Maternal and Infant Health Statistics
Prosperity Region 4
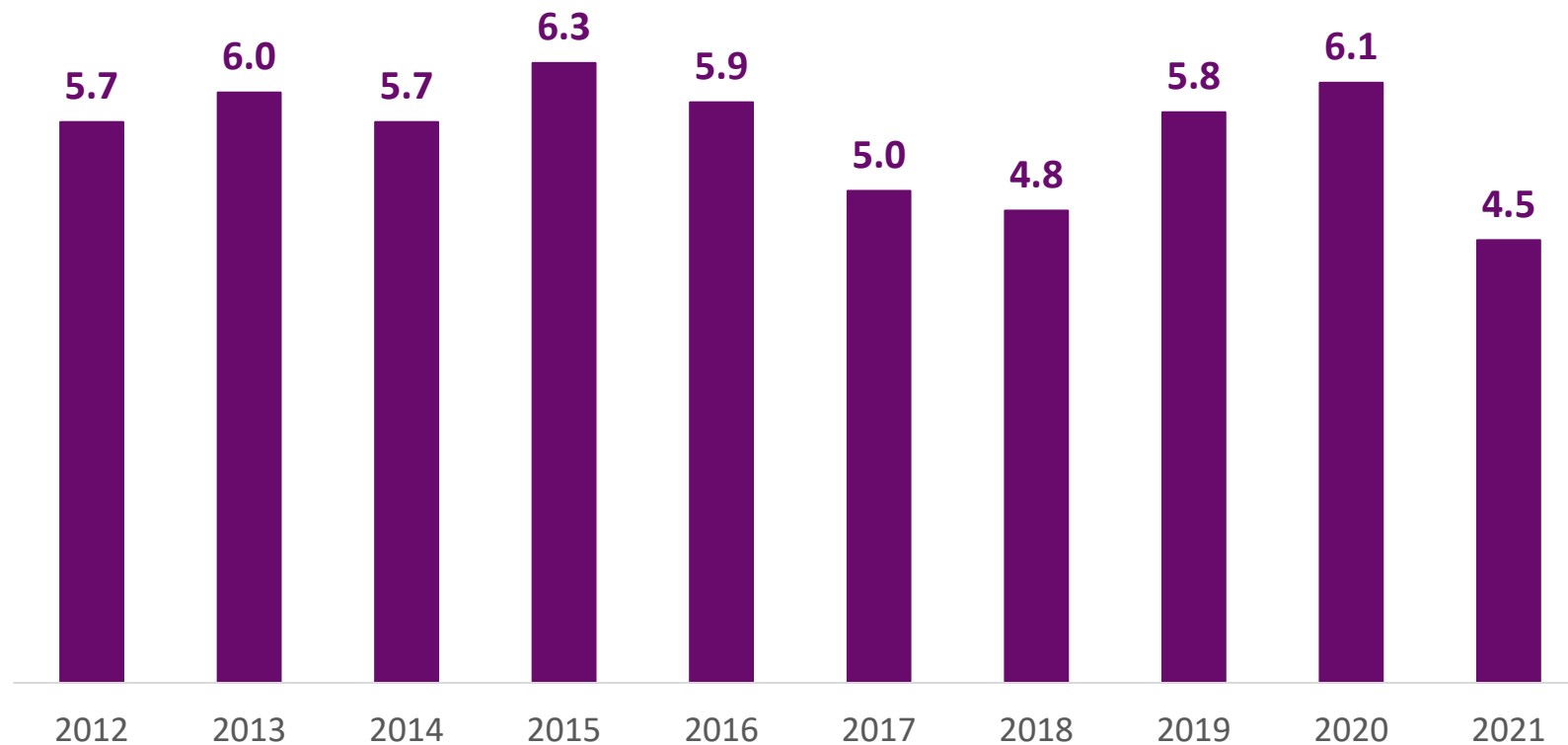## Michigan

Infant Mortality Rate (IMR) Prosperity Region 4 2012-2021

Infant Mortality Rate
Prosperity Region 4, 2012-2021

Infant mortality is defined as a death of a baby before his or her first birthday and is expressed as a rate per 1,000 live births.

2021 Michigan Rate = 6.2			
Year	# Infant Deaths	# Births	Rate per 1,000 Live Births
2012	112	19,811	5.7
2013	117	19,591	6.0
2014	113	19,802	5.7
2015	124	19,625	6.3
2016	116	19,709	5.9
2017	96	19,387	5.0
2018	93	19,218	4.8
2019	107	18,404	5.8
2020	110	18,104	6.1
2021	82	18,253	4.5

Infant Mortality Rates by Maternal Race/Ethnicity Prosperity Region 4, 2017-2021

Infant mortality is defined as a death of a baby before his or her first birthday and is expressed as a rate per 1,000 live births.

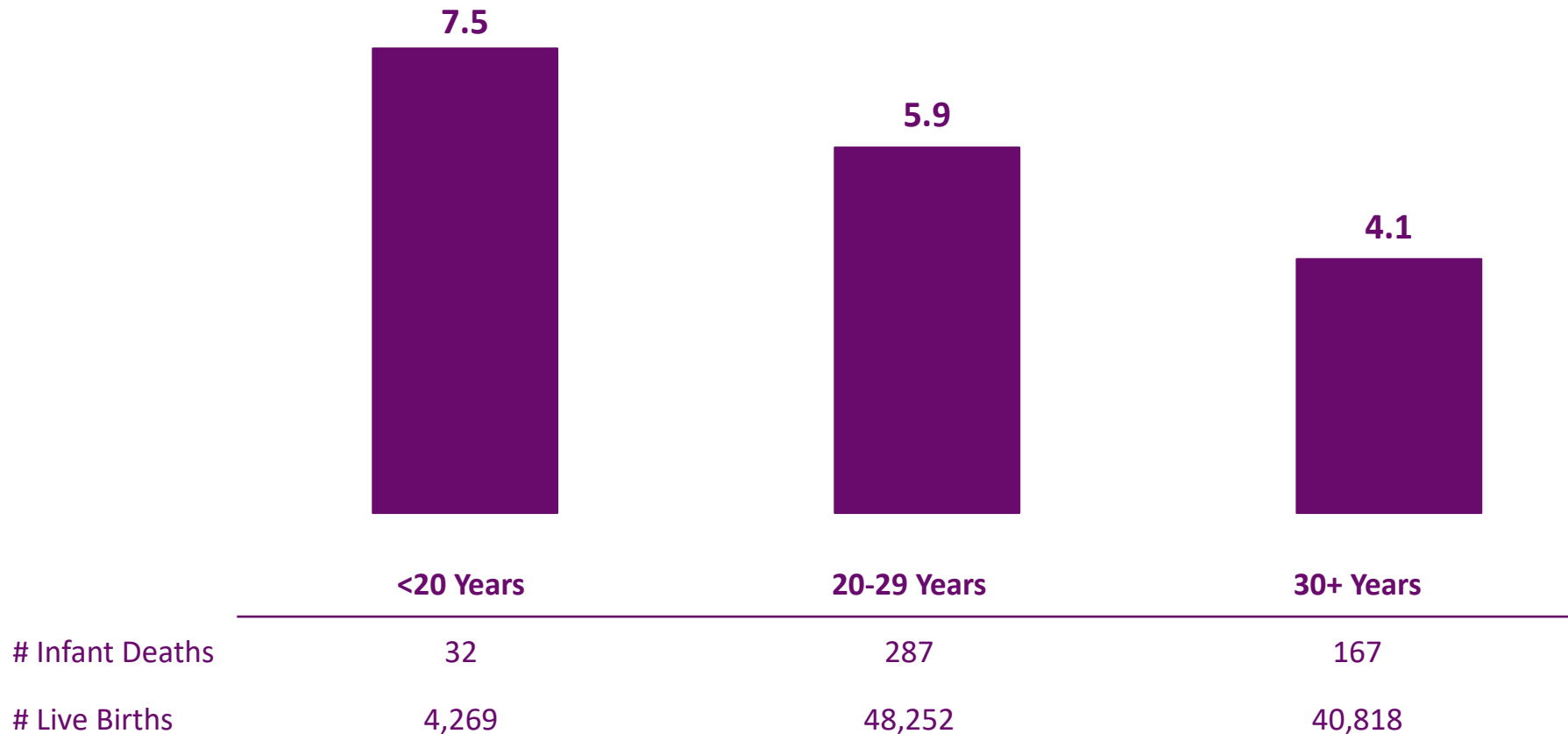| Maternal Race	# Infant Deaths	# Live Births		Infant Mortality Rate (per 1,000 Live Births)	MI
White Non-Hispanic	306	69,553	4.4	4.4	4.8
Black Non-Hispanic	91	8,484	10.7	10.7	13.6
Hispanic	53	10,411	5.1	5.1	5.6
American Indian	0<N<6	173	Data Not Sufficient		5.5
Asian/Pacific Islander	15	2,171	6.9	6.9	4.5

Birth Outcomes by Race/Ethnicity Prosperity Region 4, 2017-2021

Infant mortality is defined as a death of a baby before his or her first birthday and is expressed as a rate per 1,000 live births.

Comparison of methods used to measure cases among Native Americans	# Live Births	# Infant Deaths	# Low Birthweight	# Preterm	IMR per 1,000 Live Births	% Low Birthweight	% Preterm
#1: Birthing mother is identified on the birth certificate as American Indian and Non-Hispanic	173	0<N<6	16	30	Data Not Sufficient	9.2%	17.3%
#2: Birthing mother is identified on the birth certificate as American Indian or Mixed Race (i.e., American Indian or Alaskan Native).	519	0<N<6	48	72	Data Not Sufficient	9.2%	13.9%
#3: Birthing mother is identified on the birth certificate as American Indian or Mixed race (i.e., American Indian or Alaskan Native) OR the father is listed as American Indian or Mixed Race (i.e., American Indian or Alaskan Native)	888	0<N<6	79	102	Data Not Sufficient	8.9%	11.5%

Infant Mortality Rate by Maternal Age Prosperity Region 4, 2017-2021

Infant mortality is defined as a death of a baby before his or her first birthday and is expressed as a rate per 1,000 live births.

|	<20 Years	20-29 Years	30+ Years
Infant Mortality Rate	7.5	5.9	4.1
# Infant Deaths	32	287	167
# Live Births	4,269	48,252	40,818

Infant Mortality Rates by Intended Payment Source Prosperity Region 4, 2017-2021

Infant mortality is defined as a death of a baby before his or her first birthday and is expressed as a rate per 1,000 live births.

Payment	# Infant Deaths	# Live Births	Infant Mortality Rate (per 1,000 Live Births)		MI
Private Insurance	245	57,842	4.2	4.2	4.9
Medicaid	219	32,300	6.8	6.8	8.7

Infant Mortality Rates by Census Tract Prosperity Region 4, 2016-2020

Infant mortality is defined as a death of a baby before his or her first birthday and is expressed as a rate per 1,000 live births.

