

**PRECONCEPTION HEALTH STATUS OF WOMEN IN MICHIGAN:  
PRELIMINARY TABLES**

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## **INTRODUCTION**

By the time prenatal care begins, even if during the first trimester, it is often too late to prevent many unfavorable outcomes for mother and baby. Preconception health is about women's health before becoming pregnant either for the first time or more than once. The goal of preconception health is to promote and assure a balanced combination of the best medical care, healthy behaviors, strong support, and safe environments at home and at work. Reducing physical, emotional, mental and oral health risk factors and improving health during the reproductive age is a public health priority. Thus, poor birth outcomes and complications of mothers and infants can be avoided.<sup>1</sup>

Examples of unfavorable outcomes are as follows:

- In 2008 8.5% of Michigan babies were born with low birthweight;<sup>2</sup>
- One in ten Michigan infants were born preterm (< 37 weeks gestation);<sup>2</sup>
- Nearly one-quarter (24.8%) of mothers giving birth in Michigan during 2008 had at least one medical risk factor;<sup>3</sup>
- Infant mortality (per 1,000 births) is nearly 3 times higher among Black infants (15.0) than White infants (5.5) in 2008 in Michigan.<sup>4</sup>

Past efforts to reduce infant mortality and improve birth outcomes have focused on prenatal health and neonatal care, resulting in some reduction of poor outcomes. Yet the rates of adverse events (such as infant mortality and premature birth) remain high, often with significant racial disparities and exceeding Healthy People 2010 objectives. Various studies and epidemiological analyses proved that the health of women prior to pregnancy is the key to improving maternal and infant health. The Centers for Disease Control and Prevention (CDC) in collaboration with other national partners published ten recommendations to improve preconception health.<sup>1</sup> However, implementing these recommendations requires accurate monitoring of preconception health in women of reproductive age. This can be accomplished only by having well defined indicators. Several states including Michigan formed a national group that defined a list of indicators that could be used for the surveillance of health among women of

reproductive age and for monitoring the effectiveness of interventions.<sup>5</sup>

## RECOMMENDED INDICATORS

Each indicator was evaluated on five criteria: public health importance, policy/program importance, data availability, data quality, and the complexity of calculating the indicator. The group selected 45 indicators among 10 preconception health domains (see below) to be limited to women aged 18 to 44 years.

### PRECONCEPTION HEALTH DOMAINS

- GENERAL HEALTH STATUS
- SOCIAL DETERMINANTS OF HEALTH
- HEALTH CARE
- REPRODUCTIVE HEALTH & FAMILY PLANNING
- TOBACCO, ALCOHOL, & SUBSTANCE USE
- NUTRITION & PHYSICAL ACTIVITY
- MENTAL HEALTH
- EMOTIONAL & SOCIAL SUPPORT
- CHRONIC CONDITIONS
- INFECTIONS

The following tables outline the preconception health status of Michigan women ages 18-44 years for the most recent year for each data source. Wherever possible, analysis by race/ethnicity, age/group, education, income and health insurance status is also included. Subsequent to this report a fact sheet series detailing trends along with comparison to national rates, and to Healthy People 2020 objectives is planned for Spring 2011 release. To view tables for each domain CTRL click on the domain name.

This report was prepared by the Division of Genomics, Perinatal Health, and Chronic Disease Epidemiology.

## DATA SOURCES

**Michigan Behavioral Risk Factor Surveillance System (MiBRFSS).** The MiBRFSS conducted by the Michigan Department of Community Health (MDCH) in cooperation with the CDC, collects information on health behaviors, preventative health practices and health care access among Michigan adults 18 years of age and older. A random

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digit dialing phone survey, MiBRFSS provides timely and accurate data despite being self-reported and so is subject to bias, as behaviors may change over time and recall of events, health conditions and behaviors may diminish.

**Pregnancy risk assessment monitoring system (PRAMS) for Michigan.** PRAMS is a joint collaboration between CDC and MDCH. A population-based survey of Michigan resident mothers who delivered a live infant, PRAMS is essential for monitoring maternal attitudes, experiences, health behaviors, health conditions and access to care before, during and after pregnancy. Data is self-reported two to six months after delivery and may be subject to reporting or recall bias, behaviors may change over time and the ability to recall preconception events, health and behaviors may decrease. However, the sampling methods used ensure findings can be applied to approximately 98% of the state's population of women who have delivered a live-born infant each year.

Both MiBRFSS and PRAMS not only provide state-specific data for many preconception health indicators, but also allow comparison among different states.

**Michigan Division for Vital Records & Health Statistics (MDCH-VR), Michigan Disease Surveillance System (MDSS), and the American Community Survey (ACS)** are additional data sources. MDCH-VR collects and disseminates vital record data (including birth certificate data for the State of Michigan). MDSS is a web-based communicable disease surveillance system developed for the State of Michigan. The ACS is conducted by the Census Bureau and provides estimates of poverty level as well as the denominator for sexually transmitted infection rates.

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**Indicator #1:**

<b>Domain: General Health Status and Life Satisfaction</b>		
<b>Sub-domain: Self-rated Health</b>		
<b>2009 Michigan BRFSS</b>		
<b>Demographic Characteristics</b>	<b>General Health, Excellent, Very Good or Good<sup>a</sup></b>	
	<b>%</b>	<b>95% Confidence Interval</b>
<b>Total</b>	<b>9.7</b>	<b>(7.8-12.0)</b>
<b>Age</b>		
18 - 24	90.7	(84.3-94.7)
25 - 34	89.7	(85.6-92.8)
35 - 44	90.5	(87.6-92.8)
<b>Race</b>		
White	91.6	(89.1-93.5)
Black	83.2	(75.2-89.0)
Other	90.1	(77.4-96.0)
<b>Education</b>		
Less than high school	72.5	(56.1-84.4)
High school graduate	85.0	(78.7-89.7)
Some college	90.0	(86.0-92.9)
College graduate	96.1	(93.0-97.8)
<b>Household Income</b>		
< \$25,000	78.5	(71.6-84.1)
\$25,000 - \$49,999	89.5	(84.5-93.0)
\$50,000+	96.7	(93.7-98.3)
<b>Health Insurance</b>		
Health Insurance	91.2	(88.9-93.1)
No Health Insurance	84.7	(75.9-90.6)
<sup>a</sup> Among adult women aged 18-44 years, the proportion who reported that their health, in general, was either excellent, very good or good.		

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**Indicator #2:**

<b>Domain: Social Determinants of Health</b>		
<b>Sub-domain: Education</b>		
<b>2009 Michigan BRFSS</b>		
<b>Demographic Characteristics</b>	<b>High School Education/GED or Greater<sup>a</sup></b>	
	<b>%</b>	<b>95% Confidence Interval</b>
<b>Total</b>	<b>95.2</b>	<b>(93.5-96.5)</b>
<b>Age</b>		
18 – 24	92.9	(87.8-96.0)
25 – 34	96.0	(92.9-97.8)
35 – 44	96.1	(93.7-97.6)
<b>Race</b>		
White	96.2	(94.4-97.5)
Black	92.7	(88.2-95.6)
Other	89.3	(73.1-96.2)
<b>Household Income</b>		
< \$25,000	88.3	(82.6-92.3)
\$25,000 - \$49,999	98.6	(96.8-99.4)
\$50,000+	99.2	(97.6-99.8)
<b>Health Insurance</b>		
Health Insurance	96.2	(94.6-97.4)
No Health Insurance	91.2	(83.3-95.6)

<sup>a</sup> Among adult women aged 18-44 years, the proportion who reported having a high school education/GED or greater.

