

# WIC PNSS & PedNSS

## Table 1C

### 2020 Pregnancy Nutrition Surveillance (1)

### Michigan

### Summary of Demographic Indicators (2)

Total Records	Number	%
Complete Records	32,542	65.0
Prenatal Records	4,032	8.1
Postpartum Records	13,462	26.9
<b>Total</b>	<b>50,036</b>	

Source of Data	Number	%
WIC	50,036	100.0
Maternal Health	0	0.0
Other	0	0.0
<b>Total</b>	<b>50,036</b>	<b>100.0</b>
<i>Excluded Unknown</i>	0	0.0 %

Race/Ethnic Distribution	Number	%
White, Not Hispanic	25,426	51.0
Black, Not Hispanic	15,414	30.9
Hispanic	5,429	10.9
American Indian/Alaska Native	186	0.4
Asian/Pacific Islander	1,153	2.3
Multiple Races	2,295	4.6
All Other	0	0.0
<b>Total</b>	<b>49,903</b>	<b>100.0</b>
<i>Excluded Unknown</i>	131	0.3 %

Age Distribution	Number	%
< 15 Years	48	0.1
15 - 17 Years	1,124	2.3
18 - 19 Years	3,396	6.8
20 - 29 Years	30,330	60.8
30 - 39 Years	13,957	28.0
>= 40 Years	1,055	2.1
<b>Total</b>	<b>49,910</b>	<b>100.0</b>
<i>Excluded Unknown:</i>	126	0.3 %

Education Distribution	Number	%
< High School	10,542	21.5
High School	23,341	47.5
> High School	15,217	31.0
<b>Total</b>	<b>49,100</b>	<b>100.0</b>
<i>Excluded Unknown</i>	936	1.9 %

% of Poverty Level	Number	%
0 - 50	13,719	37.6
51 - 100	8,824	24.2
101 - 130	4,425	12.1
131 - 150	2,315	6.3
151 - 185	3,192	8.8
186 - 200	942	2.6
> 200	2,947	8.1
Adjunctive Eligibility	115	0.3
<b>Total</b>	<b>36,479</b>	<b>100.0</b>
<i>Excluded Unknown</i>	95	0.2 %

Program Participation (3)	Number	%
WIC	36,574	100.0
SNAP	36,507	43.2
Medicaid	36,496	90.6
Tanf	36,546	4.6
Excluded Unknown:		
WIC:	0	0.0
SNAP:	67	0.1
Medicaid:	78	0.2
Tanf:	28	0.1

Migrant Status	Number	%
Yes	352	0.7
No	49,684	99.3
<b>Total</b>	<b>50,036</b>	<b>100.0</b>
<i>Excluded Unknown</i>	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 2020 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	36,925	4.0	128,555	4.0
Normal Weight	36,925	35.1	128,555	34.4
Overweight	36,925	24.7	128,555	24.9
Obese	36,925	36.2	128,555	36.7
Maternal Weight Gain (4)				
Less Than Ideal	21,575	18.2	89,471	22.3
Ideal	21,575	29.7	89,471	28.1
Greater Than Ideal	21,575	52.2	89,471	49.7
Anemia (Low Hb/Hct) (5)				
1st Trimester	11,678	9.3	29,251	5.6
2nd Trimester	8,403	12.8	29,194	6.5
3rd Trimester	2,834	39.8	34,531	19.0
Postpartum	956	30.9	48,409	17.0
Parity (6)				
0	49,703	35.4	117,566	36.2
1	49,703	28.5	117,566	29.7
2	49,703	18.6	117,566	19.6
>= 3	49,703	17.4	117,566	14.5
Interpregnancy Interval				
<= 6 Months	31,484	12.2	73,728	13.7
6 - <18 Months	31,484	26.1	73,728	24.3
>= 18 Months	31,484	61.7	73,728	62.0
Gestational Diabetes	45,597	8.3	94,843	9.2
Hypertension During Pregnancy	45,629	12.4	94,594	9.6

(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.

(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 available for analysis after exclusions

# WIC PNSS & PedNSS

## Table 2C

### 2020 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	45,167	85.6	100,055	77.9
No Care	45,167	6.4	100,055	5.0
WIC Enrollment				
1st Trimester	49,385	29.3	134,286	21.1
2nd Trimester	49,385	27.6	134,286	20.7
3rd Trimester	49,385	16.8	134,286	29.2
Postpartum (3)	49,385	26.3	134,286	29.0
Prepregnancy Multivitamin Consumption (4)	38,062	20.3	82,984	20.5
Multivitamin Consumption During Pregnancy (5)	36,374	89.1	79,295	89.0
Smoking				
3 Months Prior to Pregnancy	43,650	22.6	126,132	26.9
During Pregnancy	36,389	13.3	114,362	18.9
Last 3 Months of Pregnancy	45,656	11.5	133,382	14.1
Postpartum	45,663	11.8	133,620	14.6
Smoking Changes (6)				
Quit Smoking by First Prenatal Visit	8,706	44.9	26,611	38.2
Quit Smoking by First Prenatal Visit and Stayed Off Cigarettes	7,693	39.4	21,263	35.7
Smoking in Household				
During Pregnancy	36,252	8.6	97,728	11.9
Postpartum	45,631	2.0	118,446	6.6
Drinking				
3 Months Prior to Pregnancy	43,442	18.5	125,621	13.4
Last 3 Months of Pregnancy	45,662	0.5	118,040	0.4

