WIC PNSS & PedNSS
Table 1C
2019 Pregnancy Nutrition Surveillance (1)
Michigan
Summary of Demographic Indicators (2)

Total Records	Number	%
Complete Records	36,275	67.0
Prenatal Records	3,749	6.9
Postpartum Records	14,078	26.0
Total	**54,102**	

Source of Data	Number	%
WIC	54,102	100.0
Maternal Health	0	0.0
Other	0	0.0
Total	**54,102**	**100.0**
Excluded Unknown	*0*	*0.0 %*

Race/Ethnic Distribution	Number	%
White, Not Hispanic	27,657	51.3
Black, Not Hispanic	16,571	30.7
Hispanic	5,749	10.7
American Indian/Alaska Native	195	0.4
Asian/Pacific Islander	1,148	2.1
Multiple Races	2,570	4.8
All Other	0	0.0
Total	**53,890**	**100.0**
Excluded Unknown 209 0.4 %		

Age Distribution	Number	%
< 15 Years	50	0.1
15 - 17 Years	1,282	2.4
18 - 19 Years	3,998	7.4
20 - 29 Years	33,442	61.9
30 - 39 Years	14,141	26.2
>= 40 Years	1,102	2.0
Total	**54,015**	**100.0**
Excluded Unknown: 87 0.2 %		

Education Distribution	Number	%
< High School	11,839	22.2
High School	24,859	46.7
> High School	16,524	31.0
Total	**53,222**	**100.0**
Excluded Unknown 880 1.6 %		

% of Poverty Level	Number	%
0 - 50	15,097	37.8
51 - 100	10,059	25.2
101 - 130	4,817	12.1
131 - 150	2,489	6.2
151 - 185	3,389	8.5
186 - 200	1,014	2.5
> 200	2,878	7.2
Adjunctive Eligibility	181	0.5
Total	**39,924**	**100.0**
Excluded Unknown 100 0.2 %		

Program Participation (3)	Number	%
WIC	40,024	100.0
SNAP	39,981	42.9
Medicaid	39,972	90.6
Tanf	39,997	4.6
Excluded Unknown:		
WIC:	0	0.0
SNAP:	43	0.1
Medicaid:	52	0.1
Tanf:	27	0.0

Migrant Status	Number	%
Yes	637	1.2
No	53,465	98.8
Total	**54,102**	**100.0**
Excluded Unknown 0 0.0 %		

(1) Reporting period is January 1 through December 31
(2) Excludes records with unknown data or errors.
(3) Prenatal program participation

WIC PNSS & PedNSS
Table 2C
2019 Pregnancy Nutrition Surveillance (1)
Michigan
Summary of Health Indicators

Summary of Health Indicators (2)				
	Michigan Prevalence		National (7) Prevalence (Prior Year)	
	Number	%	Number	%
Prepregnancy BMI (3)				
Underweight	43,733	4.2	159,852	4.1
Normal Weight	43,733	35.2	159,852	35.6
Overweight	43,733	25.1	159,852	25.0
Obese	43,733	35.5	159,852	35.2
Maternal Weight Gain (4)				
Less Than Ideal	27,372	19.1	114,229	22.5
Ideal	27,372	29.4	114,229	29.2
Greater Than Ideal	27,372	51.5	114,229	48.3
Anemia (Low Hb/Hct) (5)				
1st Trimester	15,080	12.7	35,729	5.7
2nd Trimester	14,863	18.3	35,449	7.0
3rd Trimester	9,098	45.0	44,569	18.2
Postpartum	12,203	30.7	57,476	18.5
Parity (6)				
0	53,608	35.3	135,082	31.3
1	53,608	28.2	135,082	32.2
2	53,608	18.7	135,082	21.4
>= 3	53,608	17.9	135,082	15.1
Interpregnancy Interval				
<= 6 Months	33,814	12.8	80,427	13.1
6 - <18 Months	33,814	26.7	80,427	23.4
>= 18 Months	33,814	60.5	80,427	63.5
Gestational Diabetes	49,829	7.3	100,642	10.0
Hypertension During Pregnancy	49,855	11.9	99,796	9.4

(1) Reporting period is January 1 through December 31
(2) Excludes records with unknown data errors.
(3) Based on 2009 IOM report "Weight Gain During Pregnancy": underweight (BMI <18.5), normal weight (BMI 18.5 to 24.9). overweight (BMI 25.0 to 29.9), obese (BMI > 30.0).
(4) Based on 2009 IOM report "Weight Gain During Pregnancy": underweight during pregnancy (ideal weight gain = 28 to 40 pounds), normal weight prepregnancy
   (ideal weight gain = 25 to 35 pounds), overweight gain = 15 to 25 pounds), obese prepregnancy (ideal weight gain = 11 to 20 pounds).
(5) Based on 1990 MMWR, "Recommendations to prevent and control Iron Deficiency in the United States"; adjusted for altitude and smoking.
(6) Number of times a woman has given birth to an infant 20 or more weeks gestation
(7) National includes previous year's data for all participating States and ITOs.
* Percentages are not calculated if <100 records are avilable for analysis after exclusions

WIC PNSS & PedNSS
Table 2C
2019 Pregnancy Nutrition Surveillance (1)
Michigan
Summary of Health Indicators

Summary of Health Indicators (2)				
	Michigan Prevalence		National (7) Prevalence (Prior Year)	
	Number	%	Number	%
Medical Care				
1st Trimester	49,415	84.9	125,577	72.2
No Care	49,415	6.6	125,577	5.9
WIC Enrollment				
1st Trimester	53,324	28.5	159,369	19.0
2nd Trimester	53,324	28.6	159,369	18.6
3rd Trimester	53,324	17.6	159,369	35.5
Postpartum (3)	53,324	25.3	159,369	26.9
Prepregnancy Multivitamin Consumption (4)	42,172	19.1	98,317	21.7
Multivitamin Consumption During Pregnancy (5)	39,761	87.7	96,069	88.0
Smoking				
3 Months Prior to Pregnancy	47,367	24.7	155,621	27.7
During Pregnancy	39,779	14.6	143,812	19.5
Last 3 Months of Pregnancy	49,881	13.5	167,457	14.5
Postpartum	49,892	14.4	167,715	15.0
Smoking Changes (6)				
Quit Smoking by First Prenatal Visit	10,342	44.4	33,463	37.9
Quit Smoking by First Prenatal Visit and Stayed Off Cigarettes	9,363	38.4	26,902	35.4
Smoking in Household				
During Pregnancy	39,647	10.1	120,434	11.5
Postpartum	49,826	2.9	146,763	7.1
Drinking				
3 Months Prior to Pregnancy	47,224	17.6	157,857	13.0
Last 3 Months of Pregnancy	49,900	0.6	147,740	0.5

(1) Reporting period is January 1 through December 31
(2) Excludes records with unknown data errors.
(3) Women who initially enrolled in WIC during the postpartum period.
(4) Women who reported taking a multivitamin four times a weeks or more in the month before pregnancy, proxy for folic acid consumption.
(5) Pregnant women who reported taking a multivitamin in the past month; proxy for prenatal iron consumption.
(6) Among women who smoked 3 months prior to pregnancy.
(7) National includes previous year's data for all participating States and ITOs.
* Percentages are not calculated if <100 records are available for analysis after exclusions

WIC PNSS & PedNSS
Table 2C
2019 Pregnancy Nutrition Surveillance (1)
Michigan
Summary of Health Indicators

Summary of Health Indicators (2)				
	Michigan Prevalence		National (6) Prevalence (Prior Year)	
	Number	%	Number	%
Birthweight (3)				
Very Low	47,135	1.5	121,176	1.2
Low	47,135	8.9	121,176	8.1
Normal	47,135	83.2	121,176	84.1
High	47,135	6.4	121,176	6.7
Preterm (4)	48,449	12.5	121,542	11.8
Full term Low Birth Weight (5)	40,866	4.5	103,169	3.9
Multiple Births	49,644	1.8	151,681	1.5
Breastfeeding				
Ever Breastfed	47,531	67.8	119,843	73.4

(1) Reporting period is January 1 through December 31
(2) Excludes records with unknown data errors.
(3) Very low birth weight (<1500 g), low birth weight (1500 - <2500 g), normal birth weight (2500 - <4000 g), high birth weight (>4000 g).
(4) <37 weeks gestation.
(5) 37 or more weeks gestation <2500 g.
(6) National includes previous year's data for all participating States and ITOs.
* Percentages are not calculated if <100 records are available for analysis after exclusions

WIC PNSS & PedNSS

Table 3C

2019 Pregnancy Nutrition Surveillance (1)

Michigan

Comparison of Racial and Ethnic Distribution by Contributor to National (3)

Comparison of Racial and Ethnic Distribution (2)							
Contributor	Number Included in Analysis	White, Not Hispanic %	Black, Not Hispanic %	Hispanic %	American Indian/Alaska Native %	Asian/Pacific Islander %	Multiple Races %	All Other/Unknown %
Michigan	54,099	51.1	30.6	10.6	0.4	2.1	4.8	0.4
National (Prior Year)	181,949	53.8	23.0	14.9	1.5	2.8	3.7	0.4

(1) Reporting period is January 1 through December 31
(2) Excludes data with errors
(3) National includes previous year's data for all participating States and ITOs.
*   Percentages are not calculated if <100 records are available for analysis after exclusions.