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**Indicator #3:**

<b>Domain: Social Determinants of Health</b>		
<b>Sub-domain: Poverty</b>		
<b>2006-2008 ACS Michigan PUMS<sup>a</sup></b>		
<b>Demographic Characteristics</b>	<b>Women who live at or below 200% of the Federal poverty threshold<sup>b</sup></b>	
	<b>%</b>	<b>95% Confidence Interval</b>
<b>Total</b>	<b>37.8</b>	<b>(36.6-39.0)</b>
<b>Age</b>		
18 - 24	49.5	(47.1-51.9)
25 - 34	38.5	(36.4-40.5)
35 - 44	29.8	(28.1-31.5)
<b>Race</b>		
White	32.3	(31.1-33.6)
Black	58.6	(55.2-62.0)
Hispanic	54.2	(48.3-60.1)
Other	42.4	(36.8-48.0)
<b>Education</b>		
Less than high school	71.4	(67.9-74.8)
High school graduate	47.6	(45.3-49.9)
Some college	37.5	(35.7-39.4)
College graduate	13.8	(12.1-15.5)
<sup>a</sup> American community Survey Public Use Microdata Set U.S. Census <a href="http://factfinder.census.gov/home/en/acs_pums_2008_3yr.html">http://factfinder.census.gov/home/en/acs_pums_2008_3yr.html</a>		
<sup>b</sup> Women ages 18-44 years		

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**Indicator #4:**

<b>Domain: Health Care</b>		
<b>Sub-domain: Access to and Utilization of Health Care</b>		
<b>2009 Michigan BRFSS</b>		
<b>Demographic Characteristics</b>	<b>Health Care Coverage<sup>a</sup></b>	
	<b>%</b>	<b>95% Confidence Interval</b>
<b>Total</b>	<b>84.5</b>	<b>(81.7-87.0)</b>
<b>Age</b>		
18 – 24	77.3	(69.3-83.7)
25 – 34	85.9	(81.3-89.5)
35 – 44	88.2	(85.2-90.7)
<b>Race</b>		
White	85.2	(82.0-87.8)
Black	80.5	(72.0-86.9)
Other	86.2	(71.2-94.1)
<b>Education</b>		
Less than high school	70.3	(51.5-84.1)
High school graduate	78.6	(71.8-84.1)
Some college	81.1	(75.7-85.5)
College graduate	93.4	(90.4-95.5)
<b>Household Income</b>		
< \$25,000	66.6	(58.8-73.5)
\$25,000 - \$49,999	86.3	(80.5-90.6)
\$50,000+	94.6	(91.7-96.5)
<sup>a</sup> Among adult women aged 18-44 years, the proportion who reported having health care coverage, including health insurance, prepaid plans such as HMOs, or government plans, such as Medicare.		

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**Indicator #5:**

<b>Domain: Health Care</b>		
<b>Sub-domain: Access to and Utilization of Health Care</b>		
<b>2008 Michigan PRAMS</b>		
<b>Demographic Characteristics</b>	<b>Prepregnancy health care coverage<sup>a</sup></b>	
	<b>%</b>	<b>95% Confidence Interval</b>
<b>Total</b>	<b>78.9</b>	<b>(76.4-81.3)</b>
<b>Age</b>		
18 - 24	65.5	(60.4-70.2)
25 - 34	84.5	(81.3-87.3)
35 - 44	89.3	(83.5-93.2)
<b>Race</b>		
White	79.7	(76.6-82.5)
Black	78.8	(74.9-82.3)
Other	73.6	(54.2-86.8)
<b>Education</b>		
Less than high school	64.6	(56.0-72.4)
High school graduate	69.8	(64.2-74.9)
Some college	79.4	(75.0-83.1)
College graduate	94.8	(91.8-96.8)
<b>Household Income</b>		
< \$25,000	63.1	(58.5-67.5)
\$25,000 - \$49,999	78.8	(72.8-83.8)
\$50,000+	96.7	(94.2-98.1)
<sup>a</sup> Among women aged 18-44 years, who had a live birth in 2008, the proportion who reported having health insurance (including Medicaid) during the month before conception.		

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**Indicator #6:**

<b>Domain: Health Care</b>		
<b>Sub-domain: Access to and Utilization of Health Care</b>		
<b>2008 Michigan BRFSS</b>		
<b>Demographic Characteristics</b>	<b>Had Routine Checkup in Past Year<sup>a</sup></b>	
	<b>%</b>	<b>95% Confidence Interval</b>
<b>Total</b>	<b>70.3</b>	<b>(67.1-73.3)</b>
<b>Age</b>		
18 – 24	71.1	(62.6-78.3)
25 – 34	65.9	(60.5-70.9)
35 – 44	73.7	(69.8-77.3)
<b>Race</b>		
White	67.9	(64.1-71.4)
Black	83.6	(77.1-88.5)
Other	68.7	(53.9-80.5)
<b>Education</b>		
Less than high school	74.2	(57.5-85.9)
High school graduate	67.8	(60.5-74.3)
Some college	68.5	(62.8-73.7)
College graduate	73.1	(68.2-77.5)
<b>Household Income</b>		
< \$25,000	62.8	(55.1-69.9)
\$25,000 - \$49,999	68.6	(61.5-74.8)
\$50,000+	73.7	(69.1-77.8)
<b>Health Insurance</b>		
Health Insurance	74.6	(71.3-77.6)
No Health Insurance	45.3	(36.2-54.6)

<sup>a</sup> Among adult women aged 18-44 years, the proportion who reported having had a routine checkup in the past year.

**Indicator #7: Percentage of women having a live birth who had a postpartum checkup** - Data not collected by MI PRAMS in 2008, but will be collected from 2009-2011.

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**Indicator #8: Percentage of women having a live birth who had their teeth cleaned during the 12 months prior to pregnancy -** Data not collected by MI PRAMS in 2008, but will be collected from 2009-2011.

**Indicator #9:**

<b>Domain: Health Care</b>		
<b>Sub-domain: Reproductive Health Care</b>		
<b>2008 Michigan BRFSS</b>		
<b>Demographic Characteristics</b>	<b>Had Appropriately Timed Pap Test<sup>a</sup></b>	
	<b>%</b>	<b>95% Confidence Interval</b>
<b>Total</b>	<b>85.1</b>	<b>(82.4-87.5)</b>
<b>Age</b>		
18 – 24	66.3	(58.3-73.4)
25 – 34	92.8	(89.5-95.1)
35 – 44	90.9	(88.2-92.9)
<b>Race</b>		
White	85.4	(82.4-88.0)
Black	86.8	(79.9-91.6)
Other	76.6	(60.7-87.5)
<b>Education</b>		
Less than high school	83.6	(70.9-91.4)
High school graduate	73.2	(66.3-79.1)
Some college	85.8	(80.7-89.7)
College graduate	93.3	(90.5-95.3)
<b>Household Income</b>		
< \$25,000	80.5	(73.4-86.1)
\$25,000 - \$49,999	87.6	(82.6-91.3)
\$50,000+	90.5	(87.0-93.2)
<b>Health Insurance</b>		
Health Insurance	87.3	(84.5-89.6)
No Health Insurance	71.8	(62.6-79.4)
<sup>a</sup> Among adult women aged 18-44 years, the proportion who reported having had a Pap test within the previous three years.		

