

# WIC PNSS & PedNSS

Run Date: 5/29/2024

## Table 3B

2021 Pregnancy Nutrition Surveillance (1)

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## 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	35	*	*	*	*	*	*	*
Alger	31	*	*	*	*	*	*	*
Allegan	460	74.6	1.5	18.0	0.2	1.1	3.3	1.3
Alpena	142	93.0	0.7	2.1	0.7	0.0	3.5	0.0
Antrim	82	*	*	*	*	*	*	*
Arenac	115	93.9	0.0	2.6	0.0	0.0	3.5	0.0
Baraga	43	*	*	*	*	*	*	*
Barry	186	91.4	0.5	5.4	0.5	0.0	1.6	0.5
Bay	512	80.3	2.1	11.3	0.0	0.2	6.1	0.0
Benzie	78	*	*	*	*	*	*	*
Berrien	767	49.3	37.0	7.8	0.1	1.4	3.3	1.0
Branch	326	83.1	1.2	12.6	0.0	0.3	1.8	0.9
Calhoun	959	60.4	21.0	7.7	0.2	4.6	5.5	0.6
Cass	267	58.1	7.1	21.7	0.0	0.4	9.4	3.4
Charlevoix	103	87.4	0.0	4.9	0.0	0.0	7.8	0.0
Cheboygan	125	87.2	0.0	2.4	0.0	0.0	10.4	0.0
Chippewa	180	57.2	0.6	3.9	17.2	1.1	20.0	0.0
Clare	183	92.9	0.5	3.3	0.0	0.5	2.7	0.0
Clinton	132	84.1	0.8	9.1	0.0	0.0	6.1	0.0
Crawford	94	*	*	*	*	*	*	*
Delta	200	82.0	1.5	2.5	1.5	1.5	11.0	0.0
Dickinson	141	95.0	0.0	1.4	0.0	0.0	2.1	1.4
Eaton	217	88.0	3.2	7.8	0.0	0.5	0.5	0.0

(1) Reporting period is January 1 through December 31

(2) Excludes data with errors

\* National includes previous year's data for all participating States and ITOs.

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# WIC PNSS & PedNSS

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## Table 3B

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## 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  %
Emmet	124	83.9	0.8	3.2	0.8	1.6	9.7	0.0
Genesee	2,457	48.4	38.4	6.1	0.0	0.4	6.4	0.2
Gladwin	131	93.9	0.0	2.3	0.0	1.5	2.3	0.0
Gogebic	53	*	*	*	*	*	*	*
Gr Travers	399	84.5	1.3	6.0	3.5	0.8	3.5	0.5
Gratiot	176	83.5	0.6	11.4	0.0	0.0	2.8	1.7
Hillsdale	206	93.2	0.5	2.4	0.0	0.0	1.9	1.9
Houghton	198	89.4	0.5	2.0	1.5	2.5	4.0	0.0
Huron	124	95.2	0.0	4.8	0.0	0.0	0.0	0.0
Ingham	1,770	42.9	28.6	15.2	0.2	4.8	8.2	0.1
Ionia	296	86.5	0.3	9.5	0.0	0.0	3.7	0.0
Iosco	138	92.0	0.7	2.2	0.7	0.0	4.3	0.0
Iron	47	*	*	*	*	*	*	*
Isabella	355	76.1	4.2	8.2	2.3	0.3	9.0	0.0
Jackson	960	71.7	15.2	6.5	0.1	0.9	5.6	0.0
Kalamazoo	1,234	46.1	35.6	9.6	0.2	0.7	7.1	0.7
Kalkaska	92	*	*	*	*	*	*	*
Kent	3,185	30.5	28.9	30.6	0.3	4.9	4.6	0.3
Lake	57	*	*	*	*	*	*	*
Lapeer	350	84.9	1.1	9.7	0.0	0.6	3.7	0.0
Leelanau	37	*	*	*	*	*	*	*
Lenawee	389	69.9	3.6	19.8	0.0	0.3	5.7	0.8
Livingston	340	89.1	1.5	4.1	0.0	0.9	3.2	1.2

(1) Reporting period is January 1 through December 31

(2) Excludes data with errors

\* National includes previous year's data for all participating States and ITOs.