WIC PNSS & PedNSS
Table 4C
2019 Pregnancy Nutrition Surveillance (1)
Michigan
Comparison of Age Distribution by Contributor to National (3)

Comparison of Age Distribution (2)							
Contributor	Number Included in Analysis	< 15 Years %	15 - 17 Years %	18 - 19 Years %	20 - 29 Years %	30 - 39 Years %	>= 40 Years %	Unknown %
Michigan	54,102	0.1	2.4	7.4	61.8	26.1	2.0	0.2
National (Prior Year)	181,959	0.1	2.9	8.6	61.8	24.6	1.8	0.1

(1) Reporting period is January 1 through December 31
(2) Excludes data with errors
(3) National includes previous year's data for all participating States and ITOs.
*   Percentages are not calculated if <100 records are available for analysis after exclusions.

WIC PNSS & PedNSS
Table 5C
2019 Pregnancy Nutrition Surveillance (1)
Michigan
Comparison of Maternal Health Indicators by Contributor to National (6)

Comparison of Maternal Health Indicators (2)															
Contributor	Prepregnancy BMI (3)			Weight Gain (4)			Anemia (Low Hb/Hct) (5)				Gestational Diabetes During Pregnancy		Hypertension During Pregnancy	
		Under-weight	Over-weight		< Ideal	> Ideal	3rd Trimester		Postpartum					
	Number	%	%	Number	%	%	Number	%	Number	%	Number	%	Number	%
Michigan	43,733	4.2	60.6	27,372	19.1	51.5	9,098	45.0	12,203	30.7	49,829	7.3	49,855	11.9
National (Prior Year)	159,852	4.1	60.3	114,229	22.5	48.3	44,569	18.2	57,476	18.5	100,642	10.0	99,796	9.4

(1) Reporting period is January 1 through December 31
(2) Excludes records with unknown data errors.
(3) Based on 2009 IOM report "Weight Gain During Pregnancy": underweight (BMI <18.5), normal weight (BMI 18.5 to 24.9). overweight (BMI 25.0 to 29.9), obese (BMI > 30.0).
(4) Based on 2009 IOM report "Weight Gain During Pregnancy": underweight during pregnancy (ideal weight gain = 28 40 40 pounds), normal weight prepregnancy
   (ideal weight gain = 25 to 35 pounds), overweight gain = 15 to 25 pounds), obese prepregnancy (ideal weight gain = 11 to 20 pounds).
(5) Based on 1990 MMWR, "Recommendations to prevent and control Iron Deficiency in the United States"; adjusted for altitude and smoking.
(6) National includes previous year's data for all participating States and ITOs.
* Percentages are not calculated if <100 records are available for analysis after exclusions

Table 6C
2019 Pregnancy Nutrition Surveillance (1)
Michigan
Comparison of Maternal Behavioral Indicators by Contributor to National (5)

Comparison of Maternal Behavioral Indicators (2)									
Contributor	Medical Care			WIC Enrollment		Multivitamin Consumption			
	1st Trimester		No Care	1st Trimester		Prepregnancy (3)		During Pregnancy (4)	
	Number	%	%	Number	%	Number	%	Number	%
Michigan	49,415	84.9	6.6	53,324	28.5	42,172	19.1	39,761	87.7
National (Prior Year)	125,577	72.2	5.9	159,369	19.0	98,317	21.7	96,069	88.0

(1) Reporting period is January 1 through December 31.
(2) Excludes records with unknown data or errors.
(3) Woman who reported taking a multivitamin four times a weeks or more in the month before pregnancy: proxy for folic acid consumption.
(4) Pregnant women who reported tkaing a multivitamin in the past month; proxy for prenatal iron consumption.
(5) National includes previous year's data for all participating States and ITOs.
*   Percentages are not calculated if <100 records are available for analysis after exclusions.

WIC PNSS & PedNSS
Table 7C
2019 Pregnancy Nutrition Surveillance   (1)
Michigan
Comparison of Smoking Indicators by Contributor to National   (4)

Comparison of Smoking Indicators (2)											
Contributor	Smoking				Quit Smoking By First Prenatal Visit and Stayed Off Cigarettes (3)		Smoking in Household					
	3 Months Prior to Pregnancy		Last 3 Months of Pregnancy				Prenatal		Postpartum		
	Number	%	Number	%	Number	%	Number	%	Number	%	
Michigan	47,367	24.7	49,881	13.5	9,363	38.4	39,647	10.1	49,826	2.9	
National (Prior Year)	155,621	27.7	167,457	14.5	26,902	35.4	120,434	11.5	146,763	7.1	

(1) Reporting period is January 1 through December 31.
(2) Excludes records with unknown data or errors.
(3) Among women who smoked 3 months prior to pregnancy.
(4) National includes previous year's data for all participating States and ITOs.
*   Percentages are not calculated if <100 records are available for analysis after exclusions.

WIC PNSS & PedNSS

Run Date: 6/26/2020

Table 8C

Page : 10

2019 Pregnancy Nutrition Surveillance (1)
Michigan

Comparison of Infant Health Indicators by Contributor to National (7)

Comparison of Infant Health Indicators (2)									
Contributor	Birthweight			Preterm (5)		Full Term LBW (6)		Ever Breastfed	
		Low (3)	High (4)						
	Number	%	%	Number	%	Number	%	Number	%
Michigan	47,135	10.4	6.4	48,449	12.5	40,866	4.5	47,531	67.8
National (Prior Year)	121,176	9.3	6.7	121,542	11.8	103,169	3.9	119,843	56.8

(1) Reporting period is January 1 through December 31
(2) Excludes records with unkown data errors.
(3) <2500 g.
(4) >4000 g.
(5) <37 weeks gestation.
(6) 37 or more weeks gestation and <2500 g.
(7) National includes previous year's data for all participating States and ITOs.
* Percentages are not calculated if <100 records are available for analysis after exclusions.

WIC PNSS & PedNSS
Table 9C
2019 Pregnancy Nutrition Surveillance (1)
Michigan
Maternal Health Indicators by Race/Ethnicity, Age, or Education