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**Indicator #10: Percentage of women having a live birth who received preconception counseling about healthy lifestyle behaviors & prevention strategies from a health care provider prior to pregnancy - Data not collected by MI PRAMS in 2008, but will be collected from 2009-2011.**

**Indicator #11:**

<b>Domain: Reproductive Health &amp; Family Planning</b>		
<b>Sub-domain: Previous Preterm Birth</b>		
<b>2009 Michigan Live Birth File</b>		
<b>Demographic Characteristics</b>	<b>Women (18-44 yrs old) having a live birth who had a previous preterm birth<sup>a</sup></b>	
	<b>%</b>	<b>95% Confidence Interval</b>
<b>Total</b>	<b>1.9</b>	<b>(1.8-2.0)</b>
<b>Age</b>		
18 - 24	1.2	(1.1-1.3)
25 - 34	2.0	(1.9-2.1)
35 - 44	3.0	(2.7-3.3)
<b>Race</b>		
White	1.9	(1.8-2.0)
Black	2.0	(1.8-2.2)
Hispanic	1.3	(1.0-1.6)
Other	‡	‡
<b>Education</b>		
Less than high school	2.0	(1.8-2.2)
High school graduate	1.8	(1.7-1.9)
Some college	2.0	(1.8-2.2)
College graduate	1.8	(1.7-1.9)
<sup>a</sup> Michigan Residents <sup>‡</sup> Data unavailable		

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**Indicator #12:**

<b>Domain: Reproductive Health and Family Planning</b>		
<b>Sub-domain: Previous Preterm Birth</b>		
<b>2008 Michigan PRAMS</b>		
<b>Demographic Characteristics</b>	<b>Previous live birth born premature<sup>a</sup></b>	
	%	<b>95% Confidence Interval</b>
<b>Total</b>	<b>12.7</b>	<b>(10.4-15.5)</b>
<b>Age</b>		
18 - 24	15.0	(10.4-21.2)
25 - 34	11.5	(8.6-15.2)
35 - 44	13.6	(8.4-21.3)
<b>Race</b>		
White	11.7	(9.0-15.0)
Black	16.1	(12.0-21.4)
Other	‡	‡
<b>Education</b>		
Less than high school	18.0	(11.5-27.1)
High school graduate	13.3	(8.9-19.3)
Some college	10.4	(7.1-15.1)
College graduate	10.7	(6.8-16.4)
<b>Household Income</b>		
< \$25,000	16.5	(12.3-21.7)
\$25,000 - \$49,999	10.1	(6.1-16.3)
\$50,000+	8.9	(6.0-13.0)
<b>Health Insurance</b>		
Private Insurance	9.3	(6.9-12.5)
Medicaid	17.1	(11.8-24.3)
No Health Insurance	18.9	(12.6-27.4)
<sup>a</sup> Among women aged 18-44 years, who had a live birth in 2008 that was not their first live birth, the proportion who reported having their last live birth more than three weeks before the due date. <sup>‡</sup> Data not shown due to small sample size.		

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**Indicator #13: Percentage of women who experienced a miscarriage, fetal death or stillbirth in the 12 months prior to getting pregnant with their most recent live born infant - Data not collected in MI PRAMS Survey**

**Indicator #14:**

<b>Domain: Reproductive Health Family Planning</b>		
<b>Sub-domain: Inter pregnancy interval interval/birth spacing</b>		
<b>2009 Michigan Live Birth File</b>		
<b>Demographic Characteristics</b>	<b>Women (18-44 yrs old) having a live birth who had an Interpregnancy interval/birth interval less than 18 months<sup>a</sup></b>	
	<b>%</b>	<b>95% Confidence Interval</b>
<b>Total</b>	<b>19.8</b>	<b>(19.5-20.1)</b>
<b>Age</b>		
18 - 24	29.4	(28.7-30.1)
25 - 34	17.3	(16.9-17.7)
35 - 44	14.7	(14.1-15.3)
<b>Race</b>		
White	19.4	(19.1-19.7)
Black	23.4	(22.7-24.1)
Hispanic	17.5	(16.5-18.5)
Other	‡	‡
<b>Education</b>		
Less than high school	24.4	(23.6-25.2)
High school graduate	20.7	(20.1-21.3)
Some college	19.3	(18.7-19.9)
College graduate	17.8	(17.3-18.3)
<sup>a</sup> Michigan Residents		
<sup>‡</sup> Data unavailable		

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**Indicator #15:**

<b>Domain: Reproductive Health and Family Planning</b>		
<b>Sub-domain: Pregnancy Intention/Wantedness</b>		
<b>2008 Michigan PRAMS</b>		
<b>Demographic Characteristics</b>	<b>Unintended or Unwanted Pregnancy<sup>a</sup></b>	
	%	95% Confidence Interval
<b>Total</b>	<b>41.5</b>	<b>(38.7-44.4)</b>
<b>Age</b>		
18 - 24	61.3	(56.2-66.1)
25 - 34	33.1	(29.4-37.0)
35 - 44	27.2	(20.9-34.6)
<b>Race</b>		
White	37.1	(33.8-40.7)
Black	66.6	(62.2-70.7)
Other	19.7	(8.7-38.8)
<b>Education</b>		
Less than high school	61.8	(53.3-69.7)
High school graduate	49.5	(43.8-55.2)
Some college	43.0	(38.1-48.1)
College graduate	20.2	(16.2-25.0)
<b>Household Income</b>		
< \$25,000	59.7	(55.1-64.2)
\$25,000 - \$49,999	44.3	(37.8-51.1)
\$50,000+	19.1	(15.5-23.2)
<b>Health Insurance</b>		
Private Insurance	30.3	(26.9-33.8)
Medicaid	65.3	(58.8-71.2)
No Health Insurance	53.0	(46.3-59.5)
<sup>a</sup> Among women aged 18-44 years, who had a live birth in 2008, the proportion who reported not wanting to be pregnant just before conception, plus those who reported not wanting to be pregnant ever.		

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**Indicator #16:**

<b>Domain: Reproductive Health and Family Planning</b>		
<b>Sub-domain: Contraception (Access, Availability, and Use)</b>		
<b>2008 Michigan PRAMS</b>		
<b>Demographic Characteristics</b>	<b>Not trying to get pregnant and not doing anything to keep from getting pregnant<sup>a</sup></b>	
	<b>%</b>	<b>95% Confidence Interval</b>
<b>Total</b>	<b>28.5</b>	<b>(25.9-31.2)</b>
<b>Age</b>		
18 - 24	38.3	(33.5-43.4)
25 - 34	22.9	(19.7-26.5)
35 - 44	26.4	(20.3-33.7)
<b>Race</b>		
White	25.4	(22.4-28.7)
Black	46.1	(41.5-50.7)
Other	‡	‡
<b>Education</b>		
Less than high school	46.3	(38.1-54.8)
High school graduate	38.6	(33.2-44.3)
Some college	26.5	(22.2-31.2)
College graduate	11.9	(8.7-15.9)
<b>Household Income</b>		
< \$25,000	43.1	(38.6-47.7)
\$25,000 - \$49,999	25.0	(19.8-31.2)
\$50,000+	14.0	(10.9-17.8)
<b>Health Insurance</b>		
Private Insurance	18.7	(16.0-21.8)
Medicaid	44.1	(37.8-50.6)
No Health Insurance	42.7	(36.2-49.5)
<sup>a</sup> Among women aged 18-44 years, who had a live birth in 2008, the proportion who reported not trying to get pregnant at conception and also that neither they nor their husbands/partners were doing anything to keep from getting pregnant at time of conception. <sup>‡</sup> Data not shown due to small sample size.		

