

# WIC PNSS & PedNSS

## Table 3B

### 2020 Pregnancy Nutrition Surveillance (1)

#### Michigan

#### Comparison of Racial and Ethnic Distribution by County

Comparison of Racial and Ethnic Distribution (2)								
County	Number Included in Analysis	White, Not Hispanic  %	Black, Not Hispanic  %	Hispanic  %	American Indian/Alaska Native  %	Asian/Pacific Islander  %	Multiple Races  %	All Other/Unknown  %
Alcona	40	*	*	*	*	*	*	*
Alger	29	*	*	*	*	*	*	*
Allegan	421	75.8	1.4	18.1	0.2	0.5	3.8	0.2
Alpena	153	96.1	0.7	1.3	0.0	0.0	2.0	0.0
Antrim	82	*	*	*	*	*	*	*
Arenac	96	*	*	*	*	*	*	*
Baraga	55	*	*	*	*	*	*	*
Barry	216	93.5	0.0	4.6	0.0	0.9	0.9	0.0
Bay	516	79.8	1.9	10.7	0.0	0.2	7.0	0.4
Benzie	69	*	*	*	*	*	*	*
Berrien	833	49.9	36.1	8.2	0.1	1.1	4.3	0.2
Branch	345	85.8	0.3	10.1	0.0	0.9	1.4	1.4
Calhoun	934	58.4	19.0	8.4	0.6	5.8	7.7	0.2
Cass	286	61.9	7.7	21.0	0.7	0.0	8.0	0.7
Charlevoix	109	90.8	0.0	3.7	0.0	0.0	5.5	0.0
Cheboygan	118	87.3	0.8	4.2	0.8	0.0	6.8	0.0
Chippewa	191	55.5	1.0	1.0	18.8	0.5	23.0	0.0
Clare	182	95.6	0.0	2.2	0.0	0.0	2.2	0.0
Clinton	116	81.9	2.6	11.2	0.0	0.0	3.4	0.9
Crawford	85	*	*	*	*	*	*	*
Delta	212	85.8	0.0	2.4	1.4	0.0	9.9	0.5
Dickinson	129	95.3	0.0	2.3	0.0	0.0	2.3	0.0
Eaton	236	81.4	4.7	11.9	0.0	1.3	0.4	0.4

(1) Reporting period is January 1 through December 31

(2) Excludes data with errors

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Emmet	145	87.6	2.1	2.1	2.1	0.0	6.2	0.0
Genesee	2,526	45.9	41.3	5.9	0.1	0.2	6.4	0.2
Gladwin	152	94.7	0.0	3.3	0.0	0.0	2.0	0.0
Gogebic	53	*	*	*	*	*	*	*
Gr Travers	374	85.3	0.5	7.8	1.9	0.5	3.5	0.5
Gratiot	202	87.1	0.0	10.9	0.5	0.0	1.5	0.0
Hillsdale	216	95.4	0.0	2.3	0.5	0.0	1.9	0.0
Houghton	193	90.2	3.1	2.1	0.0	1.6	2.6	0.5
Huron	146	91.1	0.7	6.2	0.0	0.0	2.1	0.0
Ingham	1,711	41.0	27.7	17.0	0.2	5.4	8.3	0.4
Ionia	312	87.8	0.3	9.0	0.0	0.0	2.9	0.0
Iosco	162	91.4	0.6	1.2	0.6	0.0	6.2	0.0
Iron	58	*	*	*	*	*	*	*
Isabella	343	79.6	4.4	4.1	5.0	0.9	5.8	0.3
Jackson	983	70.0	14.6	5.6	0.2	0.5	9.0	0.1
Kalamazoo	1,272	44.7	35.6	10.6	0.2	1.1	7.5	0.4
Kalkaska	95	*	*	*	*	*	*	*
Kent	3,297	31.5	29.4	28.5	0.3	5.2	5.0	0.1
Lake	53	*	*	*	*	*	*	*
Lapeer	343	83.1	0.6	13.1	0.0	0.6	2.6	0.0
Leelanau	40	*	*	*	*	*	*	*
Lenawee	440	73.0	2.3	20.5	0.0	0.2	3.9	0.2
Livingston	320	92.2	1.6	3.1	0.0	0.6	2.2	0.3

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Luce	39	*	*	*	*	*	*	*
Mackinac	30	*	*	*	*	*	*	*
Macomb	3,329	53.8	30.2	4.3	0.2	7.1	4.1	0.2
Manistee	97	*	*	*	*	*	*	*
Marquette	236	85.2	1.3	3.8	1.7	1.3	6.8	0.0
Mason	137	83.9	1.5	8.0	0.0	1.5	5.1	0.0
Mecosta	231	84.8	4.8	2.2	0.4	1.3	6.1	0.4
Menominee	77	*	*	*	*	*	*	*
Midland	300	89.3	1.3	3.7	0.0	2.3	3.3	0.0
Missaukee	67	*	*	*	*	*	*	*
Monroe	673	81.1	7.1	5.3	0.1	0.4	4.8	1.0
Montcalm	347	92.2	0.0	5.2	0.0	0.3	2.0	0.3
Montmorenc	53	*	*	*	*	*	*	*
Muskegon	1,204	50.4	31.7	8.6	0.3	0.7	7.9	0.3
Newaygo	360	78.1	0.8	18.3	0.3	0.0	1.4	1.1
Oakland	3,465	40.5	42.3	10.7	0.1	2.0	4.3	0.2
Oceana	170	54.1	1.2	40.6	0.6	0.0	3.5	0.0
Ogemaw	121	94.2	0.0	0.8	0.0	0.0	4.1	0.8
Ontonagon	20	*	*	*	*	*	*	*
Osceola	149	87.9	3.4	3.4	0.0	0.0	5.4	0.0
Oscoda	39	*	*	*	*	*	*	*
Otsego	159	97.5	0.0	1.3	0.0	0.6	0.6	0.0
Ottawa	1,060	51.7	4.3	35.1	0.2	2.9	4.9	0.8

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<b>County</b>	Number Included in Analysis	White, Not Hispanic  %	Black, Not Hispanic  %	Hispanic  %	American Indian/Alaska Native  %	Asian/Pacific Islander  %	Multiple Races  %	All Other/Unknown  %
Presque Is	42	*	*	*	*	*	*	*
Roscommon	101	97.0	0.0	1.0	0.0	1.0	1.0	0.0
Saginaw	1,252	37.2	41.1	15.1	0.0	0.8	5.4	0.4
Sanilac	205	92.7	0.0	5.4	0.5	0.5	0.5	0.5
Schoolcraf	46	*	*	*	*	*	*	*
Shiawassee	340	87.1	0.3	9.7	0.0	0.0	2.9	0.0
St Clair	684	80.0	6.9	5.6	0.0	0.6	6.9	0.1
St Joseph	419	71.1	1.0	20.0	0.0	0.0	7.6	0.2
Tuscola	277	93.1	0.4	5.1	0.0	0.4	1.1	0.0
Van Buren	453	62.9	3.3	30.0	0.0	0.2	2.0	1.5
Washtenaw	1,014	38.0	41.1	10.4	0.1	2.7	7.5	0.3
Wayne	13,682	28.8	56.7	9.1	0.1	2.6	2.5	0.1
Wexford	258	91.1	0.0	2.7	0.0	0.0	5.8	0.4
<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>

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## Table 4B

### 2020 Pregnancy Nutrition Surveillance (1)

### Michigan

### Comparison of Age Distribution by County

<b>Comparison of Age Distribution (2)</b>								
County	Number Included in Analysis	< 15 Years %	15 - 17 Years %	18 - 19 Years %	20 - 29 Years %	30 - 39 Years %	>= 40 Years %	Unknown %
Alcona	40	*	*	*	*	*	*	*
Alger	29	*	*	*	*	*	*	*
Allegan	421	0.0	2.4	8.6	59.9	26.4	2.6	0.2
Alpena	153	0.0	2.0	10.5	63.4	23.5	0.7	0.0
Antrim	82	*	*	*	*	*	*	*
Arenac	96	*	*	*	*	*	*	*
Baraga	55	*	*	*	*	*	*	*
Barry	216	0.0	1.9	7.4	67.1	21.3	2.3	0.0
Bay	516	0.0	2.3	8.5	62.8	25.0	1.4	0.0
Benzie	69	*	*	*	*	*	*	*
Berrien	833	0.0	4.4	9.4	60.1	22.0	1.9	2.2
Branch	345	0.0	2.6	10.4	62.6	22.6	1.7	0.0
Calhoun	934	0.0	3.3	6.5	64.1	23.7	1.9	0.4
Cass	286	0.3	4.2	10.5	60.5	24.1	0.3	0.0
Charlevoix	109	0.0	0.0	7.3	68.8	22.9	0.9	0.0
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Clare	182	0.5	6.0	6.0	62.6	23.6	1.1	0.0
Clinton	116	0.0	1.7	5.2	55.2	37.1	0.9	0.0
Crawford	85	*	*	*	*	*	*	*
Delta	212	0.0	2.4	6.6	56.6	34.4	0.0	0.0
Dickinson	129	0.0	3.1	6.2	59.7	30.2	0.8	0.0
Eaton	236	0.0	2.1	10.6	61.4	23.3	1.7	0.8
Emmet	145	0.0	2.8	2.8	62.8	28.3	3.4	0.0

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Gratiot	202	0.5	2.5	7.9	63.4	24.3	1.0	0.5
Hillsdale	216	0.0	2.8	10.2	67.1	18.5	0.5	0.9
Houghton	193	0.0	1.6	6.7	56.5	34.2	1.0	0.0
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Iron	58	*	*	*	*	*	*	*
Isabella	343	0.0	3.2	7.9	65.0	23.0	0.9	0.0
Jackson	983	0.0	2.8	7.5	63.5	24.6	1.0	0.5
Kalamazoo	1,272	0.2	3.5	7.5	60.9	25.6	1.8	0.6
Kalkaska	95	*	*	*	*	*	*	*
Kent	3,297	0.1	2.1	7.7	58.5	29.5	1.5	0.5
Lake	53	*	*	*	*	*	*	*
Lapeer	343	0.0	2.3	5.2	61.5	29.4	1.2	0.3
Leelanau	40	*	*	*	*	*	*	*
Lenawee	440	0.2	1.8	7.7	60.0	28.9	1.1	0.2
Livingston	320	0.0	0.9	5.3	61.6	30.6	1.6	0.0
Luce	39	*	*	*	*	*	*	*
Mackinac	30	*	*	*	*	*	*	*

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Manistee	97	*	*	*	*	*	*	*
Marquette	236	0.4	0.4	3.8	58.5	33.1	3.8	0.0
Mason	137	0.0	3.6	7.3	67.2	20.4	1.5	0.0
Mecosta	231	0.0	2.2	5.2	66.2	25.1	1.3	0.0
Menominee	77	*	*	*	*	*	*	*
Midland	300	0.0	2.0	5.3	62.7	29.0	1.0	0.0
Missaukee	67	*	*	*	*	*	*	*
Monroe	673	0.0	2.4	7.7	60.9	26.7	2.1	0.1
Montcalm	347	0.0	2.3	12.4	64.3	19.6	1.2	0.3
Montmorenc	53	*	*	*	*	*	*	*
Muskegon	1,204	0.2	3.4	9.0	62.0	23.2	1.7	0.4
Newaygo	360	0.0	1.4	7.2	64.7	24.2	2.2	0.3
Oakland	3,465	0.0	1.6	4.7	58.7	32.2	2.5	0.2
Oceana	170	0.0	2.9	8.2	64.7	20.0	4.1	0.0
Ogemaw	121	0.0	4.1	5.0	66.9	23.1	0.8	0.0
Ontonagon	20	*	*	*	*	*	*	*
Osceola	149	0.0	2.7	8.1	60.4	27.5	0.7	0.7
Oscoda	39	*	*	*	*	*	*	*
Otsego	159	0.6	1.3	5.0	69.8	20.8	2.5	0.0
Ottawa	1,060	0.2	1.7	6.0	64.5	24.7	2.5	0.4
Presque Is	42	*	*	*	*	*	*	*
Roscommon	101	0.0	1.0	13.9	57.4	26.7	1.0	0.0
Saginaw	1,252	0.1	3.3	8.2	63.1	23.5	1.4	0.4

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Schoolcraf	46	*	*	*	*	*	*	*
Shiawassee	340	0.0	2.4	7.1	67.4	22.6	0.6	0.0
St Clair	684	0.3	2.3	7.6	65.9	22.2	1.5	0.1
St Joseph	419	0.2	1.4	8.8	67.5	21.2	0.7	0.0
Tuscola	277	0.0	2.9	6.1	63.5	24.5	2.5	0.4
Van Buren	453	0.0	0.9	7.3	60.7	28.7	1.5	0.9
Washtenaw	1,014	0.0	1.3	5.6	56.9	33.6	2.4	0.2
Wayne	13,682	0.1	2.1	5.9	58.5	30.2	2.9	0.2
Wexford	258	0.0	2.3	10.5	67.4	18.6	1.2	0.0
<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>

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# WIC PNSS & PedNSS

## Table 5B 2020 Pregnancy Nutrition Surveillance (1) Michigan

### Comparison of Maternal Health Indicators by County

<b>Comparison of Maternal Health Indicators (2,3)</b>														
County	Prepregnancy BMI			Weight Gain			Anemia (Low Hb/Hct)				Gestational Diabetes During Pregnancy		Hypertension During Pregnancy	
	(4)			(5)			(6)							
	Under- weight		Over- weight	< Ideal		> Ideal	3rd Trimester		Postpartum					
	Number	% (Rank)	% (Rank)	Number	% (Rank)	% (Rank)	Number	% (Rank)	Number	% (Rank)	Number	% (Rank)	Number	% (Rank)
Alcona	28	*	*	12	*	*	7	*	1	*	36	*	36	*
Alger	20	*	*	11	*	*	0	*	0	*	26	*	26	*
Allegan	328	4.9 (43)	60.4 (25)	163	16.0 (13)	54.6 (36)	30	*	33	*	386	8.5 (28)	386	12.4 (29)
Alpena	138	6.5 (53)	58.7 (12)	64	*	*	11	*	2	*	132	8.3 (21)	133	18.0 (53)
Antrim	69	*	*	15	*	*	7	*	1	*	74	*	74	*
Arenac	73	*	*	57	*	*	6	*	2	*	91	*	92	*
Baraga	51	*	*	29	*	*	1	*	3	*	50	*	50	*
Barry	83	*	*	15	*	*	18	*	3	*	198	14.1 (56)	198	14.6 (41)
Bay	429	3.0 (11)	63.6 (40)	218	16.5 (16)	53.2 (28)	28	*	4	*	467	6.0 (7)	467	11.3 (19)
Benzie	55	*	*	30	*	*	4	*	1	*	64	*	64	*
Berrien	729	3.6 (19)	61.9 (34)	500	17.4 (21)	57.4 (38)	74	*	55	*	721	8.6 (29)	721	18.9 (58)
Branch	172	4.1 (28)	65.1 (44)	72	*	*	14	*	3	*	314	10.5 (46)	314	7.6 (2)
Calhoun	663	5.1 (47)	57.0 (4)	379	20.6 (36)	52.0 (21)	40	*	10	*	829	8.3 (21)	830	10.0 (12)
Cass	240	4.2 (31)	58.8 (14)	165	15.2 (9)	52.7 (25)	18	*	11	*	270	7.8 (17)	271	13.3 (35)
Charlevoix	79	*	*	19	*	*	7	*	3	*	102	3.9 (2)	102	18.6 (56)
Cheboygan	103	1.9 (3)	60.2 (23)	30	*	*	3	*	0	*	106	9.4 (38)	106	8.5 (3)
Chippewa	172	2.9 (10)	62.8 (37)	124	15.3 (10)	50.8 (16)	4	*	4	*	170	8.2 (20)	172	9.9 (10)

(1) Reporting period is January 1 through December 31.

(2) Excludes records with unknown data or errors.

(3) Rank compares one County's rate to other Counties. Rank 1 = best rate.

(4) 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).

(5) 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 prepregnancy (ideal weight gain = 15 to 25 pounds), obese prepregnancy (ideal weight gain = 11 to 20 pounds).

(6) Based on 1990 MMWR, "Recommendations to Prevent and Control Iron Deficiency in the United States"; adjusted for altitude and smoking.

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# WIC PNSS & PedNSS

## Table 5B 2020 Pregnancy Nutrition Surveillance (1) Michigan

### Comparison of Maternal Health Indicators by County

<b>Comparison of Maternal Health Indicators (2,3)</b>														
<b>County</b>	Prepregnancy BMI			Weight Gain			Anemia (Low Hb/Hct)				Gestational Diabetes During Pregnancy		Hypertension During Pregnancy	
	(4)			(5)			(6)							
	Under- weight		Over- weight	< Ideal		> Ideal	3rd Trimester		Postpartum					
	Number	% (Rank)	% (Rank)	Number	% (Rank)	% (Rank)	Number	% (Rank)	Number	% (Rank)	Number	% (Rank)	Number	% (Rank)
Clare	165	3.0 (11)	60.0 (21)	101	18.8 (30)	49.5 (9)	10	*	7	*	168	7.7 (16)	168	10.7 (16)
Clinton	103	4.9 (43)	71.8 (54)	58	*	*	7	*	0	*	105	19.0 (59)	105	17.1 (48)
Crawford	72	*	*	33	*	*	2	*	1	*	77	*	77	*
Delta	198	2.5 (6)	63.6 (40)	150	19.3 (32)	52.7 (25)	11	*	3	*	191	12.0 (54)	191	12.0 (27)
Dickinson	96	*	*	36	*	*	9	*	4	*	114	0.9 (1)	115	14.8 (42)
Eaton	140	7.9 (54)	56.4 (3)	62	*	*	11	*	6	*	218	11.9 (53)	218	17.0 (47)
Emmet	128	4.7 (39)	60.9 (28)	64	*	*	3	*	0	*	135	8.9 (35)	135	15.6 (43)
Genesee	1,745	4.3 (34)	59.8 (16)	769	17.0 (18)	52.0 (21)	151	43.0 (5)	41	*	2,272	7.9 (19)	2,276	15.6 (43)
Gladwin	146	2.7 (8)	65.8 (46)	115	7.8 (1)	61.7 (41)	6	*	4	*	142	10.6 (48)	143	17.5 (52)
Gogebic	47	*	*	39	*	*	4	*	0	*	50	*	50	*
Gr Travers	313	5.1 (47)	51.8 (1)	240	15.0 (7)	48.3 (6)	21	*	2	*	343	5.2 (4)	345	9.3 (8)
Gratiot	188	2.1 (4)	66.5 (48)	123	22.0 (38)	51.2 (17)	10	*	4	*	184	17.9 (58)	185	15.7 (45)
Hillsdale	179	5.0 (46)	66.5 (48)	134	14.9 (5)	50.0 (10)	4	*	6	*	204	5.4 (6)	204	4.4 (1)
Houghton	172	2.3 (5)	57.6 (9)	125	19.2 (31)	44.8 (2)	10	*	1	*	171	7.6 (13)	171	11.7 (23)
Huron	128	4.7 (39)	68.8 (52)	92	*	*	10	*	3	*	142	9.9 (40)	143	11.9 (25)
Ingham	1,370	3.9 (22)	62.0 (35)	1,094	20.3 (35)	53.7 (32)	101	32.7 (1)	18	*	1,608	7.0 (10)	1,608	13.3 (35)
Ionia	234	6.0 (52)	59.8 (16)	167	17.4 (21)	53.3 (29)	10	*	4	*	287	9.8 (39)	287	17.1 (48)

(1) Reporting period is January 1 through December 31.