Infant Deaths per 1,000 Live Births

Infant mortality is defined as a death of a baby before his or her first birthday and is expressed as a rate per 1,000 live births.
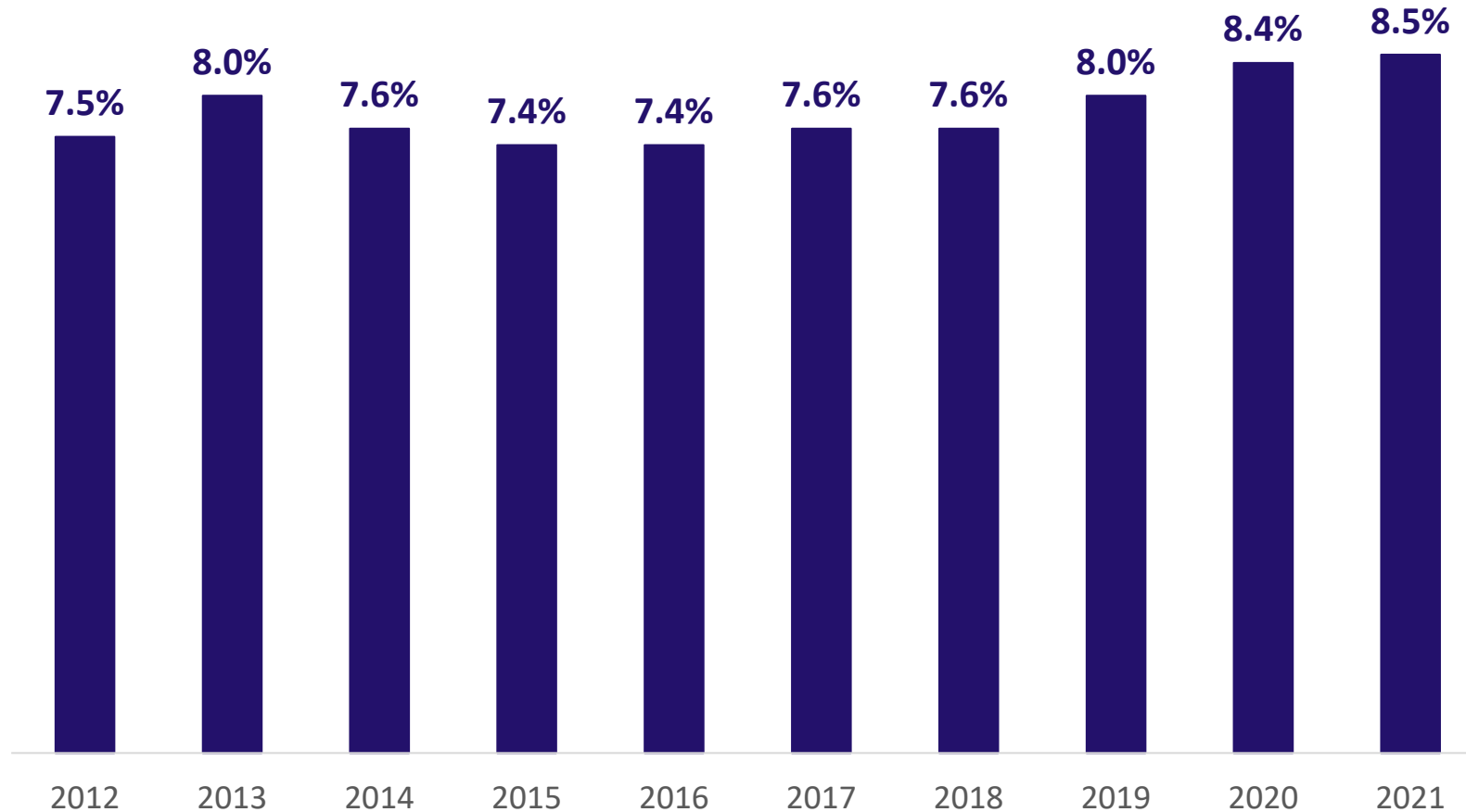
0.1   6.6   16.0   250.0
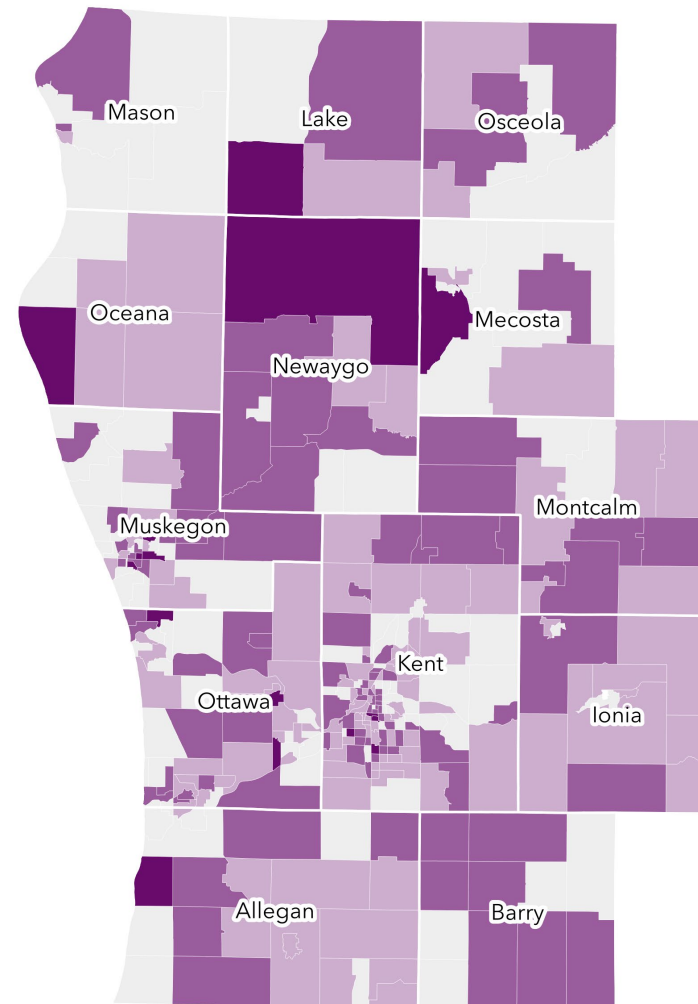
No Live Births/Infant Deaths

Low Birthweight (LBW) Prosperity Region 4 2012-2021

Low Birthweight Prosperity Region 4, 2012-2021

Low birthweight rate is defined as number of births with baby birthweight <2,500 grams per 100 live births.

2021 Michigan = 9.2%

Year	# LBW	# Births	% LBW
2012	1,487	19,811	7.5%
2013	1,564	19,591	8.0%
2014	1,502	19,802	7.6%
2015	1,456	19,625	7.4%
2016	1,455	19,709	7.4%
2017	1,478	19,387	7.6%
2018	1,468	19,218	7.6%
2019	1,477	18,404	8.0%
2020	1,518	18,104	8.4%
2021	1,554	18,253	8.5%

Low Birthweight by Maternal Race/Ethnicity Prosperity Region 4, 2017-2021

Low birthweight rate is defined as number of births with baby birthweight <2,500 grams per 100 live births.

Maternal Race	# LBW	# Live Births		Percent (%) Low Birthweight	MI
White non-Hispanic	4,875	69,553	7.0%	7.0%	7.2%
Black non-Hispanic	1,353	8,484	15.9%	15.9%	15.2%
Hispanic	809	10,411	7.8%	7.8%	7.7%
American Indian	16	173	9.2%	9.2%	8.4%
Asian/Pacific Islander	213	2,171	9.8%	9.8%	9.0%

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Birth Outcomes by Race/Ethnicity Prosperity Region 4, 2017-2021

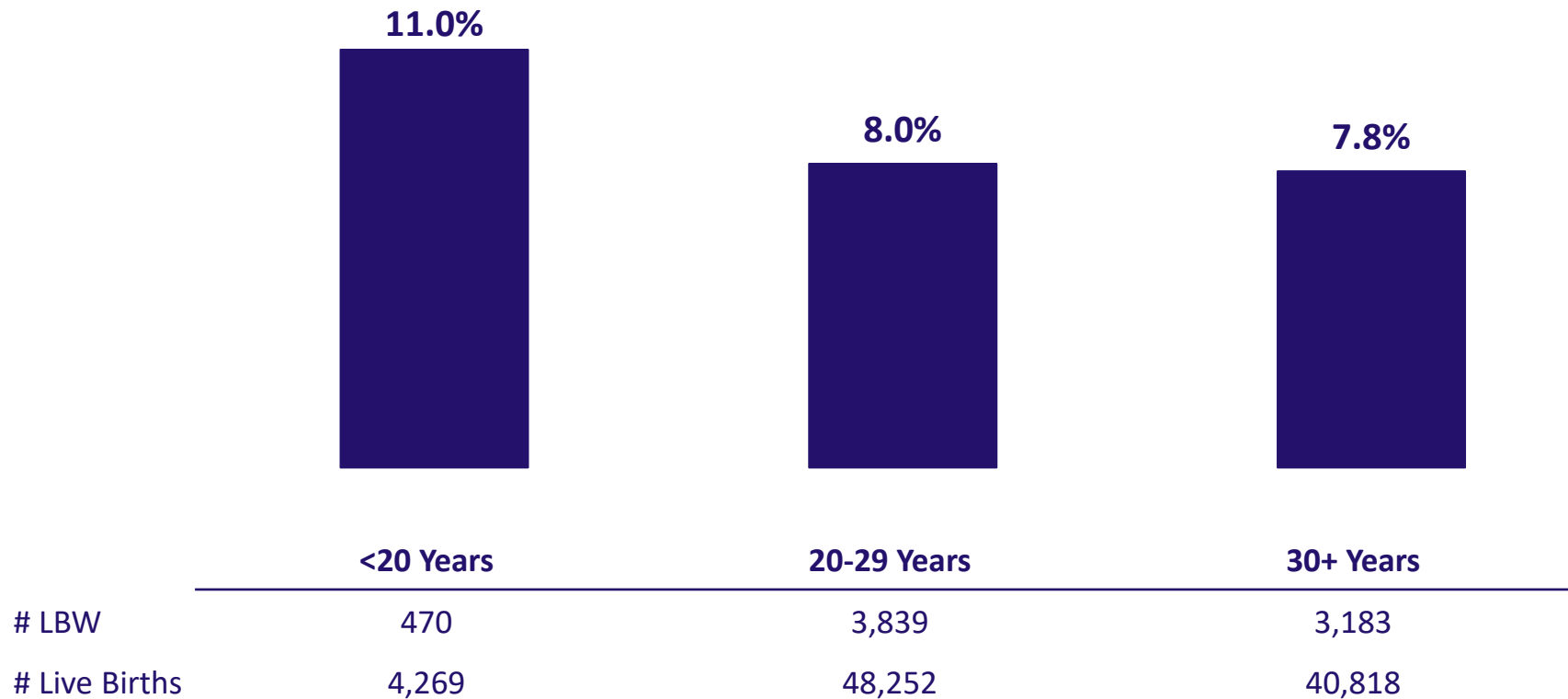Low birthweight rate is defined as number of births with baby birthweight <2,500 grams per 100 live births.