Maternal Health Indicators by Race/Ethnicity, Age, or Education (2)													
	Prepregnancy BMI (3)			Weight Gain (4)			Anemia (Low Hb/Hct) (5)				Gestational Diabetes		Hypertension During Pregnancy
		Under-Weight	Over-Weight		< Ideal	>Ideal	3rd Trimester		Postpartum				
	Number	%	%	Number	%	%	Number	%	Number	%	Number	%	Number	%
Race/Ethnicity														
White, Not Hispanic	22,546	4.6	58.7	14,128	17.5	52.7	4,351	35.0	6,717	23.2	25,488	7.8	25,501	11.7
Black, Not Hispanic	13,399	3.7	63.1	8,438	19.9	52.9	3,126	60.9	3,274	45.9	15,477	5.6	15,484	14.0
Hispanic	4,605	2.6	67.1	2,862	22.8	45.5	981	38.2	1,282	30.9	5,287	9.1	5,292	9.0
American Indian/Alaska Native	160	6.9	61.9	89	*	*	24	*	43	*	171	8.8	171	14.6
Asian/Pacific Islander	881	7.4	39.4	568	26.6	29.6	170	38.2	287	28.9	1,073	16.1	1,076	5.5
Multiple Races	2,136	4.4	60.9	1,284	18.8	52.9	446	48.4	598	31.6	2,328	6.1	2,326	9.9
All Other/Unknown	3	*	*	1	*	*	0	*	2	*	2	*	2	*
Total	**43,733**	**4.2**	**60.6**	**27,372**	**19.1**	**51.5**	**9,098**	**45.0**	**12,203**	**30.7**	**49,829**	**7.3**	**49,855**	**11.9**
Age														
< 15 Years	37	*	*	24	*	*	15	*	5	*	46	*	46	*
15 - 17 Years	1,069	8.2	39.5	637	22.6	51.8	227	45.4	240	34.2	1,168	1.8	1,169	11.0
18 - 19 Years	3,372	8.2	46.3	2,042	19.0	51.6	731	46.9	774	38.5	3,656	2.5	3,657	11.3
20 - 29 Years	27,186	4.4	59.3	17,151	18.8	51.9	5,890	45.4	7,508	31.2	30,827	5.7	30,843	10.8
30 - 39 Years	11,168	2.2	69.1	6,999	19.1	51.2	2,079	43.0	3,388	27.8	13,081	12.1	13,089	14.3
>= 40 Years	841	1.0	75.5	483	22.2	44.5	146	47.3	273	28.6	973	21.2	973	19.9
Unknown	60	*	*	36	*	*	10	*	15	*	78	*	78	*
Total	**43,733**	**4.2**	**60.6**	**27,372**	**19.1**	**51.5**	**9,098**	**45.0**	**12,203**	**30.7**	**49,829**	**7.3**	**49,855**	**11.9**
Education														
< High School	9,208	5.8	57.0	5,549	22.5	48.0	1,963	47.5	2,361	34.3	10,932	6.5	10,936	10.3
High School	20,238	4.3	60.4	12,747	18.8	52.1	4,348	46.1	5,355	32.1	23,060	6.8	23,075	12.0
> High School	13,819	3.0	63.5	8,780	17.1	53.0	2,700	41.3	4,329	27.2	15,239	8.7	15,246	13.0
Excluded Unknown	468	3.6	56.6	296	22.3	51.4	87	*	158	25.3	598	7.4	598	13.4
Total	**43,733**	**4.2**	**60.6**	**27,372**	**19.1**	**51.5**	**9,098**	**45.0**	**12,203**	**30.7**	**49,829**	**7.3**	**49,855**	**11.9**

(1) Reporting period is January 1 through December 31
(2) Excludes records with unknown data for health indicators, and data with errors for health and demographic indicators.
(3) Based on 2009 IOM report "Weight Gain During Pregnancy": underweight (BMI <18.5), normal weight (BMI 18.5 to 24.9). overweight (BMI 25.0 to 29.9), obese (BMI > 30.0).
(4) Based on 2009 IOM report "Weight Gain During Pregnancy": underweight during pregnancy (ideal weight gain = 28 40 40 pounds), normal weight prepregnancy
   (ideal weight gain = 25 to 35 pounds), overweight gain = 15 to 25 pounds), obese prepregnancy (ideal weight gain = 11 to 20 pounds).
(5) Based on 1990 MMWR, "Recommendations to prevent and control Iron Deficiency in the United States"; adjusted for altitude and smoking.
* Percentages are not calculated if <100 records are available for analysis after exclusions

WIC PNSS & PedNSS
Table 10C
2019 Pregnancy Nutrition Surveillance   (1)
Michigan
Maternal Behavioral Indicators by Race/Ethnicity, Age, or Education

Maternal Behavioral Indicators by Race/Ethnicity, Age, or Education (2)									
	Medical Care			WIC Enrollment		Multivitamin Consumption			
	1st Trimester		No Care	1st Trimester		Prepregnancy (3)		During Pregnancy (4)	
	Number	%	%	Number	%	Number	%	Number	%
Race/Ethnicity									
White, Not Hispanic	25,289	86.5	7.7	27,266	31.7	22,677	21.6	20,624	89.4
Black, Not Hispanic	15,338	82.8	4.2	16,325	21.3	11,774	13.4	11,560	85.7
Hispanic	5,240	83.3	8.1	5,672	32.9	4,560	20.8	4,571	85.9
American Indian/Alaska Native	170	85.3	8.2	189	34.4	162	25.3	148	89.9
Asian/Pacific Islander	1,064	91.0	5.4	1,136	32.0	923	23.3	853	87.0
Multiple Races	2,309	83.3	6.6	2,533	31.3	2,070	17.8	2,001	86.8
All Other/Unknown	2	*	*	200	1.0	3	*	2	*
Total	**49,415**	**84.9**	**6.6**	**53,324**	**28.5**	**42,172**	**19.1**	**39,761**	**87.7**
Age									
< 15 Years	48	*	*	50	*	43	*	42	*
15 - 17 Years	1,151	68.6	10.9	1,269	34.5	1,084	7.7	1,075	84.9
18 - 19 Years	3,608	80.8	7.5	3,958	30.8	3,363	11.1	3,255	86.7
20 - 29 Years	30,600	85.8	6.1	32,977	27.0	25,805	17.7	24,389	87.7
30 - 39 Years	12,962	85.8	7.0	13,905	30.2	10,936	25.6	10,144	88.5
>= 40 Years	971	83.3	7.4	1,080	35.8	869	27.3	799	88.0
Unknown	75	*	*	85	*	72	*	57	*
Total	**49,415**	**84.9**	**6.6**	**53,324**	**28.5**	**42,172**	**19.1**	**39,761**	**87.7**
Education									
< High School	10,802	79.4	8.2	11,658	30.8	8,731	14.4	8,956	83.0
High School	22,866	84.9	6.5	24,526	28.5	19,401	16.9	18,609	87.6
> High School	15,164	89.1	5.4	16,278	27.4	13,477	25.3	11,764	91.7
Excluded Unknown	583	82.3	8.4	862	17.9	563	20.1	432	85.2
Total	**49,415**	**84.9**	**6.6**	**53,324**	**28.5**	**42,172**	**19.1**	**39,761**	**87.7**

(1) Reporting period is January 1 through December 31.
(2) Excludes records with unknown data for behavioral indicators, and data with errors for behavioral and demographic indicators.
(3) Woman who reported taking a multivitamin four a weeks or more in the month before pregnancy. proxy for folic acid consumption.
(4) Pregnant women who reported tkaing a multivitamin in the past month; proxy for prenatal iron consumption.
*   Percentages are not calculated if <100 records are available for analysis after exclusions.

Table 11C
2019 Pregnancy Nutrition Surveillance (1)
Michigan
Smoking Indicators by Race/Ethnicity, Age, or Education

Smoking Indicators by Race/Ethnicity, Age, or Education (2)											
	Smoking				Quit Smoking By First Prenatal Visit and Stayed Off Cigarettes (3)		Smoking in Household				
	3 Months Prior to Pregnancy		Last 3 Months of Pregnancy				Prenatal		Postpartum		
	Number	%	Number	%	Number	%	Number	%	Number	%	
Race/Ethnicity											
White, Not Hispanic	24,850	31.9	25,511	19.2	6,274	32.6	20,589	10.5	25,500	2.8	
Black, Not Hispanic	13,854	16.4	15,488	6.7	1,892	54.2	11,523	11.7	15,469	3.4	
Hispanic	5,158	13.0	5,299	5.6	553	52.4	4,540	4.7	5,278	1.6	
American Indian/Alaska Native	174	44.8	170	30.0	62	*	148	10.8	171	6.4	
Asian/Pacific Islander	1,058	3.2	1,077	1.1	18	*	851	3.1	1,076	2.3	
Multiple Races	2,266	30.7	2,331	17.6	562	35.2	1,992	12.9	2,327	3.6	
All Other/Unknown	4	*	2	*	0	*	2	*	2	*	
Total	**47,367**	**24.7**	**49,881**	**13.5**	**9,363**	**38.4**	**39,647**	**10.1**	**49,826**	**2.9**	
Age											
< 15 Years	50	*	47	*	2	*	41	*	46	*	
15 - 17 Years	1,245	16.9	1,170	7.0	176	51.7	1,072	23.4	1,168	7.2	
18 - 19 Years	3,808	24.2	3,663	10.5	773	48.6	3,245	17.2	3,652	5.1	
20 - 29 Years	28,942	25.1	30,861	13.2	5,884	40.1	24,332	9.8	30,832	2.7	
30 - 39 Years	12,259	25.1	13,084	15.6	2,390	30.4	10,102	7.4	13,072	2.4	
>= 40 Years	982	20.6	978	12.2	133	25.6	798	6.8	979	1.8	
Unknown	81	*	78	*	5	*	57	*	77	*	
Total	**47,367**	**24.7**	**49,881**	**13.5**	**9,363**	**38.4**	**39,647**	**10.1**	**49,826**	**2.9**	
Education											
< High School	10,020	33.0	10,945	20.6	2,703	31.6	8,923	13.7	10,927	4.0	
High School	21,785	26.2	23,082	13.8	4,641	39.8	18,573	10.4	23,063	3.0	
> High School	14,937	17.0	15,254	7.9	1,950	44.4	11,720	7.0	15,237	1.9	
Excluded Unknown	625	19.5	600	10.3	69	*	431	10.4	599	2.0	
Total	**47,367**	**24.7**	**49,881**	**13.5**	**9,363**	**38.4**	**39,647**	**10.1**	**49,826**	**2.9**	

(1) Reporting period is January 1 through December 31.
(2) Excludes records with unknown data for smoking indicators, and data with errors for smoking and demographic indicators.
(3) Among women who smoked 3 months prior to pregnancy.
*   Percentages are not calculated if <100 records are available for analysis after exclusions.