(2) Excludes records with unknown data or errors.

(3) Rank compares one County's rate to other Counties. Rank 1 = best rate.

(4) 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).

(5) 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 prepregnancy (ideal weight gain = 15 to 25 pounds), obese prepregnancy (ideal weight gain = 11 to 20 pounds).

(6) Based on 1990 MMWR, "Recommendations to Prevent and Control Iron Deficiency in the United States"; adjusted for altitude and smoking.

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# WIC PNSS & PedNSS

## Table 5B 2020 Pregnancy Nutrition Surveillance (1) Michigan

### Comparison of Maternal Health Indicators by County

<b>Comparison of Maternal Health Indicators (2,3)</b>														
<b>County</b>	Prepregnancy BMI			Weight Gain			Anemia (Low Hb/Hct)				Gestational Diabetes During Pregnancy		Hypertension During Pregnancy	
	(4)			(5)			(6)							
	Under- weight		Over- weight	< Ideal		> Ideal	3rd Trimester		Postpartum					
	Number	% (Rank)	% (Rank)	Number	% (Rank)	% (Rank)	Number	% (Rank)	Number	% (Rank)	Number	% (Rank)	Number	% (Rank)
Iosco	99	*	*	25	*	*	12	*	1	*	145	7.6 (13)	145	11.7 (23)
Iron	39	*	*	10	*	*	4	*	1	*	49	*	49	*
Isabella	298	4.7 (39)	60.4 (25)	179	15.6 (12)	48.6 (7)	20	*	11	*	308	8.8 (33)	308	9.4 (9)
Jackson	682	4.5 (38)	61.6 (32)	463	14.9 (5)	55.3 (37)	36	*	9	*	914	8.4 (25)	916	11.0 (18)
Kalamazoo	1,005	3.6 (19)	60.1 (22)	502	16.1 (14)	52.2 (23)	56	*	17	*	1,091	10.0 (41)	1,091	10.6 (15)
Kalkaska	74	*	*	51	*	*	2	*	5	*	90	*	90	*
Kent	1,993	3.9 (22)	60.2 (23)	777	24.2 (40)	46.2 (4)	199	41.2 (3)	78	*	2,987	8.6 (29)	2,989	13.9 (38)
Lake	52	*	*	40	*	*	3	*	0	*	48	*	48	*
Lapeer	305	4.3 (34)	58.0 (10)	237	18.1 (25)	54.0 (34)	13	*	6	*	311	6.8 (8)	311	11.9 (25)
Leelanau	37	*	*	20	*	*	0	*	0	*	36	*	36	*
Lenawee	279	4.3 (34)	59.9 (20)	173	14.5 (3)	50.3 (12)	27	*	8	*	398	10.1 (42)	399	14.3 (40)
Livingston	313	3.2 (14)	57.2 (5)	240	15.0 (7)	52.9 (27)	17	*	8	*	296	10.5 (46)	296	18.2 (54)
Luce	37	*	*	26	*	*	1	*	1	*	32	*	32	*
Mackinac	30	*	*	27	*	*	4	*	1	*	28	*	28	*
Macomb	2,787	4.2 (31)	59.8 (16)	2,115	17.8 (23)	53.8 (33)	177	42.9 (4)	59	*	3,095	10.2 (44)	3,096	9.9 (10)
Manistee	46	*	*	21	*	*	4	*	3	*	90	*	91	*
Marquette	223	4.9 (43)	59.2 (15)	158	17.1 (19)	50.6 (14)	15	*	9	*	210	8.6 (29)	212	12.3 (28)

(1) Reporting period is January 1 through December 31.

(2) Excludes records with unknown data or errors.

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(4) 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).

(5) 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 prepregnancy (ideal weight gain = 15 to 25 pounds), obese prepregnancy (ideal weight gain = 11 to 20 pounds).

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# WIC PNSS & PedNSS

## Table 5B

### 2020 Pregnancy Nutrition Surveillance (1)

#### Michigan

#### Comparison of Maternal Health Indicators by County

<b>Comparison of Maternal Health Indicators (2,3)</b>														
<b>County</b>	Prepregnancy BMI			Weight Gain			Anemia (Low Hb/Hct)				Gestational Diabetes During Pregnancy		Hypertension During Pregnancy	
	(4)			(5)			(6)							
	Under- weight		Over- weight	< Ideal		> Ideal	3rd Trimester		Postpartum					
	Number	% (Rank)	% (Rank)	Number	% (Rank)	% (Rank)	Number	% (Rank)	Number	% (Rank)	Number	% (Rank)	Number	% (Rank)
Mason	127	0.0 (1)	57.5 (8)	102	14.7 (4)	61.8 (42)	4	*	3	*	127	8.7 (32)	127	17.3 (50)
Mecosta	163	4.3 (34)	68.7 (51)	56	*	*	19	*	5	*	213	5.2 (4)	213	19.7 (59)
Menominee	70	*	*	50	*	*	2	*	0	*	62	*	63	*
Midland	227	3.1 (13)	63.0 (38)	16	*	*	15	*	4	*	268	11.6 (52)	268	9.0 (5)
Missaukee	66	*	*	44	*	*	1	*	1	*	57	*	57	*
Monroe	584	5.7 (50)	61.0 (29)	431	16.2 (15)	53.6 (31)	39	*	14	*	604	8.4 (25)	605	18.5 (55)
Montcalm	318	2.5 (6)	60.7 (27)	170	15.3 (10)	57.6 (39)	22	*	8	*	319	11.0 (49)	319	14.1 (39)
Montmorenc	49	*	*	32	*	*	4	*	1	*	48	*	48	*
Muskegon	1,071	3.2 (14)	65.6 (45)	824	17.2 (20)	51.6 (18)	39	*	10	*	1,106	10.1 (42)	1,102	18.8 (57)
Newaygo	319	4.7 (39)	63.6 (40)	223	20.6 (36)	45.7 (3)	13	*	14	*	330	11.2 (51)	330	16.1 (46)
Oakland	2,506	3.8 (21)	58.3 (11)	1,306	17.8 (23)	51.6 (18)	212	41.0 (2)	53	*	3,116	6.8 (8)	3,115	11.4 (21)
Oceana	131	0.8 (2)	71.0 (53)	101	19.8 (34)	53.5 (30)	5	*	5	*	150	15.3 (57)	150	17.3 (50)
Ogemaw	104	5.8 (51)	66.3 (47)	38	*	*	5	*	3	*	106	4.7 (3)	106	13.2 (33)
Ontonagon	20	*	*	15	*	*	0	*	0	*	18	*	18	*
Osceola	123	3.3 (16)	61.0 (29)	80	*	*	12	*	1	*	141	7.8 (17)	141	11.3 (19)
Oscoda	27	*	*	7	*	*	2	*	1	*	37	*	38	*
Otsego	101	4.0 (26)	57.4 (7)	31	*	*	10	*	3	*	148	8.8 (33)	148	12.8 (30)

(1) Reporting period is January 1 through December 31.

(2) Excludes records with unknown data or errors.

(3) Rank compares one County's rate to other Counties. Rank 1 = best rate.

(4) 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).

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# WIC PNSS & PedNSS

## Table 5B 2020 Pregnancy Nutrition Surveillance (1) Michigan

### Comparison of Maternal Health Indicators by County

<b>Comparison of Maternal Health Indicators</b> (2,3)														
<b>County</b>	Prepregnancy BMI			Weight Gain			Anemia (Low Hb/Hct)				Gestational Diabetes During Pregnancy		Hypertension During Pregnancy	
	(4)			(5)			(6)							
	Under- weight		Over- weight	< Ideal		> Ideal	3rd Trimester		Postpartum					
	Number	% (Rank)	% (Rank)	Number	% (Rank)	% (Rank)	Number	% (Rank)	Number	% (Rank)	Number	% (Rank)	Number	% (Rank)
Ottawa	504	5.6 (49)	56.3 (2)	184	13.0 (2)	59.2 (40)	71	*	70	*	956	8.3 (21)	957	9.1 (6)
Presque Is	41	*	*	31	*	*	3	*	0	*	40	*	40	*
Roscommon	99	*	*	79	*	*	7	*	0	*	86	*	86	*
Saginaw	1,034	3.3 (16)	62.6 (36)	549	16.9 (17)	50.1 (11)	72	*	41	*	1,153	8.3 (21)	1,154	10.7 (16)
Sanilac	32	*	*	10	*	*	9	*	5	*	171	7.6 (13)	171	8.8 (4)
Schoolcraf	45	*	*	39	*	*	0	*	0	*	42	*	42	*
Shiawassee	306	4.2 (31)	64.7 (43)	247	18.2 (27)	50.6 (14)	12	*	5	*	300	9.3 (37)	301	13.3 (35)
St Clair	651	3.5 (18)	58.7 (12)	546	18.7 (29)	54.4 (35)	43	*	9	*	616	7.1 (12)	617	13.0 (32)
St Joseph	355	3.9 (22)	61.1 (31)	131	22.9 (39)	46.6 (5)	16	*	8	*	379	8.4 (25)	378	10.1 (13)
Tuscola	220	4.1 (28)	63.2 (39)	170	25.3 (41)	51.8 (20)	16	*	4	*	255	11.0 (49)	256	12.9 (31)
Van Buren	358	2.8 (9)	66.8 (50)	111	32.4 (42)	41.4 (1)	33	*	24	*	404	12.1 (55)	405	10.1 (13)
Washtenaw	779	4.0 (26)	59.8 (16)	489	19.4 (33)	48.9 (8)	44	*	19	*	931	9.2 (36)	931	13.2 (33)
Wayne	9,117	3.9 (22)	61.6 (32)	4,945	18.2 (27)	52.3 (24)	847	48.3 (6)	183	38.3 (1)	12,597	7.0 (10)	12,601	11.5 (22)
Wexford	218	4.1 (28)	57.3 (6)	149	18.1 (25)	50.3 (12)	15	*	5	*	242	10.3 (45)	242	9.1 (6)
<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>

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(2) Excludes records with unknown data or errors.

(3) Rank compares one County's rate to other Counties. Rank 1 = best rate.

(4) 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).

(5) 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 prepregnancy (ideal weight gain = 15 to 25 pounds), obese prepregnancy (ideal weight gain = 11 to 20 pounds).

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# WIC PNSS & PedNSS

## Table 6B

### 2020 Pregnancy Nutrition Surveillance (1)

#### Michigan

#### Comparison of Maternal Behavioral Indicators by County

<b>Comparison of Maternal Behavioral Indicators (2,3)</b>									
County	Medical Care			WIC Enrollment		Multivitamin Consumption			
	1st Trimester		No Care	1st Trimester		Prepregnancy (4)		During Pregnancy (5)	
	Number	% (rank)	% (rank)	Number	% (rank)	Number	% (rank)	Number	% (rank)
Alcona	36	*	*	40	*	35	*	31	*
Alger	25	*	*	28	*	23	*	21	*
Allegan	386	94.6 (3)	2.3 (3)	419	35.6 (25)	366	21.3 (37)	312	92.0 (19)
Alpena	131	80.9 (41)	16.8 (53)	152	42.8 (8)	138	21.7 (35)	127	95.3 (3)
Antrim	74	*	*	80	*	70	*	64	*
Arenac	91	*	*	96	*	85	*	73	*
Baraga	51	*	*	53	*	47	*	42	*
Barry	195	91.8 (7)	3.6 (7)	214	27.1 (53)	190	24.2 (25)	150	96.7 (1)
Bay	472	73.1 (54)	19.7 (55)	513	41.5 (9)	473	14.0 (52)	423	84.6 (48)
Benzie	64	*	*	68	*	63	*	52	*
Berrien	700	74.3 (53)	11.0 (40)	815	31.5 (40)	722	19.3 (46)	601	89.5 (29)
Branch	260	79.2 (42)	11.2 (41)	336	31.0 (41)	290	23.1 (28)	265	84.9 (47)
Calhoun	811	93.1 (4)	4.1 (11)	920	33.8 (31)	678	23.0 (29)	677	82.6 (51)
Cass	262	86.6 (22)	8.0 (34)	282	44.0 (5)	243	21.0 (41)	219	80.8 (54)
Charlevoix	104	88.5 (17)	7.7 (31)	107	33.6 (32)	99	*	87	*
Cheboygan	108	71.3 (55)	15.7 (50)	115	34.8 (27)	102	29.4 (10)	92	*
Chippewa	172	96.5 (1)	2.9 (5)	186	46.8 (2)	172	34.9 (4)	157	82.2 (53)
Clare	171	83.0 (37)	8.8 (36)	181	45.3 (4)	150	25.3 (24)	153	88.9 (33)
Clinton	104	86.5 (23)	3.8 (10)	116	30.2 (45)	79	*	88	*
Crawford	77	*	*	85	*	81	*	70	*

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(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.

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# WIC PNSS & PedNSS

## Table 6B

### 2020 Pregnancy Nutrition Surveillance <sup>(1)</sup>

#### Michigan

#### Comparison of Maternal Behavioral Indicators by County

<b>Comparison of Maternal Behavioral Indicators <sup>(2,3)</sup></b>									
<b>County</b>	Medical Care			WIC Enrollment		Multivitamin Consumption			
	1st Trimester		No Care	1st Trimester		Prepregnancy <sup>(4)</sup>		During Pregnancy <sup>(5)</sup>	
	Number	% (rank)	% (rank)	Number	% (rank)	Number	% (rank)	Number	% (rank)
Delta	190	91.6 (9)	2.1 (2)	211	35.5 (26)	192	28.1 (13)	169	94.1 (8)
Dickinson	117	91.5 (10)	5.1 (17)	129	33.3 (34)	119	22.7 (30)	99	*
Eaton	213	85.0 (28)	4.2 (13)	234	31.6 (39)	211	27.5 (18)	174	93.1 (14)
Emmet	135	85.2 (27)	6.7 (26)	144	27.8 (51)	130	33.8 (6)	104	93.3 (11)
Genesee	2,249	87.0 (21)	3.6 (7)	2,495	28.1 (50)	1,812	6.0 (57)	1,808	87.8 (38)
Gladwin	145	65.5 (58)	28.3 (59)	151	47.0 (1)	141	34.8 (5)	122	87.7 (39)
Gogebic	48	*	*	53	*	46	*	36	*
Gr Travers	346	76.9 (50)	15.3 (49)	371	27.0 (54)	325	26.5 (21)	255	89.0 (31)
Gratiot	186	86.0 (25)	7.0 (29)	199	38.7 (14)	168	26.8 (20)	159	94.3 (7)
Hillsdale	202	83.2 (36)	9.4 (37)	214	37.9 (18)	187	16.6 (49)	164	90.9 (24)
Houghton	169	78.1 (47)	14.8 (48)	189	33.3 (34)	166	33.7 (7)	152	91.4 (22)
Huron	143	78.3 (46)	5.6 (19)	145	27.6 (52)	120	24.2 (25)	101	92.1 (18)
Ingham	1,597	87.9 (19)	6.8 (28)	1,697	28.8 (48)	1,494	7.1 (56)	1,273	89.0 (31)
Ionia	289	90.0 (14)	6.6 (25)	311	33.1 (37)	275	21.1 (39)	221	94.6 (6)
Iosco	146	83.6 (34)	7.5 (30)	156	38.5 (15)	150	21.3 (37)	139	85.6 (46)
Iron	51	*	*	57	*	50	*	48	*
Isabella	309	84.8 (29)	8.4 (35)	342	34.8 (27)	298	27.9 (14)	275	89.5 (29)
Jackson	907	82.8 (38)	9.7 (38)	970	37.9 (18)	822	20.2 (45)	772	86.7 (40)
Kalamazoo	1,088	84.8 (29)	5.9 (22)	1,258	34.7 (29)	1,099	17.6 (48)	951	85.9 (44)
Kalkaska	90	*	*	92	*	85	*	76	*
Kent	2,944	84.4 (31)	5.6 (19)	3,267	24.5 (58)	2,727	21.0 (41)	2,406	89.8 (28)

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# WIC PNSS & PedNSS

## Table 6B

### 2020 Pregnancy Nutrition Surveillance <sup>(1)</sup>

#### Michigan

#### Comparison of Maternal Behavioral Indicators by County

<b>Comparison of Maternal Behavioral Indicators <sup>(2,3)</sup></b>									
<b>County</b>	Medical Care			WIC Enrollment		Multivitamin Consumption			
	1st Trimester		No Care	1st Trimester		Prepregnancy <sup>(4)</sup>		During Pregnancy <sup>(5)</sup>	
	Number	% (rank)	% (rank)	Number	% (rank)	Number	% (rank)	Number	% (rank)
Lake	48	*	*	52	*	46	*	40	*
Lapeer	312	77.9 (48)	13.1 (44)	335	30.1 (46)	300	21.7 (35)	249	92.4 (16)
Leelanau	35	*	*	39	*	31	*	27	*
Lenawee	392	91.8 (7)	3.3 (6)	439	30.5 (43)	380	21.8 (34)	327	92.0 (19)
Livingston	295	85.8 (26)	7.8 (32)	316	26.3 (56)	254	39.8 (2)	219	93.2 (13)
Luce	31	*	*	38	*	27	*	32	*
Mackinac	28	*	*	30	*	28	*	25	*
Macomb	3,077	90.7 (12)	4.7 (15)	3,272	27.0 (54)	2,238	12.6 (54)	2,373	93.6 (10)
Manistee	92	*	*	96	*	83	*	72	*
Marquette	206	88.8 (15)	6.3 (23)	233	36.1 (24)	167	38.3 (3)	179	86.6 (41)
Mason	125	78.4 (45)	11.2 (41)	133	43.6 (6)	120	24.2 (25)	104	93.3 (11)
Mecosta	212	92.0 (5)	5.7 (21)	230	37.8 (20)	191	14.7 (51)	188	92.6 (15)
Menominee	59	*	*	75	*	56	*	44	*
Midland	268	91.0 (11)	2.6 (4)	298	33.6 (32)	273	28.9 (11)	228	94.7 (5)
Missaukee	57	*	*	64	*	61	*	53	*
Monroe	601	84.0 (33)	7.8 (32)	664	30.3 (44)	594	22.7 (30)	488	88.3 (35)
Montcalm	318	83.3 (35)	10.7 (39)	340	32.6 (38)	293	26.3 (22)	259	95.4 (2)
Montmorenc	49	*	*	52	*	46	*	39	*
Muskegon	1,080	87.5 (20)	5.5 (18)	1,179	38.3 (17)	884	22.5 (32)	903	85.8 (45)
Newaygo	323	78.6 (44)	13.6 (46)	355	39.7 (11)	199	29.6 (9)	276	92.4 (16)
Oakland	3,089	88.8 (15)	4.9 (16)	3,436	25.9 (57)	2,296	19.2 (47)	2,432	90.4 (26)

(1) Reporting period is January 1 through December 31.