Comparison of methods used to measure cases among Native Americans	# Live Births	# Infant Deaths	# Low Birthweight	# Preterm	IMR per 1,000 Live Births	% Low Birthweight	% Preterm
#1: Birthing mother is identified on the birth certificate as American Indian and Non-Hispanic	173	0<N<6	16	30	Data Not Sufficient	9.2%	17.3%
#2: Birthing mother is identified on the birth certificate as American Indian or Mixed Race (i.e., American Indian or Alaskan Native).	519	0<N<6	48	72	Data Not Sufficient	9.2%	13.9%
#3: Birthing mother is identified on the birth certificate as American Indian or Mixed race (i.e., American Indian or Alaskan Native) OR the father is listed as American Indian or Mixed Race (i.e., American Indian or Alaskan Native)	888	0<N<6	79	102	Data Not Sufficient	8.9%	11.5%

Low Birthweight by Maternal Age Prosperity Region 4, 2017-2021

Low birthweight rate is defined as number of births with baby birthweight <2,500 grams per 100 live births.

	<20 Years	20-29 Years	30+ Years
# LBW	470	3,839	3,183
# Live Births	4,269	48,252	40,818

Low Birthweight by Intended Payment Source Prosperity Region 4, 2017-2021

Low birthweight rate is defined as number of births with baby birthweight <2,500 grams per 100 live births.

Payment	# LBW	# Live Births	Percent (%) Low Birthweight		MI
Private Insurance	4,010	57,842	6.9%	6.9%	7.5%
Medicaid	3,328	32,300	10.3%	10.3%	10.9%

Low Birthweight by Census Tract Prosperity Region 4, 2016-2020

Low birthweight rate is defined as number of births with baby birthweight <2,500 grams per 100 live births.

Percent Low Birthweight
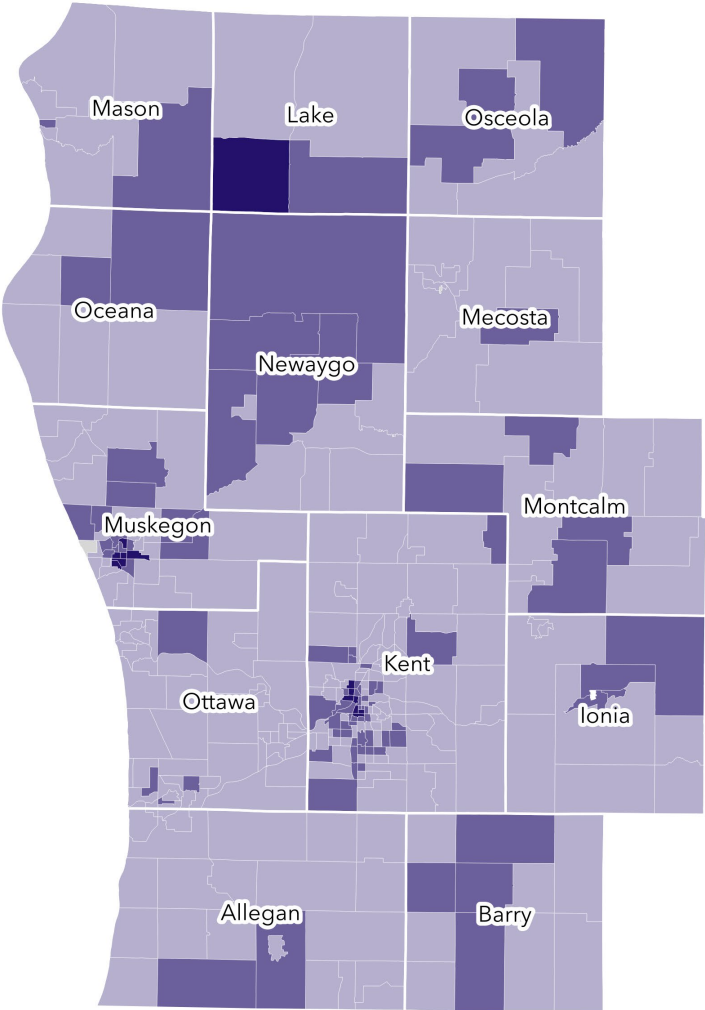
Low birthweight rate is defined as number of births with baby birthweight less than 5.5lbs (<2,500 grams) per 100 live births.

0.1%   8.8%   13.2%   50.0%
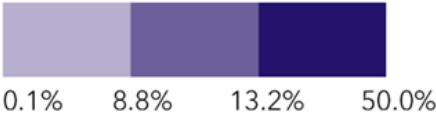
No Live Births/Low Birthweight Births

Preterm Birth Prosperity Region 4 2012-2021

Preterm Birth
Prosperity Region 4, 2012-2021

Preterm birth rate is defined as number of births delivered before 37 completed weeks of gestation per 100 live births.
Gestational age is based on the obstetric estimate of gestation.

| 9.7% | 9.8% | 9.7% | 9.4% | 9.7% | 9.9% | 9.7% | 10.2% | 9.9% | 10.4% |

| 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 |
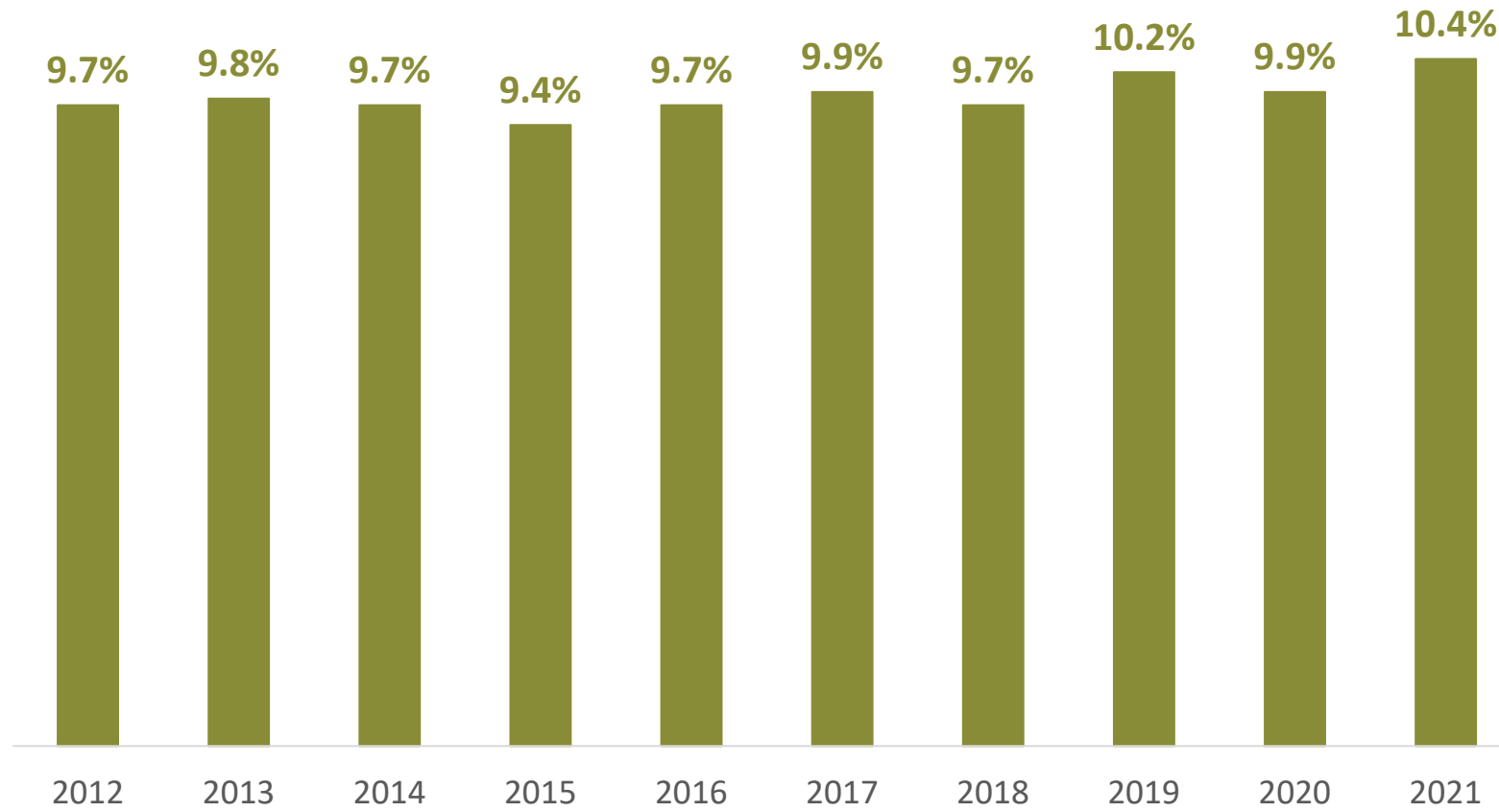
2021 Michigan = 10.6%

Year	# Preterm	# Births	% Preterm
2012	1,920	19,811	9.7%
2013	1,911	19,591	9.8%
2014	1,915	19,802	9.7%
2015	1,841	19,625	9.4%
2016	1,920	19,709	9.7%
2017	1,923	19,387	9.9%
2018	1,870	19,218	9.7%
2019	1,886	18,404	10.2%
2020	1,791	18,104	9.9%
2021	1,891	18,253	10.4%

Preterm Birth by Maternal Race/Ethnicity Prosperity Region 4, 2017-2021

Preterm birth rate is defined as number of births delivered before 37 completed weeks of gestation per 100 live births.
Gestational age is based on the obstetric estimate of gestation.

Maternal Race	# Preterm	# Live Births	Percent (%) Preterm		MI
White non-Hispanic	6,449	69,553	9.3%	9.3%	9.2%
Black non-Hispanic	1,318	8,484	15.5%	15.5%	14.9%
Hispanic	1,065	10,411	10.2%	10.2%	9.8%
American Indian	30	173	17.3%	17.3%	10.1%
Asian/Pacific Islander	214	2,171	9.9%	9.9%	8.2%

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Birth Outcomes by Race/Ethnicity Prosperity Region 4, 2017-2021

Preterm birth rate is defined as number of births delivered before 37 completed weeks of gestation per 100 live births.
Gestational age is based on the obstetric estimate of gestation.

Comparison of methods used to measure cases among Native Americans	# Live Births	# Infant Deaths	# Low Birthweight	# Preterm	IMR per 1,000 Live Births	% Low Birthweight	% Preterm
#1: Birthing mother is identified on the birth certificate as American Indian and Non-Hispanic	173	0<N<6	16	30	Data Not Sufficient	9.2%	17.3%
#2: Birthing mother is identified on the birth certificate as American Indian or Mixed Race (i.e., American Indian or Alaskan Native).	519	0<N<6	48	72	Data Not Sufficient	9.2%	13.9%
#3: Birthing mother is identified on the birth certificate as American Indian or Mixed race (i.e., American Indian or Alaskan Native) **OR** the father is listed as American Indian or Mixed Race (i.e., American Indian or Alaskan Native)	888	0<N<6	79	102	Data Not Sufficient	8.9%	11.5%

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Preterm Birth by Maternal Age Prosperity Region 4, 2017-2021

Preterm birth rate is defined as number of births delivered before 37 completed weeks of gestation per 100 live births. Gestational age is based on the obstetric estimate of gestation.

