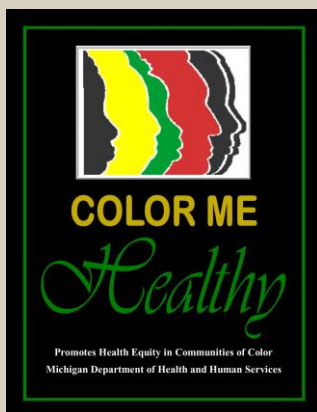


# Michigan Health Equity Status Report Data Update

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FOCUS ON MATERNAL AND CHILD HEALTH



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# Michigan Health Equity Status Report Data Update

- Compared to Whites, most racial and ethnic groups experience higher rates of infant mortality. (Figure 1).
- Using a life course perspective helps us better understand how social determinants impact infant mortality outcomes .
- The social determinants related data are categorized into four domains: psychosocial factors, socioeconomic position, basic needs, and healthcare access.
- Data are presented by racial and ethnic population groups.

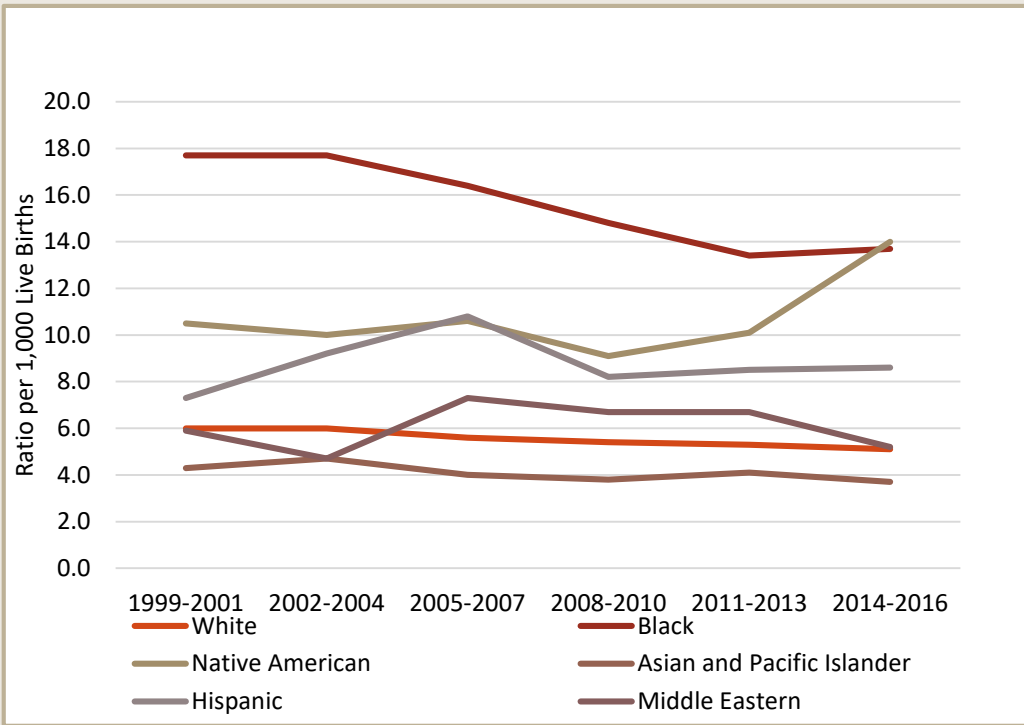


Figure 1. Infant Mortality Rate, per 1,000 Live Births.  
 Data Source: Michigan Resident Birth and Death Files, Division for Vital Records and Health Statistics

## Psychosocial

- ◆ Racism
- ◆ Intimate Partner Violence
- ◆ Stress
- ◆ Partner Support

## Socioeconomic position

- ◆ Education
- ◆ Unemployment
- ◆ Poverty

## Basic Needs

- ◆ Transportation
- ◆ Affordable Housing
- ◆ Neighborhood Safety
- ◆ Sleep Environment

## Healthcare Access

- ◆ Healthcare coverage for pregnancy and delivery
- ◆ Barriers to accessing prenatal care

### **Concepts:**

**Health Equity:** Absence of systemic disparities in health and its determinants between groups of people at different levels of disadvantage<sup>1</sup>.

**Health Disparities:** Measured differences between two groups.

**Social Determinants of Health:** Social, economic, and environmental factors that contribute to the overall health of individuals and communities<sup>1</sup>.

**Life Course Perspective:** A woman's exposure to various risk and protective factors throughout her life strongly influence her reproductive potential and the health of her children<sup>2</sup>.

⇒ Exposure to racism, and increased likelihood of exposure to harmful physical, social, and environmental risk factors, throughout the life course accumulate and contribute to worse birth outcomes for non-white women as compared to white women.

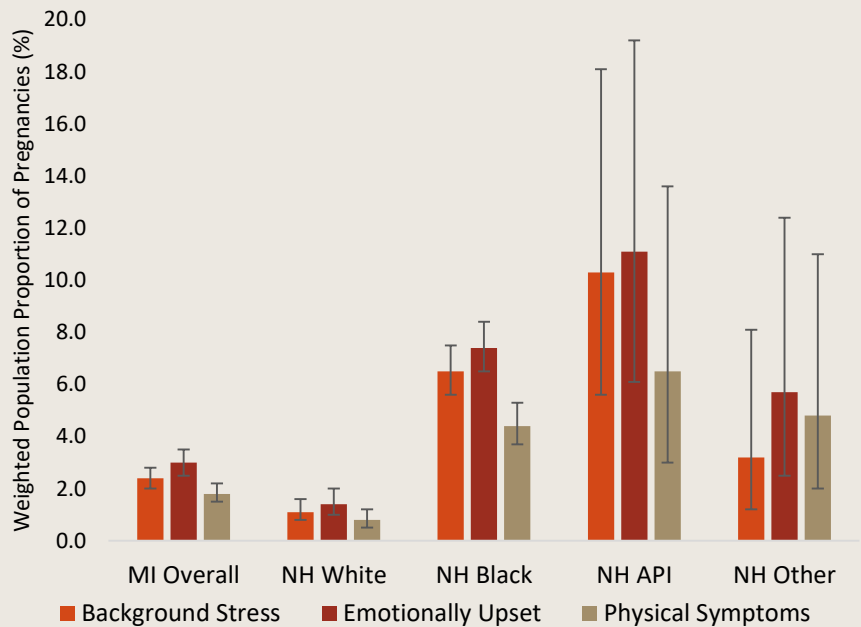
# Psychosocial Determinants of Health

## Racism:

Studies have found a mother's self-reported experience of racism to be associated with very low birth weight and preterm infants.<sup>3</sup>

As compared to non-Hispanics White (NH White) mothers:

- ◆ Non-Hispanic Black (NH Black) mothers were more than five times as likely to feel background stress, emotional symptoms, or physical symptoms based on their race.
- ◆ Non-Hispanic Asian Pacific Islanders (NH API) were approximately eight times as likely to feel physical or emotional symptoms and over nine times as likely to feel their racial or ethnic background contributed to their overall stress.
- ◆ Non-Hispanic Other (NH Other) were approximately three times as likely to feel their racial or ethnic background contributed to their overall stress, four times as likely to experience emotional symptoms and six times as likely to experience physical symptoms based on their race or ethnicity.