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**Indicator #17:**

<b>Domain: Reproductive Health and Family Planning</b>		
<b>Sub-domain: Contraception (Access, Availability, and Use)</b>		
<b>2008 Michigan PRAMS</b>		
<b>Demographic Characteristics</b>	<b>Doing something to keep from getting pregnant<sup>a</sup></b>	
	<b>%</b>	<b>95% Confidence Interval</b>
<b>Total</b>	<b>46.3</b>	<b>(42.3-50.3)</b>
<b>Age</b>		
18 - 24	46.1	(40.2-52.1)
25 - 34	47.3	(41.2-53.4)
35 - 44	43.4	(32.7-54.8)
<b>Race</b>		
White	47.0	(41.9-52.2)
Black	41.9	(36.9-47.1)
Other	‡	‡
<b>Education</b>		
Less than high school	38.3	(29.3-48.3)
High school graduate	42.3	(35.6-49.2)
Some college	50.2	(43.3-57.0)
College graduate	57.5	(47.0-67.3)
<b>Household Income</b>		
< \$25,000	40.9	(35.8-46.2)
\$25,000 - \$49,999	54.9	(45.9-63.6)
\$50,000+	51.2	(42.1-60.2)
<b>Health Insurance</b>		
Private Insurance	52.4	(46.5-58.3)
Medicaid	40.9	(33.8-48.4)
No Health Insurance	41.8	(34.4-49.6)
<sup>a</sup> Among women aged 18-44 years, who had a live birth in 2008, the proportion who reported either they or their husbands/partners were doing something to keep from getting pregnant at time of conception. <sup>‡</sup> Data not shown due to small sample size.		

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**Indicator #18: Percentage of women having a live birth who used fertility drugs or received any medical procedures from a doctor, nurse or other health care worker to help get them pregnant -** Data not collected by MI PRAMS in 2008, but will be collected from 2009-2011.

**Indicator #19:**

<b>Domain: Tobacco, Alcohol and Substance Abuse</b>		
<b>Sub-domain: Smoking</b>		
<b>2009 Michigan BRFSS</b>		
<b>Demographic Characteristics</b>	<b>Current Smoking<sup>a</sup></b>	
	<b>%</b>	<b>95% Confidence Interval</b>
<b>Total</b>	<b>20.6</b>	<b>(18.1-23.4)</b>
<b>Age</b>		
18 – 24	17.7	(12.4-24.7)
25 – 34	24.1	(19.7-29.3)
35 – 44	19.5	(16.3-23.1)
<b>Race</b>		
White	21.1	(18.2-24.4)
Black	19.7	(13.8-27.2)
Other	17.5	(9.1-30.9)
<b>Education</b>		
Less than high school	45.2	(30.3-61.0)
High school graduate	34.9	(28.2-42.2)
Some college	20.5	(16.5-25.2)
College graduate	9.0	(6.3-12.7)
<b>Household Income</b>		
< \$25,000	36.0	(29.4-43.1)
\$25,000 - \$49,999	21.8	(16.4-28.4)
\$50,000+	12.1	(9.2-15.8)
<b>Health Insurance</b>		
Health Insurance	18.0	(15.4-21.0)
No Health Insurance	35.6	(27.5-44.6)

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<sup>a</sup> Among adult women aged 18-44 years, the proportion who reported that they had ever smoked at least 100 cigarettes (5 packs) in their life and that they smoke cigarettes now, either every day or on some days.

**Indicator #20:**

<b>Domain: Tobacco, Alcohol, and Substance Use</b>		
<b>Sub-domain: Smoking</b>		
<b>2008 Michigan PRAMS</b>		
<b>Demographic Characteristics</b>	<b>Prepregnancy smoking<sup>a</sup></b>	
	<b>%</b>	<b>95% Confidence Interval</b>
<b>Total</b>	<b>26.9</b>	<b>(24.3-29.6)</b>
<b>Age</b>		
18 - 24	39.4	(34.5-44.5)
25 - 34	20.9	(17.7-24.4)
35 - 44	20.1	(14.5-27.2)
<b>Race</b>		
White	28.5	(25.4-31.9)
Black	19.9	(16.5-23.7)
Other	‡	‡
<b>Education</b>		
Less than high school	52.7	(44.3-60.9)
High school graduate	38.6	(33.1-44.5)
Some college	21.5	(17.6-26.0)
College graduate	8.2	(5.6-11.9)
<b>Household Income</b>		
< \$25,000	42.2	(37.7-46.8)
\$25,000 - \$49,999	27.9	(22.1-34.5)
\$50,000+	10.1	(7.5-13.5)
<b>Health Insurance</b>		
Private Insurance	15.9	(13.3-19.0)
Medicaid	43.2	(36.8-49.8)
No Health Insurance	43.5	(37.1-50.2)
<sup>a</sup> Among women aged 18-44 years, who had a live birth in 2008, the proportion who reported smoking more than zero cigarettes per day during the 3 months before conception. <sup>‡</sup> Data not shown due to small sample size.		

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**Indicator #21:**

<b>Domain: Tobacco, Alcohol and Substance Abuse</b>		
<b>Sub-domain: Alcohol Consumption</b>		
<b>2009 Michigan BRFSS</b>		
<b>Demographic Characteristics</b>	<b>Heavy Drinking<sup>a</sup></b>	
	<b>%</b>	<b>95% Confidence Interval</b>
<b>Total</b>	<b>4.4</b>	<b>(3.2-6.1)</b>
<b>Age</b>		
18 – 24	5.0	(2.5-9.6)
25 – 34	4.9	(2.7-8.8)
35 – 44	3.7	(2.5-5.4)
<b>Race</b>		
White	4.3	(3.1-6.1)
Black	2.8	(1.0-7.5)
Other	8.2	(2.2-26.2)
<b>Education</b>		
Less than high school	3.2	(1.0-9.8)
High school graduate	3.4	(1.7-6.7)
Some college	3.8	(2.2-6.5)
College graduate	5.9	(3.5-9.7)
<b>Household Income</b>		
< \$25,000	6.8	(3.5-12.8)
\$25,000 - \$49,999	3.0	(1.5-5.9)
\$50,000+	4.2	(2.7-6.5)
<b>Health Insurance</b>		
Health Insurance	4.1	(2.8-6.0)
No Health Insurance	6.4	(3.3-12.0)
<sup>a</sup> Among adult women aged 18-44 years, the proportion who reported consuming an average of more than two alcoholic drinks per day for men or more than one per day for women in the previous month.		