	<20 Years	20-29 Years	30+ Years
# Preterm	457	4,588	4,312
# Live Births	4,269	48,252	40,818

Bar chart values: <20 Years: 10.7%, 20-29 Years: 9.5%, 30+ Years: 10.6%

Preterm Birth by Intended Payment Source Prosperity Region 4, 2017-2021

Preterm birth rate is defined as number of births delivered before 37 completed weeks of gestation per 100 live births.
Gestational age is based on the obstetric estimate of gestation.

Payment	# Preterm	# Live Births		Percent (%) Preterm		MI
Private Insurance	5,454	57,842	9.4%		9.4%	9.4%
Medicaid	3,736	32,300	11.6%		11.6%	11.6%

Preterm Birth by Census Tract Prosperity Region 4, 2016-2020

Preterm birth rate is defined as number of births delivered before 37 completed weeks of gestation per 100 live births.
Gestational age is based on the obstetric estimate of gestation.

Percent Preterm

Preterm birth rate is defined as number of births delivered before 37 completed weeks of gestation per 100 live births. Gestational age is based on the obstetric estimate of gestation.
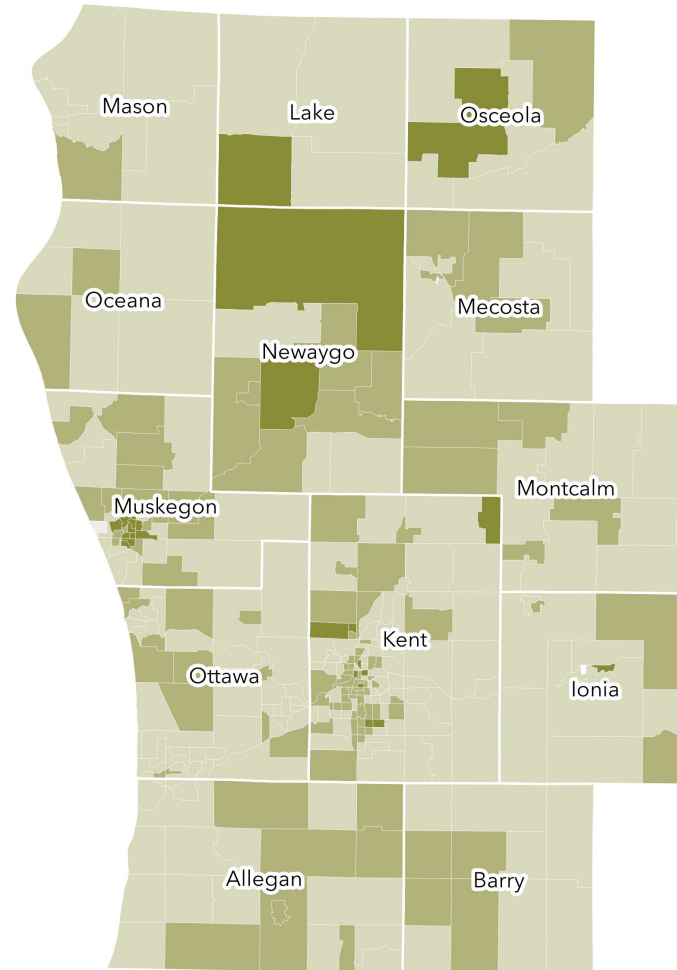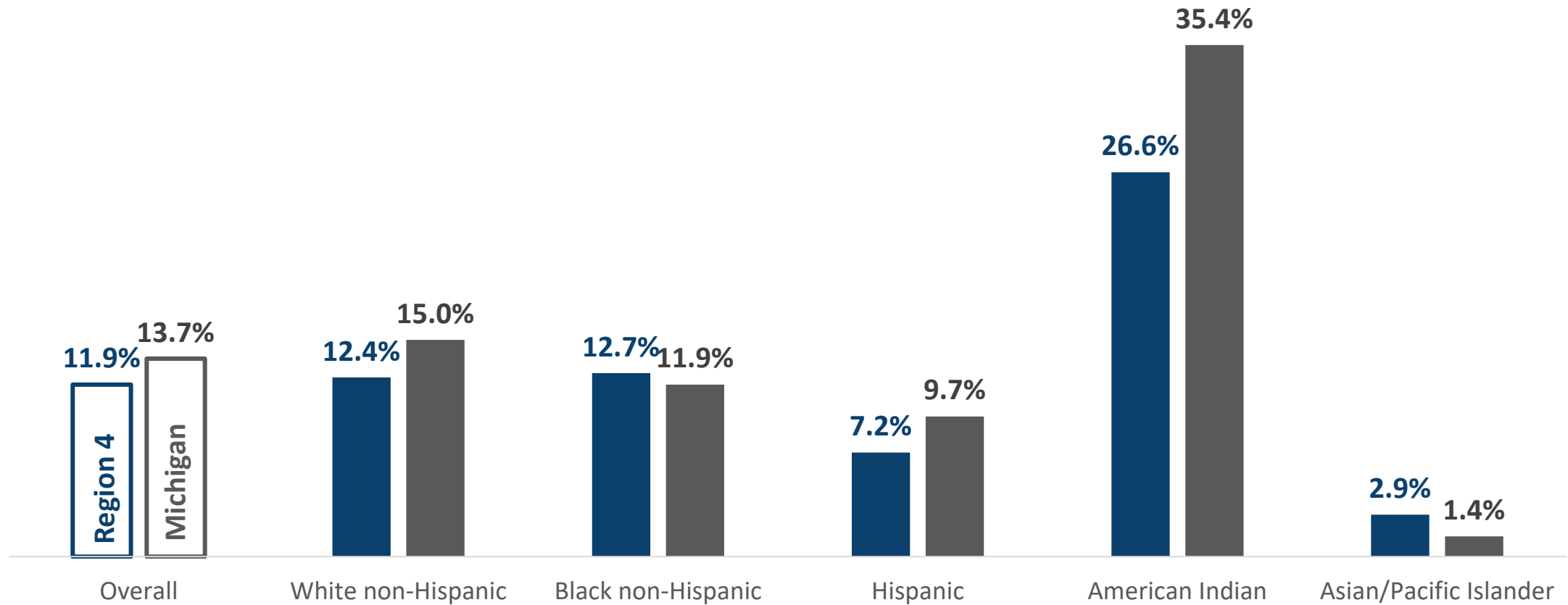
0.1%   10.2%   14.3%   50.0%
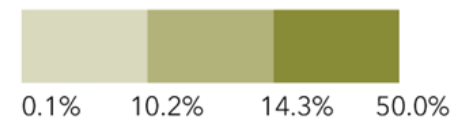
No Live Births/Preterm Births

Smoking During Pregnancy Prosperity Region 4 2017-2021

Smoking During Pregnancy by Maternal Race/Ethnicity Prosperity Region 4, 2017-2021

Smoking During Pregnancy by Race/Ethnicity Prosperity Region 4, 2017-2021

Comparison of methods used to measure cases among Native Americans	# Smoke during Pregnancy	# Live Births	Percent (%) Smoke during Pregnancy
#1: Birthing mother is identified on the birth certificate as American Indian and Non-Hispanic	46	173	26.6%
#2: Birthing mother is identified on the birth certificate as American Indian or Mixed Race (i.e., American Indian or Alaskan Native).	141	519	27.2%
#3: Birthing mother is identified on the birth certificate as American Indian or Mixed race (i.e., American Indian or Alaskan Native) **OR** the father is listed as American Indian or Mixed Race (i.e., American Indian or Alaskan Native)	238	888	26.8%

Breastfeeding Initiation and Duration Michigan
2007-2021

Breastfeeding Initiation + Duration Michigan, 2007-2021

Significance test for all linear trends: p < 0.0001

Legend: Ever — 1 Month — 2 Months — 3 Months

Y-axis: Weighted Proportion (%) of Mothers (0 to 100)

X-axis years: 2007, 2009, 2011, 2013, 2015, 2017, 2019, 2021

Data labels:
- Ever: 72.4%, 80.0%, 87.6%, 88.4%
- 1 Month: 56.9%, 66.0%, 74.2%, 76.3%
- 2 Months: 44.7%, 55.0%, 64.6%, 67.0%
- 3 Months: 40.2%, 46.2%, 56.8%, 56.9%
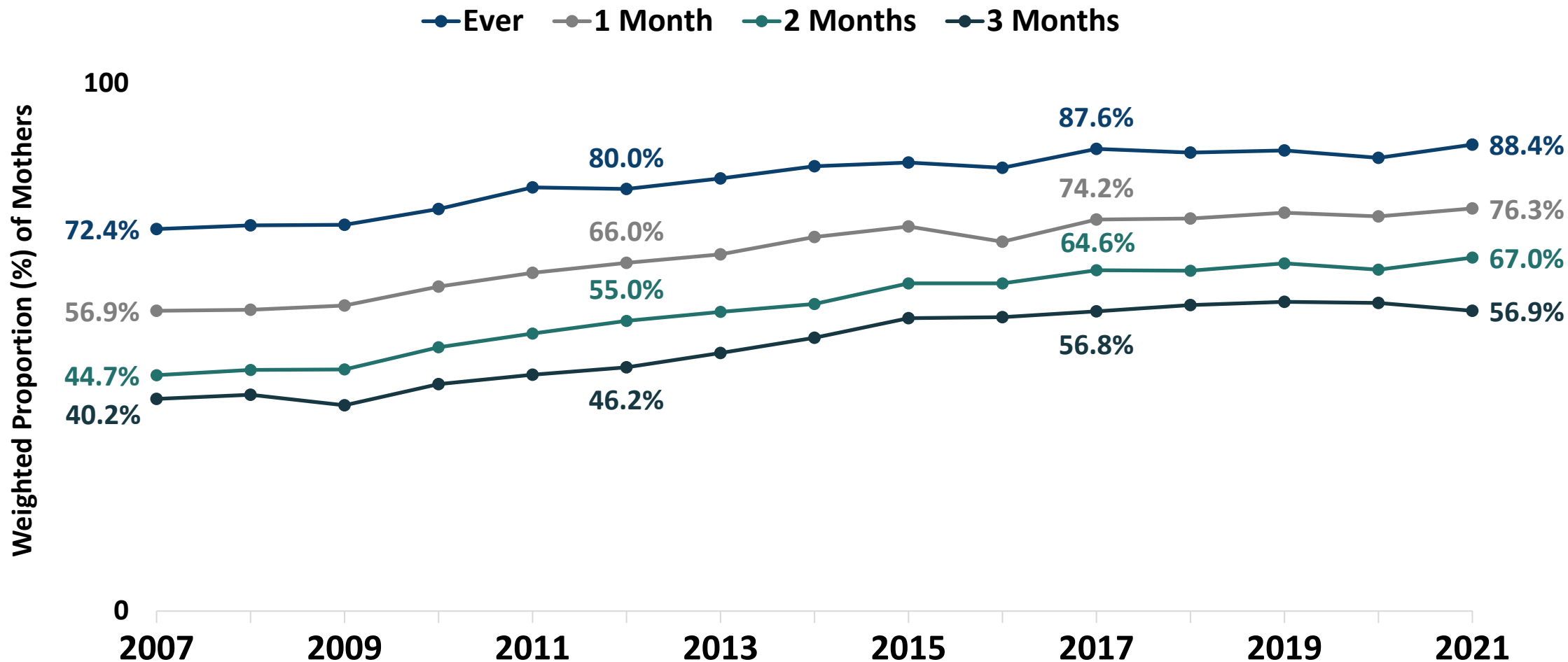
Late Entry into Prenatal Care Prosperity Region 4 2017-2021