(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

### 2020 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	42,825	1.6	99,198	1.3
Low	42,825	9.2	99,198	8.4
Normal	42,825	83.1	99,198	83.7
High	42,825	6.1	99,198	6.5
Preterm (4)	44,372	12.6	100,365	12.4
Full term Low Birth Weight (5)	37,125	4.8	84,851	4.1
Multiple Births	45,496	1.7	121,976	1.5
Breastfeeding				
Ever Breastfed	43,607	64.8	99,674	72.2

(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

### 2020 Pregnancy Nutrition Surveillance (1)

#### Michigan

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

<b>Comparison of Racial and Ethnic Distribution (2)</b>								
<b>Contributor</b>	Number Included in Analysis	White, Not Hispanic  %	Black, Not Hispanic  %	Hispanic  %	American Indian/Alaska Native %	Asian/Pacific Islander  %	Multiple Races  %	All Other/Unknown  %
<b>Michigan</b>	<b>50,034</b>	<b>50.8</b>	<b>30.8</b>	<b>10.9</b>	<b>0.4</b>	<b>2.3</b>	<b>4.6</b>	<b>0.3</b>
<b>National (Prior Year)</b>	<b>146,574</b>	<b>54.6</b>	<b>25.3</b>	<b>12.2</b>	<b>1.2</b>	<b>2.5</b>	<b>3.9</b>	<b>0.3</b>

(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**

**2020 Pregnancy Nutrition Surveillance (1)**

**Michigan**

**Comparison of Age Distribution by Contributor to National (3)**

<b>Comparison of Age Distribution (2)</b>								
<b>Contributor</b>	<b>Number Included in Analysis</b>	<b>&lt; 15 Years %</b>	<b>15 - 17 Years %</b>	<b>18 - 19 Years %</b>	<b>20 - 29 Years %</b>	<b>30 - 39 Years %</b>	<b>&gt;= 40 Years %</b>	<b>Unknown %</b>
<b>Michigan</b>	<b>50,036</b>	<b>0.1</b>	<b>2.2</b>	<b>6.8</b>	<b>60.6</b>	<b>27.9</b>	<b>2.1</b>	<b>0.3</b>
<b>National (Prior Year)</b>	<b>146,580</b>	<b>0.1</b>	<b>2.9</b>	<b>8.8</b>	<b>61.5</b>	<b>24.9</b>	<b>1.8</b>	<b>0.1</b>

(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

### 2020 Pregnancy Nutrition Surveillance (1)

#### Michigan

#### Comparison of Maternal Health Indicators by Contributor to National (6)

<b>Comparison of Maternal Health Indicators (2)</b>														
<b>Contributor</b>	Pregnancy BMI			Weight Gain			Anemia (Low Hb/Hct)				Gestational Diabetes During Pregnancy		Hypertension During Pregnancy	
	(3)			(4)			(5)							
	Under- weight		Over- weight	< Ideal		> Ideal	3rd Trimester		Postpartum					
	Number	%	%	Number	%	%	Number	%	Number	%	Number	%	Number	%
<b>Michigan</b>	<b>36,925</b>	<b>4.0</b>	<b>60.9</b>	<b>21,575</b>	<b>18.2</b>	<b>52.2</b>	<b>2,834</b>	<b>39.8</b>	<b>956</b>	<b>30.9</b>	<b>45,597</b>	<b>8.3</b>	<b>45,629</b>	<b>12.4</b>
<b>National (Prior Year)</b>	<b>128,555</b>	<b>4.0</b>	<b>61.6</b>	<b>89,471</b>	<b>22.3</b>	<b>49.7</b>	<b>34,531</b>	<b>19.0</b>	<b>48,409</b>	<b>17.0</b>	<b>94,843</b>	<b>9.2</b>	<b>94,594</b>	<b>9.6</b>

(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 pregnancy (ideal weight gain = 25 to 35 pounds), overweight gain = 15 to 25 pounds), obese pregnancy (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

# WIC PNSS & PedNSS

## Table 6C

### 2020 Pregnancy Nutrition Surveillance (1)

#### Michigan

#### Comparison of Maternal Behavioral Indicators by Contributor to National (5)

<b>Comparison of Maternal Behavioral Indicators (2)</b>									
<b>Contributor</b>	Medical Care			WIC Enrollment		Multivitamin Consumption			
	1st Trimester		No Care	1st Trimester		Pregnancy (3)		During Pregnancy (4)	
	Number	%	%	Number	%	Number	%	Number	%
<b>Michigan</b>	<b>45,167</b>	<b>85.6</b>	<b>6.4</b>	<b>49,385</b>	<b>29.3</b>	<b>38,062</b>	<b>20.3</b>	<b>36,374</b>	<b>89.1</b>
<b>National (Prior Year)</b>	<b>100,055</b>	<b>77.9</b>	<b>5.0</b>	<b>134,286</b>	<b>21.1</b>	<b>82,984</b>	<b>20.5</b>	<b>79,295</b>	<b>89.0</b>