WIC PNSS & PedNSS
Table 12C
2019 Pregnancy Nutrition Surveillance (1)
Michigan
Infant Health Indicators by Race/Ethnicity, Age, or Education

Infant Health Indicators by Race/Ethnicity, Age, or Education (2)									
	Birthweight			Preterm (5)		Full Term LBW (6)		Ever Breastfed	
		Low (3)	High (4)						
	Number	%	%	Number	%	Number	%	Number	%
Race/Ethnicity									
White, Not Hispanic	24,085	8.4	8.1	24,733	11.0	21,257	3.4	24,266	72.3
Black, Not Hispanic	14,676	14.6	3.4	15,109	15.5	12,281	6.6	14,849	58.1
Hispanic	5,004	7.7	7.2	5,117	11.6	4,380	3.2	5,029	71.2
American Indian/Alaska Native	157	7.6	14.0	162	13.6	131	3.8	158	69.6
Asian/Pacific Islander	1,017	10.7	4.2	1,051	10.9	899	6.0	1,022	79.4
Multiple Races	2,193	10.6	6.1	2,272	12.1	1,916	5.1	2,202	70.0
All Other/Unknown	0	*	*	2	*	0	*	2	*
Total	**47,135**	**10.4**	**6.4**	**48,449**	**12.5**	**40,866**	**4.5**	**47,531**	**67.8**
Age									
< 15 Years	41	*	*	45	*	30	*	41	*
15 - 17 Years	1,116	8.8	4.6	1,155	10.9	986	5.9	1,125	66.1
18 - 19 Years	3,504	9.2	4.7	3,596	11.2	3,093	5.2	3,519	65.5
20 - 29 Years	29,294	8.2	6.2	30,096	11.4	25,718	4.2	29,535	68.1
30 - 39 Years	12,256	10.2	7.5	12,597	15.2	10,290	4.6	12,372	67.8
>= 40 Years	856	12.6	6.3	888	18.2	695	6.2	870	66.1
Unknown	68	*	*	72	*	54	*	69	*
Total	**47,135**	**10.4**	**6.4**	**48,449**	**12.5**	**40,866**	**4.5**	**47,531**	**67.8**
Education									
< High School	10,174	9.7	5.3	10,586	13.1	8,742	5.4	10,282	57.0
High School	21,855	8.9	6.3	22,444	12.0	19,055	4.5	22,029	65.7
> High School	14,548	8.6	7.4	14,837	12.8	12,588	3.9	14,650	78.1
Excluded Unknown	558	7.5	5.0	582	13.6	481	2.7	570	76.0
Total	**47,135**	**10.4**	**6.4**	**48,449**	**12.5**	**40,866**	**4.5**	**47,531**	**67.8**

(1) Reporting period is January 1 through December 31
(2) Excludes records with unknown data for health indicators, and data with errors for health and demographic indicators.
(3) <2500 g.
(4) >4000 g.
(5) <37 weeks gestation.
(6) 37 or more weeks gestation and <2500 g.
* Percentages are not calculated if <100 records are available for analysis after exclusions

WIC PNSS & PedNSS
Table 13C
2019 Pregnancy Nutrition Surveillance   (1)
Michigan
Maternal Weight Gain and Birth Outcomes by Select Health Indicators

Run Date: 6/26/2020

Page : 15

Maternal Weight Gain and Birth Outcomes by Select Health Indicators (2)										
	Weight Gain (3)			Birthweight			Preterm (6)		Full Term LBW (7)	
		< Ideal	> Ideal		Low (4)	High (5)				
	Number	%	%	Number	%	%	Number	%	Number	%
Prepregnancy BMI										
Underweight	1,184	30.2	29.2	1,596	16.9	1.9	1,649	15.1	1,336	8.2
Normal Weight	9,896	23.2	42.8	13,573	11.2	4.3	13,934	12.2	11,811	5.2
Overweight	6,882	11.2	61.6	9,770	9.3	7.2	9,983	11.4	8,560	3.9
Obese	9,410	19.0	56.2	13,766	9.7	8.1	14,095	12.9	11,895	3.7
Weight Gain										
< Ideal	-	-	-	4,933	15.6	3.4	5,052	16.3	4,093	6.7
Ideal	-	-	-	7,757	10.9	4.3	7,922	12.1	6,765	4.8
> Ideal	-	-	-	13,678	7.7	8.5	13,898	10.6	12,094	3.1
Smoking During Pregnancy										
Smokers	2,706	20.1	51.6	4,809	12.8	3.9	5,036	13.9	4,132	6.7
Non-Smokers	15,538	18.5	51.9	29,220	8.6	7.0	30,097	11.4	25,876	3.8

(1) Reporting period is January 1 through December 31
(2) Excludes records with unknown data errors.
(3) Based on 2009 IOM report "Weight Gain Druing Pregnancy": underweight during pregnancy (ideal weight gain = 28 40 40 pounds), normal weight prepregnancy
   (ideal weight gain = 25 to 35 pounds), overweight gain = 15 to 25 pounds), obese prepregnancy (ideal weight gain = 11 to 20 pounds).
(4) <2500 g.
(5) >4000 g.
(6) <37 weeks gestation.
(7) 37 or more weeks gestation and <2500 g.
* Percentages are not calculated if <100 records are available for analysis after exclusions

WIC PNSS & PedNSS
Table 14C
2019 Pregnancy Nutrition Surveillance (1)
Michigan
Summary of Trends in Racial and Ethnic Distribution

Run Date: 6/26/2020

Page : 16

Summary of Trends in Racial and Ethnic Distribution (2)							
Year	Number Included in Analysis	White, Not Hispanic %	Black, Not Hispanic %	Hispanic %	American Indian/Alaska Native %	Asian/Pacific Islander %	Multiple Races %	All Other/Unknown %
2019	54,099	51.1	30.6	10.6	0.4	2.1	4.8	0.4
2018	55,407	51.7	29.9	10.5	0.4	2.1	4.9	0.5
2017	57,669	52.1	30.4	10.4	0.3	2.3	4.0	0.5
2016	60,139	53.6	28.9	10.6	0.3	2.1	4.0	0.5
2015	63,103	54.0	29.0	10.2	0.4	2.1	3.6	0.8
2014	65,941	55.7	28.0	9.7	0.4	2.0	3.6	0.6
2013	67,256	55.5	28.3	9.9	0.4	2.0	3.5	0.6
2012	67,977	56.2	27.5	10.0	0.4	1.9	3.4	0.6
2011	68,267	57.0	27.3	10.0	0.4	1.7	2.9	0.6

(1) Reporting period is January 1 through December 31
(2) Excludes records with unknown data errors.
* Percentages are not calculated if <100 records are available for analysis after exclusions