Late Entry Into Prenatal Care by Maternal Race/Ethnicity Prosperity Region 4, 2017-2021

Late entry into prenatal care refers to begin prenatal care in the 7th – 9th month of gestation

Overall: Region 4 4.5%, Michigan 4.1%
White non-Hispanic: 3.7%, 3.7%
Black non-Hispanic: 7.8%, 5.2%
Hispanic: 7.1%, 5.7%
American Indian: 5.8%, 6.0%
Asian/Pacific Islander: 3.7%, 3.6%
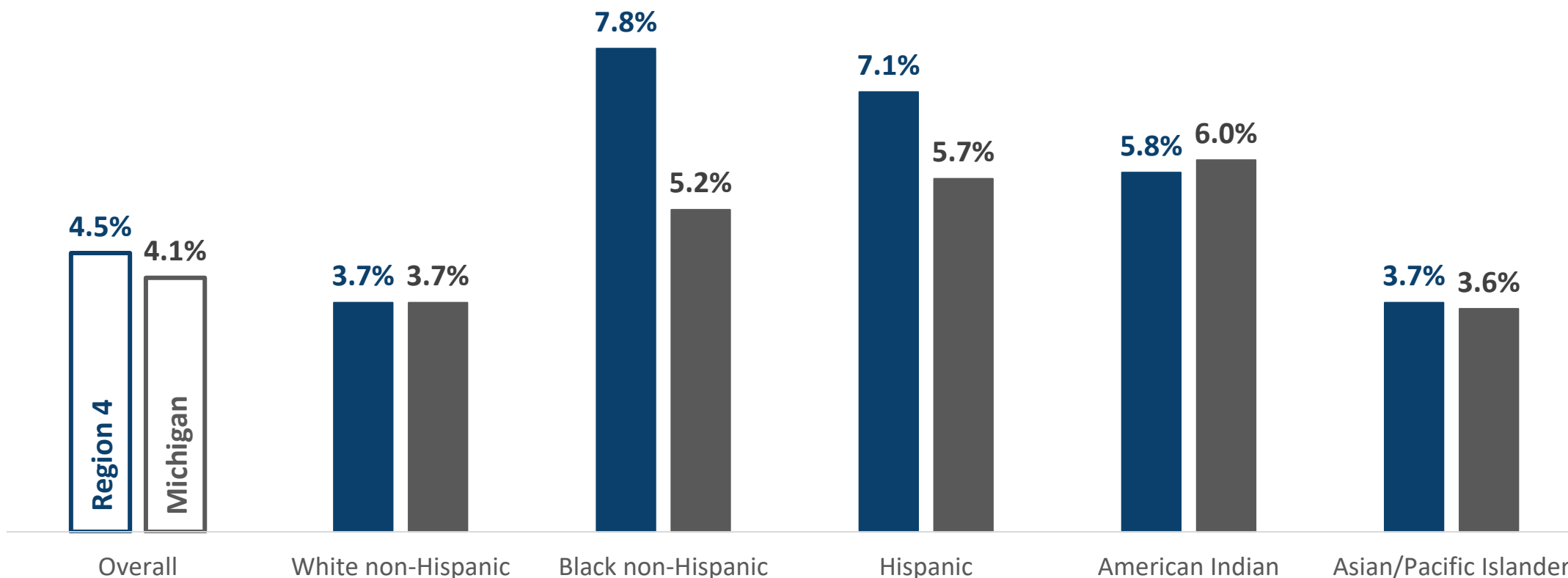
Late Entry into Prenatal Care by Race/Ethnicity Prosperity Region 4, 2017-2021
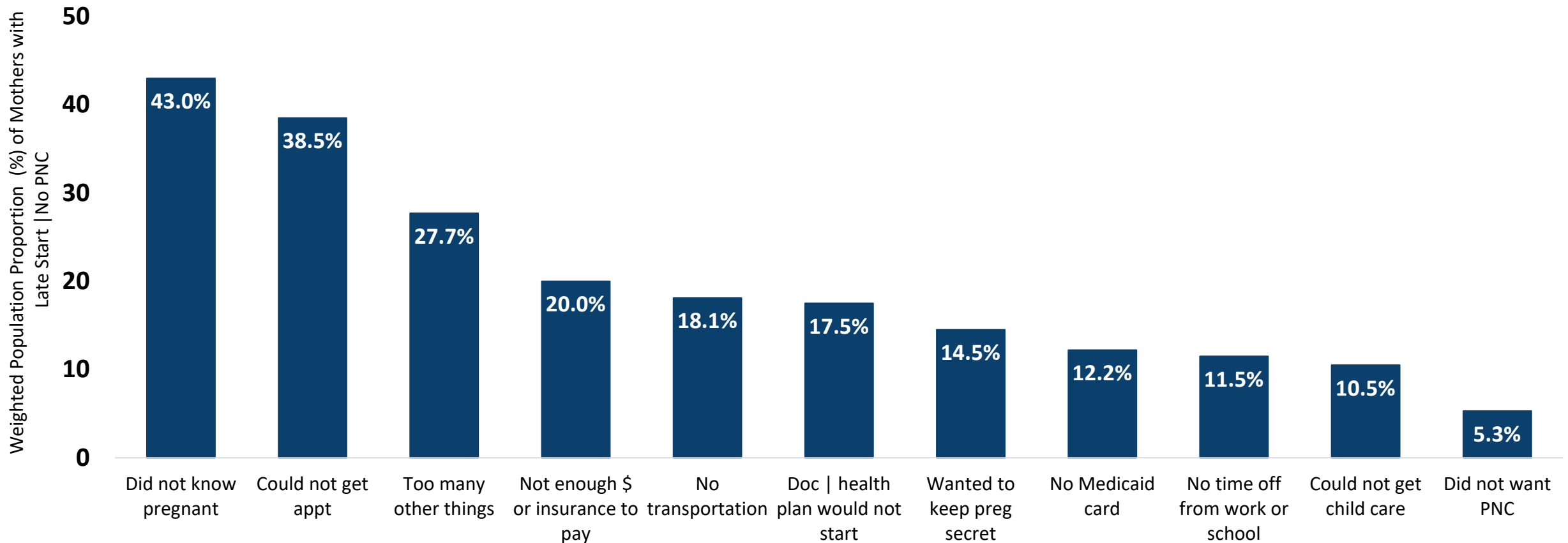
Late entry into prenatal care refers to begin prenatal care in the 7th – 9th month of gestation

Comparison of methods used to measure cases among Native Americans	# Late Prenatal Care	# Live Births	Percent (%) Late Prenatal Care
#1: Birthing mother is identified on the birth certificate as American Indian and Non-Hispanic	10	173	5.8%
#2: Birthing mother is identified on the birth certificate as American Indian or Mixed Race (i.e., American Indian or Alaskan Native).	28	519	5.4%
#3: Birthing mother is identified on the birth certificate as American Indian or Mixed race (i.e., American Indian or Alaskan Native) **OR** the father is listed as American Indian or Mixed Race (i.e., American Indian or Alaskan Native)	41	888	4.6%

Barriers to Prenatal Care
Michigan
2016-2021

Barriers to Prenatal Care among Michigan Mothers who started PNC *after* 1st trimester and wanted to start sooner, 2016-2021

Around <u>half</u> (51.7%) of mothers who started PNC after the first trimester were okay with that timing.