Data note: Hispanic suppressed due to low responders or high error

Figure 2. Racial stressors in 12 months before delivery by Race/Ethnicity, MI PRAMS 2012-2015

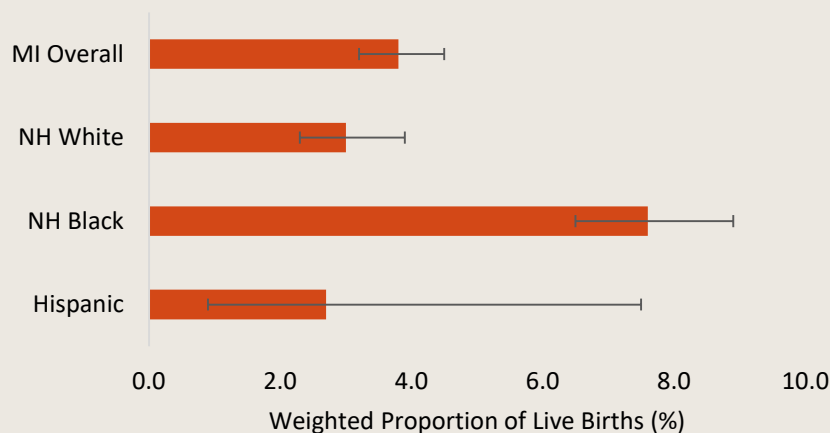
Background Stress: "I felt that my race or ethnic background contributed to the stress in my life"

Emotionally Upset: "I felt emotionally upset as a result of how I was treated based on my race or ethnic background"

Physical Symptoms "I experienced physical symptoms that I felt were related to how I was treated based on my race or ethnic background"

## Intimate Partner Violence:

Pregnancy Risk Assessment Monitoring Survey (PRAMS) data from multiple states have shown that women reporting intimate partner violence in the year before giving birth had higher risks for pregnancy complications<sup>4</sup>.



As compared to NH White:

- ◆ NH Black mothers were 2.5 times more likely to report abuse.
- ◆ Hispanics report a similar percentage of abuse.

Figure 3. Abuse in the 12 months before pregnancy or during pregnancy by Race/Ethnicity, MI PRAMS 2012-2014

# Psychosocial Determinants of Health

## Stress:

Stress during pregnancy and throughout a mother's life have been associated with poor pregnancy and birth outcomes, including: preterm labor and delivery, low birth weight, and gestational diabetes<sup>5</sup>.

As compared to NH White mothers:

- ◆ NH Black mothers were more than twice as likely to feel more than six life stressors in the year before delivery.
- ◆ Hispanic mothers were 1.5 times as likely to feel more than six life stressors in the year before delivery.
- ◆ NH Other mothers were 1.2 times as likely to feel more than six life stressors in the year before delivery.

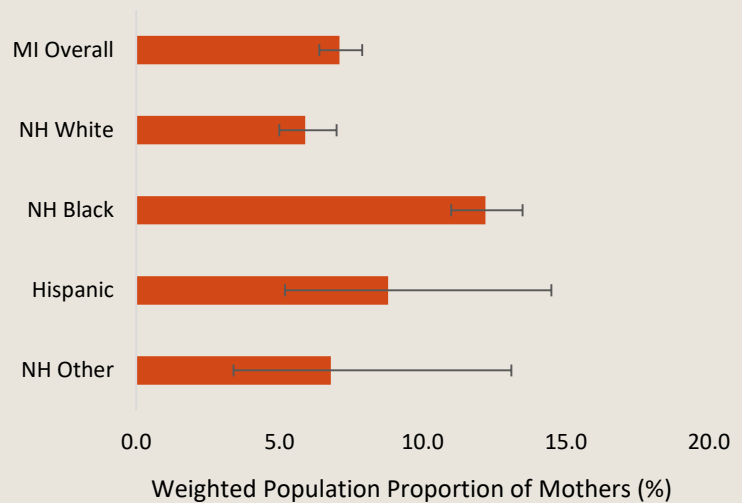


Figure 4. More than six life stressors in year before delivery, MI PRAMS 2012-2015

Table 1. Top life stressors in the year before delivery, in order of frequency for each race, MI PRAMS 2012-2015

	NH Black	NH White	Other	Total (All Races)
1	Moved to a new address (40.8%)	Moved to a new address (36.0%)	Moved to a new address (36.9%)	Moved to a new address (36.9%)
2	Argued with partner more than usual (37.8%)	Close family member hospitalized (28.2%)	Close family member hospitalized (22.4%)	Close family member hospitalized (27.6%)
3	Close person died (28.9%)	Had problems paying bills (20.3%)	Argued with partner more than usual (21.5%)	Argued with partner more than usual (23.3%)
4	Close family member hospitalized (28.7%)	Argued with partner more than usual (19.9%)	Had problems paying bills (18.5%)	Had problems paying bills (21.4%)
5	Had problems paying bills (27.6%)	Close person died (18.0%)	Partner or myself had cut in work hours or pay (18.1%)	Close person died (19.6%)

# Psychosocial Determinants of Health

## Female Headed Household:

Unmarried mothers have been shown to have higher odds of low birth weight, preterm, and infant mortality as compared to married mothers<sup>6,7</sup>.