(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**

**2020 Pregnancy Nutrition Surveillance (1)**

**Michigan**

**Comparison of Smoking Indicators by Contributor to National (4)**

<b>Comparison of Smoking Indicators (2)</b>										
<b>Contributor</b>	<b>Smoking</b>				<b>Quit Smoking By First Prenatal Visit and Stayed Off Cigarettes (3)</b>		<b>Smoking in Household</b>			
	<b>3 Months Prior to Pregnancy</b>		<b>Last 3 Months of Pregnancy</b>				<b>Prenatal</b>		<b>Postpartum</b>	
	<b>Number</b>	<b>%</b>	<b>Number</b>	<b>%</b>	<b>Number</b>	<b>%</b>	<b>Number</b>	<b>%</b>	<b>Number</b>	<b>%</b>
<b>Michigan</b>	<b>43,650</b>	<b>22.6</b>	<b>45,656</b>	<b>11.5</b>	<b>7,693</b>	<b>39.4</b>	<b>36,252</b>	<b>8.6</b>	<b>45,631</b>	<b>2.0</b>
<b>National (Prior Year)</b>	<b>126,132</b>	<b>26.9</b>	<b>133,382</b>	<b>14.1</b>	<b>21,263</b>	<b>35.7</b>	<b>97,728</b>	<b>11.9</b>	<b>118,446</b>	<b>6.6</b>

(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

## Table 8C

### 2020 Pregnancy Nutrition Surveillance (1)

#### Michigan

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

<b>Comparison of Infant Health Indicators (2)</b>									
<b>Contributor</b>	Birthweight			Preterm		Full Term LBW		Ever Breastfed	
	Low (3)		High (4)	(5)		(6)			
	Number	%	%	Number	%	Number	%	Number	%
<b>Michigan</b>	<b>42,825</b>	<b>10.8</b>	<b>6.1</b>	<b>44,372</b>	<b>12.6</b>	<b>37,125</b>	<b>4.8</b>	<b>43,607</b>	<b>64.8</b>
<b>National (Prior Year)</b>	<b>99,198</b>	<b>9.7</b>	<b>6.5</b>	<b>100,365</b>	<b>12.4</b>	<b>84,851</b>	<b>4.1</b>	<b>99,674</b>	<b>52.7</b>

(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.

(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

### 2020 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		
	Number	Under-Weight	Over-Weight	Number	< Ideal	>Ideal	3rd Trimester		Postpartum		Number	%	Number	%	
		%	%		%	%	%	Number	%	Number					%
<b>Race/Ethnicity</b>															
White, Not Hispanic	19,218	4.5	58.7	11,561	16.5	53.4	1,363	31.9	533	23.1	23,116	8.5	23,132	12.0	
Black, Not Hispanic	11,268	3.4	63.5	6,440	19.3	52.3	1,005	52.1	226	50.9	14,213	6.6	14,221	14.8	
Hispanic	3,814	2.5	66.8	2,051	21.6	47.9	284	34.9	128	28.9	4,974	10.2	4,977	9.3	
American Indian/Alaska Native	143	2.1	63.6	77	*	*	8	*	2	*	156	14.1	156	10.3	
Asian/Pacific Islander	696	7.0	42.8	397	29.0	31.0	56	*	18	*	1,071	16.9	1,072	6.2	
Multiple Races	1,784	4.0	61.7	1,048	18.8	54.3	118	39.8	49	*	2,065	7.5	2,069	12.0	
All Other/Unknown	0	*	*	0	*	*	0	*	0	*	0	*	0	*	
<b>Total</b>	<b>36,925</b>	<b>4.0</b>	<b>60.9</b>	<b>21,575</b>	<b>18.2</b>	<b>52.2</b>	<b>2,834</b>	<b>39.8</b>	<b>956</b>	<b>30.9</b>	<b>45,597</b>	<b>8.3</b>	<b>45,629</b>	<b>12.4</b>	
<b>Age</b>															
< 15 Years	31	*	*	15	*	*	5	*	1	*	42	*	42	*	
15 - 17 Years	876	8.6	38.6	471	19.5	52.0	70	*	25	*	1,007	1.3	1,006	11.4	
18 - 19 Years	2,646	7.0	45.9	1,493	17.5	55.9	208	38.5	60	*	3,041	2.6	3,043	12.1	
20 - 29 Years	22,683	4.2	59.8	13,300	17.8	52.7	1,788	40.6	602	30.7	27,640	6.6	27,663	11.4	
30 - 39 Years	9,903	2.2	68.6	5,878	18.9	50.4	707	37.8	243	28.4	12,822	13.0	12,830	14.3	
>= 40 Years	700	1.3	76.0	379	18.5	47.0	50	*	25	*	937	19.4	937	20.4	
Unknown	86	*	*	39	*	*	6	*	0	*	108	3.7	108	13.0	
<b>Total</b>	<b>36,925</b>	<b>4.0</b>	<b>60.9</b>	<b>21,575</b>	<b>18.2</b>	<b>52.2</b>	<b>2,834</b>	<b>39.8</b>	<b>956</b>	<b>30.9</b>	<b>45,597</b>	<b>8.3</b>	<b>45,629</b>	<b>12.4</b>	
<b>Education</b>															
< High School	7,355	5.2	57.0	4,083	21.2	49.4	594	43.4	200	37.5	9,635	7.4	9,644	10.9	
High School	17,402	4.3	60.5	10,162	18.3	52.3	1,362	40.7	432	29.6	21,431	7.8	21,456	12.8	
> High School	11,661	2.7	64.2	7,032	16.3	53.4	848	36.0	306	29.1	13,824	9.6	13,823	13.0	
Excluded Unknown	507	3.9	55.6	298	13.8	55.4	30	*	18	*	707	8.3	706	11.3	
<b>Total</b>	<b>36,925</b>	<b>4.0</b>	<b>60.9</b>	<b>21,575</b>	<b>18.2</b>	<b>52.2</b>	<b>2,834</b>	<b>39.8</b>	<b>956</b>	<b>30.9</b>	<b>45,597</b>	<b>8.3</b>	<b>45,629</b>	<b>12.4</b>	