Weighted Population Proportion (%) of Mothers with Late Start | No PNC

- Did not know pregnant: 43.0%
- Could not get appt: 38.5%
- Too many other things: 27.7%
- Not enough $ or insurance to pay: 20.0%
- No transportation: 18.1%
- Doc | health plan would not start: 17.5%
- Wanted to keep preg secret: 14.5%
- No Medicaid card: 12.2%
- No time off from work or school: 11.5%
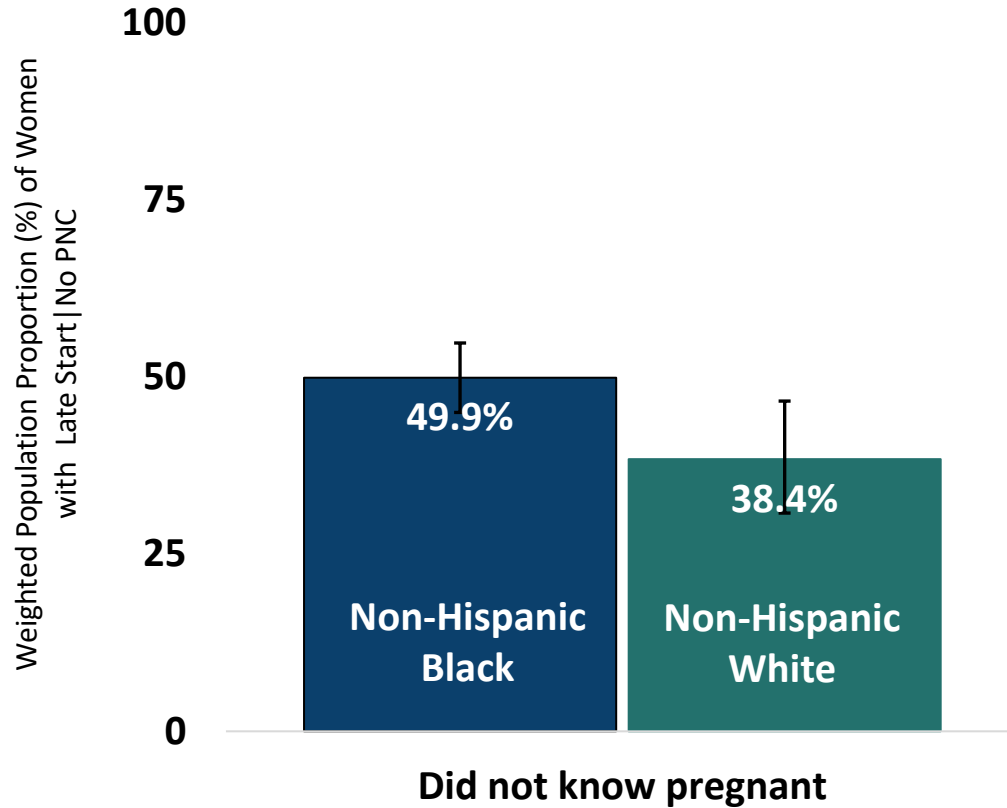- Could not get child care: 10.5%
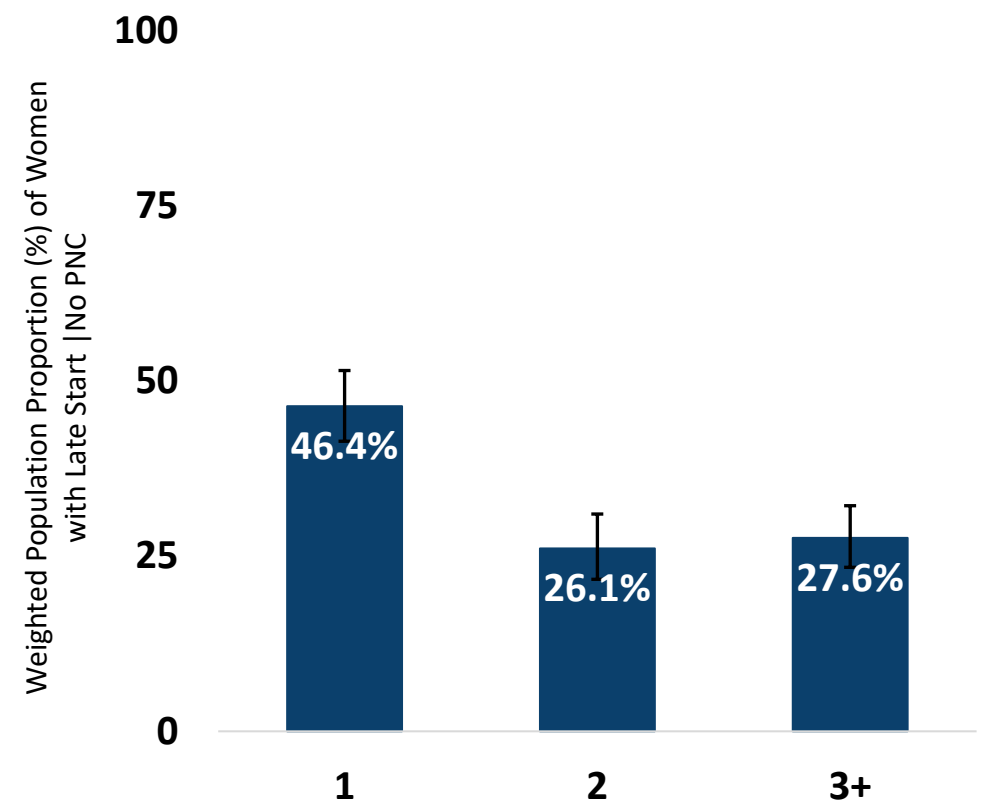- Did not want PNC: 5.3%

Barriers to Prenatal Care among Michigan Mothers who started PNC *after* 1st trimester and wanted to start sooner, 2016-2021

Selected Barriers with Significant Differences by Maternal Race/Ethnicity

Weighted Population Proportion (%) of Women with Late Start|No PNC

- Non-Hispanic Black: 49.9%
- Non-Hispanic White: 38.4%

Did not know pregnant

Number of Barriers among Mothers with Late|No PNC

Weighted Population Proportion (%) of Women with Late Start |No PNC

- 1: 46.4%
- 2: 26.1%
- 3+: 27.6%

Neonatal Abstinence Syndrome Prosperity Region 4 2012-2021

About the Data

1. NAS cases are identified by diagnosis code (ICD-9 779.5 or ICD-10 P96.1) from the Michigan Inpatient Database. The transition from ICD-9 to ICD-10 started in Fall 2015. This may contribute to some fluctuation in the data.

2. NAS cases may be underreported with the increasing popularity of non-pharmacological interventions, which may not be consistently captured in the data.

3. The goal of NAS surveillance is *not* to reduce the number of cases to zero. This is due to limitations with current surveillance practices. They do not allow us to distinguish between a) women with untreated opioid use or other substance use disorder or b) women with opioid use disorder on medicated assisted therapy, or c) women on long term opioid, benzodiazepine or barbiturate therapy for a chronic disease condition.

4. NAS rates are calculated per 1,000 live births in order to be consistent with the CSTE case definition. Previous reports published by MDHHS include NAS rates per 100,000 live births.

Neonatal Abstinence Syndrome Prosperity Region 4, 2012-2021

Note: 2010-2015: 779.5 (drug withdrawal syndrome in newborn) and
2016-current: P96.1 (neonatal withdrawal symptoms from maternal use of drugs of addiction)
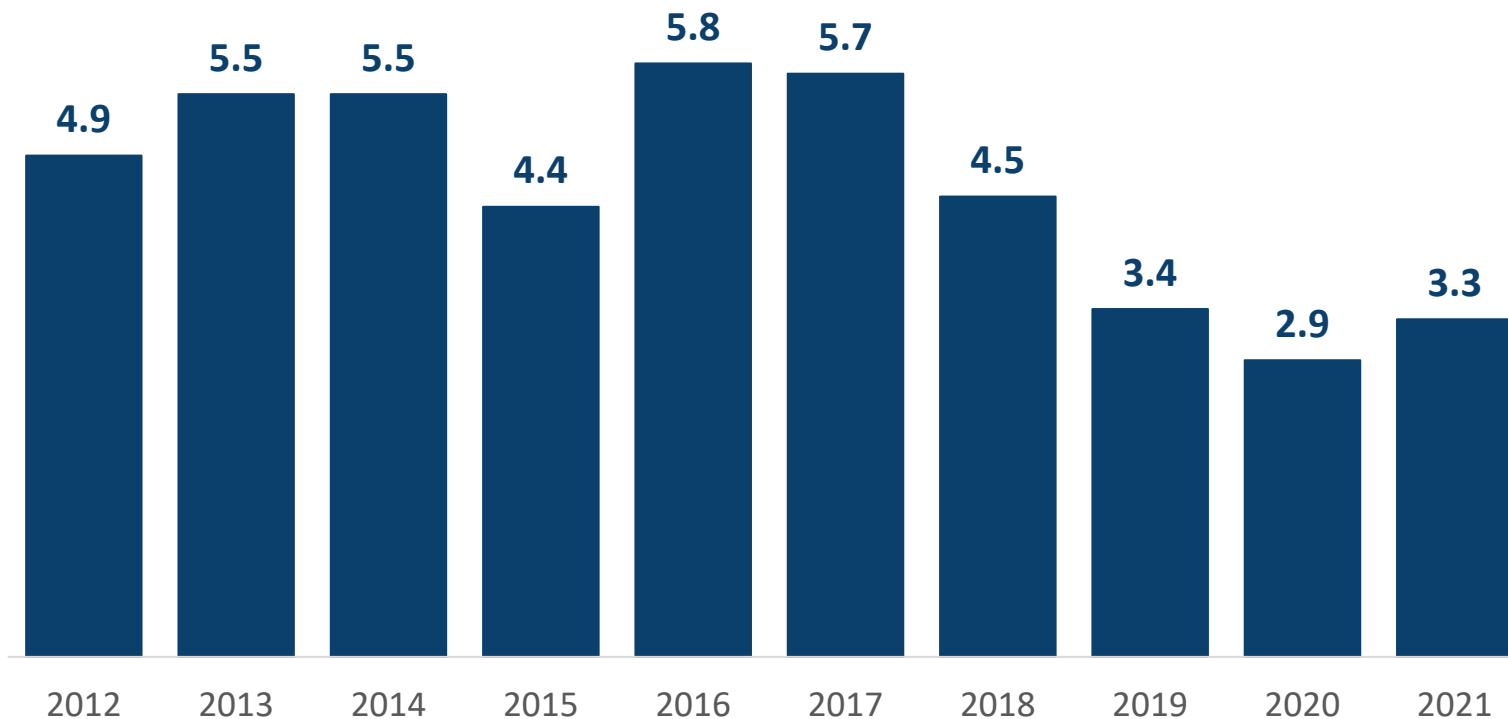
2021 Michigan Rate = 6.5

Year	# Cases	# Births	Rate per 1,000 Live Births
2012	98	19,811	4.9
2013	108	19,591	5.5
2014	108	19,802	5.5
2015	86	19,625	4.4
2016	115	19,709	5.8
2017	110	19,387	5.7
2018	87	19,218	4.5
2019	62	18,404	3.4
2020	53	18,104	2.9
2021	60	18,253	3.3

Data source: Michigan Resident Live Birth Files Linked with Michigan Hospital Discharge Data, Division for Vital Records and Health Statistics, MDHHS

Neonatal Abstinence Syndrome by Maternal Race/Ethnicity Prosperity Region 4, 2017-2021

Note: 2010-2015: 779.5 (drug withdrawal syndrome in newborn) and
2016-current: P96.1 (neonatal withdrawal symptoms from maternal use of drugs of addiction)

Maternal Race	# NAS Cases	# Live Births		NAS Rate per 1,000 Live Births	MI
White non-Hispanic	285	69,553	4.1	4.1	8.1
Black non-Hispanic	25	8,484	2.9	2.9	3.6
Hispanic	27	10,411	2.6	2.6	5.2
American Indian	0<N<6	173	Data Not Sufficient		46.9
Asian/Pacific Islander	0<N<6	2,171	Data Not Sufficient		0.3

