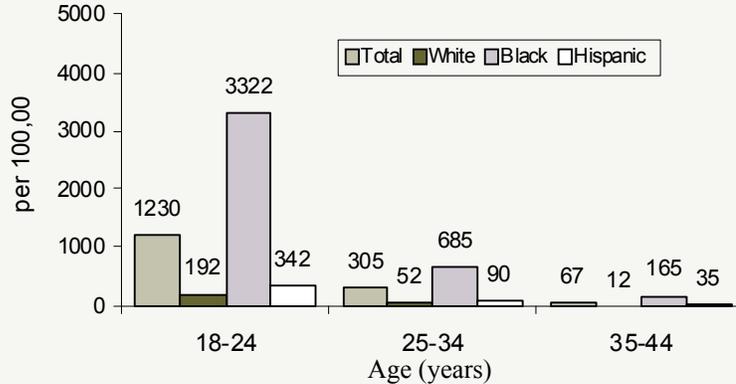
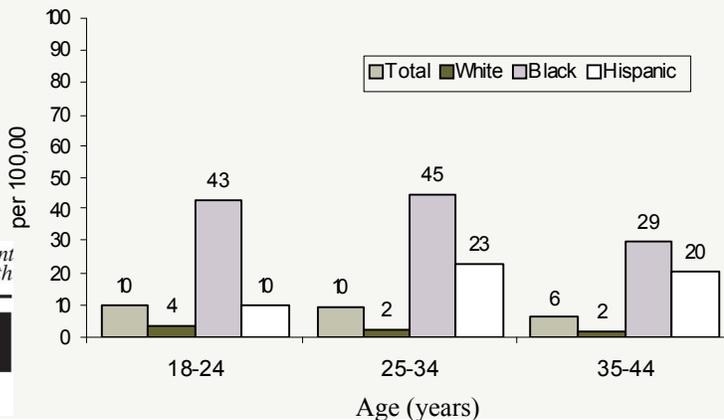


Figure 4. Prevalence of **sypphilis**^{ab} among women by race/ethnicity and age, MDSS 2008



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TABLE & FIGURE FOOTNOTES

- ^a Based on American Community Survey (ACS) 2006-2008 population estimates
^b Among adult women aged 18-44 years.

REFERENCES

1. Core State Preconception Health Indicators: a voluntary, multi-state selection process. November 2009.
2. Coonrod DV, Jack BW, Boggess KA et al. The clinical content of preconception care: infectious diseases in preconception care. *Am J Obstet Gynecol* 2008; 199 (6Suppl B): S296-309.
3. Division of STD Prevention, CDC (2007) Consultation to address STD disparities in the African-American Community. Meeting Report. Atlanta, GA June 6-7, 2007.

PRECONCEPTION HEALTH IN MICHIGAN

DOMAIN: INFECTIONS

SUB-DOMAIN: IMMUNIZATIONS

INDICATOR: PERCENTAGE OF WOMEN WHO RECEIVED AN INFLUENZA VACCINATION IN THE PAST YEAR

SUMMARY

DATA SOURCE: BEHAVIORAL RISK FACTOR SURVEILLANCE SYSTEM (BRFSS)
 RELIABILITY: UNKNOWN¹
 VALIDITY: HIGH¹
 HP 2020 OBJECTIVE: IID-12.5 INCREASE THE PERCENTAGE OF NON-INSTITUTIONALIZED ADULTS AGED 18 TO 64 YEARS WHO ARE VACCINATED ANNUALLY AGAINST SEASONAL INFLUENZA (80%)

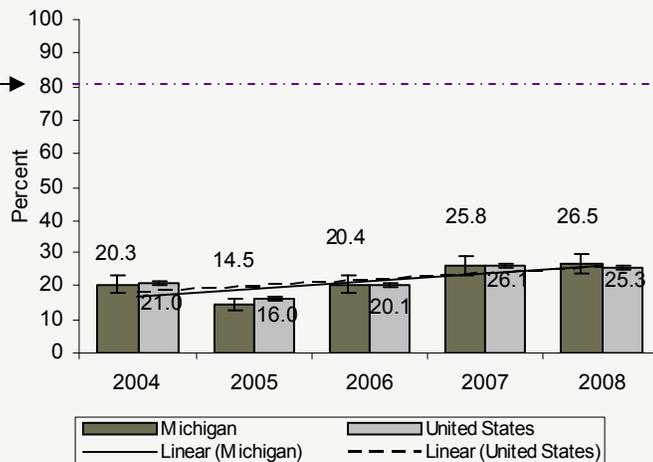
Because of changes to the immune system, heart and lungs during pregnancy, influenza is more likely to cause severe illness in pregnant women than in non-pregnant women.² Furthermore, pregnant women with the flu are at higher risk for premature labor and delivery.² The Advisory Committee on Immunization Practices recommend that all people aged 6

Table 1. Self-reported **influenza vaccination**^a by age group and race, Michigan BRFSS 2008

Demographic Characteristics	Had Flu Vaccine within the Past Year	
	%	95% Confidence Interval
Total	26.5	(23.8-29.3)
Age		
18 - 24	20.2	(14.6-27.4)
25 - 34	29.0	(24.4-34.1)
35 - 44	28.5	(25.1-32.1)
Race		
White	27.1	(24.2-30.3)
Black	21.6	(15.2-29.8)
Other	31.4	(20.6-44.6)

months and older receive an influenza vaccination annually, especially women who will be pregnant during flu season and for women at increased risk of influenza-related complications,³ which concurs with recommendations from the Select Panel on Preconception Care workgroup.⁴

Figure 1. Trend of self-reported **influenza vaccination**^a among women 18-44: US average vs. Michigan, BRFSS 2004-2008



In 2008, 26.5% of Michigan women of reproductive age received a flu vaccine within the past year a 31% increase from 2004 (Figure 1). Significant disparities were evident (Table 1, Figures 2-3).