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**Indicator #22:**

<b>Domain: Tobacco, Alcohol and Substance Abuse</b>		
<b>Sub-domain: Alcohol Consumption</b>		
<b>2009 Michigan BRFSS</b>		
<b>Demographic Characteristics</b>	<b>Binge Drinking<sup>a</sup></b>	
	<b>%</b>	<b>95% Confidence Interval</b>
<b>Total</b>	<b>15.6</b>	<b>(13.2-18.2)</b>
<b>Age</b>		
18 – 24	20.0	(14.0-27.8)
25 – 34	12.9	(9.7-16.8)
35 – 44	14.9	(12.3-18.1)
<b>Race</b>		
White	18.3	(15.5-21.5)
Black	3.9	(1.9-7.8)
Other	9.7	(4.0-21.6)
<b>Education</b>		
Less than high school	4.8	(2.0-11.1)
High school graduate	13.9	(9.7-19.5)
Some college	18.6	(14.3-23.9)
College graduate	14.9	(11.6-19.0)
<b>Household Income</b>		
< \$25,000	14.6	(10.0-20.9)
\$25,000 - \$49,999	12.2	(8.4-17.5)
\$50,000+	18.0	(14.5-22.1)
<b>Health Insurance</b>		
Health Insurance	14.7	(12.3-17.4)
No Health Insurance	21.2	(14.4-30.0)

<sup>a</sup> Among adult women aged 18-44 years, the proportion who reported consuming four or more drinks per occasion at least once in the previous month.

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**Indicator #23:**

<b>Domain: Tobacco, Alcohol, and Substance Use</b>		
<b>Sub-domain: Alcohol Consumption</b>		
<b>2008 Michigan PRAMS</b>		
<b>Demographic Characteristics</b>	<b>Prepregnancy alcohol consumption (any)<sup>a</sup></b>	
	%	95% Confidence Interval
<b>Total</b>	<b>62.9</b>	<b>(60.0-65.6)</b>
<b>Age</b>		
18 - 24	56.6	(51.5-61.5)
25 - 34	66.2	(62.3-69.9)
35 - 44	64.9	(57.5-71.6)
<b>Race</b>		
White	68.7	(65.3-71.9)
Black	45.3	(40.8-49.8)
Other	15.1	(6.2-32.2)
<b>Education</b>		
Less than high school	46.6	(38.3-55.1)
High school graduate	60.1	(54.5-65.5)
Some college	64.9	(60.0-69.5)
College graduate	71.0	(65.8-75.7)
<b>Household Income</b>		
< \$25,000	54.3	(49.7-58.8)
\$25,000 - \$49,999	65.1	(58.7-71.1)
\$50,000+	72.7	(68.1-76.8)
<b>Health Insurance</b>		
Private Insurance	70.1	(66.5-73.4)
Medicaid	44.9	(38.5-51.5)
No Health Insurance	58.1	(51.5-64.4)

<sup>a</sup>Among women aged 18-44 years, who had a live birth in 2008, the proportion who reported drinking any drinks per week during the 3 months before conception.

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**Indicator #24:**

<b>Domain: Tobacco, Alcohol, and Substance Use</b>		
<b>Sub-domain: Alcohol Consumption</b>		
<b>2008 Michigan PRAMS</b>		
<b>Demographic Characteristics</b>	<b>Prepregnancy binge drinking<sup>a</sup></b>	
	<b>%</b>	<b>95% Confidence Interval</b>
<b>Total</b>	<b>38.8</b>	<b>(32.1-38.8)</b>
<b>Age</b>		
18 - 24	41.2	(35.2-47.6)
25 - 34	31.5	(27.3-36.1)
35 - 44	37.6	(29.3-46.8)
<b>Race</b>		
White	36.7	(32.9-40.6)
Black	25.1	(20.1-30.8)
Other	‡	‡
<b>Education</b>		
Less than high school	50.4	(39.2-61.5)
High school graduate	36.5	(29.9-43.6)
Some college	35.7	(30.2-41.6)
College graduate	29.7	(24.3-35.7)
<b>Household Income</b>		
< \$25,000	42.8	(37.1-48.7)
\$25,000 - \$49,999	35.7	(28.6-43.5)
\$50,000+	29.7	(25.0-34.9)
<b>Health Insurance</b>		
Private Insurance	31.6	(27.8-35.8)
Medicaid	41.8	(33.4-50.7)
No Health Insurance	43.4	(35.6-51.5)
<sup>a</sup> Among women aged 18-44 years, who had a live birth in 2008, the proportion who reported drinking 5 or more drinks in one sitting on at least one occasion during the 3 months before conception. <sup>‡</sup> Data not shown due to small sample size.		

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**Indicator #25: Percentage of women having a live birth who reported that smoking is currently allowed in their home** - Data not collected by MI PRAMS in 2008, but will be collected from 2009-2011.

**Indicator #26:**

<b>Domain: Nutrition and Physical Activity</b>		
<b>Sub-domain: Fruit and Vegetable Consumption</b>		
<b>2009 Michigan BRFSS</b>		
<b>Demographic Characteristics</b>	<b>Adequate Fruit &amp; Vegetable Consumption<sup>a</sup></b>	
	<b>%</b>	<b>95% Confidence Interval</b>
<b>Total</b>	<b>23.2</b>	<b>(20.5-26.2)</b>
<b>Age</b>		
18 – 24	19.1	(13.4-26.4)
25 – 34	24.9	(20.4-30.0)
35 – 44	24.7	(21.2-28.5)
<b>Race</b>		
White	23.2	(20.1-26.5)
Black	19.7	(14.5-26.2)
Other	30.5	(18.4-45.9)
<b>Education</b>		
Less than high school	16.8	(6.9-35.3)
High school graduate	14.5	(10.4-19.8)
Some college	21.0	(16.7-26.1)
College graduate	31.6	(26.9-36.6)
<b>Household Income</b>		
< \$25,000	18.9	(13.9-25.2)
\$25,000 - \$49,999	23.3	(17.8-29.9)
\$50,000+	26.3	(22.2-30.9)
<b>Health Insurance</b>		
Health Insurance	24.0	(21.1-27.2)
No Health Insurance	18.4	(12.3-26.5)
<sup>a</sup> Among adult women aged 18-44 years, the proportion whose total reported consumption of fruits (including juice) and vegetables was at least five times per		

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day.

**Indicator #27:**

<b>Domain: Nutrition and Physical Activity</b>		
<b>Sub-domain: Overweight and Obesity</b>		
<b>2009 Michigan BRFSS</b>		
<b>Demographic Characteristics</b>	<b>Overweight<sup>a</sup></b>	
	<b>%</b>	<b>95% Confidence Interval</b>
<b>Total</b>	<b>23.9</b>	<b>(21.0-27.0)</b>
<b>Age</b>		
18 – 24	21.9	(15.3-30.5)
25 – 34	25.8	(21.0-31.3)
35 – 44	23.6	(20.2-27.3)
<b>Race</b>		
White	24.8	(21.5-28.5)
Black	22.0	(15.7-30.0)
Other	16.2	(9.2-27.0)
<b>Education</b>		
Less than high school	13.1	(5.9-26.6)
High school graduate	21.9	(16.2-28.9)
Some college	24.1	(19.2-29.8)
College graduate	26.2	(21.8-31.2)
<b>Household Income</b>		
< \$25,000	24.2	(18.0-31.8)
\$25,000 - \$49,999	23.4	(17.5-30.7)
\$50,000+	25.4	(21.3-29.9)
<b>Health Insurance</b>		
Health Insurance	23.7	(20.7-27.1)
No Health Insurance	24.3	(16.7-33.8)
<p>Note: BMI, body mass index, is defined as weight (in kilograms) divided by height (in meters) squared [weight in kg/(height in meters)<sup>2</sup>]. Weight and height were self-reported. Pregnant women were excluded.</p> <p><sup>a</sup> Among adult women aged 18-44 years, the proportion of whose BMI was greater than or equal to 25.0, but less than 30.0.</p>		