Neonatal Abstinence Syndrome by Race/Ethnicity Prosperity Region 4, 2017-2021
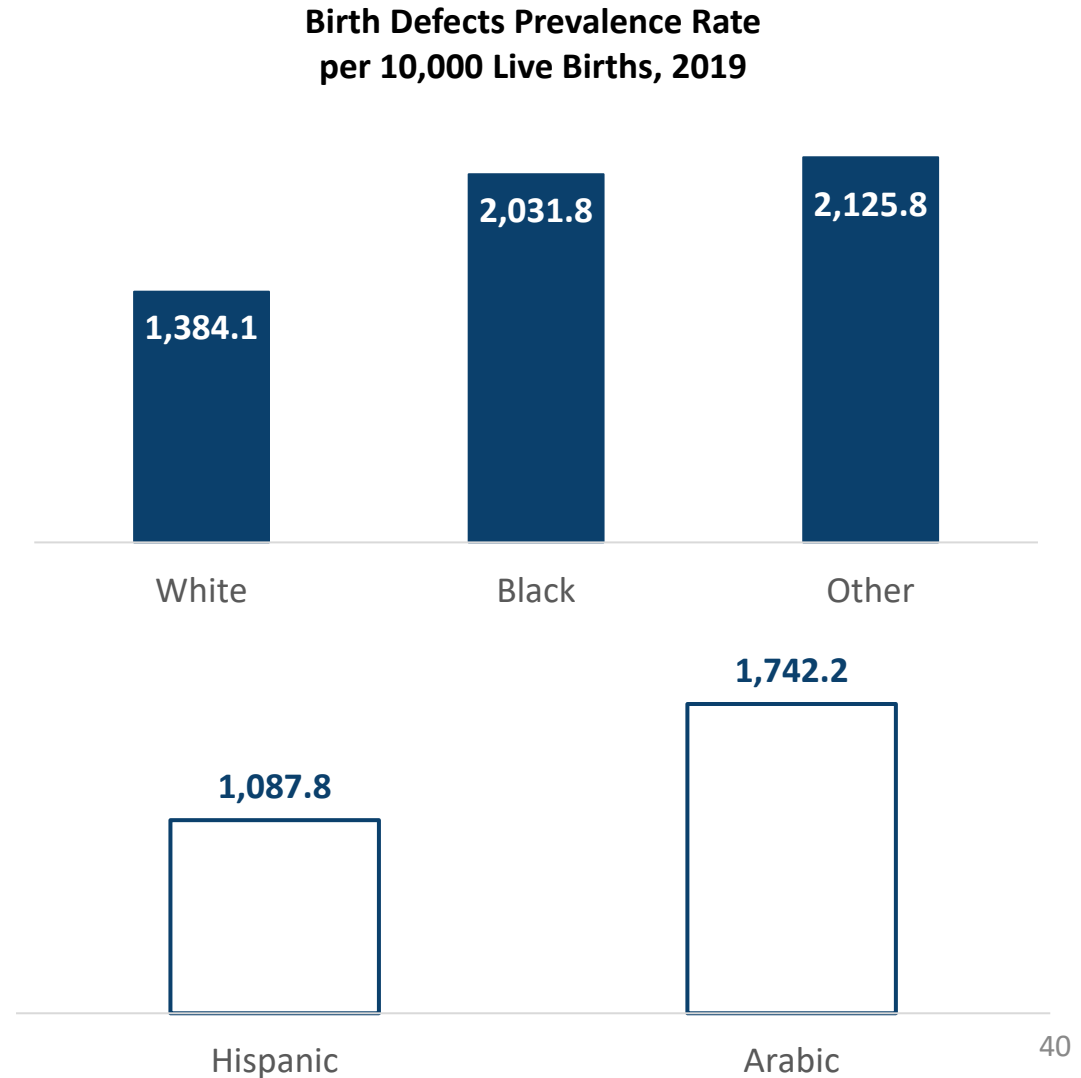
Note: 2010-2015: 779.5 (drug withdrawal syndrome in newborn) and
2016-current: P96.1 (neonatal withdrawal symptoms from maternal use of drugs of addiction)

Comparison of methods used to measure cases among Native Americans	# NAS Cases	# Live Births	NAS Rate per 1,000 Live Births
#1: Birthing mother is identified on the birth certificate as American Indian and Non-Hispanic	0<N<6	173	Data Not Sufficient
#2: Birthing mother is identified on the birth certificate as American Indian or Mixed Race (i.e., American Indian or Alaskan Native).	11	519	21.2
#3: Birthing mother is identified on the birth certificate as American Indian or Mixed race (i.e., American Indian or Alaskan Native) **OR** the father is listed as American Indian or Mixed Race (i.e., American Indian or Alaskan Native)	15	888	16.9

Birth Defects
by Maternal Race/Ethnicity &
Prosperity Region
2019

Birth Defect Prevalence
by Maternal Race/ethnicity, 2019

- Throughout birth years 2013-2019, the birth defect prevalence rate for Michigan remained fairly steady at an average rate of 1,444.1 cases per 10,000 live births.

- In 2019, the race-specific birth defect prevalence rate for cases born to mothers of "other" races (2125.8 per 10,000 live births) exceeded that of cases born to black mothers (2031.8 cases per 10,000 live births) and cases born to white mothers (1,384.1 cases per 10,000 live births).

- In 2019, the ethnicity-specific birth defect prevalence rate for cases born to a mother reporting Arabic ethnicity (1,630.2 cases per 10,000 live births) was greater than that of cases born to a mother reporting Hispanic ethnicity (1,406.5 cases per 10,000 live births).

Birth Defects Prevalence Rate per 10,000 Live Births, 2019

White: 1,384.1
Black: 2,031.8
Other: 2,125.8

Hispanic: 1,087.8
Arabic: 1,742.2

Birth Defect Prevalence Rates by Prosperity Region, 2019

Prevalence rates are based on births to mothers living in Michigan at the time of delivery. Regions approximate prosperity region boundaries

- The State of Michigan is broken up into 10 prosperity regions based on shared geographic, demographic, and economic interests.

- In 2019, Michigan prosperity regions 7 and 10 reported the highest birth defect prevalence rates of 1,980.5 and 2,044.2.5 cases per 10,000 live births respectively.

- The prosperity region that reported the lowest birth defect prevalence was region 8 with a prevalence rate of 551.0 cases per 10,000 live births.

Region	# Cases	Prevalence Rate (per 10,000 live births)
1	184	736.3
2	235	870.4
3	135	798.4
4	2,400	1,304.1
5	480	849.1
6	1,145	1,299.7
7	976	1,980.5
8	480	551.0
9	1,707	1,716.1
10	9,112	2,044.2
Total	16,854	1,561.8

41
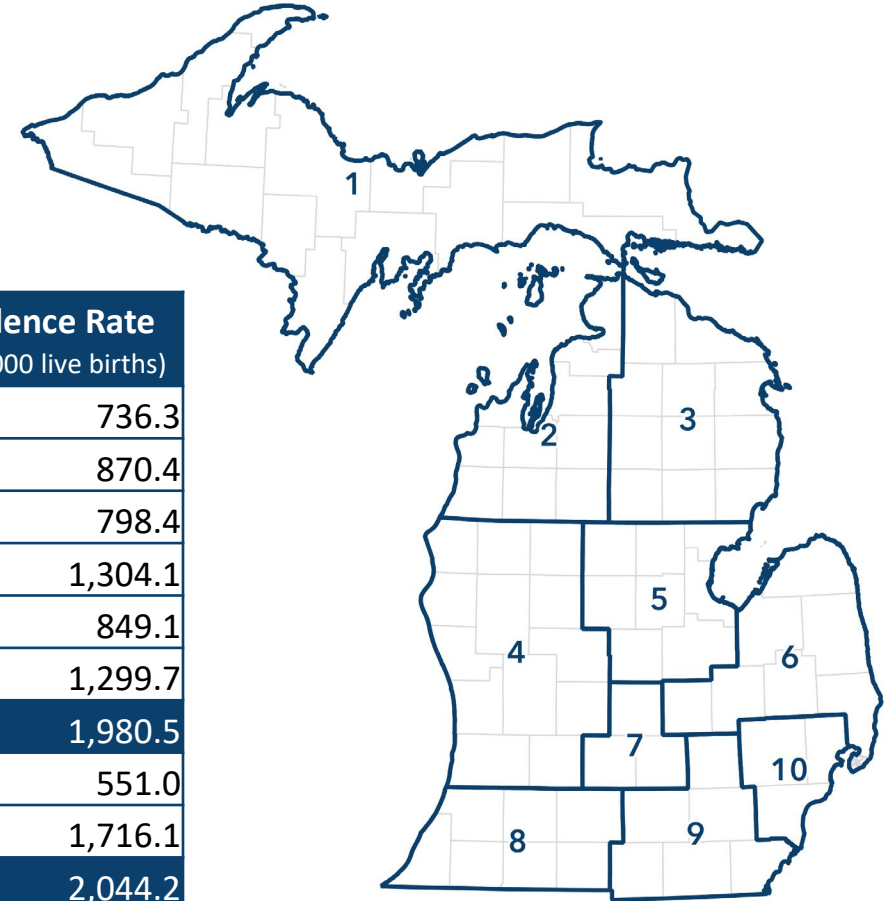
Low Risk Cesarean Prosperity Region 4 2017-2021

Low Risk Cesarean by Maternal Race/Ethnicity Prosperity Region 4, 2017-2021

Low risk cesarean is a ratio of the number of first births delivered by cesarean section to low risk females (full-term, singleton births, vertex presentation) to the number of first births to low-risk females (full-term, singleton births, vertex presentation)

Maternal Race	# Low Risk Cesarean	# Low Risk Live Birth		Percent (%) cesarean among low-risk females with no prior birth
Overall	6,569	25,154	26.1%	26.1%
White non-Hispanic	4,928	19,332	25.5%	25.5%
Black non-Hispanic	567	1,925	29.5%	29.5%
Hispanic	687	2,535	27.1%	27.1%
American Indian	12	43	27.9%	27.9%
Asian/Pacific Islander	201	646	31.1%	31.1%

Low Risk Cesarean by Race/Ethnicity Prosperity Region 4, 2017-2021

Low risk cesarean is a ratio of the number of first births delivered by cesarean section to low risk females (full-term, singleton births, vertex presentation) to the number of first births to low-risk females (full-term, singleton births, vertex presentation)

Comparison of methods used to measure cases among Native Americans	# Low Risk Cesarean	# Low Risk Live Births	Percent (%) low-risk females with no prior birth had a cesarean
#1: Birthing mother is identified on the birth certificate as American Indian and Non-Hispanic	12	43	27.9%
#2: Birthing mother is identified on the birth certificate as American Indian or Mixed Race (i.e., American Indian or Alaskan Native).	32	131	24.4%
#3: Birthing mother is identified on the birth certificate as American Indian or Mixed race (i.e., American Indian or Alaskan Native) OR the father is listed as American Indian or Mixed Race (i.e., American Indian or Alaskan Native)	58	236	24.6%

Sleep-Related Infant Death Rate Prosperity Region 4 2010-2020

Overview of Sleep-Related Infant Deaths
Michigan, 2010-2020

- Between 2010 and 2020 there were **1,597** sleep-related infant deaths in Michigan.

- The rate of sleep-related infant deaths has fluctuated slightly but has not statistically significantly differed between years (Figure 1).

- Between 2010 and 2020 Black Infants were **3.8** times more likely to die of sleep-related causes as compared to white Infants. American Indian infants were **2.5** times more likely to die of sleep-related causes as compared to white infants (Figure 2).