WIC PNSS & PedNSS

Run Date: 6/26/2020

Table 15C

Page : 17

2019 Pregnancy Nutrition Surveillance (1)
Michigan
Summary of Trends in Age Distribution

Summary of Trends in Age Distribution (2)							
Year	Number Included in Analysis	< 15 Years %	15 - 17 Years %	18 - 19 Years %	20 - 29 Years %	30 - 39 Years %	>= 40 Years %	Unknown %
2019	54,102	0.1	2.4	7.4	61.8	26.1	2.0	0.2
2018	55,413	0.1	2.6	7.7	62.5	25.1	2.0	0.1
2017	57,676	0.1	2.8	7.7	63.1	24.3	1.8	0.1
2016	60,143	0.1	3.0	7.9	63.4	23.7	1.8	0.1
2015	63,108	0.1	3.2	8.4	63.8	22.8	1.6	0.2
2014	65,945	0.2	3.4	9.1	63.5	22.1	1.7	0.2
2013	67,261	0.2	3.9	9.8	63.1	21.2	1.6	0.2
2012	67,977	0.2	4.5	10.7	62.2	20.5	1.5	0.3
2011	68,267	0.2	4.9	11.5	61.7	19.9	1.5	0.3

(1) Reporting period is January 1 through December 31
(2) Excludes records with unknown data errors.
* Percentages are not calculated if <100 records are available for analysis after exclusions

WIC PNSS & PedNSS

Run Date: 6/26/2020

Page : 18

Table 16C
2019 Pregnancy Nutrition Surveillance   (1)
Michigan
Summary of Trends in Maternal Health Indicators

Summary of Trends in Maternal Health Indicators (2)										
Year	Prepregnancy BMI (3)			Weight Gain (4)			Anemia (Low Hb/Hct) (5)			
		Under-weight	Over-weight		< Ideal	> Ideal	3rd Trimester		Postpartum	
	Number	%	%	Number	%	%	Number	%	Number	%
2019	43,733	4.2	60.6	27,372	19.1	51.5	9,098	45.0	12,203	30.7
2018	45,296	4.3	59.5	29,118	19.1	51.0	9,090	49.4	12,050	37.9
2017	47,111	4.3	58.8	31,292	19.1	51.9	9,416	49.2	11,325	36.6
2016	51,019	4.4	58.1	33,141	19.4	51.2	9,642	45.1	12,082	34.6
2015	53,616	4.4	56.8	44,468	19.6	50.7	9,750	41.4	12,310	31.6
2014	56,540	4.3	56.3	45,714	17.2	52.3	9,959	39.6	12,485	28.7
2013	58,063	4.3	56.0	46,728	16.9	52.4	9,903	38.9	11,995	28.7
2012	61,321	4.4	54.9	48,759	17.4	51.3	9,736	38.4	12,636	27.9
2011	62,450	4.4	54.4	50,780	17.6	51.0	10,073	35.7	13,689	27.5

(1) Reporting period is January 1 through December 31
(2) Excludes records with unknown data errors.
(3) Based on 2009 IOM report "Weight Gain During Pregnancy": underweight (BMI <18.5), normal weight (BMI 18.5 to 24.9). overweight (BMI 25.0 to 29.9), obese (BMI > 30.0).
(4) Based on 2009 IOM report "Weight Gain During Pregnancy": underweight during pregnancy (ideal weight gain = 28 40 40 pounds), normal weight prepregnancy
    (ideal weight gain = 25 to 35 pounds), overweight gain = 15 to 25 pounds), obese prepregnancy (ideal weight gain = 11 to 20 pounds).
(5) Based on 1990 MMWR, "Recommendations to prevent and control Iron Deficiency in the United States"; adjusted for altitude and smoking.
* Percentages are not calculated if <100 records are available for analysis after exclusions

WIC PNSS & PedNSS
Table 17C
2019 Pregnancy Nutrition Surveillance (1)
Michigan
Summary of Maternal Behavioral Indicators

Summary of Maternal Behavioral Indicators (2)					
Year	Medical Care			WIC Enrollment	
	1st Trimester		No Care	1st Trimester	
	Number	%	%	Number	%
2019	49,415	84.9	6.6	53,324	28.5
2018	50,875	84.3	6.8	54,591	29.4
2017	53,045	83.1	7.7	56,717	30.6
2016	54,902	82.2	8.4	59,189	32.4
2015	57,579	81.1	9.4	62,203	34.1
2014	60,317	79.7	10.8	64,954	35.7
2013	61,039	79.9	10.5	66,266	36.9
2012	61,308	79.8	10.6	67,036	38.0
2011	60,703	81.1	9.2	67,132	36.7

(1) Reporting period is January 1 through December 31
(2) Excludes records with unknown data errors.
* Percentages are not calculated if <100 records are available for analysis after exclusions

Table 18C
2019 Pregnancy Nutrition Surveillance (1)
Michigan
Summary of Trends in Smoking Indicators

| Year | Smoking | | | | Quit Smoking By First Prenatal Visit and Stayed Off Cigarettes (3) | | Smoking in Household | | | |
| | 3 Months Prior to Pregnancy | | Last 3 Months of Pregnancy | | | | Prenatal | | Postpartum | |
	Number	%	Number	%	Number	%	Number	%	Number	%
2019	47,367	24.7	49,881	13.5	9,363	38.4	39,647	10.1	49,826	2.9
2018	48,601	26.1	51,441	13.9	10,331	38.9	40,995	10.4	51,462	3.0
2017	51,028	27.1	53,711	14.1	11,398	39.3	43,712	11.3	53,738	3.2
2016	53,738	28.6	55,530	15.1	12,776	39.3	46,598	11.9	55,576	3.4
2015	56,882	30.6	58,245	15.8	14,580	39.6	49,656	13.4	58,264	4.2
2014	60,217	32.0	61,120	16.4	16,301	39.4	52,726	14.6	61,124	4.5
2013	62,025	32.3	61,793	16.8	18,044	36.4	54,649	15.1	61,835	5.0
2012	63,072	32.4	61,988	16.9	16,769	38.6	55,380	16.0	61,994	4.9
2011	64,049	32.8	61,427	16.9	16,751	39.5	55,787	16.8	61,403	5.5

(1) Reporting period is January 1 through December 31
(2) Excludes records with unknown data errors.
(3) Prenatal program participation
* Percentages are not calculated if <100 records are available for analysis after exclusions

WIC PNSS & PedNSS
Table 19C
2019 Pregnancy Nutrition Surveillance (1)
Michigan
Summary of Trends in Infant Health Indicators

Run Date: 6/26/2020

Page : 21

Summary of Trends in Infant Health Indicators (2)										
Year	Birthweight			Preterm		Full Term LBW		Ever Breastfed	
		Low (3)	High (4)	(5)		(6)			
	Number	%	%	Number	%	Number	%	Number	%
2019	47,135	10.4	6.4	48,449	12.5	40,866	4.5	47,531	67.8
2018	48,594	10.2	6.7	49,968	12.5	42,176	4.5	48,971	67.7
2017	50,526	10.2	6.7	52,025	12.4	43,785	4.3	51,003	66.7
2016	52,145	9.8	6.9	53,729	12.3	45,193	4.2	52,506	66.2
2015	54,702	9.7	6.9	56,532	11.9	47,832	4.2	54,837	65.1
2014	57,572	9.0	7.0	59,292	11.8	50,471	3.8	57,574	63.6
2013	58,028	8.7	7.2	59,882	11.5	50,981	3.7	58,101	63.1
2012	58,368	8.8	7.3	60,111	12.1	50,877	3.7	58,753	61.2
2011	58,040	8.6	7.1	59,523	11.7	50,780	3.6	58,401	60.5

(1) Reporting period is January 1 through December 31
(2) Excludes records with unknown data errors.
(3) <2500 g.
(4) >4000 g.
(5) <37 weeks gestation.
(6) 37 or more weeks gestation and <2500 g.
* Percentages are not calculated if <100 records are available for analysis after exclusions

WIC PNSS & PedNSS

Run Date: 6/26/2020

Table 20C

Page : 22

2019 Pregnancy Nutrition Surveillance (1)

Michigan

Summary of Trends in Maternal Health Indicators by Race/Ethnicity

| Race/Ethnicity | Year | Prepregnancy BMI (3) | | | Weight Gain (4) | | | Anemia (Low Hb/Hct) (5) | | | |
| | | | Under-weight | Over-weight | | < Ideal | > Ideal | 3rd Trimester | | Postpartum | |
		Number	%	%	Number	%	%	Number	%	Number	%
White, Not Hispanic											
	2019	22,546	4.6	58.7	14,128	17.5	52.7	4,351	35.0	6,717	23.2
	2018	23,428	4.6	57.1	14,986	17.8	52.3	4,414	39.6	6,888	29.5
	2017	24,340	4.7	56.3	15,648	17.8	53.3	4,514	39.7	6,533	29.0
	2016	27,427	4.8	55.7	17,582	17.8	52.5	4,843	35.9	7,093	27.4
Black, Not Hispanic											
	2019	13,399	3.7	63.1	8,438	19.9	52.9	3,126	60.9	3,274	45.9
	2018	13,810	3.9	62.9	9,119	19.5	52.4	3,123	64.4	3,041	56.4
	2017	14,791	3.7	62.3	10,603	19.4	52.4	3,380	63.6	2,870	53.4
	2016	14,954	3.9	62.3	10,223	19.5	51.9	3,280	59.2	2,992	52.1