(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

### 2020 Pregnancy Nutrition Surveillance (1)

#### Michigan

#### Maternal Behavioral Indicators by Race/Ethnicity, Age, or Education

<b>Maternal Behavioral Indicators by Race/Ethnicity, Age, or Education (2)</b>									
	Medical Care			WIC Enrollment		Multivitamin Consumption			
	1st Trimester		No Care	1st Trimester		Prepregnancy (3)		During Pregnancy (4)	
	Number	%	%	Number	%	Number	%	Number	%
<b>Race/Ethnicity</b>									
White, Not Hispanic	22,936	86.6	7.7	25,115	32.8	20,256	23.5	18,919	90.5
Black, Not Hispanic	14,068	84.2	4.0	15,206	22.4	10,702	14.4	10,572	87.5
Hispanic	4,915	84.0	7.5	5,354	32.7	4,306	20.8	4,169	87.3
American Indian/Alaska Native	158	87.3	5.1	182	30.8	159	24.5	139	87.8
Asian/Pacific Islander	1,042	90.7	5.0	1,133	27.8	865	18.8	849	90.1
Multiple Races	2,046	85.1	7.0	2,266	31.0	1,772	19.0	1,725	86.7
All Other/Unknown	0	*	*	127	3.9	0	*	0	*
<b>Total</b>	<b>45,167</b>	<b>85.6</b>	<b>6.4</b>	<b>49,385</b>	<b>29.3</b>	<b>38,062</b>	<b>20.3</b>	<b>36,374</b>	<b>89.1</b>
<b>Age</b>									
< 15 Years	42	*	*	46	*	43	*	37	*
15 - 17 Years	996	72.1	9.7	1,112	31.1	958	9.5	904	88.3
18 - 19 Years	3,010	82.6	8.2	3,371	34.6	2,859	11.1	2,743	88.1
20 - 29 Years	27,388	86.1	6.1	29,951	28.3	22,995	18.8	21,975	89.0
30 - 39 Years	12,698	86.5	6.3	13,738	29.7	10,310	26.7	9,875	89.9
>= 40 Years	928	85.7	6.1	1,042	33.0	802	28.7	745	87.1
Unknown	105	75.2	8.6	125	26.4	95	*	95	*
<b>Total</b>	<b>45,167</b>	<b>85.6</b>	<b>6.4</b>	<b>49,385</b>	<b>29.3</b>	<b>38,062</b>	<b>20.3</b>	<b>36,374</b>	<b>89.1</b>
<b>Education</b>									
< High School	9,520	81.2	7.5	10,376	29.7	7,593	13.8	7,810	85.9
High School	21,236	85.3	6.4	23,053	29.5	17,777	18.4	17,177	88.7
> High School	13,726	89.2	5.5	15,039	29.1	12,054	27.0	10,888	91.9
Excluded Unknown	685	85.0	8.5	917	22.5	638	24.9	499	88.8
<b>Total</b>	<b>45,167</b>	<b>85.6</b>	<b>6.4</b>	<b>49,385</b>	<b>29.3</b>	<b>38,062</b>	<b>20.3</b>	<b>36,374</b>	<b>89.1</b>

(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 taking a multivitamin in the past month; proxy for prenatal iron consumption.

\* Percentages are not calculated if <100 records are available for analysis after exclusions.