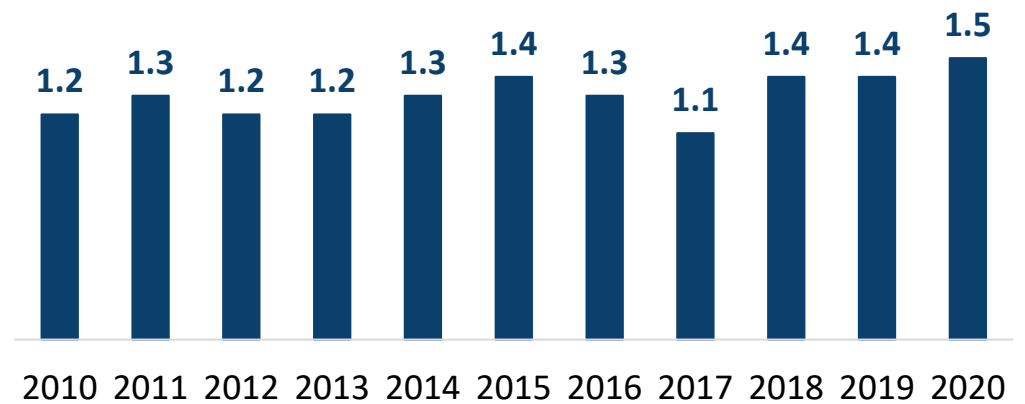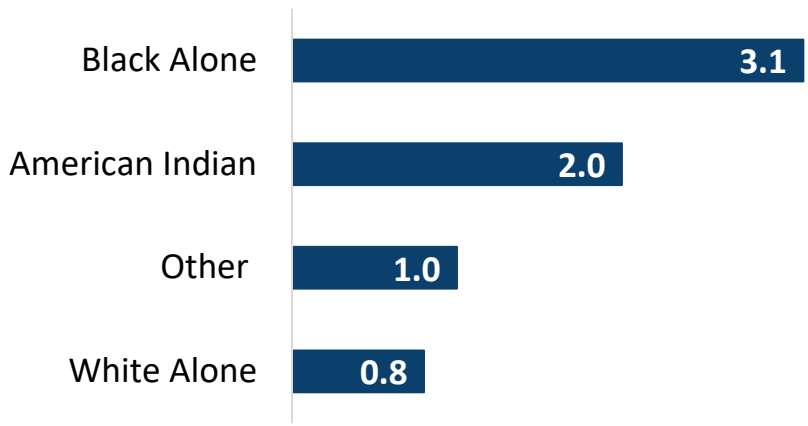Figure 1. Rate of Sleep-Related Infant Deaths per 1,000 Live Births

2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
1.2	1.3	1.2	1.2	1.3	1.4	1.3	1.1	1.4	1.4	1.5

Figure 2. Rate of Sleep-Related Infant Deaths per 1,000 Live Births

Group	Rate
Black Alone	3.1
American Indian	2.0
Other	1.0
White Alone	0.8

Sleep-Related Infant Death Rate by Prosperity Region, 2010-2020

Data for regions 5, 7, and 9 suppressed as to not inadvertently identify suppressed county level statistics.

Sleep-Related Infant Death Rate per 1,000 Live Births
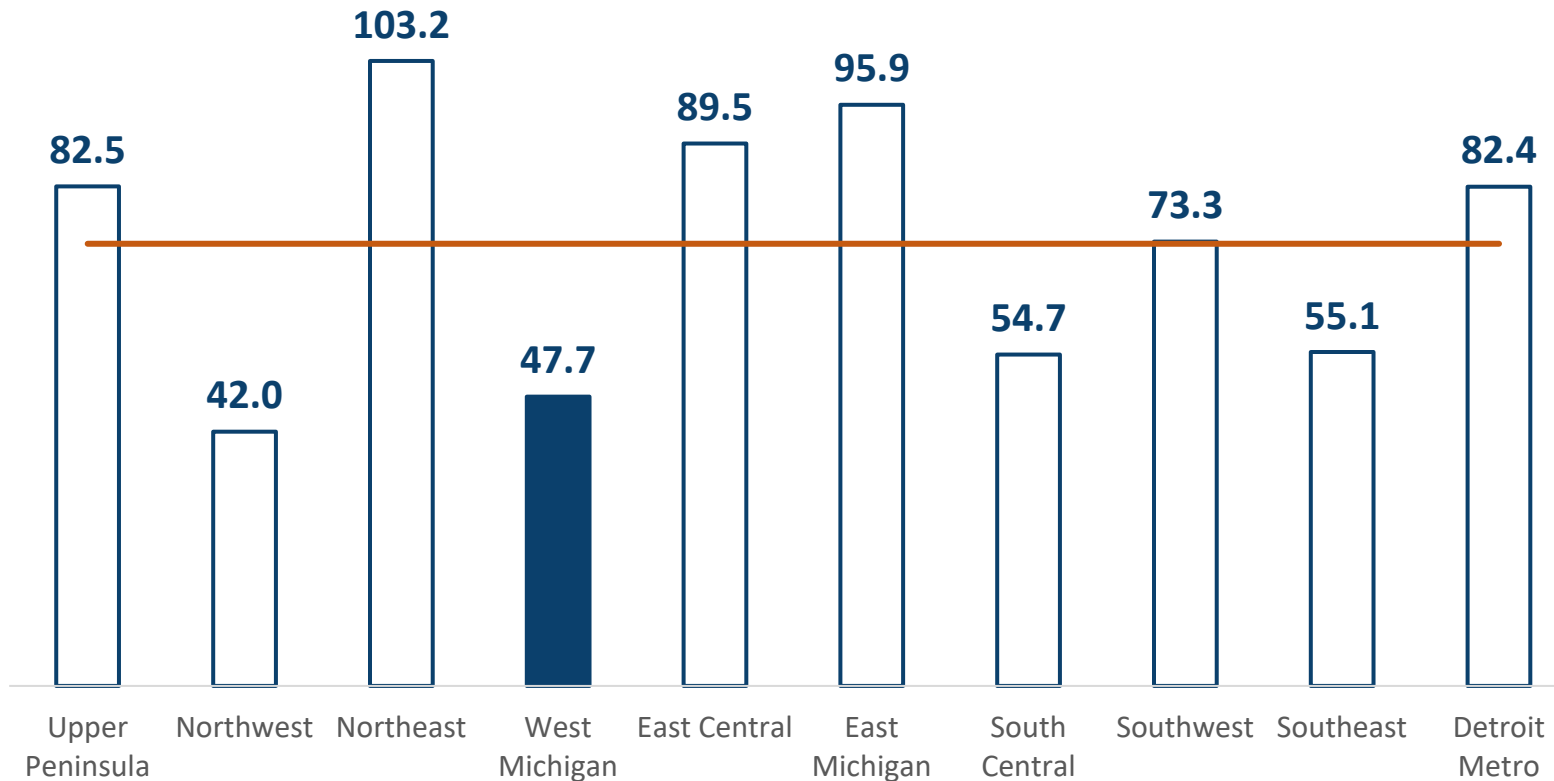2010-2020
Michigan: 1.3
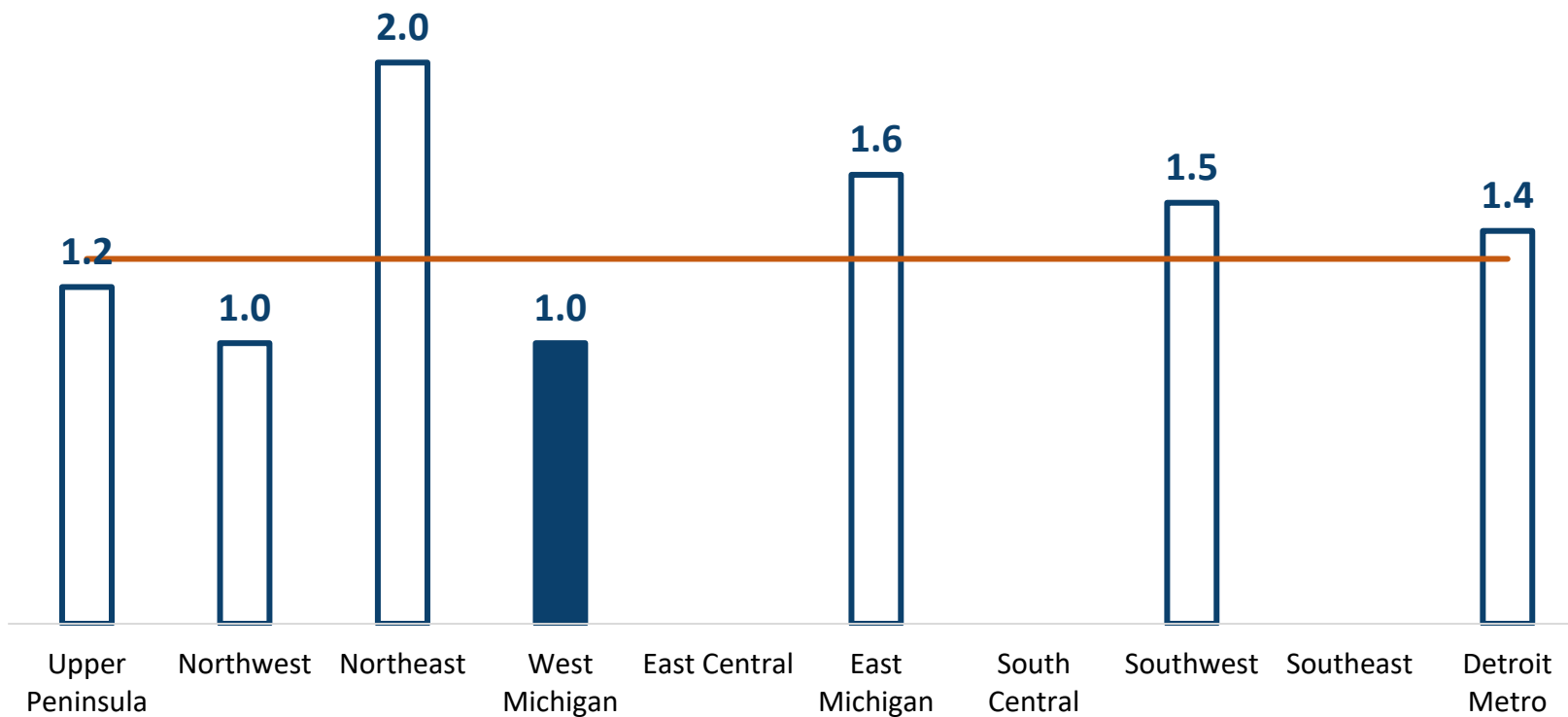
- Between 2010 and 2020 there were **213** sleep-related infant deaths in Region Four.

- The Region Four sleep-related infant death rate was statistically significantly lower than the Michigan sleep-related infant death rate.

Maternal Mortality Ratio Prosperity Region 4 2015-2019

Maternal Mortality Ratio by Prosperity Region, 2015-2019

Total (Pregnancy Associated) Maternal Mortality Ratio per 100,000 Live Births

Michigan Ratio: 73.0

Region	Ratio
Upper Peninsula	82.5
Northwest	42.0
Northeast	103.2
West Michigan	47.7
East Central	89.5
East Michigan	95.9
South Central	54.7
Southwest	73.3
Southeast	55.1
Detroit Metro	82.4

- Maternal deaths include deaths that occur during pregnancy, at delivery or within one year of pregnancy.

- Pregnancy associated (total) maternal mortality includes:
1- pregnancy associated, not related mortality *(unrelated to the pregnancy)*,
2- pregnancy-related mortality *(related to or aggravated by the pregnancy)*,
3- deaths where pregnancy-relatedness is unable to be determined.

- In Region Four there were **46 maternal deaths** between 2015 and 2019.