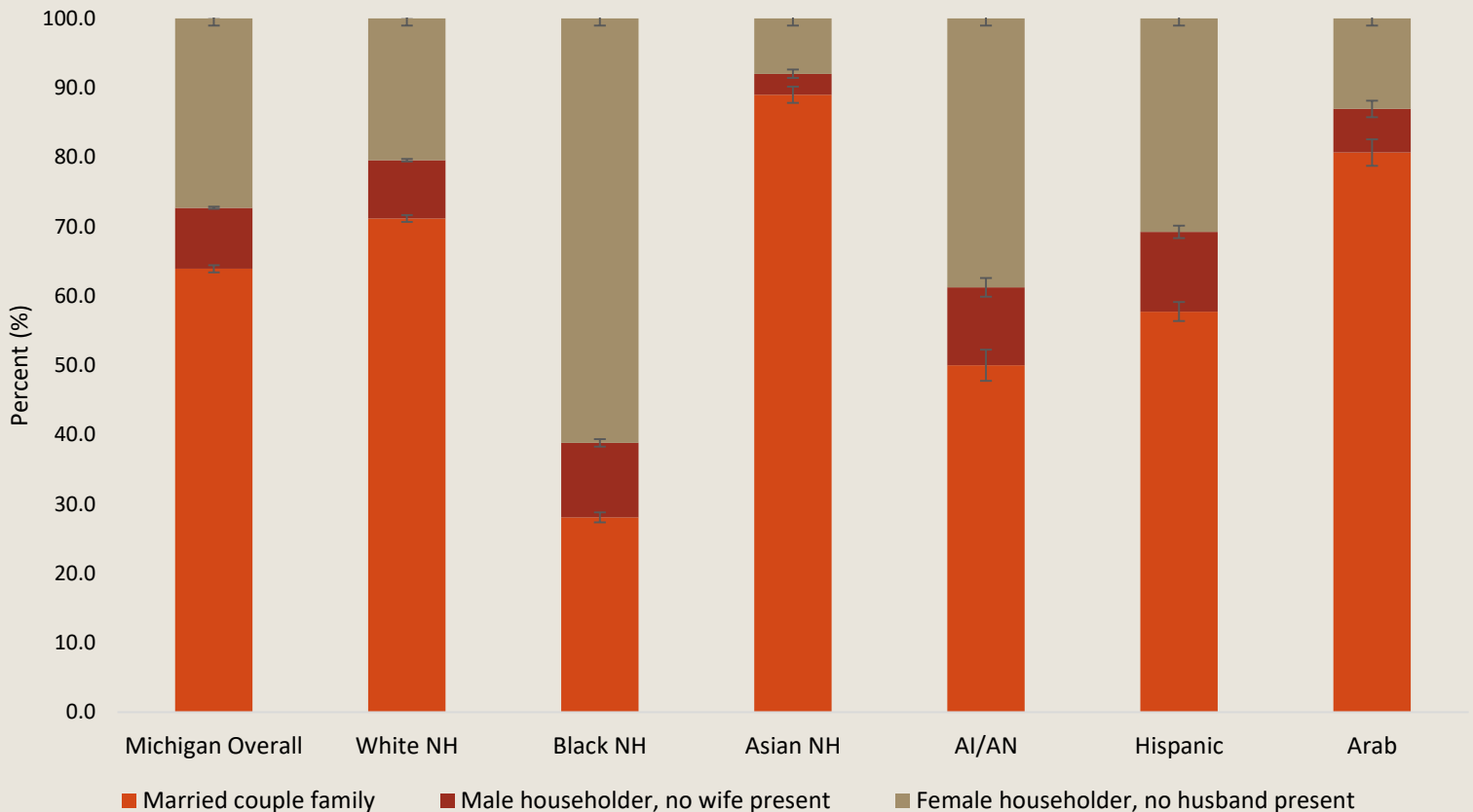


Figure 5. Family household type percentage, American Community Survey (ACS) 2011-2015

- ◆ Among family households with children present, NH Asians had the highest percentage of married couple households (89.0%), followed by Arab (80.7%) and NH Whites (71.2%)
- ◆ NH Blacks had the lowest percentage of married couple households (28.1%), followed by American Indian/Alaska Native (AI/AN) (50.0%) and Hispanic (57.7%).
- ◆ NH Blacks had the highest percentage of female headed households (61.2%) as compared to other racial and ethnic groups.
  - ⇒ Female headed households with children present were three times more prevalent among NH Blacks as compared to NH Whites.
- ◆ Hispanics had the highest percentage of male headed households with children present (11.5%) as compared to other racial and ethnic groups.
  - ⇒ Female headed households with children present were three times more prevalent among NH Blacks as compared to NH Whites.

## Socioeconomic Position

Unemployment, poverty and lower levels of education have repeatedly associated with poor birth outcomes.<sup>8</sup>

### Education

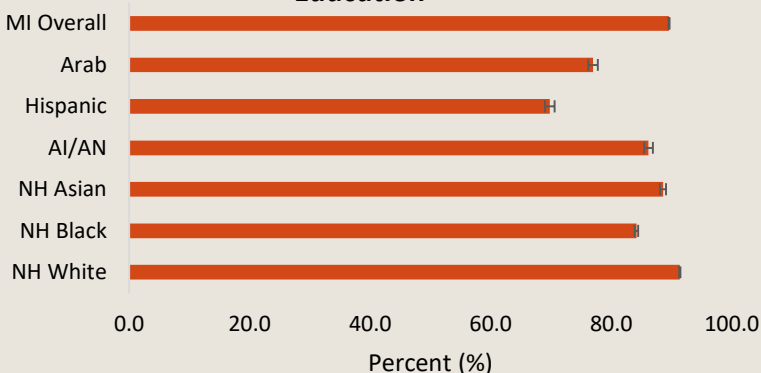


Figure 6. Percent of population 25 years and older with a high school graduate degree, ACS 2011-2015

### Unemployment

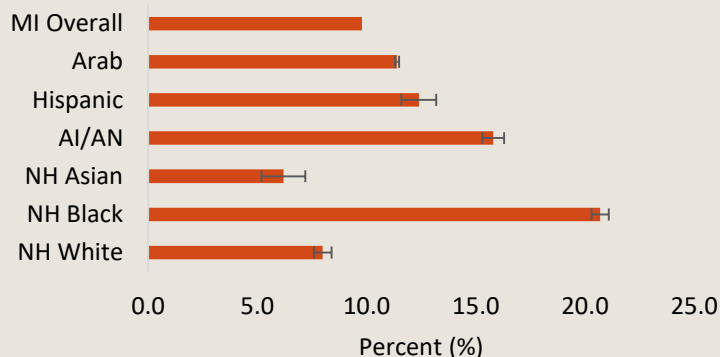


Figure 7. Civilian labor force unemployment rate, ACS 2011-2015

As compared to NH Whites:

- ◆ All racial and ethnic minority populations experienced lower percentages of high school graduation.
- ◆ Hispanics experienced the lowest percentage of high school graduation (69.8%), followed by Arabs (77.0%).

As compared to NH Whites,

- ◆ All racial and ethnic minority populations, with the exception of NH Asian, experienced higher unemployment rates.
- ◆ NH Blacks experienced over 2.5 times the rate of unemployment.