# WIC PNSS & PedNSS

## Table 11C

### 2020 Pregnancy Nutrition Surveillance (1)

#### Michigan

#### Smoking Indicators by Race/Ethnicity, Age, or Education

<b>Smoking Indicators by Race/Ethnicity, Age, or Education (2)</b>										
	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	%
<b>Race/Ethnicity</b>										
White, Not Hispanic	22,877	29.2	23,142	16.7	5,158	34.1	18,886	9.2	23,138	2.0
Black, Not Hispanic	12,753	15.0	14,222	5.6	1,534	53.6	10,548	9.3	14,219	2.5
Hispanic	4,799	12.2	4,984	4.5	470	55.5	4,116	4.5	4,976	1.0
American Indian/Alaska Native	168	44.0	159	22.6	54	*	138	18.1	159	3.1
Asian/Pacific Islander	1,062	2.7	1,073	0.7	24	*	847	1.8	1,069	0.7
Multiple Races	1,989	29.1	2,074	16.1	453	35.1	1,716	11.1	2,068	2.2
All Other/Unknown	0	*	0	*	0	*	0	*	0	*
<b>Total</b>	<b>43,650</b>	<b>22.6</b>	<b>45,656</b>	<b>11.5</b>	<b>7,693</b>	<b>39.4</b>	<b>36,252</b>	<b>8.6</b>	<b>45,631</b>	<b>2.0</b>
<b>Age</b>										
< 15 Years	48	*	42	*	4	*	38	*	42	*
15 - 17 Years	1,100	11.9	1,014	4.3	109	54.1	899	20.6	1,016	6.3
18 - 19 Years	3,235	21.1	3,040	8.3	543	50.6	2,734	15.4	3,040	3.4
20 - 29 Years	26,280	22.7	27,671	11.1	4,680	41.9	21,900	8.1	27,655	2.0
30 - 39 Years	11,919	24.1	12,842	13.9	2,214	31.5	9,838	6.7	12,833	1.6
>= 40 Years	950	19.2	939	10.8	131	26.0	748	7.1	938	1.1
Unknown	118	12.7	108	7.4	12	*	95	*	107	3.7
<b>Total</b>	<b>43,650</b>	<b>22.6</b>	<b>45,656</b>	<b>11.5</b>	<b>7,693</b>	<b>39.4</b>	<b>36,252</b>	<b>8.6</b>	<b>45,631</b>	<b>2.0</b>
<b>Education</b>										
< High School	8,819	30.5	9,648	17.9	2,171	31.6	7,757	11.9	9,651	2.7
High School	20,306	23.8	21,456	11.5	3,798	40.9	17,139	8.8	21,449	2.2
> High School	13,778	16.0	13,841	7.2	1,648	46.4	10,856	5.9	13,822	1.4
Excluded Unknown	747	16.6	711	8.7	76	*	500	11.2	709	2.0
<b>Total</b>	<b>43,650</b>	<b>22.6</b>	<b>45,656</b>	<b>11.5</b>	<b>7,693</b>	<b>39.4</b>	<b>36,252</b>	<b>8.6</b>	<b>45,631</b>	<b>2.0</b>

(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 2020 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		Full Term LBW		Ever Breastfed	
	Low (3)		High (4)	(5)		(6)			
	Number	%	%	Number	%	Number	%	Number	%
<b>Race/Ethnicity</b>									
White, Not Hispanic	21,714	8.7	7.6	22,434	10.9	19,212	3.6	22,058	69.8
Black, Not Hispanic	13,398	15.0	3.4	13,902	15.6	11,200	6.9	13,622	54.7
Hispanic	4,620	7.8	7.3	4,818	11.7	4,040	3.3	4,758	68.7
American Indian/Alaska Native	150	8.7	8.7	154	11.7	128	4.7	151	69.5
Asian/Pacific Islander	976	12.9	3.6	1,037	10.6	861	7.7	1,023	71.1
Multiple Races	1,965	11.6	6.1	2,025	13.3	1,683	5.0	1,993	66.5
All Other/Unknown	0	*	*	0	*	0	*	0	*
<b>Total</b>	<b>42,825</b>	<b>10.8</b>	<b>6.1</b>	<b>44,372</b>	<b>12.6</b>	<b>37,125</b>	<b>4.8</b>	<b>43,607</b>	<b>64.8</b>
<b>Age</b>									
< 15 Years	41	*	*	40	*	32	*	41	*
15 - 17 Years	971	10.1	4.5	995	11.9	854	6.3	977	56.7
18 - 19 Years	2,890	9.1	4.7	2,990	10.3	2,577	4.9	2,918	62.1
20 - 29 Years	26,112	8.4	6.0	26,982	11.4	22,944	4.5	26,554	65.3
30 - 39 Years	11,898	10.4	6.8	12,390	15.3	9,981	5.1	12,168	65.3
>= 40 Years	812	13.5	5.8	870	19.7	650	7.4	846	65.0
Unknown	101	5.9	4.0	105	14.3	87	*	103	63.1
<b>Total</b>	<b>42,825</b>	<b>10.8</b>	<b>6.1</b>	<b>44,372</b>	<b>12.6</b>	<b>37,125</b>	<b>4.8</b>	<b>43,607</b>	<b>64.8</b>
<b>Education</b>									
< High School	8,937	10.0	5.1	9,352	13.4	7,662	5.8	9,152	53.3
High School	20,204	9.3	5.8	20,887	12.4	17,537	4.9	20,535	63.2
> High School	13,038	8.3	7.1	13,453	12.3	11,361	3.8	13,253	75.3
Excluded Unknown	646	8.5	8.8	680	11.0	565	5.0	667	65.1
<b>Total</b>	<b>42,825</b>	<b>10.8</b>	<b>6.1</b>	<b>44,372</b>	<b>12.6</b>	<b>37,125</b>	<b>4.8</b>	<b>43,607</b>	<b>64.8</b>

(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 2020 Pregnancy Nutrition Surveillance (1) Michigan