(1) Reporting period is January 1 through December 31
(2) Excludes records with unknown data errors.
(3) Based on 2009 IOM report "Weight Gain During Pregnancy": underweight (BMI <18.5), normal weight (BMI 18.5 to 24.9). overweight (BMI 25.0 to 29.9), obese (BMI > 30.0).
(4) Based on 2009 IOM report "Weight Gain During Pregnancy": underweight during pregnancy (ideal weight gain = 28 to 40 pounds), normal weight prepregnancy
   (ideal weight gain = 25 to 35 pounds), overweight gain = 15 to 25 pounds), obese prepregnancy (ideal weight gain = 11 to 20 pounds).
(5) Based on 1990 MMWR, "Recommendations to prevent and control Iron Deficiency in the United States"; adjusted for altitude and smoking.
* Percentages are not calculated if <100 records are available for analysis after exclusions

WIC PNSS & PedNSS
Table 20C
2019 Pregnancy Nutrition Surveillance (1)
Michigan
Summary of Trends in Maternal Health Indicators by Race/Ethnicity

Summary of Trends in Maternal Health Indicators by Race/Ethnicity (2)										
Race/Ethnicity	**Year**	Prepregnancy BMI (3)			Weight Gain (4)			Anemia (Low Hb/Hct) (5)			
			Under-weight	Over-weight		< Ideal	> Ideal	3rd Trimester		Postpartum	
		Number	%	%	Number	%	%	Number	%	Number	%
Hispanic											
	2019	4,605	2.6	67.1	2,862	22.8	45.5	981	38.2	1,282	30.9
	2018	4,704	2.5	65.6	2,934	22.7	44.3	850	45.4	1,184	38.3
	2017	4,919	3.0	64.2	3,119	23.0	45.8	908	42.4	1,071	37.0
	2016	5,372	3.1	62.6	3,323	24.8	44.2	935	45.3	1,149	33.9
American Indian/Alaska Native											
	2019	160	6.9	61.9	89	*	*	24	*	43	*
	2018	153	5.9	60.8	84	*	*	33	*	56	*
	2017	153	6.5	58.2	96	*	*	23	*	42	*
	2016	156	3.2	63.5	78	*	*	22	*	42	*

(1) Reporting period is January 1 through December 31
(2) Excludes records with unknown data errors.
(3) Based on 2009 IOM report "Weight Gain During Pregnancy": underweight (BMI <18.5), normal weight (BMI 18.5 to 24.9). overweight (BMI 25.0 to 29.9), obese (BMI > 30.0).
(4) Based on 2009 IOM report "Weight Gain During Pregnancy": underweight during pregnancy (ideal weight gain = 28 to 40 pounds), normal weight prepregnancy
    (ideal weight gain = 25 to 35 pounds), overweight gain = 15 to 25 pounds), obese prepregnancy (ideal weight gain = 11 to 20 pounds).
(5) Based on 1990 MMWR, "Recommendations to prevent and control Iron Deficiency in the United States"; adjusted for altitude and smoking.
* Percentages are not calculated if <100 records are available for analysis after exclusions

WIC PNSS & PedNSS

Run Date: 6/26/2020

Table 20C

Page : 24

2019 Pregnancy Nutrition Surveillance (1)

Michigan

Summary of Trends in Maternal Health Indicators by Race/Ethnicity

Summary of Trends in Maternal Health Indicators by Race/Ethnicity (2)

Race/Ethnicity	Year	Prepregnancy BMI (3)			Weight Gain (4)			Anemia (Low Hb/Hct) (5)			
			Under-weight	Over-weight		< Ideal	> Ideal	3rd Trimester		Postpartum	
		Number	%	%	Number	%	%	Number	%	Number	%
Asian/Pacific Islander											
	2019	881	7.4	39.4	568	26.6	29.6	170	38.2	287	28.9
	2018	903	7.9	41.1	546	31.5	29.1	162	34.6	294	35.0
	2017	964	7.6	38.1	602	30.2	34.6	186	37.6	295	32.5
	2016	1,003	7.7	37.9	610	30.7	30.7	183	40.4	292	29.5
Multiple Races											
	2019	2,136	4.4	60.9	1,284	18.8	52.9	446	48.4	598	31.6
	2018	2,265	4.9	58.9	1,429	18.9	50.9	503	54.5	578	42.6
	2017	1,927	4.4	59.0	1,210	18.5	52.9	400	54.3	497	41.4
	2016	2,084	4.7	58.0	1,318	19.8	54.9	376	41.2	506	35.8

(1) Reporting period is January 1 through December 31
(2) Excludes records with unknown data errors.
(3) Based on 2009 IOM report "Weight Gain During Pregnancy": underweight (BMI <18.5), normal weight (BMI 18.5 to 24.9). overweight (BMI 25.0 to 29.9), obese (BMI > 30.0).
(4) Based on 2009 IOM report "Weight Gain During Pregnancy": underweight during pregnancy (ideal weight gain = 28 to 40 pounds), normal weight prepregnancy
   (ideal weight gain = 25 to 35 pounds), overweight gain = 15 to 25 pounds), obese prepregnancy (ideal weight gain = 11 to 20 pounds).
(5) Based on 1990 MMWR, "Recommendations to prevent and control Iron Deficiency in the United States"; adjusted for altitude and smoking.
* Percentages are not calculated if <100 records are available for analysis after exclusions

WIC PNSS & PedNSS
Table 20C
2019 Pregnancy Nutrition Surveillance (1)
Michigan
Summary of Trends in Maternal Health Indicators by Race/Ethnicity

Run Date: 6/26/2020

Page : 25

Summary of Trends in Maternal Health Indicators by Race/Ethnicity (2)										
Race/Ethnicity	Year	Prepregnancy BMI (3)			Weight Gain (4)			Anemia (Low Hb/Hct) (5)			
			Under-weight	Over-weight		< Ideal	> Ideal	3rd Trimester		Postpartum	
		Number	%	%	Number	%	%	Number	%	Number	%
All Other/Unknown											
	2019	3	*	*	1	*	*	0	*	2	*
	2018	29	*	*	20	*	*	4	*	8	*
	2017	10	*	*	9	*	*	0	*	15	*
	2016	20	*	*	6	*	*	3	*	7	*
Total All Race/Ethnic Groups											
	2019	43,733	4.2	60.6	27,372	19.1	51.5	9,098	45.0	12,203	30.7
	2018	45,296	4.3	59.5	29,118	19.1	51.0	9,090	49.4	12,050	37.9
	2017	47,111	4.3	58.8	31,292	19.1	51.9	9,416	49.2	11,325	36.6
	2016	51,019	4.4	58.1	33,141	19.4	51.2	9,642	45.1	12,082	34.6

(1) Reporting period is January 1 through December 31
(2) Excludes records with unknown data errors.
(3) Based on 2009 IOM report "Weight Gain During Pregnancy": underweight (BMI <18.5), normal weight (BMI 18.5 to 24.9). overweight (BMI 25.0 to 29.9), obese (BMI > 30.0).
(4) Based on 2009 IOM report "Weight Gain During Pregnancy": underweight during pregnancy (ideal weight gain = 28 to 40 pounds), normal weight prepregnancy
    (ideal weight gain = 25 to 35 pounds), overweight gain = 15 to 25 pounds), obese prepregnancy (ideal weight gain = 11 to 20 pounds).
(5) Based on 1990 MMWR, "Recommendations to prevent and control Iron Deficiency in the United States"; adjusted for altitude and smoking.
* Percentages are not calculated if <100 records are available for analysis after exclusions

Table 21C
2019 Pregnancy Nutrition Surveillance (1)
Michigan
Summary of Trends in Maternal Behavioral Indicators by Race/Ethnicity