### Poverty

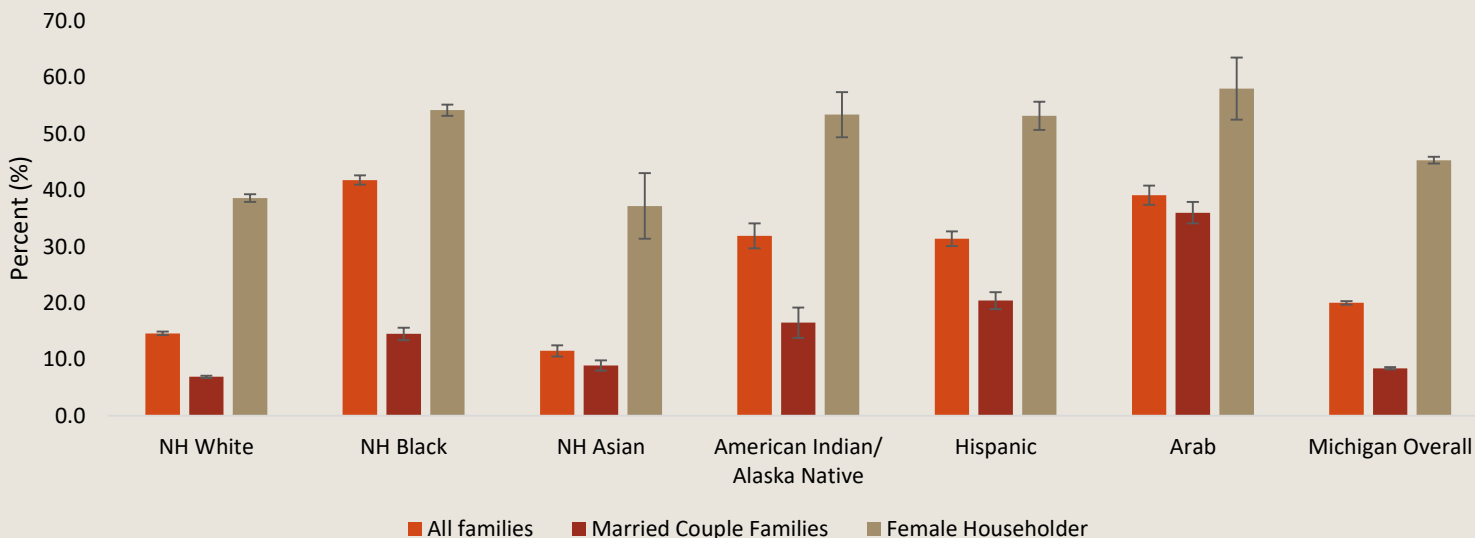


Figure 8. Percentage of families with related children of the householder under 18 years whose income in the past 12 months is below the poverty level, ACS 2011-2015

- ◆ All female headed households with no husband present experienced higher percentages of poverty as compared to married couple families. Persons and families experiencing poverty are at a greater risk for poor health and birth outcomes.
- ◆ Among both female headed households and married couple families, Arabs experienced the highest percentage of poverty.

## Basic Needs

Lack of access to basic needs influence an individuals opportunity to access prenatal care. Basic needs are sometimes referred to as intermediate determinants as they are often determined by psychosocial and socioeconomic determinants.<sup>9</sup>

### Transportation:

As compared to NH Whites

- ◆ All racial and ethnic minority groups experienced higher percentages of no vehicle available.
- ◆ NH Blacks had over 3.5 times the rate of no vehicle available.
- ◆ AI/AN experienced over 2 times the rate of no vehicle available.
- ◆ Hispanics experienced 1.5 times the rate of no vehicle available.

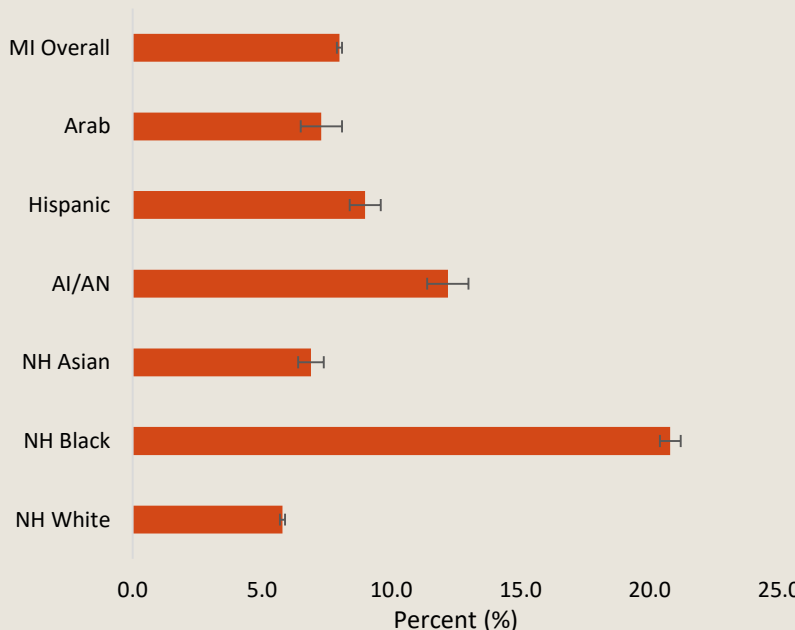


Figure 9. Percentage of households with no vehicle available, ACS 2011-2015

### Affordable Rental Housing

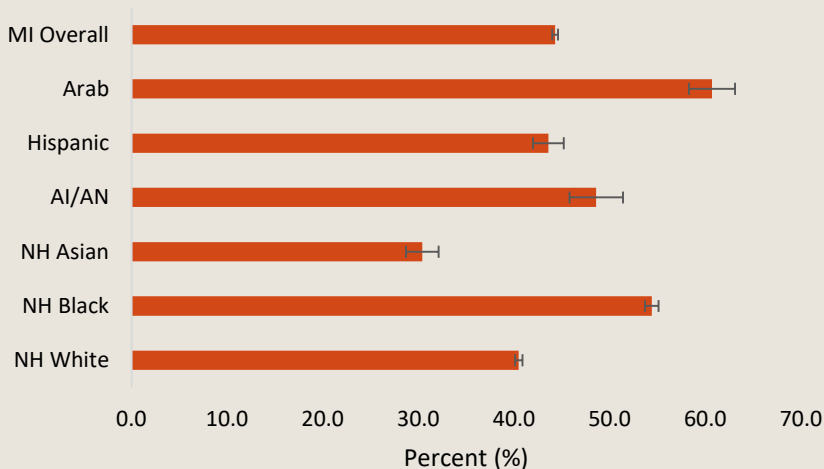


Figure 10. Percentage of renter-occupied housing units spending 35% or more of annual household income on rent, ACS 2011-2015

As compared to NH Whites,

- ◆ All racial and ethnic minority groups, with the exception of NH Asians, experienced higher percentages of rental housing cost burden\*.
- ◆ NH Blacks experienced the highest percentage of rental housing cost burden.
- ◆ NH Blacks experienced over 1.3 times the rate of rental housing cost burden.