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<b>Domain: Nutrition and Physical Activity</b> <b>Sub-domain: Obesity and Overweight</b> <b>2009 Michigan BRFSS</b>		
<b>Demographic Characteristics</b>	<b>Obesity<sup>a</sup></b>	
	<b>%</b>	<b>95% Confidence Interval</b>
<b>Total</b>	<b>29.2</b>	<b>(26.2-32.4)</b>
<b>Age</b>		
18 – 24	18.2	(12.5-25.6)
25 – 34	30.9	(25.7-36.5)
35 – 44	35.3	(31.2-39.6)
<b>Race</b>		
White	26.4	(23.2-29.8)
Black	50.1	(41.3-58.8)
Other	17.8	(9.9-29.9)
<b>Education</b>		
Less than high school	35.3	(21.4-52.3)
High school graduate	37.1	(30.1-44.7)
Some college	28.4	(23.6-33.8)
College graduate	24.4	(20.1-29.4)
<b>Household Income</b>		
< \$25,000	34.5	(27.8-41.9)
\$25,000 - \$49,999	37.6	(30.7-45.0)
\$50,000+	22.8	(18.8-27.4)
<b>Health Insurance</b>		
Health Insurance	28.9	(25.7-32.4)
No Health Insurance	31.8	(23.8-41.1)
<p>Note: BMI, body mass index, is defined as weight (in kilograms) divided by height (in meters) squared [weight in kg/(height in meters)<sup>2</sup>]. Weight and height were self-reported. Pregnant women were excluded.</p> <p><sup>a</sup> Among adult women aged 18-44 years, the proportion whose BMI was greater than or equal to 30.0.</p>		

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**Indicator #28:**

<b>Domain: Nutrition and Physical Activity</b>		
<b>Sub-domain: Obesity and Overweight</b>		
<b>2008 Michigan PRAMS</b>		
<b>Demographic Characteristics</b>	<b>Prepregnancy overweight/obese<sup>a</sup></b>	
	%	95% Confidence Interval
<b>Total</b>	<b>46.5</b>	<b>(43.6-49.4)</b>
<b>Age</b>		
18 - 24	45.1	(40.1-50.1)
25 - 34	46.0	(42.0-50.0)
35 - 44	51.5	(43.9-58.9)
<b>Race</b>		
White	44.9	(41.5-48.5)
Black	56.9	(52.4-61.3)
Other	17.0	(7.2-35.1)
<b>Education</b>		
Less than high school	46.7	(38.6-55.0)
High school graduate	49.3	(43.6-55.0)
Some college	50.6	(45.5-55.6)
College graduate	39.4	(34.1--44.8)
<b>Household Income</b>		
< \$25,000	52.7	(48.1-57.3)
\$25,000 - \$49,999	46.9	(40.4-53.5)
\$50,000+	38.5	(33.9-43.3)
<b>Health Insurance</b>		
Private Insurance	43.8	(40.1-47.6)
Medicaid	58.0	(51.6-64.3)
No Health Insurance	43.0	(36.6-49.6)
<sup>a</sup> Among women aged 18-44 years, who had a live birth in 2008, the proportion who had a calculated BMI of at least 25, based on self-reported weight at conception and height.		

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**Indicator #29:**

<b>Domain: Nutrition and Physical Activity</b>		
<b>Sub-domain: Folic Acid Supplementation</b>		
<b>2008 Michigan PRAMS</b>		
<b>Demographic Characteristics</b>	<b>Prepregnancy, daily consumption of multivitamin/prenatal vitamin<sup>a</sup></b>	
	<b>%</b>	<b>95% Confidence Interval</b>
<b>Total</b>	<b>27.7</b>	<b>(25.2-30.4)</b>
<b>Age</b>		
18 - 24	13.4	(10.4-17.1)
25 - 34	33.0	(29.3-36.9)
35 - 44	41.0	(33.8-48.5)
<b>Race</b>		
White	29.9	(26.8-33.2)
Black	17.4	(14.3-21.0)
Other	40.8	(23.8-60.2)
<b>Education</b>		
Less than high school	15.4	(10.3-22.5)
High school graduate	18.4	(14.4-23.2)
Some college	26.6	(22.3-31.4)
College graduate	44.5	(39.2-50.1)
<b>Household Income</b>		
< \$25,000	15.3	(12.2-18.9)
\$25,000 - \$49,999	20.1	(15.4-25.7)
\$50,000+	46.0	(41.1-50.9)
<b>Health Insurance</b>		
Private Insurance	36.8	(33.3-40.6)
Medicaid	17.8	(13.4-23.1)
No Health Insurance	10.2	(6.8-15.1)

<sup>a</sup>Among women aged 18-44 years, who had a live birth in 2008, the proportion who reported taking a multivitamin or prenatal vitamin daily during the month before conception. This is measure is a proxy for prepregnancy folic acid consumption.

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**Indicator #30:**

<b>Domain: Nutrition and Physical Activity</b>		
<b>Sub-domain: Exercise and Physical Activity</b>		
<b>2009 Michigan BRFSS</b>		
<b>Demographic Characteristics</b>	<b>Adequate Physical Activity<sup>a</sup></b>	
	<b>%</b>	<b>95% Confidence Interval</b>
<b>Total</b>	<b>54.3</b>	<b>(50.8-57.7)</b>
<b>Age</b>		
18 – 24	57.0	(48.2-65.3)
25 – 34	54.2	(48.5-59.8)
35 – 44	52.4	(48.1-56.7)
<b>Race</b>		
White	56.5	(52.6-60.3)
Black	41.0	(32.8-49.7)
Other	56.3	(40.3-71.0)
<b>Education</b>		
Less than high school	36.4	(21.6-54.4)
High school graduate	50.9	(43.3-58.4)
Some college	57.7	(51.6-63.5)
College graduate	54.8	(49.5-59.9)
<b>Household Income</b>		
< \$25,000	50.2	(42.5-58.0)
\$25,000 - \$49,999	53.0	(45.4-60.5)
\$50,000+	59.2	(54.2-64.0)
<b>Health Insurance</b>		
Health Insurance	54.9	(51.2-58.6)
No Health Insurance	50.9	(41.2-60.5)
<sup>a</sup> Among adult women aged 18-44 years, the proportion who reported that they usually do moderate physical activities for a total of at least 30 minutes on five or more days per week or vigorous physical activities for a total of at least 20 minutes on three or more days per week while not at work.		