Summary of Trends in Maternal Behavioral Indicators by Race/Ethnicity (2)					
Race/Ethnicity	Year	Medical Care			WIC Enrollment
		1st Trimester		No Care	1st Trimester
		Number	%	%	Number	%
White, Not Hispanic						
	2019	25,289	86.5	7.7	27,266	31.7
	2018	26,419	85.8	8.1	28,188	32.9
	2017	27,700	84.7	9.1	29,532	34.7
	2016	29,471	83.8	9.8	31,689	36.0
Black, Not Hispanic						
	2019	15,338	82.8	4.2	16,325	21.3
	2018	15,371	82.7	3.8	16,355	21.7
	2017	16,319	81.6	4.4	17,248	21.8
	2016	16,144	80.4	4.8	17,148	23.5

(1) Reporting period is January 1 through December 31
(2) Excludes data with errors.
* Percentages are not calculated if <100 records are available for analysis after exclusions

WIC PNSS & PedNSS
Table 21C
2019 Pregnancy Nutrition Surveillance (1)
Michigan
Summary of Trends in Maternal Behavioral Indicators by Race/Ethnicity

Summary of Trends in Maternal Behavioral Indicators by Race/Ethnicity (2)					
Race/Ethnicity	Year	Medical Care			WIC Enrollment
		1st Trimester		No Care	1st Trimester
		Number	%	%	Number	%
Hispanic						
	2019	5,240	83.3	8.1	5,672	32.9
	2018	5,277	80.5	9.9	5,723	35.2
	2017	5,474	79.4	11.0	5,888	36.7
	2016	5,744	79.0	11.7	6,262	38.5
American Indian/Alaska Native						
	2019	170	85.3	8.2	189	34.4
	2018	169	84.6	6.5	195	30.3
	2017	174	82.8	10.3	192	39.1
	2016	162	84.6	5.6	182	40.7

(1) Reporting period is January 1 through December 31
(2) Excludes data with errors.
* Percentages are not calculated if <100 records are available for analysis after exclusions

WIC PNSS & PedNSS
Table 21C
2019 Pregnancy Nutrition Surveillance (1)
Michigan
Summary of Trends in Maternal Behavioral Indicators by Race/Ethnicity

Summary of Trends in Maternal Behavioral Indicators by Race/Ethnicity (2)					
Race/Ethnicity	Year	Medical Care			WIC Enrollment
		1st Trimester		No Care	1st Trimester
		Number	%	%	Number	%
Asian/Pacific Islander						
	2019	1,064	91.0	5.4	1,136	32.0
	2018	1,099	89.1	5.4	1,162	30.1
	2017	1,226	87.7	5.3	1,293	28.0
	2016	1,164	84.8	7.6	1,240	31.2
Multiple Races						
	2019	2,309	83.3	6.6	2,533	31.3
	2018	2,517	84.4	5.8	2,693	30.4
	2017	2,129	80.5	9.3	2,278	33.0
	2016	2,205	81.0	9.2	2,348	34.6

(1) Reporting period is January 1 through December 31
(2) Excludes data with errors.
* Percentages are not calculated if <100 records are available for analysis after exclusions

WIC PNSS & PedNSS
Table 21C
2019 Pregnancy Nutrition Surveillance (1)
Michigan
Summary of Trends in Maternal Behavioral Indicators by Race/Ethnicity

Summary of Trends in Maternal Behavioral Indicators by Race/Ethnicity (2)					
Race/Ethnicity	**Year**	Medical Care			WIC Enrollment
		1st Trimester		No Care	1st Trimester
		Number	%	%	Number	%
All Other/Unknown						
	2019	2	*	*	200	1.0
	2018	21	*	*	269	2.6
	2017	16	*	*	279	0.7
	2016	9	*	*	316	6.0
Total All Race/Ethnic Groups						
	2019	49,415	84.9	6.6	53,324	28.5
	2018	50,875	84.3	6.8	54,591	29.4
	2017	53,045	83.1	7.7	56,717	30.6
	2016	54,902	82.2	8.4	59,189	32.4

(1) Reporting period is January 1 through December 31
(2) Excludes data with errors.
* Percentages are not calculated if <100 records are available for analysis after exclusions

WIC PNSS & PedNSS

Table 22C

2019 Pregnancy Nutrition Surveillance (1)

Michigan

Summary of Trends in Smoking Indicators by Race/Ethnicity

Run Date: 6/26/2020

Page : 30

Summary of Trends in Smoking Indicators by Race/Ethnicity (2)												
Race/Ethnicity	Year	Smoking				Quit Smoking By First Prenatal Visit and Stayed Off Cigarettes (3)		Smoking in Household					
		3 Months Prior to Pregnancy		Last 3 Months of Pregnancy				Prenatal		Postpartum		
		Number	%	Number	%	Number	%	Number	%	Number	%
White, Not Hispanic											
	2019	24,850	31.9	25,511	19.2	6,274	32.6	20,589	10.5	25,500	2.8
	2018	25,740	33.6	26,654	19.8	6,992	33.0	21,521	11.1	26,665	2.8
	2017	27,201	34.3	28,001	20.2	7,583	33.4	23,102	11.9	28,026	3.1
	2016	29,428	35.6	29,826	20.8	8,628	33.1	25,257	12.4	29,852	3.0
Black, Not Hispanic											
	2019	13,854	16.4	15,488	6.7	1,892	54.2	11,523	11.7	15,469	3.4
	2018	13,953	17.7	15,561	6.9	2,044	55.5	11,708	11.5	15,571	3.9
	2017	14,920	19.3	16,531	6.9	2,473	54.7	12,760	12.2	16,535	3.9
	2016	15,021	20.9	16,280	8.1	2,669	55.8	13,003	13.6	16,292	4.6

(1) Reporting period is January 1 through December 31
(2) Excludes data with errors.
(3) Among women who smoked 3 months prior to pregnancy
* Percentages are not calculated if <100 records are available for analysis after exclusions

WIC PNSS & PedNSS
Table 22C
2019 Pregnancy Nutrition Surveillance (1)
Michigan
Summary of Trends in Smoking Indicators by Race/Ethnicity

Summary of Trends in Smoking Indicators by Race/Ethnicity (2)											
Race/Ethnicity	**Year**	Smoking				Quit Smoking By First Prenatal Visit and Stayed Off Cigarettes (3)		Smoking in Household				
		3 Months Prior to Pregnancy		Last 3 Months of Pregnancy				Prenatal		Postpartum	
		Number	%	Number	%	Number	%	Number	%	Number	%
Hispanic											
	2019	5,158	13.0	5,299	5.6	553	52.4	4,540	4.7	5,278	1.6
	2018	5,195	14.3	5,381	5.9	622	51.9	4,620	5.1	5,380	1.5
	2017	5,434	14.2	5,582	5.7	653	53.0	4,894	5.4	5,578	1.6
	2016	5,775	14.7	5,846	6.0	721	53.5	5,271	6.1	5,850	1.7
American Indian/Alaska Native											
	2019	174	44.8	170	30.0	62	*	148	10.8	171	6.4
	2018	180	49.4	167	36.5	60	*	148	20.9	168	8.3
	2017	175	49.7	171	33.3	73	*	150	24.0	172	8.1
	2016	168	48.8	160	26.9	62	*	152	16.4	161	6.8

(1) Reporting period is January 1 through December 31
(2) Excludes data with errors.
(3) Among women who smoked 3 months prior to pregnancy
* Percentages are not calculated if <100 records are available for analysis after exclusions

WIC PNSS & PedNSS

Run Date: 6/26/2020

Table 22C

Page : 32

2019 Pregnancy Nutrition Surveillance [1]

Michigan

Summary of Trends in Smoking Indicators by Race/Ethnicity

Summary of Trends in Smoking Indicators by Race/Ethnicity [2]												
Race/Ethnicity	**Year**	Smoking				Quit Smoking By First Prenatal Visit and Stayed Off Cigarettes [3]		Smoking in Household					
		3 Months Prior to Pregnancy		Last 3 Months of Pregnancy						Prenatal		Postpartum	
		Number	%	Number	%	Number	%	Number	%	Number	%	Number	%
Asian/Pacific Islander													
	2019	1,058	3.2	1,077	1.1	18	*	851	3.1	1,076	2.3		
	2018	1,106	3.4	1,116	1.4	27	*	879	1.9	1,114	1.2		
	2017	1,232	3.6	1,248	1.4	37	*	991	2.8	1,249	1.5		
	2016	1,176	3.6	1,182	1.1	36	*	977	3.0	1,182	1.2		
Multiple Races													
	2019	2,266	30.7	2,331	17.6	562	35.2	1,992	12.9	2,327	3.6		
	2018	2,396	29.8	2,538	16.4	586	38.4	2,109	12.7	2,540	3.7		
	2017	2,043	34.0	2,155	18.1	577	36.0	1,810	15.0	2,155	4.4		
	2016	2,147	36.0	2,224	19.5	660	37.7	1,924	14.5	2,227	3.8		