\*rental housing cost burden refers to renter-occupied housing units spending more than 35 percent of income of annual household income on rent.



# Basic Needs

## Neighborhood Safety:

As compared to NH Whites,

- ◆ All racial and ethnic minority groups experienced higher percentages of feeling unsafe in their neighborhood always or often.
- ◆ NH Black mothers reported over 3.5 times the rate of always or often feeling unsafe in their neighborhood .
- ◆ Hispanic mothers reported 1.8 times the rate of always or often feeling unsafe in their neighborhood.
- ◆ NH Other mothers reported over 2 times the rate of always or often feeling unsafe in their neighborhood.

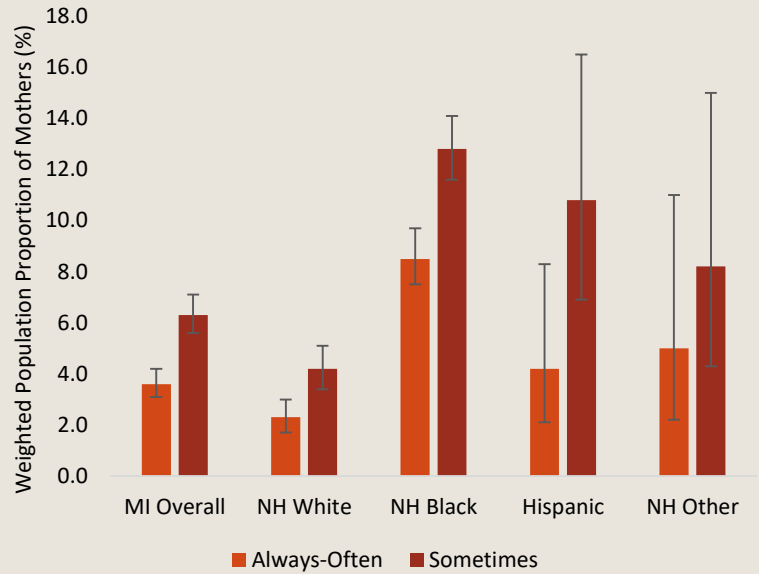


Figure 11. Mother felt unsafe in neighborhood 12 months before delivery, MI PRAMS 2012-2015

## Sleep Environment:

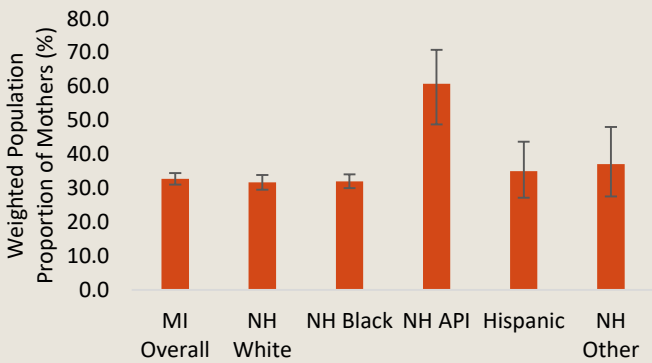


Figure 12. Percentage of babies who usually sleep with mother or another person , MI PRAMS 2012-2014

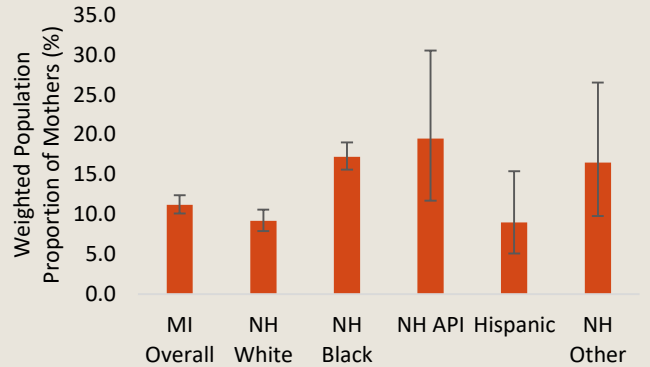


Figure 13. Percentage of babies who do not usually sleep in a crib or portable crib, MI PRAMS 2012-2014

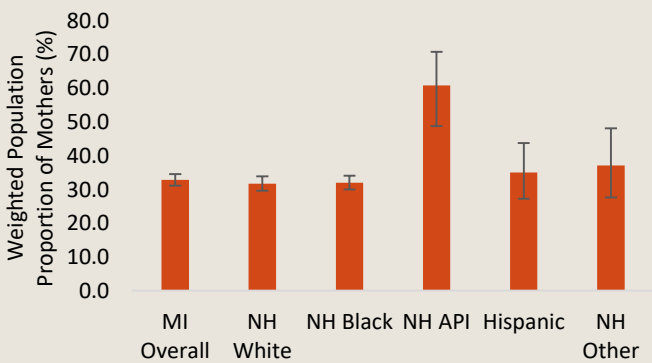


Figure 14. Percentage of babies who usually sleep in a space with at least one hazardous sleep item, MI PRAMS 2012-2014

- ◆ It is recommended that infants be placed to sleep in their own sleep space on a firm sleep surface, such as a crib or portable crib that is free from soft objects that could increase the risk of suffocation.
- ◆ NH White infants tend to experience higher percentages of safe sleep practices as compared to racial/ethnic minority populations.