(2) Excludes records with unknown data or errors.

(3) Rank compares one County's rate to other Counties. Rank 1 = best rate.

(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.

\* 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 6B

### 2020 Pregnancy Nutrition Surveillance (1)

#### Michigan

#### Comparison of Maternal Behavioral Indicators by County

<b>Comparison of Maternal Behavioral Indicators (2,3)</b>									
<b>County</b>	Medical Care			WIC Enrollment		Multivitamin Consumption			
	1st Trimester		No Care	1st Trimester		Prepregnancy (4)		During Pregnancy (5)	
	Number	% (rank)	% (rank)	Number	% (rank)	Number	% (rank)	Number	% (rank)
Oceana	146	70.5 (56)	23.3 (58)	166	40.4 (10)	160	26.9 (19)	135	84.4 (49)
Ogemaw	105	79.0 (43)	14.3 (47)	121	28.9 (47)	110	20.9 (43)	97	*
Ontonagon	18	*	*	20	*	20	*	19	*
Osceola	141	81.6 (40)	13.5 (45)	146	45.9 (3)	137	27.7 (16)	121	82.6 (51)
Oscoda	38	*	*	39	*	36	*	33	*
Otsego	149	95.3 (2)	1.3 (1)	159	33.3 (34)	134	33.6 (8)	116	91.4 (22)
Ottawa	949	90.7 (12)	4.6 (14)	1,042	30.6 (42)	883	27.9 (14)	754	87.9 (37)
Presque Is	40	*	*	42	*	37	*	30	*
Roscommon	86	*	*	98	*	86	*	73	*
Saginaw	1,141	82.6 (39)	6.7 (26)	1,243	34.7 (29)	1,096	14.8 (50)	977	86.6 (41)
Sanilac	169	88.2 (18)	6.5 (24)	204	43.6 (6)	188	48.9 (1)	168	91.7 (21)
Schoolcraf	42	*	*	46	*	41	*	38	*
Shiawassee	297	84.2 (32)	12.5 (43)	337	37.4 (21)	231	26.0 (23)	261	83.5 (50)
St Clair	616	70.5 (56)	21.8 (57)	681	39.6 (12)	579	22.1 (33)	548	86.1 (43)
St Joseph	363	64.7 (59)	21.2 (56)	414	36.7 (22)	374	20.6 (44)	330	90.6 (25)
Tuscola	259	76.8 (51)	16.6 (52)	276	39.1 (13)	253	28.5 (12)	215	94.9 (4)
Van Buren	401	77.1 (49)	16.2 (51)	446	36.5 (23)	338	12.4 (55)	348	88.8 (34)
Washtenaw	926	92.0 (5)	4.1 (11)	996	28.4 (49)	860	13.3 (53)	717	93.7 (9)
Wayne	12,488	86.1 (24)	3.7 (9)	13,479	23.0 (59)	8,986	21.1 (39)	9,429	88.2 (36)
Wexford	238	74.8 (52)	18.1 (54)	252	38.5 (15)	221	27.6 (17)	193	90.2 (27)

(1) Reporting period is January 1 through December 31.

(2) Excludes records with unknown data or errors.

(3) Rank compares one County's rate to other Counties. Rank 1 = best rate.

(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.

\* 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 6B

### 2020 Pregnancy Nutrition Surveillance (1)

#### Michigan

#### Comparison of Maternal Behavioral Indicators by County

<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) Rank compares one County's rate to other Counties. Rank 1 = best rate.

(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.

\* 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 7B

### 2020 Pregnancy Nutrition Surveillance (1)

### Michigan

### Comparison of Smoking Indicators by County

<b>Comparison of Smoking Indicators (2,3)</b>										
<b>County</b>	Smoking				Quit Smoking By First Prenatal Visit and Stayed Off Cigarettes (4)		Smoking in Household			
	3 Months Prior to Pregnancy		Last 3 Months of Pregnancy				Prenatal		Postpartum	
	Number	% (rank)	Number	% (rank)	Number	% (rank)	Number	% (rank)	Number	% (rank)
Alcona	35	*	36	*	13	*	31	*	36	*
Alger	23	*	26	*	8	*	21	*	26	*
Allegan	373	28.2 (18)	385	14.3 (18)	81	*	312	4.8 (4)	385	1.8 (29)
Alpena	139	42.4 (54)	133	25.6 (53)	45	*	127	12.6 (40)	132	1.5 (22)
Antrim	70	*	74	*	20	*	64	*	74	*
Arenac	86	*	92	*	31	*	73	*	92	*
Baraga	47	*	51	*	16	*	42	*	51	*
Barry	191	38.2 (43)	198	19.7 (33)	52	*	149	10.7 (31)	198	0.5 (4)
Bay	474	39.9 (50)	472	22.0 (44)	162	30.2 (16)	423	12.5 (38)	472	4.0 (51)
Benzie	64	*	64	*	22	*	52	*	64	*
Berrien	724	31.1 (24)	720	15.1 (20)	151	43.0 (6)	601	13.5 (45)	721	2.8 (40)
Branch	312	27.2 (15)	315	13.3 (14)	68	*	264	9.1 (25)	315	0.3 (2)
Calhoun	804	27.4 (16)	825	13.6 (15)	171	35.1 (12)	683	6.7 (13)	828	1.1 (14)
Cass	251	24.7 (13)	271	14.0 (17)	56	*	219	4.6 (3)	271	0.4 (3)
Charlevoix	99	*	102	15.7 (24)	31	*	86	*	102	5.9 (57)
Cheboygan	102	35.3 (34)	105	19.0 (31)	31	*	92	*	106	4.7 (53)
Chippewa	180	33.9 (32)	172	23.8 (49)	52	*	155	12.3 (36)	172	3.5 (46)
Clare	165	44.8 (56)	169	33.1 (59)	64	*	153	21.6 (54)	169	1.2 (16)

(1) Reporting period is January 1 through December 31.

(2) Excludes records with unknown data or errors.

(3) Rank compares one County's rate to other Counties. Rank 1 = best rate.

(4) Among women who smoked 3 months prior to pregnancy.

\* 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 7B

### 2020 Pregnancy Nutrition Surveillance (1)

### Michigan

### Comparison of Smoking Indicators by County

<b>Comparison of Smoking Indicators (2,3)</b>										
<b>County</b>	Smoking				Quit Smoking By First Prenatal Visit and Stayed Off Cigarettes (4)		Smoking in Household			
	3 Months Prior to Pregnancy		Last 3 Months of Pregnancy				Prenatal		Postpartum	
	Number	% (rank)	Number	% (rank)	Number	% (rank)	Number	% (rank)	Number	% (rank)
Clinton	95	*	105	14.3 (18)	27	*	88	*	105	0.0 (1)
Crawford	81	*	77	*	24	*	69	*	76	*
Delta	192	45.3 (57)	191	25.1 (52)	66	*	169	12.4 (37)	191	1.6 (27)
Dickinson	120	35.8 (38)	115	24.3 (51)	34	*	99	*	115	0.9 (10)
Eaton	210	40.0 (52)	218	18.3 (27)	71	*	174	6.9 (16)	218	1.8 (29)
Emmet	133	39.8 (49)	135	18.5 (29)	39	*	104	6.7 (13)	135	1.5 (22)
Genesee	2,149	22.8 (10)	2,279	12.9 (12)	381	37.8 (10)	1,803	8.3 (20)	2,277	2.4 (33)
Gladwin	143	38.5 (44)	144	23.6 (48)	43	*	122	18.9 (52)	144	3.5 (46)
Gogebic	47	*	50	*	16	*	36	*	50	*
Gr Travers	325	36.3 (39)	348	17.0 (26)	89	*	255	9.8 (28)	348	3.2 (42)
Gratiot	179	30.7 (23)	185	20.0 (35)	46	*	160	13.1 (44)	186	1.1 (14)
Hillsdale	189	42.9 (55)	204	27.5 (56)	67	*	164	14.0 (46)	203	1.5 (22)
Houghton	167	38.9 (46)	171	26.3 (54)	53	*	152	9.2 (26)	171	1.2 (16)
Huron	129	34.9 (33)	143	21.0 (40)	39	*	101	12.9 (43)	143	4.9 (54)
Ingham	1,510	17.6 (5)	1,610	10.6 (7)	210	33.8 (14)	1,268	4.3 (2)	1,606	1.5 (22)
Ionia	274	27.7 (17)	286	19.9 (34)	61	*	221	5.0 (6)	289	2.4 (33)
Iosco	150	39.3 (47)	146	30.1 (58)	49	*	139	17.3 (49)	146	2.7 (39)
Iron	52	*	49	*	17	*	47	*	48	*
Isabella	318	32.4 (29)	309	18.4 (28)	85	*	275	8.7 (22)	308	2.6 (38)

(1) Reporting period is January 1 through December 31.

(2) Excludes records with unknown data or errors.

(3) Rank compares one County's rate to other Counties. Rank 1 = best rate.

(4) Among women who smoked 3 months prior to pregnancy.

\* 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 7B

### 2020 Pregnancy Nutrition Surveillance (1)

### Michigan

### Comparison of Smoking Indicators by County

<b>Comparison of Smoking Indicators (2,3)</b>										
<b>County</b>	Smoking				Quit Smoking By First Prenatal Visit and Stayed Off Cigarettes (4)		Smoking in Household			
	3 Months Prior to Pregnancy		Last 3 Months of Pregnancy				Prenatal		Postpartum	
	Number	% (rank)	Number	% (rank)	Number	% (rank)	Number	% (rank)	Number	% (rank)
Jackson	861	35.3 (34)	917	21.8 (42)	265	30.2 (16)	772	8.2 (19)	917	1.2 (16)
Kalamazoo	1,108	23.2 (11)	1,088	10.9 (8)	191	38.2 (9)	946	6.6 (12)	1,084	1.2 (16)
Kalkaska	84	*	90	*	33	*	75	*	90	*
Kent	2,886	16.3 (4)	2,991	7.1 (5)	346	47.1 (5)	2,351	4.8 (4)	2,975	0.6 (5)
Lake	46	*	48	*	24	*	40	*	48	*
Lapeer	301	31.9 (27)	310	15.5 (23)	65	*	249	6.8 (15)	311	2.3 (31)
Leelanau	34	*	36	*	10	*	27	*	36	*
Lenawee	385	30.6 (22)	399	13.8 (16)	90	*	327	12.2 (35)	399	3.0 (41)
Livingston	290	31.7 (25)	295	21.4 (41)	69	*	221	5.9 (10)	295	0.7 (7)
Luce	34	*	31	*	11	*	32	*	31	*
Mackinac	28	*	28	*	8	*	25	*	28	*
Macomb	2,963	15.5 (3)	3,094	7.0 (4)	354	41.8 (7)	2,368	5.7 (9)	3,095	1.0 (12)
Manistee	84	*	91	*	32	*	72	*	91	*
Marquette	217	33.2 (30)	217	20.7 (37)	66	*	179	10.1 (29)	217	1.4 (21)
Mason	121	42.1 (53)	127	29.9 (57)	41	*	104	12.5 (38)	127	2.4 (33)
Mecosta	205	31.7 (25)	212	22.2 (45)	54	*	188	12.8 (42)	212	2.4 (33)
Menominee	60	*	63	*	17	*	44	*	63	*
Midland	273	29.7 (20)	268	15.3 (22)	64	*	228	7.0 (17)	265	0.8 (8)
Missaukee	61	*	57	*	14	*	53	*	56	*

(1) Reporting period is January 1 through December 31.

(2) Excludes records with unknown data or errors.

(3) Rank compares one County's rate to other Counties. Rank 1 = best rate.

(4) Among women who smoked 3 months prior to pregnancy.

\* 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 7B

### 2020 Pregnancy Nutrition Surveillance (1)

### Michigan

### Comparison of Smoking Indicators by County

<b>Comparison of Smoking Indicators (2,3)</b>										
<b>County</b>	Smoking				Quit Smoking By First Prenatal Visit and Stayed Off Cigarettes (4)		Smoking in Household			
	3 Months Prior to Pregnancy		Last 3 Months of Pregnancy				Prenatal		Postpartum	
	Number	% (rank)	Number	% (rank)	Number	% (rank)	Number	% (rank)	Number	% (rank)
Monroe	597	37.0 (41)	605	18.8 (30)	166	41.6 (8)	488	11.9 (34)	605	5.6 (56)
Montcalm	307	37.8 (42)	318	22.6 (46)	86	*	259	17.4 (50)	318	4.1 (52)
Montmorenc	46	*	47	*	17	*	39	*	48	*
Muskegon	1,027	29.7 (20)	1,103	19.6 (32)	242	28.1 (18)	906	10.4 (30)	1,108	3.5 (46)
Newaygo	326	23.3 (12)	329	11.9 (10)	67	*	276	9.4 (27)	330	1.5 (22)
Oakland	3,062	11.3 (1)	3,117	5.5 (1)	256	37.5 (11)	2,428	5.4 (7)	3,116	0.9 (10)
Oceana	159	27.0 (14)	150	12.0 (11)	29	*	134	9.0 (24)	150	3.3 (43)
Ogemaw	110	36.4 (40)	106	27.4 (55)	28	*	97	*	106	6.6 (58)
Ontonagon	20	*	18	*	5	*	19	*	18	*
Osceola	137	38.7 (45)	141	22.7 (47)	47	*	121	17.4 (50)	141	3.5 (46)
Oscoda	36	*	38	*	7	*	33	*	38	*
Otsego	135	35.6 (36)	149	24.2 (50)	41	*	116	19.8 (53)	149	3.4 (44)
Ottawa	942	18.3 (7)	958	7.9 (6)	120	50.8 (3)	744	3.9 (1)	955	1.6 (27)
Presque Is	38	*	40	*	9	*	30	*	40	*
Roscommon	86	*	86	*	23	*	73	*	86	*
Saginaw	1,099	33.5 (31)	1,154	13.1 (13)	301	52.8 (1)	976	11.5 (32)	1,153	3.7 (50)
Sanilac	189	19.6 (8)	171	15.2 (21)	27	*	166	7.8 (18)	171	0.6 (5)
Schoolcraf	41	*	42	*	13	*	38	*	42	*
Shiawassee	308	39.9 (50)	302	20.9 (39)	95	*	259	12.7 (41)	301	7.6 (59)

(1) Reporting period is January 1 through December 31.

(2) Excludes records with unknown data or errors.

(3) Rank compares one County's rate to other Counties. Rank 1 = best rate.

(4) Among women who smoked 3 months prior to pregnancy.

\* 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 7B

### 2020 Pregnancy Nutrition Surveillance (1)

#### Michigan

#### Comparison of Smoking Indicators by County

<b>Comparison of Smoking Indicators (2,3)</b>										
<b>County</b>	Smoking				Quit Smoking By First Prenatal Visit and Stayed Off Cigarettes (4)		Smoking in Household			
	3 Months Prior to Pregnancy		Last 3 Months of Pregnancy				Prenatal		Postpartum	
	Number	% (rank)	Number	% (rank)	Number	% (rank)	Number	% (rank)	Number	% (rank)
St Clair	614	39.7 (48)	619	21.8 (42)	197	33.5 (15)	548	14.1 (47)	618	3.4 (44)
St Joseph	373	31.9 (27)	380	16.3 (25)	100	35.0 (13)	330	8.5 (21)	378	2.4 (33)
Tuscola	253	35.6 (36)	259	20.8 (38)	73	*	215	11.6 (33)	259	1.2 (16)
Van Buren	396	20.5 (9)	404	10.9 (8)	61	*	343	5.5 (8)	405	1.0 (12)
Washtenaw	872	18.2 (6)	926	6.9 (3)	129	49.6 (4)	714	5.9 (10)	930	0.8 (8)
Wayne	11,604	14.3 (2)	12,614	5.5 (1)	1,258	52.0 (2)	9,405	8.9 (23)	12,611	2.3 (31)
Wexford	222	28.4 (19)	243	20.2 (36)	51	*	193	16.1 (48)	242	5.4 (55)
<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) Rank compares one County's rate to other Counties. Rank 1 = best rate.

(4) Among women who smoked 3 months prior to pregnancy.

\* 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 8B

### 2020 Pregnancy Nutrition Surveillance (1)

#### Michigan

#### Comparison of Infant Health Indicators by County

<b>Comparison of Infant Health Indicators (2,3)</b>									
County	Birthweight			Preterm		Full Term LBW		Ever Breastfed	
	Low (4)		High (5)	(6)		(7)			
	Number	% (rank)	% (rank)	Number	% (rank)	Number	% (rank)	Number	% (rank)
Alcona	35	*	*	36	*	35	*	35	*
Alger	24	*	*	24	*	20	*	24	*
Allegan	358	8.1 (23)	5.3 (6)	374	12.3 (37)	313	2.9 (19)	364	71.7 (35)
Alpena	128	2.3 (1)	7.8 (30)	129	7.8 (5)	118	0.0 (1)	128	73.4 (31)
Antrim	69	*	*	68	*	62	*	70	*
Arenac	90	*	*	90	*	82	*	90	*
Baraga	49	*	*	49	*	43	*	49	*
Barry	182	10.4 (42)	5.5 (10)	194	10.8 (25)	162	4.9 (41)	186	80.1 (14)
Bay	448	10.3 (41)	9.6 (46)	462	13.2 (46)	389	4.1 (31)	453	65.1 (48)
Benzie	56	*	*	61	*	49	*	56	*
Berrien	686	7.7 (18)	4.7 (3)	696	9.1 (12)	611	5.1 (44)	687	69.9 (41)
Branch	301	9.0 (33)	8.0 (32)	306	8.5 (7)	268	4.1 (31)	304	72.4 (33)
Calhoun	796	10.6 (46)	7.3 (27)	806	10.5 (24)	706	4.8 (39)	804	70.8 (39)
Cass	253	6.3 (11)	8.3 (36)	256	12.1 (36)	219	4.1 (31)	254	73.6 (29)
Charlevoix	95	*	*	96	*	81	*	95	*
Cheboygan	102	2.9 (2)	9.8 (51)	102	8.8 (9)	91	*	102	78.4 (17)
Chippewa	160	8.8 (30)	13.8 (58)	160	13.8 (51)	134	3.7 (27)	160	66.3 (45)
Clare	159	4.4 (3)	8.2 (34)	165	6.7 (2)	149	2.7 (14)	158	71.5 (36)
Clinton	101	13.9 (57)	12.9 (57)	104	14.4 (53)	87	*	102	78.4 (17)

(1) Reporting period is January 1 through December 31.