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**Indicator #31:**

<b>Domain: Mental Health</b>		
<b>Sub-domain: General Mental Distress</b>		
<b>2009 Michigan BRFSS</b>		
<b>Demographic Characteristics</b>	<b>Poor Mental Health<sup>a</sup></b>	
	<b>%</b>	<b>95% Confidence Interval</b>
<b>Total</b>	<b>14.9</b>	<b>(12.8-17.7)</b>
<b>Age</b>		
18 – 24	15.4	(10.1-22.9)
25 – 34	15.9	(12.1-20.8)
35 – 44	13.7	(11.0-17.0)
<b>Race</b>		
White	14.4	(11.8-17.4)
Black	16.7	(11.0-24.7)
Other	17.1	(8.0-32.9)
<b>Education</b>		
Less than high school	26.1	(13.6-44.1)
High school graduate	22.6	(16.8-29.6)
Some college	15.4	(11.6-20.1)
College graduate	8.6	(5.9-12.4)
<b>Household Income</b>		
< \$25,000	27.9	(21.5-35.3)
\$25,000 - \$49,999	10.6	(6.8-16.2)
\$50,000+	8.8	(6.3-12.1)
<b>Health Insurance</b>		
Health Insurance	12.0	(9.8-14.7)
No Health Insurance	31.4	(23.2-40.9)
<sup>a</sup> Among adult women aged 18-44 years, the proportion who reported 14 or more days of poor mental health, which includes stress, depression, and problems with emotions, during the past 30 days.		

**Indicator #32: Percentage of women having a live birth who visited a health care provider to be checked or treated for anxiety or depression 12 months prior to**

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**pregnancy** - Data not collected by MI PRAMS in 2008, but will be collected from 2009-2011.

**Indicator #33: Percentage of women having a live birth who experienced depressive symptoms after pregnancy** - Data not collected by MI PRAMS in 2008, but will be collected from 2009-2011.

**Indicator #34:**

<b>Domain: Emotional and Social Support</b>		
<b>Sub-domain: Domestic Abuse (Physical and Mental)</b>		
<b>2008 Michigan PRAMS</b>		
<b>Demographic Characteristics</b>	<b>Prepregnancy physical abuse<sup>a</sup></b>	
	<b>%</b>	<b>95% Confidence Interval</b>
<b>Total</b>	<b>5.4</b>	<b>(4.2-6.9)</b>
<b>Age</b>		
18 - 24	9.5	(6.9-12.9)
25 - 34	2.9	(1.8-4.6)
35 - 44	5.1	(2.5-10.1)
<b>Race</b>		
White	3.9	(2.7-5.6)
Black	8.7	(6.4-11.7)
Other	‡	‡
<b>Education</b>		
Less than high school	14.5	(9.5-21.6)
High school graduate	6.7	(4.4-10.1)
Some college	4.9	(3.2-7.5)
College graduate	‡	‡
<b>Household Income</b>		
< \$25,000	12.0	(9.2-15.4)
\$25,000 - \$49,999	2.0	(0.9-4.6)
\$50,000+	‡	‡
<b>Health Insurance</b>		
Private Insurance	2.5	(1.6-3.9)
Medicaid	9.8	(6.4-14.6)
No Health Insurance	10.0	(6.6-14.8)

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<sup>a</sup>Among women aged 18-44 years, who had a live birth in 2008, the proportion who reported being pushed, hit, slapped, kicked, choked, or physically hurt in any other way by a partner or ex-partner during the 12 months before pregnancy.  
<sup>‡</sup>Data not shown due to small sample size.

**Indicator #35:**

<b>Domain: Emotional and Social Support</b>		
<b>Sub-domain: Domestic Abuse (Physical and Mental)</b>		
<b>2008 Michigan PRAMS</b>		
<b>Demographic Characteristics</b>	<b>Prepregnancy mental abuse<sup>a</sup></b>	
	<b>%</b>	<b>95% Confidence Interval</b>
<b>Total</b>	<b>6.7</b>	<b>(5.3-8.4)</b>
<b>Age</b>		
18 - 24	11.3	(8.4-15.2)
25 - 34	3.7	(2.4-5.6)
35 - 44	7.0	(3.9-12.1)
<b>Race</b>		
White	6.3	(4.8-8.4)
Black	6.8	(4.9-9.4)
Other	‡	‡
<b>Education</b>		
Less than high school	17.2	(11.5-24.8)
High school graduate	6.8	(4.5-10.3)
Some college	5.6	(3.7-8.4)
College graduate	1.9	(0.9-4.1)
<b>Household Income</b>		
< \$25,000	13.5	(10.5-17.2)
\$25,000 - \$49,999	2.3	(1.0-5.2)
\$50,000+	1.9	(1.0-3.6)
<b>Health Insurance</b>		
Private Insurance	3.3	(2.2-4.8)
Medicaid	16.9	(12.2-22.8)
No Health Insurance	7.6	(4.7-12.0)

<sup>a</sup>Among women aged 18-44 years, who had a live birth in 2008, the proportion who reported being repeatedly called names, told they were worthless or ugly, or verbally threatened by a partner or someone important to them during the 12 months before delivery. This is a proxy for mental abuse during the 12 months before pregnancy.  
<sup>‡</sup>Data not shown due to small sample size.

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**Indicator #36:**

<b>Domain: Emotional and Social Support</b>		
<b>Sub-domain: Adequacy of Support</b>		
<b>2009 Michigan BRFSS</b>		
<b>Demographic Characteristics</b>	<b>Always, Usually or Sometimes Receive the Social and Emotional Support that is Needed<sup>a</sup></b>	
	<b>%</b>	<b>95% Confidence Interval</b>
<b>Total</b>	<b>95.0</b>	<b>(93.4-96.2)</b>
<b>Age</b>		
18 – 24	96.1	(91.6-98.2)
25 – 34	95.7	(93.3-97.2)
35 – 44	93.6	(91.0-95.4)
<b>Race</b>		
White	96.2	(94.4-97.4)
Black	89.9	(85.1-93.3)
Other	92.4	(84.3-96.5)
<b>Education</b>		
Less than high school	79.3	(63.0-89.6)
High school graduate	91.4	(86.2-94.7)
Some college	96.5	(94.6-97.8)
College graduate	97.4	(95.7-98.5)
<b>Household Income</b>		
< \$25,000	88.7	(84.0-92.1)
\$25,000 - \$49,999	96.4	(93.5-98.1)
\$50,000+	98.1	(96.5-98.9)
<b>Health Insurance</b>		
Health Insurance	95.0	(93.3-96.3)
No Health Insurance	94.5	(89.9-97.1)
<sup>a</sup> Among adult women aged 18-44 years, the proportion who reported either “Always,” “Usually” or “Sometimes” to the following question: “How often do you get the social and emotional support you need?”		

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**Indicator #37: Percentage of women having a live birth who reported that they had adequate social and emotional support available to them after delivering their baby - Data not collected in MI PRAMS survey**

**Indicator #38:**

<b>Domain: Chronic Conditions</b>		
<b>Sub-domain: Diabetes</b>		
<b>2009 Michigan BRFSS</b>		
<b>Demographic Characteristics</b>	<b>Ever Told Diabetes<sup>a</sup></b>	
	%	95% Confidence Interval
<b>Total</b>	<b>3.3</b>	<b>(2.3-4.7)</b>
<b>Age</b>		
18 – 24	3.1	(1.1-8.1)
25 – 34	2.3	(1.2-4.4)
35 – 44	4.3	(2.9-6.5)
<b>Race</b>		
White	3.6	(2.4-5.4)
Black	2.4	(1.3-4.6)
Other	1.9	(0.6-6.1)
<b>Education</b>		
Less than high school	1.2	(0.3-5.0)
High school graduate	6.1	(3.2-11.4)
Some college	3.2	(1.8-5.4)
College graduate	2.0	(1.1-3.8)
<b>Household Income</b>		
< \$25,000	3.6	(1.9-6.6)
\$25,000 - \$49,999	3.3	(1.7-6.4)
\$50,000+	1.8	(0.9-3.5)
<b>Health Insurance</b>		
Health Insurance	3.4	(2.3-5.0)
No Health Insurance	3.0	(1.1-8.0)
<sup>a</sup> Among adult women aged 18-44 years, the proportion who reported that they were ever told by a doctor that they have diabetes. Women who had been told they have prediabetes or who had diabetes only during pregnancy were classified as not having been diagnosed.		