# Healthcare Access

## Healthcare Coverage:

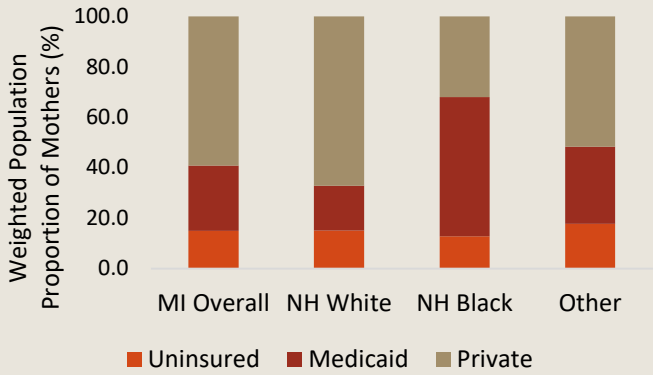


Figure 15. Pre-pregnancy insurance status, MI PRAMS 2012-2015

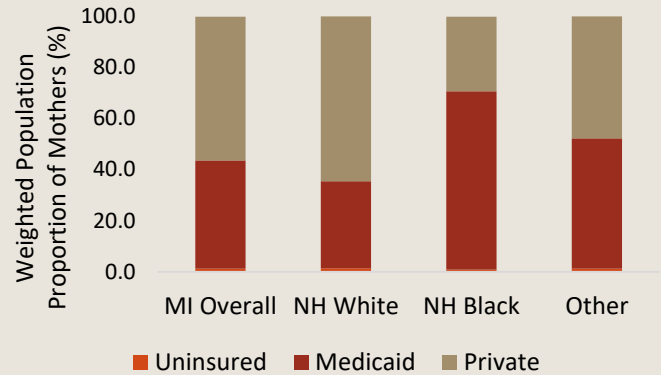


Figure 16. Payment method for prenatal care, MI PRAMS 2012-2015

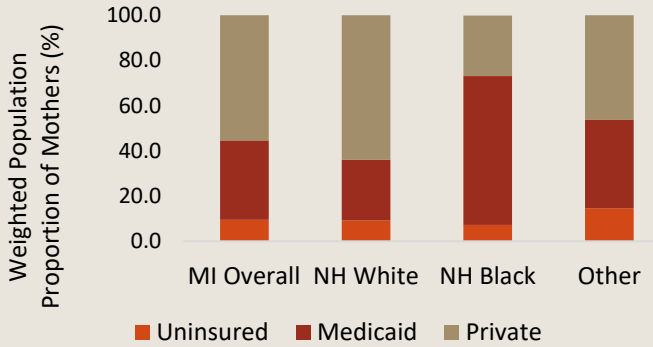


Figure 17. Mother's current insurance source, MI PRAMS 2012-2015

As compared to NH Whites,

- ◆ NH Black mothers were over three times more likely to have Medicaid as their form of insurance before pregnancy.
- ◆ NH Black mothers were twice as likely to have Medicaid as their form of insurance for prenatal care.
- ◆ Mother's that identified as a race other than NH White or NH Black were 1.5 times more likely to be uninsured after delivery.

Table 2. Barriers to accessing prenatal care, MI PRAMS 2012-2015

	NH Black	NH White	Other	Total (All Races)
1	I didn't know that I was pregnant (48.9%)	I could not get appointment when I wanted one (42.8%)	I didn't know that I was pregnant (44.7%)	I didn't know that I was pregnant (42.6%)
2	I could not get appointment when I wanted one (37.9%)	I didn't know that I was pregnant (38.5%)	I could not get appointment when I wanted one (31.0%) †	I could not get appointment when I wanted one (39.1%)
3	I had too many other things going on (20.5%)	The doctor or health plan would not start my care as early as I wanted (35.7%)	The doctor or health plan would not start my care as early as I wanted (23.5%) †	The doctor or health plan would not start my care as early as I wanted (29.0%)
4	The doctor or health plan would not start my care as early as I wanted (18.5%)	I didn't have enough money or insurance to pay for my visits (13.7%) †	I didn't have my Medicaid or MOMS card (23.4%) †	I didn't have enough money or insurance to pay for my visits (16.2%)
5	I didn't have any transportation to get to the clinic or doctor's office (18.0%)	I had too many other things going on (12.6%) †	I didn't have enough money or insurance to pay for my visits (22.5%) †	I had too many other things going on (14.8%)

†This estimate should be interpreted with caution due to low reliability and precision.

# Acknowledgments

Special thank you to Pete Haak and Jill Hardy with Michigan PRAMS for analyzing the PRAMS data for this document.

Thank you to Rebecca Coughlin for her work on the original health equity update.

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For more information on this project please visit:

[https://www.michigan.gov/documents/mdhhs/HE\\_Status\\_Report\\_506754\\_7.pdf](https://www.michigan.gov/documents/mdhhs/HE_Status_Report_506754_7.pdf)

# Appendix A

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## DATA TABLES

Disparity ratios for select indicators

	Black: White	Asian:White	AI/AN:White	Hispanic:White	Arab: White	Other:White
Background stress due to race	5.91	9.36				2.91
Emotional symptoms due to race	5.29	7.93				4.07
Physical symptoms due to race	5.50	8.13				6.00
Abuse in 12 months before or during pregnancy	2.53			0.9		
Always-often unsafe in neighborhood	3.70			1.83		2.17
Sometimes unsafe in neighborhood	3.05			2.57		1.95
Rarely-never unsafe in neighborhood	0.84			0.91		0.93
More than 6 life stressors in year before delivery	2.07			1.49		1.15
High school graduate	0.92	0.97	0.94	0.76	0.84	
Unemployment	2.59	0.78	1.98	1.55	1.43	
No vehicle available	3.59	1.19	2.10	1.55	1.26	
Unaffordable Housing	1.34	0.75	1.20	1.08	1.50	
Poverty- married couple	2.10	1.29	2.39	2.96	5.22	
Poverty- female householder	1.40	0.96	1.38	1.38	1.50	
Prenatal care – uninsured	0.6					0.9†
Prenatal care – Medicaid	2.1					1.5
Prenatal care- Private	0.5					0.7

†This estimate should be interpreted with caution due to low reliability and precision.

Interpretation Example: Black, non-Hispanic mothers were 3.7 times more likely to feel always or often unsafe in the neighborhood that they lived in 12 months before their baby was born as compared to White, non-Hispanics.

Racial stressors in 12 months before delivery, Michigan PRAMS 2012-2015

	Michigan Overall		White NH		Black NH		Asian		Other NH	
	%	95% CI	%	95% CI	%	95% CI	%	95% CI	%	95% CI
I felt that my race or ethnic background contributed to the stress in my life	2.4	(2.0-2.8)	1.1	(0.7-1.6)	6.5	(5.6-7.6)	10.3	(5.7-18.1)	3.2	(1.2-8.1)
I felt emotionally upset as a result of how I was treated based on my race or ethnic background	3.0	(2.6-3.5)	1.4	(1.0-2.0)	7.4	(6.4-8.4)	11.1	(6.1-19.2)	5.7	(2.5-12.5)
I experienced physical symptoms that I felt were related to how I was treated based on my race or ethnic background	1.8	(1.5-2.2)	0.8	(0.5-1.3)	4.4	(3.7-5.2)	6.5	(3.0-13.6)	4.8	(2.0-10.9)

Percentage of moms experiencing abuse in the year before or during pregnancy, Michigan PRAMS 2012-2014

	Michigan Overall		White NH		Black NH		Hispanic	
	%	95% CI	%	95% CI	%	95% CI	%	95% CI
Any abuse before or during pregnancy	3.8	(3.2- 4.5)	3.0	(2.3-3.9)	7.6	(6.5- 8.9)	2.7	(0.9-7.5)

Felt unsafe in neighborhood where lived in 12 months before baby was born, Michigan PRAMS 2012-2015