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# WIC PNSS & PedNSS

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## 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  %
Luce	39	*	*	*	*	*	*	*
Mackinac	28	*	*	*	*	*	*	*
Macomb	3,186	50.1	33.9	4.5	0.2	7.4	3.7	0.3
Manistee	88	*	*	*	*	*	*	*
Marquette	226	87.2	2.2	3.1	2.2	0.0	4.9	0.4
Mason	119	73.9	2.5	15.1	0.8	0.8	5.0	1.7
Mecosta	257	90.3	1.6	3.9	0.4	0.0	3.5	0.4
Menominee	91	*	*	*	*	*	*	*
Midland	330	86.4	2.1	6.4	0.0	2.4	2.4	0.3
Missaukee	71	*	*	*	*	*	*	*
Monroe	624	81.3	6.9	6.4	0.0	0.2	5.0	0.3
Montcalm	333	90.7	0.9	6.9	0.0	0.0	1.2	0.3
Montmorenc	43	*	*	*	*	*	*	*
Muskegon	1,145	59.2	22.9	10.0	0.3	0.3	6.9	0.4
Newaygo	364	71.2	0.3	22.5	0.5	0.8	4.4	0.3
Oakland	3,450	41.2	41.5	11.2	0.1	2.3	3.6	0.2
Oceana	161	60.2	0.0	36.0	0.6	0.0	3.1	0.0
Ogemaw	124	90.3	0.8	4.8	0.0	0.0	4.0	0.0
Ontonagon	14	*	*	*	*	*	*	*
Osceola	157	94.9	0.0	3.2	0.0	0.0	1.9	0.0
Oscoda	42	*	*	*	*	*	*	*
Otsego	137	92.7	0.0	2.2	0.0	0.0	5.1	0.0
Ottawa	1,050	55.0	5.2	30.6	0.2	3.3	5.2	0.5

(1) Reporting period is January 1 through December 31

(2) Excludes data with errors

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# WIC PNSS & PedNSS

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## Table 3B

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## 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  %
Presque Is	38	*	*	*	*	*	*	*
Roscommon	104	93.3	0.0	1.9	0.0	0.0	3.8	1.0
Saginaw	1,224	40.2	38.5	14.9	0.1	0.2	6.0	0.2
Sanilac	173	94.8	0.0	2.3	0.0	0.6	1.2	1.2
Schoolcraf	36	*	*	*	*	*	*	*
Shiawassee	334	87.4	0.6	5.7	0.0	0.3	5.7	0.3
St Clair	590	81.4	5.1	7.5	0.0	0.5	5.4	0.2
St Joseph	380	68.9	0.8	22.4	0.0	0.3	7.4	0.3
Tuscola	251	93.6	0.0	4.4	0.0	0.0	2.0	0.0
Van Buren	427	63.0	4.0	27.9	0.2	0.9	2.6	1.4
Washtenaw	1,089	36.8	40.8	9.9	0.1	2.9	9.0	0.5
Wayne	12,854	29.6	55.0	10.0	0.1	2.8	2.3	0.2
Wexford	214	89.7	1.4	2.3	0.0	0.5	6.1	0.0
<b>Michigan</b>	<b>48,337</b>	<b>51.3</b>	<b>30.0</b>	<b>11.3</b>	<b>0.3</b>	<b>2.4</b>	<b>4.5</b>	<b>0.3</b>
<b>National (Prior Year)</b>	<b>99,423</b>	<b>47.9</b>	<b>24.1</b>	<b>19.8</b>	<b>1.6</b>	<b>2.8</b>	<b>3.6</b>	<b>0.2</b>

(1) Reporting period is January 1 through December 31

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# WIC PNSS & PedNSS

Run Date: 5/29/2024

## Table 4B

### 2021 Pregnancy Nutrition Surveillance (1) Michigan Comparison of Age Distribution by County

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Comparison of Age Distribution (2)								
County	Number Included in Analysis	< 15 Years %	15 - 17 Years %	18 - 19 Years %	20 - 29 Years %	30 - 39 Years %	>= 40 Years %	Unknown %
Alcona	35	*	*	*	*	*	*	*
Alger	31	*	*	*	*	*	*	*
Allegan	460	0.0	2.4	6.1	57.4	32.4	1.5	0.2
Alpena	142	0.0	2.1	7.7	58.5	30.3	1.4	0.0
Antrim	82	*	*	*	*	*	*	*
Arenac	115	0.0	0.9	12.2	61.7	24.3	0.9	0.0
Baraga	43	*	*	*	*	*	*	*
Barry	186	0.0	2.7	5.4	63.4	26.9	0.0	1.6
Bay	512	0.0	2.0	5.9	62.3	28.7	1.2	0.0
Benzie	78	*	*	*	*	*	*	*
Berrien	767	0.3	3.0	8.7	61.4	24.3	1.4	0.9
Branch	326	0.0	1.8	7.4	62.6	23.9	4.0	0.3
Calhoun	959	0.0	2.1	7.8	64.3	23.7	1.4	0.7
Cass	267	0.4	2.6	10.1	58.4	25.1	1.9	1.5
Charlevoix	103	0.0	1.9	7.8	57.3	27.2	4.9	1.0
Cheboygan	125	0.8	2.4	8.0	64.0	24.0	0.8	0.0
Chippewa	180	0.0	2.2	6.7	61.1	28.9	1.1	0.0
Clare	183	0.5	2.7	12.6	60.1	23.0	1.1	0.0
Clinton	132	0.0	0.8	5.3	56.1	36.4	1.5	0.0
Crawford	94	*	*	*	*	*	*	*
Delta	200	0.5	0.0	6.5	64.5	27.5	1.0	0.0
Dickinson	141	0.0	0.7	5.7	65.2	27.7	0.7	0.0
Eaton	217	0.0	2.3	6.5	59.0	30.0	1.8	0.5
Emmet	124	0.0	2.4	6.5	58.1	29.8	3.2	0.0