The prevalence of influenza vaccination was lower among women who:

- Had a high school diploma or some college compared to college graduates;
- Reported a yearly household income of less than \$25,000 compared to women with income greater than \$50,000;
- Did not have health insurance; and
- Had no chronic illness.

HP 2020 goal: 80%

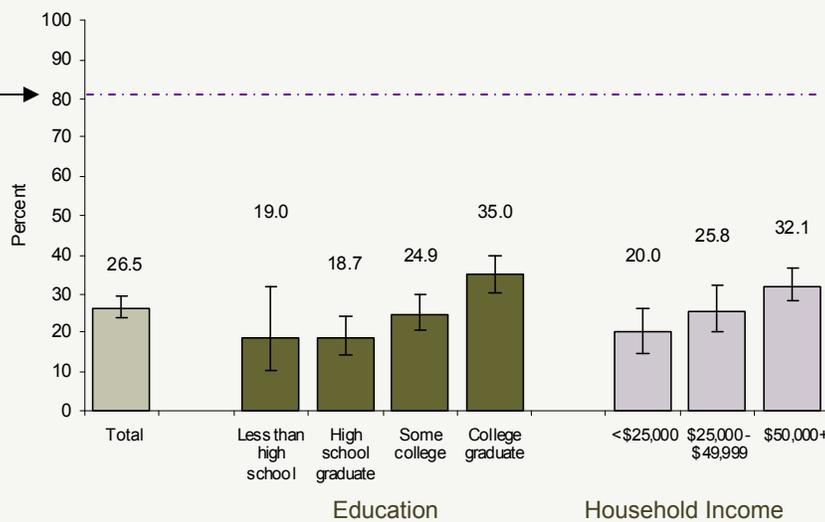
PRECONCEPTION HEALTH IN MICHIGAN

DOMAIN: INFECTIONS

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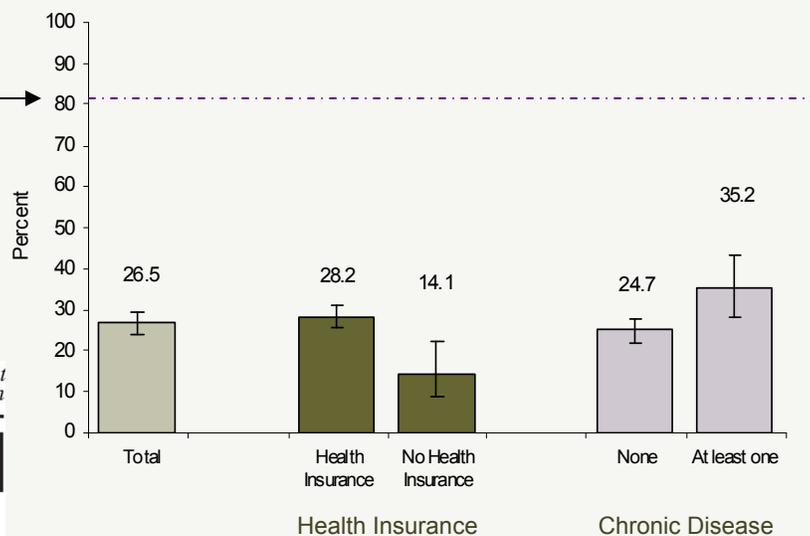
INDICATOR: PERCENTAGE OF WOMEN WHO RECEIVED AN INFLUENZA VACCINATION IN THE PAST YEAR

Figure 2. Prevalence of self-reported **influenza vaccination**^a among MI women by educational attainment or household income, Michigan BRFSS 2008



HP 2020 goal: 80%

Figure 3. Prevalence of self-reported **influenza vaccination**^a among MI women by health insurance coverage or at least one chronic disease^b, Michigan BRFSS 2008



HP 2020 goal: 80%

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TABLE & FIGURE FOOTNOTES

^a Among adult women aged 18-44 years, the proportion who reported that they had a flu vaccine, either by an injection in the arm or sprayed in the nose during the past 12 months.

^b Women with at least one of the following: Ever told that they had diabetes, heart attack/myocardial infarction, angina/coronary heart disease, stroke or who currently had asthma.

REFERENCES

1. Core State Preconception Health Indicators: a voluntary, multi-state selection process. November 2009.
2. CDC (2010) Seasonal influenza: Pregnant women and influenza (flu). Accessed at <http://www.cdc.gov/flu/protect/vaccine/pregnant.htm> on April 19, 2010.
3. Fiore AE, Uyeki TM, Broder K, et al. Prevention and control of influenza with vaccines. *MMWR* 2010; 59 (rr08):1-62
4. Coonrod DV, Jack BW, Boggess KA, et al. The clinical content of preconception care: immunizations as part of preconception care. *Am J Obstet Gynecol* 2008; 199(6suppl B): S290-95

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