(1) Reporting period is January 1 through December 31
(2) Excludes data with errors.
(3) Among women who smoked 3 months prior to pregnancy
* Percentages are not calculated if <100 records are available for analysis after exclusions

Table 22C
2019 Pregnancy Nutrition Surveillance   (1)
Michigan
Summary of Trends in Smoking Indicators by Race/Ethnicity

Summary of Trends in Smoking Indicators by Race/Ethnicity (2)											
Race/Ethnicity	Year	Smoking				Quit Smoking By First Prenatal Visit and Stayed Off Cigarettes (3)		Smoking in Household				
		3 Months Prior to Pregnancy		Last 3 Months of Pregnancy				Prenatal		Postpartum	
		Number	%	Number	%	Number	%	Number	%	Number	%
All Other/Unknown											
	2019	4	*	2	*	0	*	2	*	2	*
	2018	25	*	22	*	0	*	5	*	22	*
	2017	16	*	16	*	0	*	0	*	16	*
	2016	19	*	9	*	0	*	10	*	9	*
Total All Race/Ethnic Groups											
	2019	47,367	24.7	49,881	13.5	9,363	38.4	39,647	10.1	49,826	2.9
	2018	48,601	26.1	51,441	13.9	10,331	38.9	40,995	10.4	51,462	3.0
	2017	51,028	27.1	53,711	14.1	11,398	39.3	43,712	11.3	53,738	3.2
	2016	53,738	28.6	55,530	15.1	12,776	39.3	46,598	11.9	55,576	3.4

(1) Reporting period is January 1 through December 31
(2) Excludes data with errors.
(3) Among women who smoked 3 months prior to pregnancy
* Percentages are not calculated if <100 records are available for analysis after exclusions

WIC PNSS & PedNSS

Run Date: 6/26/2020

Table 23C

2019 Pregnancy Nutrition Surveillance (1)

Page : 34

Michigan

Summary of Trends in Infant Health Indicators by Race/Ethnicity

Summary of Trends in Infant Health Indicators by Race/Ethnicity (2)										
Race/Ethnicity	Year	Birthweight			Preterm (5)		Full Term LBW (6)		Ever Breastfed	
			Low (3)	High (4)						
		Number	%	%	Number	%	Number	%	Number	%
White, Not Hispanic										
	2019	24,085	8.4	8.1	24,733	11.0	21,257	3.4	24,266	72.3
	2018	25,171	8.3	8.3	25,844	10.9	22,236	3.4	25,327	71.9
	2017	26,229	8.4	8.5	27,065	10.8	23,152	3.5	26,555	71.5
	2016	27,800	8.0	8.8	28,754	11.1	24,436	3.2	28,124	70.6
Black, Not Hispanic										
	2019	14,676	14.6	3.4	15,109	15.5	12,281	6.6	14,849	58.1
	2018	14,739	14.4	3.7	15,218	15.5	12,342	6.7	14,896	57.7
	2017	15,697	14.1	3.4	16,145	15.5	13,154	6.3	15,781	55.3
	2016	15,487	13.8	3.5	15,903	15.3	12,985	6.3	15,497	54.6

(1) Reporting period is January 1 through December 31
(2) Excludes records with unknown data errors.
(3) <2500 g.
(4) >4000 g.
(5) <37 weeks gestation.
(6) 37 or more weeks gestation and <2500 g.
* Percentages are not calculated if <100 records are available for analysis after exclusions

WIC PNSS & PedNSS

Run Date: 6/26/2020

Table 23C

Page : 35

2019 Pregnancy Nutrition Surveillance   (1)

Michigan

Summary of Trends in Infant Health Indicators by Race/Ethnicity

Summary of Trends in Infant Health Indicators by Race/Ethnicity (2)										
Race/Ethnicity	Year	Birthweight			Preterm (5)		Full Term LBW (6)		Ever Breastfed	
		Low (3)	High (4)							
		Number	%	%	Number	%	Number	%	Number	%
Hispanic										
	2019	5,004	7.7	7.2	5,117	11.6	4,380	3.2	5,029	71.2
	2018	5,062	7.4	7.5	5,167	11.8	4,425	3.3	5,100	72.3
	2017	5,232	7.5	7.9	5,329	11.9	4,543	2.9	5,262	72.5
	2016	5,469	7.5	7.8	5,590	11.1	4,797	3.7	5,496	72.3
American Indian/Alaska Native										
	2019	157	7.6	14.0	162	13.6	131	3.8	158	69.6
	2018	158	7.0	11.4	166	10.2	140	3.6	158	72.8
	2017	157	10.2	7.6	167	16.8	128	3.9	157	79.0
	2016	149	3.4	12.1	158	8.2	136	1.5	150	73.3

(1) Reporting period is January 1 through December 31
(2) Excludes records with unknown data errors.
(3) <2500 g.
(4) >4000 g.
(5) <37 weeks gestation.
(6) 37 or more weeks gestation and <2500 g.
* Percentages are not calculated if <100 records are available for analysis after exclusions

WIC PNSS & PedNSS

Run Date: 6/26/2020

Table 23C

2019 Pregnancy Nutrition Surveillance (1)

Page : 36

Michigan

Summary of Trends in Infant Health Indicators by Race/Ethnicity

Summary of Trends in Infant Health Indicators by Race/Ethnicity (2)										
Race/Ethnicity	Year	Birthweight			Preterm (5)		Full Term LBW (6)		Ever Breastfed	
			Low (3)	High (4)						
		Number	%	%	Number	%	Number	%	Number	%
Asian/Pacific Islander										
	2019	1,017	10.7	4.2	1,051	10.9	899	6.0	1,022	79.4
	2018	1,039	11.6	4.8	1,075	12.1	905	7.1	1,058	79.4
	2017	1,155	10.7	6.1	1,199	11.3	1,012	5.4	1,183	79.9
	2016	1,112	10.6	4.5	1,159	11.8	972	5.1	1,127	74.4
Multiple Races										
	2019	2,193	10.6	6.1	2,272	12.1	1,916	5.1	2,202	70.0
	2018	2,402	9.5	7.5	2,475	11.5	2,105	4.3	2,409	69.6
	2017	2,035	9.8	6.7	2,097	11.8	1,779	4.2	2,043	69.7
	2016	2,119	9.1	6.4	2,155	11.2	1,860	4.0	2,102	70.7

(1) Reporting period is January 1 through December 31
(2) Excludes records with unknown data errors.
(3) <2500 g.
(4) >4000 g.
(5) <37 weeks gestation.
(6) 37 or more weeks gestation and <2500 g.
* Percentages are not calculated if <100 records are available for analysis after exclusions

WIC PNSS & PedNSS
Table 23C
2019 Pregnancy Nutrition Surveillance (1)
Michigan
Summary of Trends in Infant Health Indicators by Race/Ethnicity

Summary of Trends in Infant Health Indicators by Race/Ethnicity (2)										
Race/Ethnicity	Year	Birthweight			Preterm (5)		Full Term LBW (6)		Ever Breastfed	
			Low (3)	High (4)						
		Number	%	%	Number	%	Number	%	Number	%
All Other/Unknown										
	2019	0	*	*	2	*	0	*	2	*
	2018	21	*	*	21	*	21	*	21	*
	2017	15	*	*	16	*	12	*	16	*
	2016	7	*	*	8	*	5	*	8	*
Total All Race/Ethnic Groups										
	2019	47,135	10.4	6.4	48,449	12.5	40,866	4.5	47,531	67.8
	2018	48,594	10.2	6.7	49,968	12.5	42,176	4.5	48,971	67.7
	2017	50,526	10.2	6.7	52,025	12.4	43,785	4.3	51,003	66.7
	2016	52,145	9.8	6.9	53,729	12.3	45,193	4.2	52,506	66.2

(1) Reporting period is January 1 through December 31
(2) Excludes records with unknown data errors.
(3) <2500 g.
(4) >4000 g.
(5) <37 weeks gestation.
(6) 37 or more weeks gestation and <2500 g.
* Percentages are not calculated if <100 records are available for analysis after exclusions