(2) Excludes records with unknown data or errors.

(3) Rank compares one County's rate to other Counties. Rank 1 = best rate.

(4) <2500 g.

(5) >4000 g.

(6) <37 weeks gestation.

(7) 37 or more weeks gestation and <2500 g.

\* 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 8B

### 2020 Pregnancy Nutrition Surveillance (1)

#### Michigan

#### Comparison of Infant Health Indicators by County

<b>Comparison of Infant Health Indicators (2,3)</b>									
<b>County</b>	Birthweight			Preterm		Full Term LBW		Ever Breastfed	
	Low (4)		High (5)	(6)		(7)			
	Number	% (rank)	% (rank)	Number	% (rank)	Number	% (rank)	Number	% (rank)
Crawford	61	*	*	77	*	54	*	62	*
Delta	175	5.1 (6)	9.1 (42)	187	9.6 (19)	158	1.9 (4)	176	82.4 (10)
Dickinson	113	9.7 (36)	6.2 (15)	114	15.8 (57)	95	*	114	71.1 (37)
Eaton	207	10.1 (39)	7.2 (26)	215	11.2 (29)	183	3.3 (24)	211	85.8 (4)
Emmet	124	7.3 (16)	6.5 (17)	129	10.1 (21)	110	2.7 (14)	128	86.7 (2)
Genesee	2,193	11.5 (50)	4.4 (1)	2,232	12.9 (43)	1,897	5.5 (47)	2,197	55.6 (56)
Gladwin	131	7.6 (17)	9.9 (52)	134	9.7 (20)	117	2.6 (10)	132	82.6 (9)
Gogebic	46	*	*	48	*	41	*	46	*
Gr Travers	322	8.1 (23)	7.1 (24)	331	9.1 (12)	291	3.4 (25)	324	81.5 (12)
Gratiot	179	6.1 (9)	7.8 (30)	179	9.5 (17)	159	1.3 (2)	179	78.8 (16)
Hillsdale	197	8.6 (25)	8.6 (39)	199	10.1 (21)	176	4.0 (29)	198	77.8 (20)
Houghton	161	8.7 (28)	11.2 (55)	167	8.4 (6)	145	6.2 (49)	162	84.0 (6)
Huron	135	10.4 (42)	10.4 (53)	141	13.5 (48)	119	5.0 (43)	135	77.0 (22)
Ingham	1,524	10.8 (47)	5.6 (12)	1,566	13.3 (47)	1,318	4.2 (34)	1,531	73.4 (31)
Ionia	280	7.1 (15)	9.6 (46)	284	8.8 (9)	255	3.5 (26)	279	83.2 (7)
Iosco	133	10.5 (44)	9.0 (41)	135	8.9 (11)	118	7.6 (53)	133	62.4 (53)
Iron	47	*	*	46	*	42	*	47	*
Isabella	297	9.8 (37)	10.8 (54)	303	12.5 (38)	260	5.4 (46)	298	71.1 (37)
Jackson	872	8.8 (30)	9.4 (44)	890	10.8 (25)	781	4.7 (38)	875	69.3 (43)

(1) Reporting period is January 1 through December 31.

(2) Excludes records with unknown data or errors.

(3) Rank compares one County's rate to other Counties. Rank 1 = best rate.

(4) <2500 g.

(5) >4000 g.

(6) <37 weeks gestation.

(7) 37 or more weeks gestation and <2500 g.

\* 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 8B

### 2020 Pregnancy Nutrition Surveillance (1)

### Michigan

### Comparison of Infant Health Indicators by County

<b>Comparison of Infant Health Indicators (2,3)</b>									
<b>County</b>	Birthweight			Preterm		Full Term LBW		Ever Breastfed	
	Low (4)		High (5)	(6)		(7)			
	Number	% (rank)	% (rank)	Number	% (rank)	Number	% (rank)	Number	% (rank)
Kalamazoo	1,020	9.5 (35)	6.0 (13)	1,068	11.0 (27)	899	3.2 (22)	1,039	64.1 (49)
Kalkaska	87	*	*	86	*	78	*	87	*
Kent	2,816	12.9 (56)	5.5 (10)	2,927	15.2 (56)	2,385	5.2 (45)	2,853	73.5 (30)
Lake	46	*	*	48	*	41	*	46	*
Lapeer	296	10.1 (39)	9.5 (45)	298	14.4 (53)	249	4.8 (39)	298	77.2 (21)
Leelanau	35	*	*	35	*	28	*	35	*
Lenawee	385	4.9 (5)	8.8 (40)	393	5.9 (1)	362	2.8 (17)	385	65.5 (47)
Livingston	283	9.2 (34)	6.0 (13)	287	12.5 (38)	247	2.0 (6)	282	83.0 (8)
Luce	31	*	*	30	*	26	*	31	*
Mackinac	28	*	*	28	*	27	*	28	*
Macomb	2,964	10.9 (48)	5.4 (8)	2,997	12.0 (35)	2,577	4.5 (35)	2,977	59.9 (55)
Manistee	81	*	*	83	*	69	*	83	*
Marquette	208	4.8 (4)	8.2 (34)	206	6.8 (3)	191	2.6 (10)	208	88.0 (1)
Mason	114	12.3 (53)	7.0 (23)	117	13.7 (50)	96	*	114	73.7 (28)
Mecosta	205	7.8 (19)	6.8 (19)	207	8.7 (8)	187	3.2 (22)	206	73.8 (27)
Menominee	58	*	*	60	*	53	*	58	*
Midland	261	6.5 (12)	9.6 (46)	264	9.1 (12)	235	2.1 (7)	261	77.0 (22)
Missaukee	45	*	*	49	*	39	*	45	*
Monroe	580	6.7 (13)	6.9 (21)	589	11.4 (31)	512	1.4 (3)	580	66.2 (46)

(1) Reporting period is January 1 through December 31.

(2) Excludes records with unknown data or errors.

(3) Rank compares one County's rate to other Counties. Rank 1 = best rate.

(4) <2500 g.

(5) >4000 g.

(6) <37 weeks gestation.

(7) 37 or more weeks gestation and <2500 g.

\* 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 8B

### 2020 Pregnancy Nutrition Surveillance (1)

### Michigan

### Comparison of Infant Health Indicators by County

<b>Comparison of Infant Health Indicators (2,3)</b>									
<b>County</b>	Birthweight			Preterm		Full Term LBW		Ever Breastfed	
	Low (4)		High (5)	(6)		(7)			
	Number	% (rank)	% (rank)	Number	% (rank)	Number	% (rank)	Number	% (rank)
Montcalm	302	8.6 (25)	6.3 (16)	307	11.1 (28)	265	2.6 (10)	303	85.5 (5)
Montmorenc	44	*	*	43	*	39	*	44	*
Muskegon	1,062	10.5 (44)	5.1 (5)	1,063	12.5 (38)	911	5.5 (47)	1,065	64.0 (50)
Newaygo	309	6.1 (9)	7.4 (28)	315	9.5 (17)	279	2.5 (9)	310	78.4 (17)
Oakland	2,894	11.9 (51)	5.4 (8)	3,050	14.2 (52)	2,476	4.5 (35)	2,969	69.8 (42)
Oceana	140	8.6 (25)	7.1 (24)	141	14.9 (55)	116	2.6 (10)	142	78.9 (15)
Ogemaw	101	6.9 (14)	11.9 (56)	104	7.7 (4)	93	*	101	63.4 (52)
Ontonagon	18	*	*	18	*	15	*	18	*
Osceola	133	11.3 (49)	6.8 (19)	135	11.9 (34)	116	6.9 (52)	134	74.6 (25)
Oscoda	33	*	*	36	*	31	*	33	*
Otsego	136	14.0 (58)	9.6 (46)	149	12.8 (41)	117	6.8 (51)	147	70.7 (40)
Ottawa	760	8.7 (28)	7.6 (29)	928	13.1 (45)	650	2.9 (19)	918	81.8 (11)
Presque Is	39	*	*	39	*	32	*	39	*
Roscommon	81	*	*	81	*	71	*	81	*
Saginaw	1,094	12.2 (52)	5.3 (6)	1,127	13.0 (44)	953	4.9 (41)	1,102	61.2 (54)
Sanilac	166	5.4 (7)	8.4 (37)	170	9.4 (16)	150	2.7 (14)	168	49.4 (58)
Schoolcraf	42	*	*	42	*	36	*	42	*
Shiawassee	287	8.0 (21)	9.1 (42)	295	11.5 (32)	253	2.8 (17)	288	68.8 (44)
St Clair	594	9.9 (38)	6.7 (18)	604	11.6 (33)	526	4.0 (29)	594	64.0 (50)

(1) Reporting period is January 1 through December 31.

(2) Excludes records with unknown data or errors.

(3) Rank compares one County's rate to other Counties. Rank 1 = best rate.

(4) <2500 g.

(5) >4000 g.

(6) <37 weeks gestation.

(7) 37 or more weeks gestation and <2500 g.

\* 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 8B

### 2020 Pregnancy Nutrition Surveillance (1)

### Michigan

### Comparison of Infant Health Indicators by County

<b>Comparison of Infant Health Indicators (2,3)</b>									
<b>County</b>	Birthweight			Preterm		Full Term LBW		Ever Breastfed	
	Low (4)		High (5)	(6)		(7)			
	Number	% (rank)	% (rank)	Number	% (rank)	Number	% (rank)	Number	% (rank)
St Joseph	356	5.6 (8)	8.4 (37)	364	9.3 (15)	319	1.9 (4)	360	86.7 (2)
Tuscola	248	8.9 (32)	6.9 (21)	251	10.4 (23)	222	4.5 (35)	248	75.0 (24)
Van Buren	375	8.0 (21)	8.0 (32)	388	11.3 (30)	329	3.0 (21)	386	72.0 (34)
Washtenaw	887	12.3 (53)	4.5 (2)	904	16.0 (58)	735	3.7 (27)	896	74.6 (25)
Wayne	11,665	12.8 (55)	4.7 (3)	12,264	13.6 (49)	9,958	6.3 (50)	12,027	51.5 (57)
Wexford	227	7.9 (20)	9.7 (50)	227	12.8 (41)	194	2.1 (7)	228	80.7 (13)
<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 or errors.

(3) Rank compares one County's rate to other Counties. Rank 1 = best rate.

(4) <2500 g.

(5) >4000 g.

(6) <37 weeks gestation.

(7) 37 or more weeks gestation and <2500 g.

\* 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 3B

### 2018 - 2020 Pregnancy Nutrition Surveillance <sup>(1)</sup>

### Michigan

### Comparison of Racial and Ethnic Distribution by County

### Combined 3 Years

<b>Comparison of Racial and Ethnic Distribution <sup>(2)</sup></b>								
County	Number Included in Analysis	White, Not Hispanic  %	Black, Not Hispanic  %	Hispanic  %	American Indian/Alaska Native %	Asian/Pacific Islander  %	Multiple Races  %	All Other/Unknown  %
Alcona	117	91.5	0.9	2.6	0.0	0.0	5.1	0.0
Alger	89	*	*	*	*	*	*	*
Allegan	1,457	76.9	1.7	16.0	0.2	0.3	3.8	1.1
Alpena	462	95.0	0.4	1.5	0.2	0.2	2.4	0.2
Antrim	285	91.2	0.4	2.5	0.0	0.7	5.3	0.0
Arenac	325	95.1	0.0	1.8	0.0	0.0	3.1	0.0
Baraga	135	54.8	0.0	3.0	34.1	0.7	7.4	0.0
Barry	717	93.0	0.1	4.9	0.0	0.6	1.1	0.3
Bay	1,607	80.0	1.5	11.1	0.0	0.1	6.7	0.6
Benzie	254	91.7	0.8	3.1	1.2	0.0	2.0	1.2
Berrien	2,743	48.5	36.7	8.1	0.4	1.0	4.4	0.8
Branch	1,069	86.6	0.5	9.4	0.0	0.5	2.1	1.0
Calhoun	2,877	61.5	19.0	7.1	0.3	5.0	6.7	0.4
Cass	973	61.7	7.6	21.8	0.4	0.3	7.3	0.9
Charlevoix	373	87.1	0.8	3.8	0.5	0.0	7.8	0.0
Cheboygan	386	88.6	1.0	2.8	0.3	0.0	7.3	0.0
Chippewa	657	54.3	0.6	2.7	20.4	0.6	20.5	0.6
Clare	593	94.6	0.3	2.5	0.3	0.3	1.9	0.0
Clinton	461	81.6	0.9	13.4	0.0	0.0	3.5	0.7
Crawford	253	93.3	0.4	3.6	0.0	0.0	2.4	0.4
Delta	651	85.9	0.0	2.0	0.6	0.3	11.1	0.2
Dickinson	406	92.1	0.5	2.5	0.0	0.0	3.9	1.0
Eaton	799	83.7	5.0	7.6	0.1	1.3	1.8	0.5

(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 3B

### 2018 - 2020 Pregnancy Nutrition Surveillance <sup>(1)</sup>

### Michigan

### Comparison of Racial and Ethnic Distribution by County

### Combined 3 Years

<b>Comparison of Racial and Ethnic Distribution <sup>(2)</sup></b>								
<b>County</b>	Number Included in Analysis	White, Not Hispanic  %	Black, Not Hispanic  %	Hispanic  %	American Indian/Alaska Native  %	Asian/Pacific Islander  %	Multiple Races  %	All Other/Unknown  %
Emmet	486	88.5	1.0	2.5	2.3	0.2	5.6	0.0
Genesee	8,072	46.8	40.1	5.3	0.1	0.2	7.0	0.4
Gladwin	416	95.7	0.2	2.2	0.0	0.0	1.7	0.2
Gogebic	209	82.3	1.4	1.9	7.2	0.5	4.8	1.9
Gr Travers	1,213	83.8	0.8	7.2	1.6	1.1	4.8	0.8
Gratiot	678	86.9	0.1	11.4	0.1	0.0	1.3	0.1
Hillsdale	734	94.0	0.4	2.6	0.1	0.3	1.9	0.7
Houghton	555	88.5	2.0	2.2	0.2	2.9	3.2	1.1
Huron	432	93.3	0.2	4.2	0.2	0.2	1.6	0.2
Ingham	5,317	41.9	27.9	16.1	0.2	5.2	8.4	0.4
Ionia	1,037	86.9	0.2	9.3	0.0	0.1	3.5	0.1
Iosco	510	89.6	0.8	2.4	0.6	0.2	6.3	0.2
Iron	188	89.9	0.5	0.5	0.5	0.0	5.9	2.7
Isabella	1,091	80.3	3.7	5.6	3.8	0.9	5.5	0.2
Jackson	3,066	71.7	14.1	5.3	0.1	0.4	8.1	0.3
Kalamazoo	4,240	46.4	33.3	10.0	0.2	1.1	8.7	0.4
Kalkaska	303	90.4	0.3	3.6	0.0	1.0	4.3	0.3
Kent	10,783	33.3	28.0	28.2	0.3	4.6	5.2	0.4
Lake	157	73.9	11.5	4.5	0.0	0.0	9.6	0.6
Lapeer	1,207	82.2	0.5	13.0	0.1	0.5	3.5	0.2
Leelanau	118	57.6	0.0	23.7	10.2	0.8	7.6	0.0
Lenawee	1,360	73.9	1.9	18.2	0.0	0.1	5.4	0.5
Livingston	1,066	92.5	0.8	3.6	0.0	0.8	1.9	0.6
Luce	146	83.6	0.7	2.1	0.0	0.0	13.7	0.0

(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 3B

### 2018 - 2020 Pregnancy Nutrition Surveillance <sup>(1)</sup>

### Michigan

### Comparison of Racial and Ethnic Distribution by County

### Combined 3 Years

<b>Comparison of Racial and Ethnic Distribution <sup>(2)</sup></b>								
County	Number Included in Analysis	White, Not Hispanic  %	Black, Not Hispanic  %	Hispanic  %	American Indian/Alaska Native  %	Asian/Pacific Islander  %	Multiple Races  %	All Other/Unknown  %
Mackinac	103	48.5	1.0	1.9	1.0	0.0	47.6	0.0
Macomb	10,208	55.2	28.8	4.3	0.1	6.6	4.7	0.3
Manistee	326	78.8	1.5	7.7	2.8	0.3	8.6	0.3
Marquette	796	86.9	0.6	3.3	1.4	0.4	7.3	0.1
Mason	426	81.9	1.6	11.0	0.0	0.7	4.7	0.0
Mecosta	757	86.1	4.1	2.9	0.4	0.7	5.3	0.5
Menominee	277	66.8	0.7	8.7	10.5	0.0	10.1	3.2
Midland	971	92.0	1.1	2.4	0.0	1.4	3.1	0.0
Missaukee	222	89.6	0.5	7.7	0.0	0.0	2.3	0.0
Monroe	1,994	81.2	6.1	6.4	0.1	0.5	5.0	0.7
Montcalm	1,052	92.2	0.2	4.8	0.1	0.1	2.4	0.2
Montmorenc	157	95.5	0.6	1.9	0.6	0.0	0.6	0.6
Muskegon	4,029	53.3	29.2	9.0	0.3	0.5	7.5	0.3
Newaygo	1,056	78.7	0.5	16.9	0.2	0.5	2.7	0.6
Oakland	10,917	41.2	41.5	10.6	0.1	2.0	4.4	0.2
Oceana	535	58.9	0.9	37.8	0.2	0.0	2.1	0.2
Ogemaw	407	91.2	0.0	3.7	0.5	0.0	3.9	0.7
Ontonagon	56	*	*	*	*	*	*	*
Osceola	438	90.2	2.1	2.5	0.2	0.0	5.0	0.0
Oscoda	139	93.5	0.0	3.6	0.0	0.0	2.9	0.0
Otsego	492	95.9	0.4	1.8	0.0	0.4	1.4	0.0
Ottawa	3,355	55.2	4.3	31.9	0.1	2.7	4.8	1.0
Presque Is	112	89.3	1.8	0.9	0.9	0.0	7.1	0.0
Roscommon	346	93.1	0.0	1.4	0.0	0.3	4.3	0.9