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# WIC PNSS & PedNSS

Run Date: 5/29/2024

## Table 4B

2021 Pregnancy Nutrition Surveillance (1)

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## Michigan

## Comparison of Age Distribution by County

Comparison of Age Distribution (2)								
County	Number Included in Analysis	< 15 Years %	15 - 17 Years %	18 - 19 Years %	20 - 29 Years %	30 - 39 Years %	>= 40 Years %	Unknown %
Genesee	2,457	0.2	2.0	7.1	63.2	25.5	1.8	0.2
Gladwin	131	0.0	2.3	3.8	64.9	27.5	0.8	0.8
Gogebic	53	*	*	*	*	*	*	*
Gr Travers	399	0.0	0.8	6.3	61.7	29.8	1.5	0.0
Gratiot	176	0.0	1.7	9.1	64.8	23.9	0.6	0.0
Hillsdale	206	1.5	1.9	5.8	63.1	24.3	2.4	1.0
Houghton	198	0.0	1.5	8.1	56.6	31.8	2.0	0.0
Huron	124	0.0	0.8	1.6	61.3	35.5	0.8	0.0
Ingham	1,770	0.1	2.3	6.4	61.5	27.3	2.2	0.3
Ionia	296	0.3	1.7	6.1	65.9	23.6	1.7	0.7
Iosco	138	0.0	2.2	8.7	61.6	26.1	1.4	0.0
Iron	47	*	*	*	*	*	*	*
Isabella	355	0.0	2.0	7.9	64.5	23.4	2.0	0.3
Jackson	960	0.1	2.9	7.4	62.5	24.8	1.6	0.7
Kalamazoo	1,234	0.1	2.9	7.4	59.4	28.0	1.7	0.5
Kalkaska	92	*	*	*	*	*	*	*
Kent	3,185	0.1	2.4	6.2	58.8	29.1	2.7	0.7
Lake	57	*	*	*	*	*	*	*
Lapeer	350	0.0	2.0	6.6	60.9	28.0	2.3	0.3
Leelanau	37	*	*	*	*	*	*	*
Lenawee	389	0.0	0.5	7.2	65.3	25.7	0.8	0.5
Livingston	340	0.0	1.5	6.2	55.9	33.5	2.4	0.6
Luce	39	*	*	*	*	*	*	*
Mackinac	28	*	*	*	*	*	*	*

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# WIC PNSS & PedNSS

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## Table 4B

2021 Pregnancy Nutrition Surveillance (1)

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## Michigan

### Comparison of Age Distribution by County

Comparison of Age Distribution (2)								
County	Number Included in Analysis	< 15 Years %	15 - 17 Years %	18 - 19 Years %	20 - 29 Years %	30 - 39 Years %	>= 40 Years %	Unknown %
Macomb	3,186	0.0	0.9	4.2	57.3	35.1	2.4	0.0
Manistee	88	*	*	*	*	*	*	*
Marquette	226	0.0	3.1	3.1	65.5	26.5	1.8	0.0
Mason	119	0.0	3.4	6.7	64.7	22.7	0.8	1.7
Mecosta	257	0.0	1.6	7.4	65.4	23.3	1.9	0.4
Menominee	91	*	*	*	*	*	*	*
Midland	330	0.0	1.2	7.9	63.9	25.5	1.5	0.0
Missaukee	71	*	*	*	*	*	*	*
Monroe	624	0.0	1.6	6.1	64.4	26.3	1.4	0.2
Montcalm	333	0.0	3.6	6.6	59.8	27.6	2.1	0.3
Montmorenc	43	*	*	*	*	*	*	*
Muskegon	1,145	0.1	2.6	10.3	60.4	24.8	1.0	0.7
Newaygo	364	0.0	2.5	6.3	64.3	23.4	2.7	0.8
Oakland	3,450	0.0	1.4	4.7	57.3	33.8	2.6	0.2
Oceana	161	0.0	0.6	7.5	67.1	21.7	2.5	0.6
Ogemaw	124	0.0	3.2	10.5	61.3	24.2	0.8	0.0
Ontonagon	14	*	*	*	*	*	*	*
Osceola	157	0.0	3.2	9.6	63.1	20.4	2.5	1.3
Oscoda	42	*	*	*	*	*	*	*
Otsego	137	0.0	1.5	13.1	59.9	25.5	0.0	0.0
Ottawa	1,050	0.1	1.4	5.8	60.5	29.5	2.5	0.2
Presque Is	38	*	*	*	*	*	*	*
Roscommon	104	0.0	5.8	4.8	53.8	32.7	2.9	0.0
Saginaw	1,224	0.0	2.5	7.9	64.0	23.9	1.1	0.6