### Maternal Weight Gain and Birth Outcomes by Select Health Indicators

<b>Maternal Weight Gain and Birth Outcomes by Select Health Indicators (2)</b>										
	Weight Gain (3)			Birthweight			Preterm (6)		Full Term LBW (7)	
	< Ideal	> Ideal		Low (4)	High (5)					
	Number	%	%	Number	%	%	Number	%	Number	%
<b>Prepregnancy BMI</b>										
Underweight	890	27.1	29.2	1,248	17.8	1.8	1,289	14.0	1,060	10.6
Normal Weight	7,811	22.7	42.4	11,222	11.8	3.8	11,538	12.3	9,773	5.5
Overweight	5,339	10.7	62.6	7,940	9.5	6.5	8,155	11.5	6,975	4.2
Obese	7,535	17.7	57.6	11,772	9.6	8.5	12,022	13.0	10,135	3.6
<b>Weight Gain</b>										
< Ideal	-	-	-	3,690	18.5	2.8	3,781	17.6	3,023	8.6
Ideal	-	-	-	6,184	11.6	4.0	6,296	13.0	5,325	5.1
> Ideal	-	-	-	10,911	7.8	8.8	11,076	10.4	9,685	3.2
<b>Smoking During Pregnancy</b>										
Smokers	1,976	19.0	51.0	3,905	14.3	3.5	4,066	13.9	3,356	7.5
Non-Smokers	12,058	17.3	53.2	26,404	8.8	6.7	27,433	11.5	23,324	4.0

(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 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).

(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**

**2020 Pregnancy Nutrition Surveillance (1)**

**Michigan**

**Summary of Trends in Racial and Ethnic Distribution**

**Summary of Trends in Racial and Ethnic Distribution (2)**

<b>Year</b>	<b>Number Included in Analysis</b>	<b>White, Not Hispanic %</b>	<b>Black, Not Hispanic %</b>	<b>Hispanic %</b>	<b>American Indian/Alaska Native %</b>	<b>Asian/Pacific Islander %</b>	<b>Multiple Races %</b>	<b>All Other/Unknown %</b>
2020	50,034	50.8	30.8	10.9	0.4	2.3	4.6	0.3
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**

**Table 15C**

**2020 Pregnancy Nutrition Surveillance (1)**

**Michigan**

**Summary of Trends in Age Distribution**

<b>Summary of Trends in Age Distribution (2)</b>								
<b>Year</b>	<b>Number Included in Analysis</b>	<b>&lt; 15 Years %</b>	<b>15 - 17 Years %</b>	<b>18 - 19 Years %</b>	<b>20 - 29 Years %</b>	<b>30 - 39 Years %</b>	<b>&gt;= 40 Years %</b>	<b>Unknown %</b>
2020	50,036	0.1	2.2	6.8	60.6	27.9	2.1	0.3
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

## Table 16C 2020 Pregnancy Nutrition Surveillance (1) Michigan

### Summary of Trends in Maternal Health Indicators

<b>Summary of Trends in Maternal Health Indicators (2)</b>										
Year	Prepregnancy BMI			Weight Gain			Anemia (Low Hb/Hct)			
	(3)			(4)			(5)			
	Under-weight	Over-weight		< Ideal	> Ideal		3rd Trimester		Postpartum	
	Number	%	%	Number	%	%	Number	%	Number	%
2020	36,925	4.0	60.9	21,575	18.2	52.2	2,834	39.8	956	30.9
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**  
**2020 Pregnancy Nutrition Surveillance (1)**  
**Michigan**  
**Summary of Maternal Behavioral Indicators**

<b>Summary of Maternal Behavioral Indicators (2)</b>					
<b>Year</b>	<b>Medical Care</b>			<b>WIC Enrollment</b>	
	1st Trimester		No Care	1st Trimester	
	Number	%	%	Number	%
2020	45,167	85.6	6.4	49,385	29.3
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

**WIC PNSS & PedNSS**

**Table 18C**

**2020 Pregnancy Nutrition Surveillance (1)**

**Michigan**

**Summary of Trends in Smoking Indicators**

<b>Summary of Trends in Smoking Indicators (2)</b>										
<b>Year</b>	<b>Smoking</b>				<b>Quit Smoking By First Prenatal Visit and Stayed Off Cigarettes (3)</b>		<b>Smoking in Household</b>			
	<b>3 Months Prior to Pregnancy</b>		<b>Last 3 Months of Pregnancy</b>				<b>Prenatal</b>		<b>Postpartum</b>	
	<b>Number</b>	<b>%</b>	<b>Number</b>	<b>%</b>	<b>Number</b>	<b>%</b>	<b>Number</b>	<b>%</b>	<b>Number</b>	<b>%</b>
2020	43,650	22.6	45,656	11.5	7,693	39.4	36,252	8.6	45,631	2.0
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

### 2020 Pregnancy Nutrition Surveillance (1)

### Michigan

### Summary of Trends in Infant Health Indicators

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	%
2020	42,825	10.8	6.1	44,372	12.6	37,125	4.8	43,607	64.8
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

## Table 20C

### 2020 Pregnancy Nutrition Surveillance (1)

#### Michigan

#### Summary of Trends in Maternal Health Indicators by Race/Ethnicity

<b>Summary of Trends in Maternal Health Indicators by Race/Ethnicity (2)</b>											
Race/Ethnicity	Year	Prepregnancy BMI			Weight Gain			Anemia (Low Hb/Hct) (5)			
		(3)			(4)			3rd Trimester		Postpartum	
		Under-weight	Over-weight		< Ideal	> Ideal		Number	%	Number	%
		Number	%	%	Number	%	%	Number	%	Number	%
<b>White, Not Hispanic</b>	2020	19,218	4.5	58.7	11,561	16.5	53.4	1,363	31.9	533	23.1
	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
<b>Black, Not Hispanic</b>	2020	11,268	3.4	63.5	6,440	19.3	52.3	1,005	52.1	226	50.9
	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