(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 3B

### 2018 - 2020 Pregnancy Nutrition Surveillance <sup>(1)</sup>

### Michigan

### Comparison of Racial and Ethnic Distribution by County

### Combined 3 Years

<b>Comparison of Racial and Ethnic Distribution <sup>(2)</sup></b>								
<b>County</b>	Number Included in Analysis	White, Not Hispanic  %	Black, Not Hispanic  %	Hispanic  %	American Indian/Alaska Native %	Asian/Pacific Islander  %	Multiple Races  %	All Other/Unknown  %
Saginaw	3,993	37.2	41.4	15.6	0.0	0.7	4.8	0.4
Sanilac	625	92.8	0.0	5.4	0.2	0.2	1.1	0.3
Schoolcraf	136	78.7	0.0	0.0	4.4	0.0	16.9	0.0
Shiawassee	1,139	89.0	0.4	6.3	0.1	0.1	4.0	0.1
St Clair	2,221	81.4	6.2	6.0	0.1	0.4	5.6	0.4
St Joseph	1,364	71.0	1.3	19.8	0.0	0.1	6.8	0.9
Tuscola	936	92.0	0.1	5.1	0.0	0.1	2.6	0.1
Van Buren	1,415	62.5	2.7	28.3	0.2	0.4	4.0	1.8
Washtenaw	3,209	37.1	40.2	10.3	0.2	2.3	9.3	0.6
Wayne	43,296	27.6	57.6	9.1	0.1	2.7	2.6	0.2
Wexford	835	91.4	0.1	2.9	0.0	0.2	4.9	0.5
<b>Michigan</b>	<b>159,551</b>	<b>51.2</b>	<b>30.4</b>	<b>10.7</b>	<b>0.4</b>	<b>2.2</b>	<b>4.8</b>	<b>0.4</b>

(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 4B

### 2018 - 2020 Pregnancy Nutrition Surveillance <sup>(1)</sup>

#### Michigan

#### Comparison of Age Distribution by County

#### Combined 3 Years

<b>Comparison of Age Distribution <sup>(2)</sup></b>								
County	Number Included in Analysis	< 15 Years %	15 - 17 Years %	18 - 19 Years %	20 - 29 Years %	30 - 39 Years %	>= 40 Years %	Unknown %
Alcona	117	0.0	0.9	6.8	64.1	25.6	2.6	0.0
Alger	89	*	*	*	*	*	*	*
Allegan	1,457	0.0	3.4	8.5	61.2	25.0	1.9	0.1
Alpena	462	0.0	3.7	9.1	64.5	21.2	1.5	0.0
Antrim	285	0.0	2.1	10.2	61.4	25.3	1.1	0.0
Arenac	325	0.0	2.5	4.6	71.1	19.4	2.5	0.0
Baraga	135	0.0	2.2	8.1	68.9	20.7	0.0	0.0
Barry	717	0.0	2.2	8.4	64.2	23.2	1.8	0.3
Bay	1,607	0.1	2.6	9.0	63.2	23.6	1.6	0.0
Benzie	254	0.0	3.1	7.1	66.5	22.0	1.2	0.0
Berrien	2,743	0.0	3.5	10.0	61.1	22.3	1.6	1.5
Branch	1,069	0.0	2.1	10.1	61.8	23.4	2.6	0.0
Calhoun	2,877	0.1	3.2	8.2	63.7	23.2	1.4	0.3
Cass	973	0.4	3.4	11.0	60.7	23.0	1.4	0.0
Charlevoix	373	0.0	0.5	6.4	70.8	21.4	0.8	0.0
Cheboygan	386	0.3	1.8	10.4	60.6	25.4	1.6	0.0
Chippewa	657	0.2	1.8	7.8	62.7	25.9	1.7	0.0
Clare	593	0.3	3.7	7.8	66.6	20.1	1.3	0.2
Clinton	461	0.0	2.0	6.5	62.3	27.8	1.5	0.0
Crawford	253	0.0	2.0	8.3	64.4	23.7	1.2	0.4
Delta	651	0.0	2.3	8.1	61.4	27.5	0.6	0.0
Dickinson	406	0.2	1.7	8.6	61.1	27.1	1.2	0.0
Eaton	799	0.1	2.4	10.4	60.1	25.0	1.5	0.5
Emmet	486	0.0	1.2	5.3	64.4	26.7	2.3	0.0

(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 4B

### 2018 - 2020 Pregnancy Nutrition Surveillance <sup>(1)</sup>

#### Michigan

#### Comparison of Age Distribution by County

#### Combined 3 Years

<b>Comparison of Age Distribution <sup>(2)</sup></b>								
County	Number Included in Analysis	< 15 Years %	15 - 17 Years %	18 - 19 Years %	20 - 29 Years %	30 - 39 Years %	>= 40 Years %	Unknown %
Genesee	8,072	0.2	2.6	7.8	64.6	23.3	1.5	0.1
Gladwin	416	0.0	1.9	7.2	67.3	22.6	1.0	0.0
Gogebic	209	0.0	0.5	7.7	65.1	26.3	0.5	0.0
Gr Travers	1,213	0.1	2.5	6.7	60.7	27.2	2.6	0.3
Gratiot	678	0.3	2.1	8.8	64.2	23.2	1.3	0.1
Hillsdale	734	0.1	2.6	10.2	66.8	18.9	1.0	0.4
Houghton	555	0.0	2.3	6.3	56.9	31.0	3.2	0.2
Huron	432	0.0	1.4	6.7	62.0	28.0	1.9	0.0
Ingham	5,317	0.2	2.9	8.1	61.0	25.9	1.8	0.1
Ionia	1,037	0.0	2.7	8.8	66.2	21.4	1.0	0.0
Iosco	510	0.0	3.5	8.0	64.7	22.5	1.2	0.0
Iron	188	0.0	3.7	8.0	63.3	23.9	1.1	0.0
Isabella	1,091	0.1	2.8	8.2	65.3	22.6	0.9	0.1
Jackson	3,066	0.0	3.1	8.7	65.0	22.1	0.8	0.3
Kalamazoo	4,240	0.1	3.3	8.7	61.5	24.2	2.0	0.2
Kalkaska	303	0.0	3.0	8.9	68.3	19.8	0.0	0.0
Kent	10,783	0.1	2.6	7.8	58.6	28.7	1.8	0.4
Lake	157	0.0	1.3	7.0	69.4	21.0	1.3	0.0
Lapeer	1,207	0.0	3.1	6.2	63.1	26.0	1.4	0.2
Leelanau	118	0.0	0.0	3.4	56.8	36.4	3.4	0.0
Lenawee	1,360	0.1	2.1	9.1	63.4	24.3	1.0	0.1
Livingston	1,066	0.0	1.7	5.6	61.5	29.3	1.9	0.0
Luce	146	0.0	6.2	6.8	63.0	23.3	0.7	0.0
Mackinac	103	0.0	2.9	4.9	53.4	37.9	1.0	0.0

(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 4B

### 2018 - 2020 Pregnancy Nutrition Surveillance <sup>(1)</sup>

#### Michigan

#### Comparison of Age Distribution by County

#### Combined 3 Years

<b>Comparison of Age Distribution <sup>(2)</sup></b>								
County	Number Included in Analysis	< 15 Years %	15 - 17 Years %	18 - 19 Years %	20 - 29 Years %	30 - 39 Years %	>= 40 Years %	Unknown %
Macomb	10,208	0.0	1.3	4.6	59.6	31.9	2.6	0.0
Manistee	326	0.0	2.1	11.0	57.1	25.5	4.0	0.3
Marquette	796	0.3	1.1	6.8	60.4	29.5	1.9	0.0
Mason	426	0.2	3.8	7.0	66.9	21.1	0.9	0.0
Mecosta	757	0.1	1.7	8.1	67.8	21.1	1.1	0.1
Menominee	277	0.0	4.0	8.3	64.3	22.0	1.4	0.0
Midland	971	0.0	1.9	5.5	65.7	25.5	1.4	0.0
Missaukee	222	0.0	0.5	11.3	68.0	18.5	1.8	0.0
Monroe	1,994	0.0	2.7	8.8	62.3	24.4	1.7	0.1
Montcalm	1,052	0.1	3.1	10.4	67.0	18.0	1.3	0.1
Montmorenc	157	0.0	3.2	5.7	67.5	22.9	0.6	0.0
Muskegon	4,029	0.3	3.5	9.6	63.5	21.6	1.3	0.2
Newaygo	1,056	0.1	2.1	8.2	64.9	22.8	1.8	0.1
Oakland	10,917	0.1	1.5	5.8	59.3	30.6	2.5	0.2
Oceana	535	0.2	3.9	8.0	64.5	20.7	2.6	0.0
Ogemaw	407	0.0	3.2	8.1	66.3	21.1	1.2	0.0
Ontonagon	56	*	*	*	*	*	*	*
Osceola	438	0.2	4.1	10.3	62.3	22.1	0.7	0.2
Oscoda	139	0.0	5.8	7.2	70.5	15.8	0.7	0.0
Otsego	492	0.2	1.6	7.7	65.7	23.8	1.0	0.0
Ottawa	3,355	0.1	2.4	6.9	62.1	26.5	1.9	0.1
Presque Is	112	0.0	0.0	8.9	67.9	23.2	0.0	0.0
Roscommon	346	0.0	2.3	11.6	61.3	24.0	0.6	0.3
Saginaw	3,993	0.2	3.3	8.7	64.5	21.7	1.5	0.2

(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 4B

### 2018 - 2020 Pregnancy Nutrition Surveillance <sup>(1)</sup>

#### Michigan

#### Comparison of Age Distribution by County

#### Combined 3 Years

<b>Comparison of Age Distribution <sup>(2)</sup></b>								
<b>County</b>	Number Included in Analysis	< 15 Years %	15 - 17 Years %	18 - 19 Years %	20 - 29 Years %	30 - 39 Years %	>= 40 Years %	Unknown %
Sanilac	625	0.0	2.2	9.0	66.1	21.8	1.0	0.0
Schoolcraf	136	0.0	3.7	8.8	65.4	22.1	0.0	0.0
Shiawassee	1,139	0.1	3.1	8.4	68.1	19.0	1.3	0.0
St Clair	2,221	0.1	3.0	7.9	64.7	22.6	1.5	0.1
St Joseph	1,364	0.1	2.6	9.0	65.5	21.3	1.5	0.0
Tuscola	936	0.1	2.9	7.3	65.2	22.6	1.8	0.1
Van Buren	1,415	0.0	2.5	8.8	60.1	26.4	1.7	0.5
Washtenaw	3,209	0.1	1.9	6.1	59.0	30.3	2.4	0.2
Wayne	43,296	0.1	2.2	6.4	60.4	28.1	2.7	0.1
Wexford	835	0.0	3.0	8.0	65.9	21.7	1.3	0.1
<b>Michigan</b>	<b>159,551</b>	<b>0.1</b>	<b>2.4</b>	<b>7.3</b>	<b>61.7</b>	<b>26.3</b>	<b>2.0</b>	<b>0.2</b>

(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 5B

### 2018 - 2020 Pregnancy Nutrition Surveillance <sup>(1)</sup>

#### Michigan

#### Comparison of Maternal Health Indicators by County

#### Combined 3 Years

<b>Comparison of Maternal Health Indicators <sup>(2,3)</sup></b>														
<b>County</b>	Prepregnancy BMI (4)			Weight Gain (5)			Anemia (Low Hb/Hct) (6)				Gestational Diabetes During Pregnancy		Hypertension During Pregnancy	
	Under- weight		Over- weight	< Ideal		> Ideal	3rd Trimester		Postpartum					
	Number	% (Rank)	% (Rank)	Number	% (Rank)	% (Rank)	Number	% (Rank)	Number	% (Rank)	Number	% (Rank)	Number	% (Rank)
Alcona	67	*	*	21	*	*	18	*	21	*	107	6.5 (17)	107	10.3 (20)
Alger	59	*	*	19	*	*	7	*	16	*	82	*	81	*
Allegan	1,112	5.1 (64)	61.0 (48)	523	18.7 (36)	50.5 (19)	199	42.2 (16)	322	29.2 (22)	1,314	7.8 (38)	1,317	10.6 (26)
Alpena	428	4.9 (56)	61.0 (48)	273	20.1 (53)	52.7 (40)	50	*	64	*	417	5.8 (9)	418	14.6 (60)
Antrim	219	5.9 (71)	57.1 (16)	75	*	*	37	*	20	*	268	7.5 (33)	268	9.3 (8)
Arenac	234	3.8 (20)	58.1 (21)	155	19.4 (46)	53.5 (46)	42	*	41	*	314	8.3 (48)	315	14.3 (58)
Baraga	120	0.8 (1)	60.0 (33)	62	*	*	13	*	23	*	121	5.8 (9)	121	15.7 (72)
Barry	358	6.7 (76)	52.8 (4)	94	*	*	90	*	116	16.4 (7)	653	9.2 (66)	653	12.3 (39)
Bay	1,354	3.3 (14)	62.2 (64)	881	17.4 (23)	52.4 (37)	204	29.4 (7)	150	15.3 (3)	1,482	6.3 (15)	1,482	10.2 (18)
Benzie	223	4.9 (56)	53.4 (7)	156	14.7 (4)	53.8 (49)	29	*	33	*	240	7.9 (42)	240	12.5 (41)
Berrien	2,342	3.8 (20)	61.4 (55)	1,685	18.9 (40)	53.5 (46)	360	44.2 (20)	338	24.3 (15)	2,449	7.4 (28)	2,449	15.3 (68)
Branch	718	5.7 (70)	62.5 (65)	358	17.9 (27)	53.4 (44)	142	16.2 (1)	121	25.6 (18)	977	8.5 (51)	977	8.3 (6)
Calhoun	2,214	4.1 (36)	60.0 (33)	1,276	20.9 (58)	53.4 (44)	305	44.6 (22)	412	29.6 (24)	2,589	8.2 (47)	2,590	9.7 (13)
Cass	839	4.1 (36)	60.2 (37)	561	16.9 (19)	52.8 (43)	105	41.0 (14)	84	*	894	8.4 (50)	897	14.5 (59)
Charlevoix	275	2.9 (11)	60.4 (41)	104	20.2 (54)	54.8 (55)	39	*	46	*	351	5.1 (6)	352	11.1 (31)
Cheboygan	358	5.9 (71)	57.5 (18)	120	12.5 (2)	55.8 (59)	45	*	48	*	355	9.0 (60)	355	10.1 (17)
Chippewa	541	4.1 (36)	60.3 (40)	348	16.1 (12)	54.3 (53)	69	*	90	*	587	7.2 (26)	588	11.1 (31)

(1) Reporting period is January 1 through December 31.

(2) Excludes records with unknown data or errors.

(3) Rank compares one County's rate to other Counties. Rank 1 = best rate.

(4) 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).

(5) 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 prepregnancy (ideal weight gain = 15 to 25 pounds), obese prepregnancy (ideal weight gain = 11 to 20 pounds).

(6) 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 5B

### 2018 - 2020 Pregnancy Nutrition Surveillance <sup>(1)</sup>

#### Michigan

#### Comparison of Maternal Health Indicators by County

#### Combined 3 Years

<b>Comparison of Maternal Health Indicators</b> <sup>(2,3)</sup>														
<b>County</b>	Prepregnancy BMI (4)			Weight Gain (5)			Anemia (Low Hb/Hct) (6)				Gestational Diabetes During Pregnancy		Hypertension During Pregnancy	
	Under- weight		Over- weight	< Ideal		> Ideal	3rd Trimester		Postpartum					
	Number	% (Rank)	% (Rank)	Number	% (Rank)	% (Rank)	Number	% (Rank)	Number	% (Rank)	Number	% (Rank)	Number	% (Rank)
Clare	553	4.7 (52)	57.7 (20)	374	16.8 (18)	50.0 (16)	61	*	68	*	551	6.4 (16)	551	9.4 (9)
Clinton	421	5.0 (59)	65.3 (74)	306	16.3 (13)	50.7 (21)	49	*	98	*	429	11.2 (76)	429	14.0 (56)
Crawford	214	2.8 (7)	55.6 (12)	148	20.3 (55)	56.1 (61)	23	*	42	*	235	8.9 (58)	235	9.8 (15)
Delta	534	2.4 (4)	59.2 (28)	374	16.3 (13)	54.0 (50)	71	*	111	22.5 (11)	587	10.6 (73)	587	13.1 (46)
Dickinson	311	5.5 (68)	52.4 (2)	119	16.0 (10)	50.4 (18)	50	*	59	*	367	2.7 (2)	368	14.7 (62)
Eaton	538	4.6 (51)	60.8 (44)	314	19.1 (42)	52.5 (38)	98	*	114	15.8 (6)	726	10.3 (72)	728	15.5 (69)
Emmet	424	4.0 (32)	59.2 (28)	191	14.7 (4)	49.2 (9)	58	*	53	*	461	7.2 (26)	461	14.8 (63)
Genesee	6,074	4.9 (56)	58.4 (26)	2,871	18.0 (29)	51.6 (27)	1,192	51.3 (30)	975	33.0 (28)	7,409	7.7 (36)	7,418	15.5 (69)
Gladwin	378	2.9 (11)	61.1 (50)	276	9.4 (1)	58.3 (63)	46	*	42	*	390	7.9 (42)	391	15.6 (71)
Gogebic	178	2.8 (7)	58.4 (26)	89	*	*	23	*	36	*	186	10.8 (74)	186	11.3 (37)
Gr Travers	1,064	4.1 (36)	52.3 (1)	854	15.3 (8)	52.3 (35)	133	54.1 (32)	128	32.8 (27)	1,125	8.6 (56)	1,128	9.6 (11)
Gratiot	633	3.8 (20)	63.7 (72)	480	20.6 (56)	52.3 (35)	79	*	103	2.9 (1)	626	13.3 (78)	628	14.8 (63)
Hillsdale	658	5.6 (69)	60.9 (46)	492	16.5 (15)	53.7 (48)	78	*	117	29.1 (21)	679	6.0 (12)	679	6.2 (2)
Houghton	407	3.9 (25)	52.8 (4)	225	18.2 (31)	42.7 (2)	71	*	119	12.6 (2)	500	6.6 (18)	501	10.4 (22)
Huron	363	5.0 (59)	66.7 (77)	273	15.4 (9)	55.3 (58)	47	*	75	*	410	7.6 (35)	412	12.6 (43)
Ingham	4,385	4.3 (45)	61.1 (50)	3,499	19.2 (45)	52.7 (40)	709	46.3 (23)	622	32.0 (25)	4,970	6.9 (21)	4,972	11.1 (31)
Ionia	728	4.5 (49)	61.1 (50)	487	16.0 (10)	55.2 (57)	121	25.6 (5)	204	15.7 (5)	948	9.3 (67)	946	16.8 (77)

(1) Reporting period is January 1 through December 31.