	Michigan Overall		White NH		Black NH		Hispanic		Other NH	
	%	95% CI	%	95% CI	%	95% CI	%	95% CI	%	95% CI
Always-Often	3.6	(3.1-4.1)	2.3	(1.7-3.0)	8.5	(7.5-9.7)	4.2	(2.1-8.4)	5.0	(2.2-11.0)
Sometimes	6.3	(5.6-7.0)	4.2	(3.5-5.2)	12.8	(11.5-14.1)	10.8	(6.9-16.5)	8.2	(4.3-15.0)
Rarely-Never	90.1	(89.2-91.0)	93.5	(92.3-94.4)	78.7	(77.1-80.2)	85.0	(78.8-89.6)	86.8	(79.2-91.9)

Number of life stressors in the year before delivery, Michigan PRAMS 2012-2015

	Michigan Overall		White NH		Black NH		Hispanic		Other NH	
	%	95% CI	%	95% CI	%	95% CI	%	95% CI	%	95% CI
More than 6 life stressors in year before delivery	7.1	(6.4-7.9)	5.9	(5.0-7.0)	12.2	(11.0-13.6)	8.8	(5.2-14.5)	6.8	(3.4-13.1)

Racial stressors in 12 months before delivery, Michigan PRAMS 2012-2015										
	Michigan Overall		White NH		Black NH		Other		Disparity Ratios	
	%	95% CI	%	95% CI	%	95% CI	%	95% CI	Black: White	Other: White
I moved to a new address	36.9	(35.4-38.5)	36.0	(34.0-37.9)	40.8	(38.9-42.7)	36.9	(32.3-41.8)	1.13	1.03
I argued with my partner more than usual	23.3	(22.0-24.6)	19.9	(18.3-21.6)	37.8	(36.0-39.7)	21.5	(17.6-25.8)	1.90	1.08
Someone very close to me died	19.6	(18.4-20.8)	18.0	(16.5-19.6)	28.9	(27.2-30.7)	14.8	(11.6-18.7)	1.61	0.82
A close family member was very sick and had to go to the hospital	27.6	(26.2-29.0)	28.2	(26.4-30.0)	28.7	(27.0-30.5)	22.4	(18.6-26.7)	1.02	0.79
I had problems paying the rent, mortgage or other bills	21.4	(20.1-22.7)	20.3	(18.7-22.0)	27.6	(25.9-29.4)	18.5	(14.9-22.8)	1.36	0.91
My husband, partner or I had a cut in work hours or pay	17.4	(16.2-18.7)	18.3	(16.9-19.8)	17.1	(15.6-18.7)	18.1	(14.4-22.4)	0.93	0.99
I lost my job even though I wanted to go on working	10.8	(9.9-11.8)	8.4	(7.3-9.6)	20.0	(18.5-21.6)	11.3	(8.4-14.9)	2.38	1.35
My husband or partner lost his job	11.6	(10.6-12.6)	11.2	(10.0-12.6)	14.9	(13.5-16.3)	8.4	(6.0-11.7)	1.33	0.75
My husband or partner said he didn't want me to be pregnant	8.2	(7.4-9.1)	7.1	(6.1-8.2)	13.9	(12.6-15.3)	6.2	(4.1-9.3)	1.96	0.87
Someone very close to me had a problem with drinking or drugs	13.3	(12.3-14.5)	13.9	(12.6-15.4)	13.4	(12.1-14.8)	9.8	(7.2-13.3)	0.96	0.71
I got separated or divorced from my husband or partner	7.2	(6.4-8.0)	5.9	(5.0-7.0)	12.1	(10.9-13.4)	7.2	(5.0-10.3)	2.05	1.22
My husband, partner, or I went to jail	4.7	(4.1-5.4)	3.7	(3.0-4.7)	8.8	(7.8-9.9)	4.4	(2.7-7.0)	2.38	1.19
I was homeless or had to sleep outside, in a car, or in a shelter	2.5	(2.1-3.0)	1.3	(0.9-1.9)	7.2	(6.3-8.3)	2.4	(1.2-4.5)	5.54	1.85
I was apart from my husband or partner due to military deployment or extended work-related travel	3.7	(3.2-4.4)	4.1	(3.4-4.9)	2.8	(2.2-3.5)	3.1	(1.8-5.2)	0.68	0.76

Family households with one or more people under 18 years by household type, ACS 2011-2015

	Michigan Overall		White NH		Black NH		Asian NH		AI/AN		Hispanic		Arab	
	%	90% CI	%	90% CI	%	90% CI	%	90% CI	%	90% CI	%	90% CI	%	90% CI
Married couple family	63.9	(63.4-64.4)	71.2	(70.7-71.7)	28.1	(27.4-28.8)	89.0	(87.8-90.2)	50.0	(47.8-52.3)	57.7	(56.4-59.1)	80.7	(78.8-82.6)
Male householder, no wife present	8.8	(8.6-9.0)	8.4	(8.2-8.6)	10.7	(10.2-11.3)	3.0	(2.4-3.7)	11.2	(9.9-12.6)	11.5	(10.6-12.4)	6.3	(5.1-7.5)
Female householder, no husband present	27.3	(27.0-27.5)	20.4	(20.2-20.7)	61.2	(60.4-62.0)	8.0	(7.0-8.9)	38.8	(36.3-41.2)	30.8	(29.5-32.0)	13.0	(11.7-14.3)

Social Determinants, ACS 2011-2015

	Michigan Overall		White NH		Black NH		Asian NH		AI/AN		Hispanic		Arab	
	%	90% CI	%	90% CI	%	90% CI	%	90% CI	%	90% CI	%	90% CI	%	90% CI
High school graduate degree	89.6	(89.5-89.7)	91.4	(91.3-91.5)	84.2	(83.9-84.5)	88.6	(88.1-89.1)	86.2	(85.5-86.9)	69.8	(69.0-70.6)	77.0	(76.2-77.8)
Unemployment	9.8	(9.7-9.9)	8.0	(7.9-8.1)	20.7	(20.3-21.1)	6.2	(5.8-6.6)	15.8	(14.8-16.8)	12.4	(11.9-12.9)	11.4	(10.6-12.2)
No Vehicle Available	8.0	(7.9-8.1)	5.8	(5.7-5.9)	20.8	(20.4-21.2)	6.9	(6.4-7.4)	12.2	(11.4-13.0)	9.0	(8.4-9.6)	7.3	(6.5-8.1)
Gross Rent 35.0 percent or more of household income	44.3	(44.0-44.6)	40.5	(40.1-40.9)	54.4	(53.7-55.1)	30.4	(28.7-32.1)	48.6	(45.8-51.4)	43.6	(42.0-45.2)	60.7	(58.3-63.1)