(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

### 2020 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	%
<b>Hispanic</b>	2020	3,814	2.5	66.8	2,051	21.6	47.9	284	34.9	128	28.9
	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
<b>American Indian/Alaska Native</b>	2020	143	2.1	63.6	77	*	*	8	*	2	*
	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	*

(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

### 2020 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	%
<b>Asian/Pacific Islander</b>	2020	696	7.0	42.8	397	29.0	31.0	56	*	18	*
	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
<b>Multiple Races</b>	2020	1,784	4.0	61.7	1,048	18.8	54.3	118	39.8	49	*
	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

(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

### 2020 Pregnancy Nutrition Surveillance (1)

#### Michigan

#### Summary of Trends in Maternal Health Indicators by Race/Ethnicity

<b>Summary of Trends in Maternal Health Indicators by Race/Ethnicity (2)</b>											
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	%
<b>All Other/Unknown</b>	2020	0	*	*	0	*	*	0	*	0	*
	2019	3	*	*	1	*	*	0	*	2	*
	2018	29	*	*	20	*	*	4	*	8	*
	2017	10	*	*	9	*	*	0	*	15	*
<b>Total All Race/Ethnic Groups</b>	2020	36,925	4.0	60.9	21,575	18.2	52.2	2,834	39.8	956	30.9
	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

(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 21C

### 2020 Pregnancy Nutrition Surveillance (1)

#### Michigan

#### Summary of Trends in Maternal Behavioral Indicators by Race/Ethnicity

<b>Summary of Trends in Maternal Behavioral Indicators by Race/Ethnicity (2)</b>						
Race/Ethnicity	Year	Medical Care			WIC Enrollment	
		1st Trimester		No Care	1st Trimester	
		Number	%	%	Number	%
<b>White, Not Hispanic</b>	2020	22,936	86.6	7.7	25,115	32.8
	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
<b>Black, Not Hispanic</b>	2020	14,068	84.2	4.0	15,206	22.4
	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

(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

### 2020 Pregnancy Nutrition Surveillance (1)

#### Michigan

#### Summary of Trends in Maternal Behavioral Indicators by Race/Ethnicity

<b>Summary of Trends in Maternal Behavioral Indicators by Race/Ethnicity (2)</b>						
Race/Ethnicity	Year	Medical Care			WIC Enrollment	
		1st Trimester		No Care	1st Trimester	
		Number	%	%	Number	%
<b>Hispanic</b>	2020	4,915	84.0	7.5	5,354	32.7
	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
<b>American Indian/Alaska Native</b>	2020	158	87.3	5.1	182	30.8
	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

(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

### 2020 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	%
<b>Asian/Pacific Islander</b>	2020	1,042	90.7	5.0	1,133	27.8
	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
<b>Multiple Races</b>	2020	2,046	85.1	7.0	2,266	31.0
	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

(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

### 2020 Pregnancy Nutrition Surveillance (1)

#### Michigan

#### Summary of Trends in Maternal Behavioral Indicators by Race/Ethnicity

<b>Summary of Trends in Maternal Behavioral Indicators by Race/Ethnicity (2)</b>						
Race/Ethnicity	Year	Medical Care			WIC Enrollment	
		1st Trimester		No Care	1st Trimester	
		Number	%	%	Number	%
<b>All Other/Unknown</b>	2020	0	*	*	127	3.9
	2019	2	*	*	200	1.0
	2018	21	*	*	269	2.6
	2017	16	*	*	279	0.7
<b>Total All Race/Ethnic Groups</b>	2020	45,167	85.6	6.4	49,385	29.3
	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

(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**

**2020 Pregnancy Nutrition Surveillance (1)**

**Michigan**

**Summary of Trends in Smoking Indicators by Race/Ethnicity**

<b>Summary of Trends in Smoking Indicators by Race/Ethnicity (2)</b>											
<b>Race/Ethnicity</b>	<b>Year</b>	<b>Smoking</b>				<b>Quit Smoking By First Prenatal Visit and Stayed Off Cigarettes (3)</b>		<b>Smoking in Household</b>			
		<b>3 Months Prior to Pregnancy</b>		<b>Last 3 Months of Pregnancy</b>				<b>Prenatal</b>		<b>Postpartum</b>	
		<b>Number</b>	<b>%</b>	<b>Number</b>	<b>%</b>	<b>Number</b>	<b>%</b>	<b>Number</b>	<b>%</b>	<b>Number</b>	<b>%</b>
<b>White, Not Hispanic</b>	2020	22,877	29.2	23,142	16.7	5,158	34.1	18,886	9.2	23,138	2.0
	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
<b>Black, Not Hispanic</b>	2020	12,753	15.0	14,222	5.6	1,534	53.6	10,548	9.3	14,219	2.5
	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

(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**

**2020 Pregnancy Nutrition Surveillance (1)**

**Michigan**

**Summary of Trends in Smoking Indicators by Race/Ethnicity**

<b>Summary of Trends in Smoking Indicators by Race/Ethnicity (2)</b>											
<b>Race/Ethnicity</b>	<b>Year</b>	<b>Smoking</b>				<b>Quit Smoking By First Prenatal Visit and Stayed Off Cigarettes (3)</b>		<b>Smoking in Household</b>			
		<b>3 Months Prior to Pregnancy</b>		<b>Last 3 Months of Pregnancy</b>				<b>Prenatal</b>		<b>Postpartum</b>	
		<b>Number</b>	<b>%</b>	<b>Number</b>	<b>%</b>	<b>Number</b>	<b>%</b>	<b>Number</b>	<b>%</b>	<b>Number</b>	<b>%</b>
<b>Hispanic</b>	2020	4,799	12.2	4,984	4.5	470	55.5	4,116	4.5	4,976	1.0
	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
<b>American Indian/Alaska Native</b>	2020	168	44.0	159	22.6	54	*	138	18.1	159	3.1
	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