(2) Excludes records with unknown data or errors.

(3) Rank compares one County's rate to other Counties. Rank 1 = best rate.

(4) 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).

(5) 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 prepregnancy (ideal weight gain = 15 to 25 pounds), obese prepregnancy (ideal weight gain = 11 to 20 pounds).

(6) 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 5B

### 2018 - 2020 Pregnancy Nutrition Surveillance <sup>(1)</sup>

#### Michigan

#### Comparison of Maternal Health Indicators by County

#### Combined 3 Years

<b>Comparison of Maternal Health Indicators</b> <sup>(2,3)</sup>														
<b>County</b>	Prepregnancy BMI (4)			Weight Gain (5)			Anemia (Low Hb/Hct) (6)				Gestational Diabetes During Pregnancy		Hypertension During Pregnancy	
	Under- weight		Over- weight	< Ideal		> Ideal	3rd Trimester		Postpartum					
	Number	% (Rank)	% (Rank)	Number	% (Rank)	% (Rank)	Number	% (Rank)	Number	% (Rank)	Number	% (Rank)	Number	% (Rank)
Iosco	329	6.4 (74)	60.2 (37)	130	14.6 (3)	49.2 (9)	67	*	68	*	464	5.0 (5)	464	10.6 (26)
Iron	139	8.6 (78)	53.2 (6)	45	*	*	18	*	26	*	156	7.7 (36)	156	13.5 (51)
Isabella	894	4.1 (36)	61.6 (57)	581	17.4 (23)	50.3 (17)	132	28.8 (6)	167	22.2 (10)	999	7.5 (33)	1,000	11.0 (30)
Jackson	2,219	5.0 (59)	61.2 (53)	1,343	16.6 (16)	54.1 (51)	351	41.6 (15)	357	38.1 (37)	2,831	6.9 (21)	2,836	10.6 (26)
Kalamazoo	3,424	3.7 (16)	60.1 (35)	1,758	16.7 (17)	54.2 (52)	444	48.6 (26)	706	38.2 (38)	3,788	8.7 (57)	3,789	10.3 (20)
Kalkaska	254	5.1 (64)	58.3 (24)	193	18.7 (36)	54.9 (56)	46	*	59	*	284	9.9 (70)	284	9.5 (10)
Kent	7,201	3.9 (25)	59.4 (30)	3,066	26.0 (62)	43.0 (3)	1,473	43.2 (17)	2,616	36.4 (32)	9,930	7.8 (38)	9,940	13.2 (48)
Lake	148	8.1 (77)	62.8 (69)	110	18.2 (31)	48.2 (7)	16	*	20	*	145	9.0 (60)	146	15.1 (66)
Lapeer	1,152	4.0 (32)	57.4 (17)	983	17.3 (22)	52.2 (33)	154	40.3 (13)	242	33.5 (29)	1,115	4.8 (4)	1,115	7.9 (4)
Leelanau	108	2.8 (7)	72.2 (78)	75	*	*	10	*	14	*	110	13.6 (79)	110	5.5 (1)
Lenawee	1,035	3.9 (25)	58.2 (22)	341	17.9 (27)	47.5 (5)	213	49.8 (28)	250	41.6 (41)	1,234	8.5 (51)	1,236	13.3 (49)
Livingston	1,021	4.4 (47)	52.7 (3)	714	17.2 (21)	51.7 (28)	131	33.6 (10)	262	15.3 (3)	983	11.7 (77)	982	16.4 (75)
Luce	139	3.6 (15)	62.6 (67)	93	*	*	14	*	24	*	124	8.9 (58)	125	11.2 (35)
Mackinac	102	3.9 (25)	65.7 (75)	90	*	*	12	*	20	*	94	*	94	*
Macomb	8,898	4.2 (41)	60.2 (37)	7,012	18.6 (35)	52.1 (31)	1,473	43.9 (19)	1,921	32.6 (26)	9,503	9.0 (60)	9,503	10.2 (18)
Manistee	217	2.3 (2)	60.4 (41)	71	*	*	37	*	71	*	309	7.4 (28)	310	12.9 (45)
Marquette	717	3.9 (25)	56.6 (14)	527	18.8 (39)	49.1 (8)	91	*	148	23.0 (14)	707	5.7 (8)	712	16.2 (74)

(1) Reporting period is January 1 through December 31.

(2) Excludes records with unknown data or errors.

(3) Rank compares one County's rate to other Counties. Rank 1 = best rate.

(4) 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).

(5) 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 prepregnancy (ideal weight gain = 15 to 25 pounds), obese prepregnancy (ideal weight gain = 11 to 20 pounds).

(6) 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 5B

### 2018 - 2020 Pregnancy Nutrition Surveillance <sup>(1)</sup>

#### Michigan

#### Comparison of Maternal Health Indicators by County

#### Combined 3 Years

<b>Comparison of Maternal Health Indicators</b> <sup>(2,3)</sup>														
<b>County</b>	Prepregnancy BMI (4)			Weight Gain (5)			Anemia (Low Hb/Hct) (6)				Gestational Diabetes During Pregnancy		Hypertension During Pregnancy	
	Under- weight		Over- weight	< Ideal		> Ideal	3rd Trimester		Postpartum					
	Number	% (Rank)	% (Rank)	Number	% (Rank)	% (Rank)	Number	% (Rank)	Number	% (Rank)	Number	% (Rank)	Number	% (Rank)
Mason	358	2.5 (6)	55.6 (12)	211	17.1 (20)	54.5 (54)	65	*	61	*	394	7.4 (28)	394	12.4 (40)
Mecosta	591	4.2 (41)	60.6 (43)	307	19.9 (51)	52.1 (31)	84	*	127	18.9 (8)	699	5.9 (11)	698	14.6 (60)
Menominee	224	4.0 (32)	55.4 (11)	151	15.2 (7)	51.7 (28)	34	*	52	*	230	7.4 (28)	232	15.1 (66)
Midland	828	3.1 (13)	61.8 (62)	87	*	*	110	30.0 (8)	299	22.7 (12)	904	8.3 (48)	905	12.7 (44)
Missaukee	214	4.7 (52)	61.7 (59)	164	22.6 (60)	50.6 (20)	19	*	33	*	198	1.0 (1)	198	14.1 (57)
Monroe	1,664	4.4 (47)	61.4 (55)	1,104	20.8 (57)	49.5 (11)	258	51.9 (31)	291	34.0 (30)	1,805	7.8 (38)	1,807	15.8 (73)
Montcalm	975	5.0 (59)	60.1 (35)	698	17.8 (25)	52.7 (40)	122	20.5 (2)	221	19.5 (9)	986	9.1 (65)	987	14.9 (65)
Montmorenc	146	6.2 (73)	57.5 (18)	84	*	*	17	*	25	*	144	5.6 (7)	144	10.4 (22)
Muskegon	3,651	3.9 (25)	62.9 (70)	2,600	19.0 (41)	50.9 (23)	392	43.4 (18)	373	27.1 (19)	3,695	8.5 (51)	3,696	16.6 (76)
Newaygo	951	3.8 (20)	62.5 (65)	680	21.2 (59)	46.9 (4)	120	36.7 (11)	161	25.5 (17)	988	10.0 (71)	989	13.7 (54)
Oakland	8,961	4.0 (32)	58.2 (22)	5,408	17.8 (25)	52.6 (39)	1,535	48.5 (25)	1,731	37.7 (35)	10,000	6.1 (13)	10,000	10.4 (22)
Oceana	439	2.3 (2)	66.1 (76)	309	19.1 (42)	51.5 (26)	62	*	69	*	479	9.0 (60)	478	13.4 (50)
Ogemaw	349	5.2 (66)	61.3 (54)	187	19.8 (50)	50.8 (22)	47	*	63	*	370	6.2 (14)	370	9.7 (13)
Ontonagon	55	*	*	43	*	*	8	*	9	*	50	*	50	*
Osceola	379	2.4 (4)	62.0 (63)	245	23.7 (61)	51.4 (25)	50	*	73	*	407	7.4 (28)	407	12.5 (41)
Oscoda	108	2.8 (7)	54.6 (8)	52	*	*	12	*	23	*	129	3.1 (3)	130	6.9 (3)
Otsego	315	4.8 (55)	54.9 (10)	86	*	*	60	*	55	*	463	7.8 (38)	463	9.9 (16)

(1) Reporting period is January 1 through December 31.

(2) Excludes records with unknown data or errors.

(3) Rank compares one County's rate to other Counties. Rank 1 = best rate.

(4) 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).

(5) 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 prepregnancy (ideal weight gain = 15 to 25 pounds), obese prepregnancy (ideal weight gain = 11 to 20 pounds).

(6) 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 5B

### 2018 - 2020 Pregnancy Nutrition Surveillance <sup>(1)</sup>

### Michigan

### Comparison of Maternal Health Indicators by County

### Combined 3 Years

<b>Comparison of Maternal Health Indicators</b> <sup>(2,3)</sup>														
<b>County</b>	Prepregnancy BMI (4)			Weight Gain (5)			Anemia (Low Hb/Hct) (6)				Gestational Diabetes During Pregnancy		Hypertension During Pregnancy	
	Under- weight		Over- weight	< Ideal		> Ideal	3rd Trimester		Postpartum					
	Number	% (Rank)	% (Rank)	Number	% (Rank)	% (Rank)	Number	% (Rank)	Number	% (Rank)	Number	% (Rank)	Number	% (Rank)
Ottawa	2,274	4.7 (52)	58.3 (24)	1,309	14.8 (6)	51.3 (24)	394	47.0 (24)	748	38.8 (39)	3,063	8.5 (51)	3,067	9.2 (7)
Presque Is	107	3.7 (16)	61.7 (59)	82	*	*	10	*	14	*	106	8.5 (51)	106	10.4 (22)
Roscommon	321	3.7 (16)	61.7 (59)	235	19.1 (42)	49.8 (14)	37	*	48	*	308	8.1 (46)	310	17.1 (78)
Saginaw	3,374	3.7 (16)	62.6 (67)	2,279	19.6 (48)	49.7 (13)	530	50.9 (29)	995	37.2 (34)	3,703	6.9 (21)	3,704	11.2 (35)
Sanilac	108	6.5 (75)	54.6 (8)	51	*	*	82	*	83	*	553	6.9 (21)	553	8.1 (5)
Schoolcraf	96	*	*	59	*	*	7	*	22	*	126	11.1 (75)	126	17.5 (79)
Shiawassee	1,075	4.2 (41)	63.0 (71)	886	20.0 (52)	48.1 (6)	129	39.5 (12)	181	35.4 (31)	1,037	9.3 (67)	1,039	13.6 (52)
St Clair	2,104	5.4 (67)	56.8 (15)	1,801	18.1 (30)	55.8 (59)	242	44.2 (20)	318	36.5 (33)	2,026	6.9 (21)	2,030	13.9 (55)
St Joseph	1,145	4.5 (49)	60.9 (46)	496	19.6 (48)	52.2 (33)	157	24.2 (4)	168	29.2 (22)	1,235	6.8 (20)	1,234	10.9 (29)
Tuscola	715	5.0 (59)	59.7 (32)	558	18.3 (33)	56.5 (62)	109	21.1 (3)	132	22.7 (12)	884	9.4 (69)	885	13.6 (52)
Van Buren	1,198	4.3 (45)	64.7 (73)	586	39.9 (63)	33.1 (1)	147	32.7 (9)	180	24.4 (16)	1,267	9.0 (60)	1,268	9.6 (11)
Washtenaw	2,762	3.8 (20)	60.8 (44)	1,821	19.5 (47)	49.5 (11)	453	49.7 (27)	659	37.8 (36)	2,891	8.0 (44)	2,893	13.1 (46)
Wayne	32,307	3.9 (25)	61.6 (57)	19,739	18.7 (36)	52.0 (30)	6,294	54.4 (33)	5,974	41.5 (40)	40,253	6.7 (19)	40,262	11.1 (31)
Wexford	746	4.2 (41)	59.4 (30)	485	18.4 (34)	49.9 (15)	91	*	127	28.3 (20)	765	8.0 (44)	765	11.8 (38)
<b>Michigan</b>	<b>125,954</b>	<b>4.1</b>	<b>60.3</b>	<b>78,065</b>	<b>18.8</b>	<b>51.5</b>	<b>21,022</b>	<b>46.2</b>	<b>25,209</b>	<b>34.2</b>	<b>146,794</b>	<b>7.5</b>	<b>146,883</b>	<b>11.9</b>

(1) Reporting period is January 1 through December 31.

(2) Excludes records with unknown data or errors.

(3) Rank compares one County's rate to other Counties. Rank 1 = best rate.

(4) 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).

(5) 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 prepregnancy (ideal weight gain = 15 to 25 pounds), obese prepregnancy (ideal weight gain = 11 to 20 pounds).

(6) 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 6B

### 2018 - 2020 Pregnancy Nutrition Surveillance <sup>(1)</sup>

### Michigan

### Comparison of Maternal Behavioral Indicators by County Combined 3 Years

<b>Comparison of Maternal Behavioral Indicators <sup>(2,3)</sup></b>									
<b>County</b>	Medical Care			WIC Enrollment		Multivitamin Consumption			
	1st Trimester		No Care	1st Trimester		Prepregnancy <sup>(4)</sup>		During Pregnancy <sup>(5)</sup>	
	Number	% (rank)	% (rank)	Number	% (rank)	Number	% (rank)	Number	% (rank)
Alcona	108	88.0 (22)	6.5 (30)	116	22.4 (80)	105	27.6 (26)	89	*
Alger	81	*	*	88	*	76	*	68	*
Allegan	1,317	91.8 (7)	3.6 (8)	1,440	33.1 (51)	1,159	20.9 (51)	1,073	88.4 (44)
Alpena	411	82.5 (46)	12.4 (57)	454	40.7 (14)	419	22.9 (43)	372	92.5 (14)
Antrim	270	85.9 (34)	6.3 (28)	275	35.3 (38)	250	23.6 (39)	227	83.3 (67)
Arenac	312	82.7 (45)	10.6 (50)	324	33.0 (52)	287	28.6 (23)	245	83.7 (66)
Baraga	121	93.4 (2)	0.8 (1)	131	35.1 (41)	121	29.8 (19)	106	98.1 (1)
Barry	649	89.1 (20)	7.1 (33)	708	32.1 (59)	657	23.9 (36)	549	95.4 (3)
Bay	1,482	74.5 (73)	19.7 (75)	1,597	40.8 (13)	1,477	14.4 (73)	1,336	85.5 (62)
Benzie	239	84.1 (41)	10.5 (49)	251	31.9 (60)	196	33.2 (9)	193	87.0 (55)
Berrien	2,387	72.8 (74)	12.1 (56)	2,698	30.7 (63)	2,362	16.5 (67)	2,003	89.3 (40)
Branch	837	81.0 (52)	9.9 (46)	1,050	33.0 (52)	922	22.0 (47)	819	83.3 (67)
Calhoun	2,537	90.2 (11)	5.2 (19)	2,835	35.2 (39)	2,046	19.3 (60)	2,143	82.5 (71)
Cass	877	83.5 (43)	8.9 (42)	958	42.8 (8)	796	32.0 (10)	777	80.2 (75)
Charlevoix	354	87.3 (26)	7.1 (33)	368	33.7 (46)	343	28.9 (22)	293	88.1 (47)
Cheboygan	361	79.5 (59)	11.9 (54)	379	34.3 (45)	336	26.2 (31)	305	90.5 (28)
Chippewa	590	89.2 (19)	6.9 (32)	636	44.2 (5)	559	41.5 (5)	523	83.2 (69)
Clare	550	77.5 (69)	13.8 (63)	586	44.2 (5)	499	22.8 (44)	493	87.4 (52)
Clinton	428	86.4 (31)	6.1 (27)	454	31.1 (62)	368	29.9 (17)	335	89.0 (42)
Crawford	234	91.0 (8)	4.3 (14)	253	37.9 (24)	233	27.5 (28)	206	90.8 (25)
Delta	586	92.2 (6)	1.5 (2)	643	40.9 (12)	591	25.5 (32)	525	93.0 (11)

(1) Reporting period is January 1 through December 31.

(2) Excludes records with unknown data or errors.

(3) Rank compares one County's rate to other Counties. Rank 1 = best rate.

(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.

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

# WIC PNSS & PedNSS

## Table 6B

### 2018 - 2020 Pregnancy Nutrition Surveillance <sup>(1)</sup>

### Michigan

### Comparison of Maternal Behavioral Indicators by County

### Combined 3 Years

<b>Comparison of Maternal Behavioral Indicators</b> <sup>(2,3)</sup>									
<b>County</b>	Medical Care			WIC Enrollment		Multivitamin Consumption			
	1st Trimester		No Care	1st Trimester		Prepregnancy <sup>(4)</sup>		During Pregnancy <sup>(5)</sup>	
	Number	% (rank)	% (rank)	Number	% (rank)	Number	% (rank)	Number	% (rank)
Dickinson	372	89.8 (15)	6.7 (31)	402	36.8 (31)	373	29.2 (21)	329	93.6 (9)
Eaton	722	87.1 (28)	3.7 (9)	794	30.5 (64)	717	23.7 (38)	593	92.4 (15)
Emmet	462	89.6 (16)	5.2 (19)	482	28.0 (72)	445	33.3 (8)	366	89.1 (41)
Genesee	7,367	86.1 (33)	4.1 (13)	7,936	25.0 (76)	6,206	7.4 (76)	5,717	87.7 (51)
Gladwin	393	72.3 (75)	22.4 (79)	414	42.8 (8)	384	31.3 (14)	340	88.2 (46)
Gogebic	182	92.3 (5)	1.6 (3)	204	32.8 (55)	182	30.8 (15)	156	97.4 (2)
Gr Travers	1,130	79.3 (62)	13.8 (63)	1,201	28.1 (71)	1,065	23.8 (37)	844	87.3 (53)
Gratiot	628	79.3 (62)	13.4 (61)	667	36.9 (29)	585	25.5 (32)	525	93.9 (6)
Hillsdale	673	80.4 (56)	11.3 (51)	727	35.1 (41)	629	17.0 (65)	551	86.0 (59)
Houghton	503	81.5 (51)	12.7 (58)	545	33.4 (50)	491	42.6 (4)	433	91.5 (22)
Huron	410	82.0 (48)	8.8 (41)	430	32.3 (58)	365	31.8 (12)	312	89.4 (38)
Ingham	4,928	86.9 (29)	6.3 (28)	5,270	29.5 (67)	4,680	7.3 (77)	3,957	90.8 (25)
Ionia	942	93.1 (4)	3.8 (10)	1,031	32.7 (56)	919	21.1 (49)	766	94.1 (5)
Iosco	460	85.9 (34)	8.3 (39)	495	33.7 (46)	456	20.2 (54)	420	90.0 (35)
Iron	164	83.5 (43)	12.8 (59)	187	46.5 (4)	157	54.1 (2)	156	87.8 (50)
Isabella	1,006	85.3 (37)	8.3 (39)	1,080	35.2 (39)	936	27.1 (29)	868	91.4 (23)
Jackson	2,812	85.1 (38)	7.9 (37)	3,029	39.1 (18)	2,654	17.2 (63)	2,449	85.8 (60)
Kalamazoo	3,761	83.8 (42)	8.1 (38)	4,193	38.1 (23)	3,774	16.2 (69)	3,307	82.7 (70)
Kalkaska	284	79.9 (57)	14.1 (65)	295	36.9 (29)	263	22.1 (46)	237	84.8 (64)
Kent	9,846	84.2 (40)	5.8 (24)	10,665	25.4 (75)	9,039	20.1 (55)	8,050	90.5 (28)
Lake	147	64.6 (79)	21.1 (76)	156	47.4 (2)	139	12.9 (75)	130	81.5 (74)

(1) Reporting period is January 1 through December 31.