Percentage of families whose income in the past 12 months is below poverty level with related children of the householder under 18 years, ACS 2011-2015

	Michigan Overall		White NH		Black NH		Asian NH		AI/AN		Hispanic		Arab	
	%	90% CI	%	90% CI	%	90% CI	%	90% CI	%	90% CI	%	90% CI	%	90% CI
All Families	20.0	(19.7-20.3)	14.6	(14.3-14.9)	41.8	(41.0-42.6)	11.5	(10.5, 12.5)	31.9	(29.7-34.1)	31.4	(30.1-32.7)	39.1	(37.4-40.8)
Married Couple Family	8.4	(8.2-8.6)	6.9	(6.7-7.1)	14.5	(13.4-15.6)	8.9	(8.0-9.8)	16.5	(13.8-19.2)	20.4	(18.9-21.9)	36.0	(34.1-37.9)
Female householde, no husband present	45.3	(44.7-45.9)	38.6	(37.9-39.3)	54.2	(53.2-55.2)	37.2	(31.4-43.0)	53.4	(49.4-57.4)	53.2	(50.7-55.7)	58.0	(52.5-63.5)

Sleep practices, Michigan PRAMS 2012-2014

	Michigan Overall		White NH		Black NH		API NH		Hispanic		Other	
	%	95% CI	%	95% CI	%	95% CI	%	95% CI	%	95% CI	%	95% CI
Co-Sleeping	21.2	(19.8-22.7)	17.7	(16.0-19.6)	31.6	(29.5-33.6)	49.3	(38.0-60.7)	20.0	(13.8-28.0)	21.8	(14.3-31.7)
Sleeps outside crib	11.2	(10.2-12.4)	9.2	(8.0-10.7)	17.5	(15.9-19.3)	19.5	(11.7-30.7)	9.0	(5.1- 15.4)	16.5	(9.8- 26.6)
At least one hazardous item in sleep space	32.8	(31.1-34.6)	31.7	(29.6-33.9)	32.0	(30.0-34.1)	60.8	(49.2-71.3)	35.0	(27.2-43.7)	37.1	(27.6-47.7)

## Pre-pregnancy Insurance Coverage, Michigan PRAMS 2012-2015

	Michigan Overall		White NH		Black NH		Other	
	%	95% CI	%	95% CI	%	95% CI	%	95% CI
Uninsured	15.0	(13.9- 16.2)	15.1	(13.7- 16.7)	12.8	(11.5- 14.1)	17.8	(14.2- 22.1)
Medicaid	25.9	(24.6- 27.2)	17.7	(16.1- 19.4)	55.2	(53.3- 57.1)	30.5	(26.0- 35.4)
Private	59.1	(57.6- 60.6)	67.2	(65.2- 69.1)	32.0	(30.3- 33.9)	51.7	(46.7- 56.7)

## Prenatal Care Insurance Coverage, Michigan PRAMS 2012-2015

	Michigan Overall		White NH		Black NH		Other	
	%	95% CI	%	95% CI	%	95% CI	%	95% CI
Uninsured	1.3	(1.0- 1.7)	1.4	(1.0- 2.0)	0.9	(0.6- 1.4)	1.3	(0.5- 2.9)
Medicaid	42.3	(40.8- 43.9)	34.0	(32.0- 36.0)	69.7	(67.9- 71.5)	50.9	(46.0- 55.9)
Private	56.3	(54.8- 57.9)	64.6	(62.6- 66.6)	29.3	(27.6- 31.1)	47.8	(42.9- 52.8)

Insurance Coverage after delivery, Michigan PRAMS 2012-2015

	Michigan Overall		White NH		Black NH		Other	
	%	95% CI	%	95% CI	%	95% CI	%	95% CI
Uninsured	9.6	(8.6- 10.6)	9.3	(8.2- 10.6)	7.3	(6.4- 8.4)	14.6	(11.2- 18.7)
Medicaid	35.1	(33.7- 36.6)	26.8	(25.0- 28.7)	65.8	(64.0- 67.7)	39.1	(34.3- 44.2)
Private	55.3	(53.7- 56.8)	63.9	(61.9- 65.8)	26.8	(25.2- 28.6)	46.3	(41.4- 51.3)

Barriers to accessing prenatal care, Michigan PRAMS 2012-2015

	Michigan Overall		White NH		Black NH		Other		Disparity Ratios	
	%	95% CI	%	95% CI	%	95% CI	%	95% CI	Black: White	Other: White
I didn't know that I was pregnant	42.6	(34.7- 50.8)	38.5	(27.1- 51.4)	48.9	(40.4- 57.6)	44.7	(26.5- 64.5)	1.3	1.2
I could not get appointment when I wanted one	39.1	(31.4- 47.4)	42.8	(31.0- 55.4)	37.9	(29.8- 46.7)	31.0 <sup>†</sup>	(15.5- 52.3)	0.9	0.7
The doctor or health plan would not start my care as early as I wanted	29.0	(22.1- 37.1)	35.7	(25.1- 48.0)	18.5	(12.6- 26.3)	23.5 <sup>†</sup>	(10.5- 44.6)	0.5	0.7
I didn't have enough money or insurance to pay for my visits	16.2	(11.0- 23.2)	13.7 <sup>†</sup>	(7.3- 24.5)	16.3	(10.7- 24.1)	22.5 <sup>†</sup>	(9.8- 43.7)	1.2	1.6
I had too many other things going on	14.8	(9.8- 21.7)	12.6 <sup>†</sup>	(6.2- 24.0)	20.5	(14.0- 29.0)			1.6	
I didn't have my Medicaid or MOMS card	12.8	(8.2- 19.4)	8.5 <sup>†</sup>	(3.6- 18.5)	12.9	(8.0- 20.2)	23.4 <sup>†</sup>	(10.4- 44.5)	1.5	2.8
I didn't have any transportation to get to the clinic or doctor's office	12.7	(8.2- 19.2)	11.2 <sup>†</sup>	(5.2- 22.3)	18.0	(12.1- 26.0)			1.6	
I couldn't take time off from work or school	9.9	(6.0- 16.0)	10.1 <sup>†</sup>	(4.4- 21.1)	11.6	(6.9- 18.8)			1.1	
I didn't want anyone else to know I was pregnant	6.8	(3.8- 11.9)			13.3	(8.2- 20.8)				
I didn't want prenatal care	3.2 <sup>†</sup>	(1.3- 7.4)			5.1 <sup>†</sup>	(2.4- 10.9)				
I didn't have anyone to take care of my children	1.9 <sup>†</sup>	(0.8- 4.7)								

<sup>†</sup>This estimate should be interpreted with caution due to low reliability and precision.