(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**

**2020 Pregnancy Nutrition Surveillance (1)**

**Michigan**

**Summary of Trends in Smoking Indicators by Race/Ethnicity**

<b>Summary of Trends in Smoking Indicators by Race/Ethnicity (2)</b>											
<b>Race/Ethnicity</b>	<b>Year</b>	<b>Smoking</b>				<b>Quit Smoking By First Prenatal Visit and Stayed Off Cigarettes (3)</b>		<b>Smoking in Household</b>			
		<b>3 Months Prior to Pregnancy</b>		<b>Last 3 Months of Pregnancy</b>				<b>Prenatal</b>		<b>Postpartum</b>	
		<b>Number</b>	<b>%</b>	<b>Number</b>	<b>%</b>	<b>Number</b>	<b>%</b>	<b>Number</b>	<b>%</b>	<b>Number</b>	<b>%</b>
<b>Asian/Pacific Islander</b>	2020	1,062	2.7	1,073	0.7	24	*	847	1.8	1,069	0.7
	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
<b>Multiple Races</b>	2020	1,989	29.1	2,074	16.1	453	35.1	1,716	11.1	2,068	2.2
	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

(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**

**2020 Pregnancy Nutrition Surveillance (1)**

**Michigan**

**Summary of Trends in Smoking Indicators by Race/Ethnicity**

<b>Summary of Trends in Smoking Indicators by Race/Ethnicity (2)</b>											
<b>Race/Ethnicity</b>	<b>Year</b>	<b>Smoking</b>				<b>Quit Smoking By First Prenatal Visit and Stayed Off Cigarettes (3)</b>		<b>Smoking in Household</b>			
		<b>3 Months Prior to Pregnancy</b>		<b>Last 3 Months of Pregnancy</b>				<b>Prenatal</b>		<b>Postpartum</b>	
		<b>Number</b>	<b>%</b>	<b>Number</b>	<b>%</b>	<b>Number</b>	<b>%</b>	<b>Number</b>	<b>%</b>	<b>Number</b>	<b>%</b>
<b>All Other/Unknown</b>	2020	0	*	0	*	0	*	0	*	0	*
	2019	4	*	2	*	0	*	2	*	2	*
	2018	25	*	22	*	0	*	5	*	22	*
	2017	16	*	16	*	0	*	0	*	16	*
<b>Total All Race/Ethnic Groups</b>	2020	43,650	22.6	45,656	11.5	7,693	39.4	36,252	8.6	45,631	2.0
	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

(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 23C

### 2020 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	%	%						
<b>White, Not Hispanic</b>	2020	21,714	8.7	7.6	22,434	10.9	19,212	3.6	22,058	69.8
	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
<b>Black, Not Hispanic</b>	2020	13,398	15.0	3.4	13,902	15.6	11,200	6.9	13,622	54.7
	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

(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

### 2020 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	%	%						
<b>Hispanic</b>	2020	4,620	7.8	7.3	4,818	11.7	4,040	3.3	4,758	68.7
	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
<b>American Indian/Alaska Native</b>	2020	150	8.7	8.7	154	11.7	128	4.7	151	69.5
	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

(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

### 2020 Pregnancy Nutrition Surveillance (1)

#### Michigan

#### Summary of Trends in Infant Health Indicators by Race/Ethnicity

<b>Summary of Trends in Infant Health Indicators by Race/Ethnicity (2)</b>										
Race/Ethnicity	Year	Birthweight			Preterm (5)		Full Term LBW (6)		Ever Breastfed	
		Low (3)		High (4)						
		Number	%	%	Number	%	Number	%	Number	%
<b>Asian/Pacific Islander</b>	2020	976	12.9	3.6	1,037	10.6	861	7.7	1,023	71.1
	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
<b>Multiple Races</b>	2020	1,965	11.6	6.1	2,025	13.3	1,683	5.0	1,993	66.5
	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

(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

### 2020 Pregnancy Nutrition Surveillance (1)

#### Michigan

#### Summary of Trends in Infant Health Indicators by Race/Ethnicity

<b>Summary of Trends in Infant Health Indicators by Race/Ethnicity (2)</b>										
Race/Ethnicity	Year	Birthweight			Preterm (5)		Full Term LBW (6)		Ever Breastfed	
		Low (3)		High (4)						
		Number	%	%	Number	%	Number	%	Number	%
<b>All Other/Unknown</b>	2020	0	*	*	0	*	0	*	0	*
	2019	0	*	*	2	*	0	*	2	*
	2018	21	*	*	21	*	21	*	21	*
	2017	15	*	*	16	*	12	*	16	*
<b>Total All Race/Ethnic Groups</b>	2020	42,825	10.8	6.1	44,372	12.6	37,125	4.8	43,607	64.8
	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

(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