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**Indicator #39: Percentage of women having a live birth who before their most recent pregnancy had ever been told by a health care provider that they had Type I or Type II diabetes** - Data not collected by MI PRAMS in 2008, but will be collected from 2009-2011.

**Indicator #40:**

<b>Domain: Chronic Conditions</b>		
<b>Sub-domain: Hypertension</b>		
<b>2009 Michigan BRFSS</b>		
<b>Demographic Characteristics</b>	<b>Ever Told High Blood Pressure<sup>a</sup></b>	
	%	95% Confidence Interval
<b>Total</b>	<b>9.4</b>	<b>(7.8-11.3)</b>
<b>Age</b>		
18 – 24	5.4	(2.8-10.0)
25 – 34	6.5	(4.2-9.7)
35 – 44	14.8	(12.1-18.0)
<b>Race</b>		
White	8.4	(6.7-10.5)
Black	15.2	(10.4-21.8)
Other	8.9	(4.3-17.7)
<b>Education</b>		
Less than high school	9.8	(4.5-20.2)
High school graduate	14.9	(10.6-20.6)
Some college	8.1	(5.8-11.2)
College graduate	7.4	(5.3-10.2)
<b>Household Income</b>		
< \$25,000	13.2	(9.4-18.2)
\$25,000 - \$49,999	10.4	(7.1-15.0)
\$50,000+	7.0	(5.1-9.6)
<b>Health Insurance</b>		
Health Insurance	9.4	(7.7-11.5)
No Health Insurance	9.9	(6.0-15.9)
<sup>a</sup> Among adult women aged 18-44 years, the proportion who reported that they were ever told by a doctor that they have high blood pressure (HBP). Women who had HBP only during pregnancy or who were borderline hypertensive were considered to not have been diagnosed.		

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**Indicator #41: Percentage of women having a live birth who reported that they had hypertension, not including hypertension during pregnancy -** Data not collected by MI PRAMS in 2008, but will be collected from 2009-2011.

**Indicator #42:**

<b>Domain: Chronic Conditions</b>		
<b>Sub-domain: Asthma</b>		
<b>2009 Michigan BRFSS</b>		
<b>Demographic Characteristics</b>	<b>Current Asthma<sup>a</sup></b>	
	%	95% Confidence Interval
<b>Total</b>	<b>12.9</b>	<b>(10.8-15.3)</b>
<b>Age</b>		
18 – 24	16.9	(11.6-24.0)
25 – 34	12.5	(9.4-16.3)
35 – 44	10.5	(8.2-13.3)
<b>Race</b>		
White	12.6	(10.2-15.3)
Black	13.5	(8.8-20.2)
Other	15.9	(7.6-30.4)
<b>Education</b>		
Less than high school	17.1	(7.3-35.3)
High school graduate	16.1	(11.3-22.5)
Some college	12.3	(9.1-16.5)
College graduate	11.0	(8.1-14.6)
<b>Household Income</b>		
< \$25,000	16.8	(12.1-22.9)
\$25,000 - \$49,999	12.9	(9.0-18.3)
\$50,000+	10.5	(7.7-14.1)
<b>Health Insurance</b>		
Health Insurance	13.0	(10.7-15.6)
No Health Insurance	12.9	(7.7-21.0)
<sup>a</sup> Among adult women aged 18-44 years, the proportion who reported that they were ever told by a doctor, nurse, or other health care professional that they had asthma and they still have asthma.		

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**Indicator #43: Percentage of women having a live birth who were tested for HIV within a year prior to their most recent pregnancy - Data not collected in MI PRAMS survey**

**Indicator #44:**

<b>Domain: Infections</b>		
<b>Sub-domain: Sexually Transmitted Infections</b>		
<b>2009 MDSS</b>		
Demographic Characteristics	Rate of chlamydia women aged 18-44	
	Rate per 100,000 <sup>a</sup>	95% Confidence Interval
<b>Total</b>	<b>1542</b>	<b>(1524-1560)</b>
<b>Age</b>	Data pending	
18 - 24		
25 - 34		
35 - 44		
<b>Race</b>		
White		
Black		
Other		
<sup>a</sup> Based on ACS 2006-2008 population estimates		

<b>Domain: Infections</b>		
<b>Sub-domain: Sexually Transmitted Infections</b>		
<b>2009 MDSS</b>		
Demographic Characteristics	Rate of gonorrhea women aged 18-44	
	Rate per 100,000 <sup>a</sup>	95% Confidence Interval
<b>Total</b>	<b>398</b>	<b>(389-408)</b>
<b>Age</b>	Data pending	
18 - 24		
25 - 34		
35 - 44		
<b>Race</b>		
White		

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Black		
Other		
<sup>a</sup> Based on ACS 2006-2008 population estimates		

<b>Domain: Infections</b>		
<b>Sub-domain: Sexually Transmitted Infections</b>		
<b>2009 MDSS</b>		
<b>Demographic Characteristics</b>	<b>Rate of syphilis women aged 18-44</b>	
	<b>Rate per 100,000<sup>a</sup></b>	<b>95% Confidence Interval</b>
<b>Total</b>	<b>6.6</b>	<b>(5.4-7.8)</b>
<b>Age</b>		
18 - 24		
25 - 34		
35 - 44		
<b>Race</b>		
White		
Black		
Other		
<sup>a</sup> Based on ACS 2006-2008 population estimates		

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**Indicator #45:**

<b>Domain: Infections</b>		
<b>Sub-domain: Immunizations</b>		
<b>2009 Michigan BRFS</b>		
<b>Demographic Characteristics</b>	<b>Had Flu Vaccine Within the Past Year<sup>a</sup></b>	
	%	95% Confidence Interval
<b>Total</b>	<b>26.7</b>	<b>(23.9-29.8)</b>
<b>Age</b>		
18 – 24	25.5	(18.9-33.4)
25 – 34	26.3	(21.5-31.7)
35 – 44	28.1	(24.5-32.0)
<b>Race</b>		
White	27.8	(24.5-31.3)
Black	17.9	(12.2-25.5)
Other	33.9	(21.4-49.2)
<b>Education</b>		
Less than high school	17.5	(8.6-32.3)
High school graduate	19.6	(14.3-26.2)
Some college	27.0	(22.1-32.6)
College graduate	31.9	(27.3-37.0)
<b>Household Income</b>		
< \$25,000	19.1	(13.7-26.1)
\$25,000 - \$49,999	27.7	(21.8-34.5)
\$50,000+	31.2	(26.9-35.9)
<b>Health Insurance</b>		
Health Insurance	28.1	(25.0-31.5)
No Health Insurance	19.1	(12.5-28.0)
<sup>a</sup> 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.		

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