(2) Excludes records with unknown data or errors.

(3) Rank compares one County's rate to other Counties. Rank 1 = best rate.

(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.

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

# WIC PNSS & PedNSS

## Table 6B

### 2018 - 2020 Pregnancy Nutrition Surveillance <sup>(1)</sup>

### Michigan

### Comparison of Maternal Behavioral Indicators by County

### Combined 3 Years

<b>Comparison of Maternal Behavioral Indicators <sup>(2,3)</sup></b>									
<b>County</b>	Medical Care			WIC Enrollment		Multivitamin Consumption			
	1st Trimester		No Care	1st Trimester		Prepregnancy <sup>(4)</sup>		During Pregnancy <sup>(5)</sup>	
	Number	% (rank)	% (rank)	Number	% (rank)	Number	% (rank)	Number	% (rank)
Lapeer	1,115	81.9 (50)	11.7 (53)	1,185	33.7 (46)	1,086	17.2 (63)	913	90.3 (30)
Leelanau	109	78.9 (65)	14.7 (67)	117	36.8 (31)	95	*	79	*
Lenawee	1,221	89.3 (17)	5.0 (18)	1,343	27.0 (73)	1,168	22.0 (47)	1,000	88.7 (43)
Livingston	979	89.3 (17)	4.7 (17)	1,046	23.0 (78)	787	38.8 (6)	703	92.2 (19)
Luce	125	77.6 (68)	17.6 (74)	144	50.7 (1)	105	28.6 (23)	124	90.3 (30)
Mackinac	94	*	*	103	30.1 (66)	89	*	76	*
Macomb	9,435	90.2 (11)	4.4 (15)	10,026	24.8 (77)	6,993	15.0 (71)	7,176	92.4 (15)
Manistee	311	87.8 (23)	10.0 (47)	323	34.7 (44)	283	74.6 (1)	251	92.8 (12)
Marquette	698	89.1 (20)	5.9 (26)	786	35.1 (41)	586	36.0 (7)	611	90.3 (30)
Mason	390	80.8 (54)	11.5 (52)	419	36.0 (35)	370	28.1 (25)	336	92.3 (17)
Mecosta	696	89.9 (14)	5.2 (19)	743	38.4 (21)	592	20.3 (53)	586	90.6 (27)
Menominee	224	86.2 (32)	9.8 (45)	272	32.7 (56)	208	25.5 (32)	188	92.6 (13)
Midland	907	90.0 (13)	5.2 (19)	963	29.0 (68)	868	31.5 (13)	725	94.9 (4)
Missaukee	199	75.9 (72)	16.6 (71)	218	43.6 (7)	181	29.8 (19)	179	87.2 (54)
Monroe	1,801	82.0 (48)	9.2 (43)	1,966	30.4 (65)	1,767	20.6 (52)	1,475	87.9 (49)
Montcalm	980	79.4 (60)	15.2 (69)	1,037	36.2 (34)	908	23.6 (39)	806	93.1 (10)
Montmorenc	144	85.4 (36)	2.1 (5)	154	28.6 (70)	130	23.1 (42)	113	93.8 (7)
Muskegon	3,630	87.4 (25)	5.8 (24)	3,935	38.9 (19)	3,264	19.6 (57)	3,064	82.5 (71)
Newaygo	975	80.5 (55)	12.0 (55)	1,048	38.4 (21)	608	31.9 (11)	840	92.3 (17)
Oakland	9,868	87.6 (24)	5.4 (23)	10,793	26.1 (74)	7,550	16.7 (66)	7,843	88.0 (48)
Oceana	465	71.4 (76)	21.3 (77)	524	37.4 (27)	474	23.2 (41)	417	78.7 (76)

(1) Reporting period is January 1 through December 31.

(2) Excludes records with unknown data or errors.

(3) Rank compares one County's rate to other Counties. Rank 1 = best rate.

(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.

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

# WIC PNSS & PedNSS

## Table 6B

### 2018 - 2020 Pregnancy Nutrition Surveillance <sup>(1)</sup>

### Michigan

### Comparison of Maternal Behavioral Indicators by County Combined 3 Years

<b>Comparison of Maternal Behavioral Indicators</b> <sup>(2,3)</sup>									
<b>County</b>	Medical Care			WIC Enrollment		Multivitamin Consumption			
	1st Trimester		No Care	1st Trimester		Prepregnancy <sup>(4)</sup>		During Pregnancy <sup>(5)</sup>	
	Number	% (rank)	% (rank)	Number	% (rank)	Number	% (rank)	Number	% (rank)
Ogemaw	365	79.7 (58)	13.2 (60)	402	36.3 (33)	360	21.1 (49)	329	90.3 (30)
Ontonagon	50	*	*	56	*	53	*	48	*
Osceola	407	77.4 (70)	16.7 (72)	434	41.5 (11)	391	22.3 (45)	350	82.0 (73)
Oscoda	130	82.3 (47)	9.2 (43)	139	38.8 (20)	124	19.4 (59)	110	91.8 (21)
Otsego	465	93.5 (1)	1.9 (4)	489	33.5 (49)	424	30.7 (16)	360	90.3 (30)
Ottawa	3,016	90.6 (10)	4.0 (12)	3,307	31.3 (61)	2,637	27.6 (26)	2,344	84.2 (65)
Presque Is	106	93.4 (2)	2.8 (6)	110	40.0 (16)	97	*	83	*
Roscommon	304	87.2 (27)	4.6 (16)	337	42.4 (10)	302	25.5 (32)	276	90.9 (24)
Saginaw	3,661	80.9 (53)	7.4 (35)	3,960	32.9 (54)	3,453	14.6 (72)	3,073	85.5 (62)
Sanilac	542	86.7 (30)	7.7 (36)	621	40.4 (15)	535	44.9 (3)	512	89.5 (37)
Schoolcraf	126	77.8 (67)	10.3 (48)	132	47.0 (3)	123	16.3 (68)	115	89.6 (36)
Shiawassee	1,028	79.0 (64)	15.3 (70)	1,131	37.1 (28)	951	19.2 (61)	892	87.0 (55)
St Clair	2,023	70.2 (78)	21.7 (78)	2,202	37.9 (24)	1,847	20.0 (56)	1,770	85.8 (60)
St Joseph	1,189	70.6 (77)	17.2 (73)	1,342	36.0 (35)	1,226	18.8 (62)	1,083	89.4 (38)
Tuscola	888	78.8 (66)	13.6 (62)	922	35.6 (37)	819	26.7 (30)	699	93.8 (7)
Van Buren	1,262	79.4 (60)	15.1 (68)	1,397	37.6 (26)	1,039	13.2 (74)	1,104	88.4 (44)
Washtenaw	2,888	91.0 (8)	3.2 (7)	3,156	28.9 (69)	2,795	15.2 (70)	2,381	91.9 (20)
Wayne	39,896	84.9 (39)	3.9 (11)	42,624	22.7 (79)	28,908	19.5 (58)	30,162	86.9 (57)
Wexford	762	77.2 (71)	14.4 (66)	814	39.6 (17)	686	29.9 (17)	650	86.2 (58)
<b>Michigan</b>	<b>145,457</b>	<b>84.9</b>	<b>6.6</b>	<b>157,300</b>	<b>29.1</b>	<b>123,217</b>	<b>19.5</b>	<b>117,076</b>	<b>88.0</b>

(1) Reporting period is January 1 through December 31.

(2) Excludes records with unknown data or errors.

(3) Rank compares one County's rate to other Counties. Rank 1 = best rate.

(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.

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

# WIC PNSS & PedNSS

## Table 7B

### 2018 - 2020 Pregnancy Nutrition Surveillance <sup>(1)</sup>

#### Michigan

#### Comparison of Smoking Indicators by County

#### Combined 3 Years

<b>Comparison of Smoking Indicators</b> <sup>(2,3)</sup>										
County	Smoking				Quit Smoking By First Prenatal Visit and Stayed Off Cigarettes <sup>(4)</sup>		Smoking in Household			
	3 Months Prior to Pregnancy		Last 3 Months of Pregnancy				Prenatal		Postpartum	
	Number	% (rank)	Number	% (rank)	Number	% (rank)	Number	% (rank)	Number	% (rank)
Alcona	105	46.7 (70)	107	30.8 (71)	38	*	89	*	107	1.9 (24)
Alger	77	*	82	*	31	*	68	*	82	*
Allegan	1,262	29.7 (16)	1,315	16.7 (21)	313	38.7 (15)	1,077	7.1 (9)	1,317	1.7 (20)
Alpena	423	47.8 (74)	418	28.7 (64)	163	34.4 (29)	372	12.4 (39)	417	2.4 (32)
Antrim	252	43.7 (61)	270	28.9 (65)	95	*	227	24.2 (76)	270	7.0 (77)
Arenac	288	44.8 (63)	315	28.3 (63)	109	33.0 (34)	245	22.4 (75)	315	8.6 (78)
Baraga	121	48.8 (77)	122	33.6 (76)	44	*	106	13.2 (44)	122	2.5 (35)
Barry	658	36.9 (39)	653	18.7 (25)	188	44.1 (8)	548	8.9 (23)	653	2.5 (35)
Bay	1,481	37.9 (44)	1,490	23.2 (42)	496	28.8 (44)	1,335	13.1 (42)	1,489	3.9 (57)
Benzie	229	43.2 (59)	240	26.7 (60)	84	*	194	14.9 (52)	240	4.6 (66)
Berrien	2,371	30.2 (20)	2,453	15.1 (16)	533	41.5 (12)	2,003	13.4 (45)	2,454	3.7 (55)
Branch	954	30.7 (21)	979	17.6 (24)	231	32.9 (36)	817	11.3 (33)	979	1.6 (17)
Calhoun	2,502	29.5 (14)	2,578	17.2 (23)	599	27.2 (52)	2,158	8.4 (19)	2,590	1.8 (22)
Cass	870	25.1 (10)	898	13.5 (10)	192	31.8 (41)	777	5.7 (5)	898	1.6 (17)
Charlevoix	343	37.9 (44)	352	20.5 (32)	115	38.3 (17)	292	10.3 (29)	350	4.6 (66)
Cheboygan	338	45.3 (64)	353	24.9 (50)	127	36.2 (25)	305	13.1 (42)	355	4.2 (62)
Chippewa	593	40.5 (54)	586	30.2 (70)	203	16.3 (61)	523	18.4 (65)	587	10.1 (79)
Clare	534	48.5 (75)	552	31.7 (74)	222	27.5 (51)	493	17.8 (64)	552	3.3 (49)
Clinton	402	33.1 (24)	427	16.6 (20)	113	45.1 (7)	335	7.5 (13)	430	1.4 (11)

(1) Reporting period is January 1 through December 31.

(2) Excludes records with unknown data or errors.

(3) Rank compares one County's rate to other Counties. Rank 1 = best rate.

(4) 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 7B

### 2018 - 2020 Pregnancy Nutrition Surveillance <sup>(1)</sup>

#### Michigan

#### Comparison of Smoking Indicators by County

#### Combined 3 Years

<b>Comparison of Smoking Indicators <sup>(2,3)</sup></b>										
<b>County</b>	Smoking				Quit Smoking By First Prenatal Visit and Stayed Off Cigarettes <sup>(4)</sup>	Smoking in Household				
	3 Months Prior to Pregnancy		Last 3 Months of Pregnancy			Prenatal		Postpartum		
	Number	% (rank)	Number	% (rank)		Number	% (rank)	Number	% (rank)	
Crawford	234	38.5 (47)	237	26.2 (56)	78	*	205	14.6 (51)	236	0.4 (1)
Delta	591	46.2 (67)	588	24.8 (48)	218	37.2 (19)	525	13.5 (46)	588	2.7 (38)
Dickinson	376	37.0 (40)	368	26.1 (55)	118	21.2 (57)	329	7.9 (17)	368	1.4 (11)
Eaton	717	39.9 (53)	728	20.5 (32)	223	39.9 (14)	593	7.9 (17)	728	2.1 (25)
Emmet	448	39.3 (51)	461	20.4 (30)	142	35.2 (27)	366	8.5 (20)	461	2.4 (32)
Genesee	6,887	26.0 (12)	7,446	14.9 (15)	1,426	35.9 (26)	5,713	8.7 (22)	7,436	2.1 (25)
Gladwin	389	38.6 (48)	393	23.4 (43)	122	28.7 (47)	340	15.0 (53)	393	3.1 (45)
Gogebic	183	47.5 (73)	186	34.9 (78)	70	*	156	17.3 (62)	186	2.7 (38)
Gr Travers	1,066	35.0 (30)	1,132	19.6 (28)	304	37.2 (19)	844	10.0 (28)	1,132	2.8 (40)
Gratiot	600	35.5 (32)	628	21.2 (35)	178	33.7 (31)	526	9.7 (26)	630	1.3 (6)
Hillsdale	633	43.4 (60)	679	29.2 (67)	224	29.5 (43)	551	17.1 (61)	678	4.0 (60)
Houghton	501	33.5 (26)	501	24.0 (45)	139	25.2 (54)	432	7.4 (12)	501	1.4 (11)
Huron	393	36.4 (35)	412	22.3 (39)	121	36.4 (24)	313	15.3 (55)	412	4.9 (70)
Ingham	4,706	17.7 (3)	4,973	10.8 (7)	673	33.6 (33)	3,943	6.0 (7)	4,962	2.8 (40)
Ionia	918	34.1 (28)	948	20.9 (34)	260	28.8 (44)	766	8.5 (20)	951	2.3 (30)
Iosco	458	45.9 (66)	465	33.5 (75)	175	20.6 (58)	419	19.3 (69)	465	2.8 (40)
Iron	166	47.0 (71)	156	37.2 (79)	62	*	155	16.1 (58)	155	5.8 (74)
Isabella	997	36.5 (36)	1,003	21.5 (37)	297	38.0 (18)	868	12.4 (39)	1,004	3.1 (45)
Jackson	2,740	37.4 (43)	2,838	24.7 (47)	874	28.8 (44)	2,447	10.7 (30)	2,839	2.1 (25)

(1) Reporting period is January 1 through December 31.

(2) Excludes records with unknown data or errors.

(3) Rank compares one County's rate to other Counties. Rank 1 = best rate.

(4) 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 7B

### 2018 - 2020 Pregnancy Nutrition Surveillance <sup>(1)</sup>

#### Michigan

#### Comparison of Smoking Indicators by County

#### Combined 3 Years

<b>Comparison of Smoking Indicators <sup>(2,3)</sup></b>										
<b>County</b>	Smoking				Quit Smoking By First Prenatal Visit and Stayed Off Cigarettes <sup>(4)</sup>		Smoking in Household			
	3 Months Prior to Pregnancy		Last 3 Months of Pregnancy				Prenatal		Postpartum	
	Number	% (rank)	Number	% (rank)	Number	% (rank)	Number	% (rank)	Number	% (rank)
Kalamazoo	3,800	24.3 (9)	3,782	13.5 (10)	728	33.0 (34)	3,301	7.7 (15)	3,778	1.3 (6)
Kalkaska	266	48.5 (75)	284	28.2 (62)	112	38.4 (16)	236	21.6 (73)	284	4.2 (62)
Kent	9,521	18.0 (4)	9,950	8.4 (3)	1,318	43.8 (9)	7,953	5.1 (3)	9,916	1.4 (11)
Lake	140	61.4 (78)	146	34.2 (77)	79	*	130	22.3 (74)	146	4.1 (61)
Lapeer	1,088	29.5 (14)	1,113	13.8 (12)	232	43.1 (10)	913	5.6 (4)	1,113	1.2 (5)
Leelanau	104	33.7 (27)	110	11.8 (8)	25	*	80	*	110	0.9 (3)
Lenawee	1,178	35.0 (30)	1,239	15.7 (18)	313	46.0 (4)	996	9.9 (27)	1,240	3.6 (54)
Livingston	945	31.6 (23)	979	19.5 (27)	223	36.8 (22)	706	6.2 (8)	981	2.1 (25)
Luce	133	44.4 (62)	125	26.4 (58)	47	*	124	15.3 (55)	125	0.8 (2)
Mackinac	91	*	94	*	23	*	76	*	94	*
Macomb	8,990	18.7 (5)	9,500	8.8 (4)	1,262	45.6 (6)	7,186	7.1 (9)	9,503	1.6 (17)
Manistee	290	37.2 (41)	310	25.5 (53)	98	*	251	14.3 (48)	310	3.9 (57)
Marquette	724	38.1 (46)	717	25.4 (52)	234	32.9 (36)	613	9.3 (25)	715	2.1 (25)
Mason	375	36.5 (36)	396	24.5 (46)	117	25.6 (53)	336	11.6 (35)	396	3.5 (52)
Mecosta	661	35.9 (34)	698	23.6 (44)	203	28.6 (49)	586	15.0 (53)	698	3.2 (48)
Menominee	235	47.2 (72)	232	31.0 (72)	77	*	188	16.5 (60)	231	3.0 (44)
Midland	869	29.9 (18)	905	19.2 (26)	210	31.9 (40)	725	7.6 (14)	901	2.3 (30)
Missaukee	202	29.7 (16)	199	17.1 (22)	48	*	179	14.5 (49)	198	3.5 (52)
Monroe	1,774	37.2 (41)	1,808	21.2 (35)	508	36.8 (22)	1,475	12.3 (38)	1,807	3.3 (49)

(1) Reporting period is January 1 through December 31.

(2) Excludes records with unknown data or errors.

(3) Rank compares one County's rate to other Counties. Rank 1 = best rate.

(4) 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 7B

### 2018 - 2020 Pregnancy Nutrition Surveillance <sup>(1)</sup>

#### Michigan

#### Comparison of Smoking Indicators by County

#### Combined 3 Years

<b>Comparison of Smoking Indicators</b> <sup>(2,3)</sup>										
<b>County</b>	Smoking				Quit Smoking By First Prenatal Visit and Stayed Off Cigarettes <sup>(4)</sup>		Smoking in Household			
	3 Months Prior to Pregnancy		Last 3 Months of Pregnancy				Prenatal		Postpartum	
	Number	% (rank)	Number	% (rank)			Number	% (rank)	Number	% (rank)
Montcalm	930	40.9 (56)	987	24.8 (48)	308	32.1 (39)	806	16.1 (58)	988	4.4 (64)
Montmorenc	130	46.2 (67)	144	29.9 (69)	49	*	113	18.6 (67)	145	6.9 (76)
Muskegon	3,493	31.3 (22)	3,689	20.4 (30)	916	28.7 (47)	3,068	12.0 (37)	3,702	4.7 (69)
Newaygo	962	29.9 (18)	988	15.5 (17)	249	41.0 (13)	840	11.2 (32)	989	1.5 (15)
Oakland	9,708	13.1 (1)	10,003	6.1 (1)	970	42.6 (11)	7,836	5.8 (6)	9,998	1.5 (15)
Oceana	473	25.8 (11)	478	14.4 (14)	94	*	416	7.7 (15)	479	1.7 (20)
Ogemaw	363	40.5 (54)	369	29.0 (66)	121	22.3 (56)	329	20.4 (72)	368	6.3 (75)
Ontonagon	53	*	50	*	16	*	48	*	50	*
Osceola	391	42.2 (58)	407	26.5 (59)	135	28.1 (50)	350	20.3 (71)	407	3.9 (57)
Oscoda	126	42.1 (57)	130	29.2 (67)	44	*	110	14.5 (49)	130	3.8 (56)
Otsego	428	38.8 (49)	464	26.3 (57)	131	31.3 (42)	360	19.4 (70)	464	5.0 (71)
Ottawa	2,923	20.8 (6)	3,064	10.2 (6)	498	46.0 (4)	2,337	4.3 (1)	3,060	1.3 (6)
Presque Is	98	*	106	25.5 (53)	29	*	83	*	106	2.8 (40)
Roscommon	306	45.4 (65)	310	31.6 (73)	110	34.5 (28)	276	18.5 (66)	310	5.5 (72)
Saginaw	3,464	34.2 (29)	3,709	13.9 (13)	994	50.4 (2)	3,071	11.3 (33)	3,709	2.6 (37)
Sanilac	569	26.5 (13)	552	16.3 (19)	120	20.0 (59)	512	9.0 (24)	552	1.3 (6)
Schoolcraf	123	46.3 (69)	126	27.8 (61)	50	*	115	19.1 (68)	126	2.4 (32)
Shiawassee	1,037	39.1 (50)	1,041	22.8 (41)	337	32.9 (36)	890	15.5 (57)	1,038	4.6 (66)
St Clair	1,983	39.4 (52)	2,037	22.7 (40)	638	33.7 (31)	1,768	17.6 (63)	2,032	5.5 (72)

(1) Reporting period is January 1 through December 31.

(2) Excludes records with unknown data or errors.

(3) Rank compares one County's rate to other Counties. Rank 1 = best rate.

(4) 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 7B

### 2018 - 2020 Pregnancy Nutrition Surveillance <sup>(1)</sup>

#### Michigan

#### Comparison of Smoking Indicators by County

#### Combined 3 Years

<b>Comparison of Smoking Indicators</b> <sup>(2,3)</sup>										
<b>County</b>	Smoking				Quit Smoking By First Prenatal Visit and Stayed Off Cigarettes <sup>(4)</sup>	Smoking in Household				
	3 Months Prior to Pregnancy		Last 3 Months of Pregnancy			Prenatal		Postpartum		
	Number	% (rank)	Number	% (rank)		Number	% (rank)	Number	% (rank)	
St Joseph	1,226	35.6 (33)	1,234	19.7 (29)	346	37.0 (21)	1,081	11.6 (35)	1,230	3.1 (45)
Tuscola	824	36.5 (36)	889	22.0 (38)	250	34.4 (29)	699	12.6 (41)	890	1.8 (22)
Van Buren	1,247	21.7 (7)	1,267	12.5 (9)	226	22.6 (55)	1,098	4.5 (2)	1,268	1.1 (4)
Washtenaw	2,823	21.8 (8)	2,896	9.9 (5)	474	47.5 (3)	2,377	7.1 (9)	2,900	1.3 (6)
Wayne	36,900	16.1 (2)	40,287	6.5 (2)	4,625	53.6 (1)	30,108	10.9 (31)	40,277	3.3 (49)
Wexford	733	33.4 (25)	766	24.9 (50)	200	19.0 (60)	650	14.0 (47)	765	4.4 (64)
<b>Michigan</b>	<b>139,618</b>	<b>24.5</b>	<b>146,978</b>	<b>13.0</b>	<b>27,387</b>	<b>38.9</b>	<b>116,894</b>	<b>9.8</b>	<b>146,919</b>	<b>2.7</b>

(1) Reporting period is January 1 through December 31.

(2) Excludes records with unknown data or errors.

(3) Rank compares one County's rate to other Counties. Rank 1 = best rate.

(4) 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 8B

### 2018 - 2020 Pregnancy Nutrition Surveillance <sup>(1)</sup>

### Michigan

### Comparison of Infant Health Indicators by County

### Combined 3 Years

<b>Comparison of Infant Health Indicators</b> <sup>(2,3)</sup>									
County	Birthweight			Preterm		Full Term LBW		Ever Breastfed	
	Low (4)		High (5)	(6)		(7)			
	Number	% (rank)	% (rank)	Number	% (rank)	Number	% (rank)	Number	% (rank)
Alcona	102	6.9 (14)	3.9 (1)	104	4.8 (1)	97	*	102	67.6 (67)
Alger	79	*	*	80	*	71	*	79	*
Allegan	1,245	8.2 (41)	8.4 (42)	1,275	12.9 (71)	1,074	2.9 (22)	1,258	77.1 (34)
Alpena	394	7.1 (18)	10.2 (67)	399	8.5 (5)	358	2.8 (17)	393	73.8 (51)
Antrim	245	5.7 (6)	9.4 (63)	252	9.5 (16)	217	2.8 (17)	253	79.8 (22)
Arenac	293	10.6 (68)	8.2 (38)	303	11.2 (41)	259	4.6 (63)	294	72.4 (58)
Baraga	119	7.6 (28)	8.4 (42)	119	9.2 (12)	105	3.8 (46)	118	74.6 (46)
Barry	618	8.4 (44)	9.2 (60)	641	9.8 (21)	557	4.5 (61)	624	80.3 (21)
Bay	1,410	8.6 (51)	8.4 (42)	1,454	10.7 (34)	1,263	3.6 (40)	1,416	67.1 (70)
Benzie	227	6.6 (10)	7.9 (32)	235	12.3 (61)	200	1.0 (2)	227	82.4 (15)
Berrien	2,312	7.9 (34)	5.8 (9)	2,377	9.2 (12)	2,074	4.4 (58)	2,315	70.4 (61)
Branch	924	7.9 (34)	7.4 (20)	950	10.6 (33)	815	2.7 (13)	934	75.6 (40)
Calhoun	2,483	9.2 (53)	7.6 (24)	2,519	10.3 (28)	2,206	4.2 (53)	2,495	72.2 (59)
Cass	837	6.8 (12)	7.4 (20)	854	11.8 (57)	729	3.2 (28)	838	75.4 (42)
Charlevoix	306	9.5 (56)	6.5 (12)	335	10.1 (26)	272	3.7 (44)	329	85.4 (5)
Cheboygan	331	7.3 (23)	8.5 (46)	336	9.8 (21)	292	3.1 (26)	331	78.9 (27)
Chippewa	546	7.3 (23)	11.7 (77)	549	11.5 (49)	468	2.4 (7)	547	67.5 (68)
Clare	525	5.3 (2)	7.4 (20)	535	8.8 (6)	475	2.7 (13)	524	74.0 (49)
Clinton	417	9.6 (58)	10.6 (69)	419	11.5 (49)	365	3.6 (40)	418	83.7 (8)

(1) Reporting period is January 1 through December 31.

(2) Excludes records with unknown data or errors.

(3) Rank compares one County's rate to other Counties. Rank 1 = best rate.

(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 8B

### 2018 - 2020 Pregnancy Nutrition Surveillance <sup>(1)</sup>

### Michigan

### Comparison of Infant Health Indicators by County

### Combined 3 Years

<b>Comparison of Infant Health Indicators</b> <sup>(2,3)</sup>									
<b>County</b>	Birthweight			Preterm		Full Term LBW		Ever Breastfed	
	Low (4)		High (5)	(6)		(7)			
	Number	% (rank)	% (rank)	Number	% (rank)	Number	% (rank)	Number	% (rank)
Crawford	200	8.5 (45)	10.5 (68)	233	12.0 (59)	176	4.0 (47)	201	83.1 (14)
Delta	547	7.1 (18)	9.1 (58)	565	9.9 (23)	491	3.1 (26)	548	81.8 (17)
Dickinson	357	8.1 (38)	8.4 (42)	362	11.0 (38)	315	3.5 (37)	358	73.7 (52)
Eaton	685	7.7 (32)	8.9 (53)	721	10.4 (29)	617	3.2 (28)	704	83.5 (11)
Emmet	433	7.9 (34)	8.1 (36)	447	10.5 (30)	385	2.9 (22)	441	85.5 (4)
Genesee	7,179	12.0 (78)	5.3 (5)	7,278	13.5 (73)	6,148	5.8 (72)	7,191	56.4 (77)
Gladwin	362	7.2 (20)	9.4 (63)	378	11.4 (47)	320	2.2 (4)	363	83.7 (8)
Gogebic	177	7.9 (34)	11.9 (78)	179	9.5 (16)	157	3.2 (28)	177	74.6 (46)
Gr Travers	1,070	7.6 (28)	11.0 (73)	1,097	9.1 (10)	965	2.5 (9)	1,072	83.2 (13)
Gratiot	595	7.6 (28)	8.9 (53)	606	11.1 (40)	521	2.7 (13)	596	81.9 (16)
Hillsdale	637	6.8 (12)	8.5 (46)	662	9.4 (14)	573	3.0 (25)	638	79.5 (23)
Houghton	459	7.2 (20)	10.7 (70)	477	7.8 (4)	415	4.8 (68)	461	86.1 (2)
Huron	383	9.7 (60)	11.2 (74)	398	11.3 (45)	343	4.1 (50)	383	78.6 (30)
Ingham	4,674	10.2 (63)	6.5 (12)	4,837	12.7 (69)	4,078	4.4 (58)	4,705	76.6 (36)
Ionia	917	8.5 (45)	7.9 (32)	929	11.0 (38)	814	2.8 (17)	917	83.3 (12)
Iosco	434	8.3 (43)	7.8 (29)	442	9.0 (9)	390	5.1 (70)	435	64.4 (73)
Iron	140	9.3 (54)	10.7 (70)	145	9.7 (19)	125	4.0 (47)	140	78.6 (30)
Isabella	943	8.6 (51)	9.1 (58)	977	10.7 (34)	845	4.6 (63)	945	75.0 (44)
Jackson	2,688	9.6 (58)	8.1 (36)	2,748	11.5 (49)	2,377	4.2 (53)	2,691	71.9 (60)

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# WIC PNSS & PedNSS

## Table 8B

### 2018 - 2020 Pregnancy Nutrition Surveillance <sup>(1)</sup>

### Michigan

### Comparison of Infant Health Indicators by County

### Combined 3 Years

<b>Comparison of Infant Health Indicators</b> <sup>(2,3)</sup>									
<b>County</b>	Birthweight			Preterm		Full Term LBW		Ever Breastfed	
	Low (4)		High (5)	(6)		(7)			
	Number	% (rank)	% (rank)	Number	% (rank)	Number	% (rank)	Number	% (rank)
Kalamazoo	3,545	10.2 (63)	7.6 (24)	3,674	12.3 (61)	3,093	3.6 (40)	3,589	69.9 (63)
Kalkaska	267	9.4 (55)	7.9 (32)	268	10.1 (26)	234	4.3 (56)	268	85.4 (5)
Kent	9,407	11.9 (76)	6.3 (11)	9,694	14.5 (77)	8,010	4.7 (66)	9,465	75.2 (43)
Lake	135	11.1 (71)	8.9 (53)	139	15.8 (79)	113	5.3 (71)	135	73.3 (56)
Lapeer	1,063	8.5 (45)	8.6 (50)	1,072	11.6 (53)	926	3.6 (40)	1,065	78.7 (28)
Leelanau	105	9.5 (56)	7.6 (24)	107	12.1 (60)	91	*	105	92.4 (1)
Lenawee	1,178	5.8 (7)	8.2 (38)	1,216	8.8 (6)	1,066	2.8 (17)	1,179	68.7 (65)
Livingston	951	10.0 (62)	8.3 (40)	960	12.4 (64)	831	3.5 (37)	950	81.8 (17)
Luce	124	5.6 (5)	11.3 (75)	122	11.5 (49)	108	0.9 (1)	124	76.6 (36)
Mackinac	92	*	*	94	*	88	*	92	*
Macomb	9,107	10.3 (67)	5.5 (7)	9,217	12.4 (64)	7,866	4.3 (56)	9,168	61.7 (74)
Manistee	285	9.8 (61)	9.8 (66)	292	12.3 (61)	247	4.0 (47)	287	77.4 (33)
Marquette	691	8.5 (45)	8.5 (46)	700	10.9 (37)	613	4.1 (50)	692	85.8 (3)
Mason	368	10.9 (70)	6.8 (15)	380	14.7 (78)	310	4.2 (53)	368	75.5 (41)
Mecosta	663	7.4 (25)	7.8 (29)	671	11.8 (57)	579	2.6 (11)	665	74.0 (49)
Menominee	221	8.1 (38)	9.0 (57)	224	11.2 (41)	195	4.1 (50)	221	61.5 (75)
Midland	867	6.9 (14)	9.7 (65)	891	9.9 (23)	776	2.3 (5)	867	79.0 (26)
Missaukee	166	5.4 (3)	11.4 (76)	183	7.1 (3)	151	2.6 (11)	166	80.7 (19)
Monroe	1,724	8.2 (41)	6.8 (15)	1,760	11.6 (53)	1,511	2.9 (22)	1,725	65.5 (72)

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<b>County</b>	Birthweight			Preterm		Full Term LBW		Ever Breastfed	
	Low (4)		High (5)	(6)		(7)			
	Number	% (rank)	% (rank)	Number	% (rank)	Number	% (rank)	Number	% (rank)
Montcalm	927	7.6 (28)	7.0 (17)	949	11.2 (41)	819	2.4 (7)	929	83.7 (8)
Montmorenc	135	11.9 (76)	8.9 (53)	134	12.7 (69)	116	6.0 (74)	135	74.8 (45)
Muskegon	3,531	10.8 (69)	5.3 (5)	3,563	14.2 (76)	2,966	4.6 (63)	3,537	66.1 (71)
Newaygo	932	6.5 (9)	7.3 (19)	952	11.4 (47)	824	2.8 (17)	934	78.7 (28)
Oakland	9,414	11.5 (73)	5.8 (9)	9,774	13.0 (72)	8,147	4.7 (66)	9,577	70.1 (62)
Oceana	457	7.0 (16)	6.6 (14)	457	9.6 (18)	406	3.2 (28)	458	77.9 (32)
Ogemaw	348	7.2 (20)	10.9 (72)	353	6.8 (2)	320	3.4 (36)	348	67.5 (68)
Ontonagon	49	*	*	50	*	46	*	49	*
Osceola	384	10.2 (63)	7.6 (24)	392	9.7 (19)	345	6.4 (75)	387	77.0 (35)
Oscoda	118	5.1 (1)	8.5 (46)	125	8.8 (6)	109	3.7 (44)	118	73.7 (52)
Otsego	392	10.2 (63)	7.9 (32)	457	9.4 (14)	350	4.9 (69)	445	75.7 (39)
Ottawa	2,743	8.5 (45)	8.7 (52)	2,984	11.7 (55)	2,411	3.2 (28)	2,926	80.7 (19)
Presque Is	105	6.7 (11)	12.4 (79)	104	12.5 (66)	91	*	105	74.3 (48)
Roscommon	298	5.4 (3)	7.0 (17)	296	9.1 (10)	266	2.3 (5)	298	73.5 (55)
Saginaw	3,555	11.4 (72)	5.1 (4)	3,615	12.6 (67)	3,099	4.4 (58)	3,564	60.9 (76)
Sanilac	536	6.0 (8)	7.8 (29)	549	11.7 (55)	472	1.1 (3)	538	53.7 (79)
Schoolcraf	122	11.5 (73)	5.7 (8)	119	12.6 (67)	103	6.8 (76)	122	73.0 (57)
Shiawassee	990	8.1 (38)	7.6 (24)	1,007	10.5 (30)	884	3.3 (34)	991	73.6 (54)
St Clair	1,949	7.7 (32)	8.3 (40)	1,988	10.8 (36)	1,732	3.5 (37)	1,952	68.4 (66)

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	Low (4)		High (5)	(6)		(7)			
	Number	% (rank)	% (rank)	Number	% (rank)	Number	% (rank)	Number	% (rank)
St Joseph	1,155	7.0 (16)	7.4 (20)	1,186	9.9 (23)	1,032	2.5 (9)	1,164	84.3 (7)
Tuscola	839	8.5 (45)	9.2 (60)	855	11.2 (41)	736	3.3 (34)	838	76.1 (38)
Van Buren	1,180	7.4 (25)	9.3 (62)	1,218	10.5 (30)	1,042	3.2 (28)	1,202	69.5 (64)
Washtenaw	2,767	11.5 (73)	5.0 (3)	2,818	14.0 (75)	2,369	4.5 (61)	2,752	79.1 (25)
Wayne	37,640	12.5 (79)	4.9 (2)	39,183	13.8 (74)	32,087	5.9 (73)	38,409	54.3 (78)
Wexford	717	7.4 (25)	8.6 (50)	723	11.3 (45)	620	2.7 (13)	718	79.4 (24)
<b>Michigan</b>	<b>138,554</b>	<b>10.4</b>	<b>6.4</b>	<b>142,789</b>	<b>12.5</b>	<b>120,167</b>	<b>4.6</b>	<b>140,109</b>	<b>57.4</b>

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