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**WIC PNSS & PedNSS**  
**Table 4B**  
**2021 Pregnancy Nutrition Surveillance (1)**  
**Michigan**  
**Comparison of Age Distribution by County**

Run Date: 5/29/2024

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<b>Comparison of Age Distribution (2)</b>								
<b>County</b>	<b>Number Included in Analysis</b>	<b>&lt; 15 Years %</b>	<b>15 - 17 Years %</b>	<b>18 - 19 Years %</b>	<b>20 - 29 Years %</b>	<b>30 - 39 Years %</b>	<b>&gt;= 40 Years %</b>	<b>Unknown %</b>
Sanilac	173	0.0	3.5	6.4	61.3	28.9	0.0	0.0
Schoolcraf	36	*	*	*	*	*	*	*
Shiawassee	334	0.0	3.3	6.6	65.3	24.3	0.6	0.0
St Clair	590	0.0	1.7	7.8	63.4	23.9	2.2	1.0
St Joseph	380	0.0	3.9	6.8	65.0	21.6	2.6	0.0
Tuscola	251	0.0	2.4	6.4	63.3	25.9	1.6	0.4
Van Buren	427	0.0	1.9	6.3	68.1	21.3	1.9	0.5
Washtenaw	1,089	0.1	1.3	5.9	56.4	33.2	2.7	0.5
Wayne	12,854	0.1	1.9	5.7	56.7	32.5	2.8	0.3
Wexford	214	0.0	2.8	7.5	63.6	25.7	0.5	0.0
<b>Michigan</b>	<b>48,337</b>	<b>0.1</b>	<b>2.0</b>	<b>6.3</b>	<b>59.7</b>	<b>29.4</b>	<b>2.2</b>	<b>0.4</b>
<b>National (Prior Year)</b>	<b>99,433</b>	<b>0.1</b>	<b>2.4</b>	<b>7.1</b>	<b>59.5</b>	<b>28.4</b>	<b>2.3</b>	<b>0.2</b>

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Table 5B

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Michigan

## Comparison of Maternal Health Indicators by County

Comparison of Maternal Health Indicators (2,3)														
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	26	*	*	17	*	*	0	*	2	*	32	*	32	*
Alger	28	*	*	13	*	*	0	*	0	*	27	*	27	*
Allegan	348	3.4 (18)	63.5 (34)	167	18.6 (24)	55.7 (30)	26	*	78	*	424	8.7 (21)	426	13.8 (31)
Alpena	127	4.7 (40)	65.4 (42)	73	*	*	0	*	0	*	134	11.9 (51)	134	19.4 (57)
Antrim	47	*	*	17	*	*	2	*	15	*	77	*	77	*
Arenac	106	1.9 (3)	62.3 (23)	85	*	*	0	*	1	*	113	7.1 (9)	113	15.9 (40)
Baraga	38	*	*	24	*	*	0	*	0	*	41	*	41	*
Barry	124	6.5 (49)	57.3 (4)	61	*	*	1	*	3	*	174	9.8 (36)	177	14.1 (33)
Bay	407	3.4 (18)	61.2 (16)	260	18.1 (22)	58.8 (36)	0	*	2	*	480	10.0 (40)	480	13.1 (28)
Benzie	55	*	*	24	*	*	2	*	5	*	70	*	70	*
Berrien	651	4.9 (42)	61.1 (15)	464	16.8 (17)	56.3 (33)	32	*	29	*	690	9.3 (32)	692	18.8 (56)
Branch	97	*	*	23	*	*	2	*	3	*	295	11.5 (50)	296	11.8 (15)
Calhoun	775	3.0 (9)	64.0 (35)	546	16.5 (16)	53.3 (23)	0	*	3	*	905	6.5 (6)	905	9.6 (5)
Cass	221	4.1 (31)	65.6 (44)	161	19.9 (28)	47.8 (7)	14	*	19	*	244	9.8 (36)	244	13.9 (32)
Charlevoix	55	*	*	15	*	*	10	*	14	*	96	*	96	*
Cheboygan	102	6.9 (52)	58.8 (9)	28	*	*	0	*	1	*	114	11.4 (49)	114	14.9 (37)
Chippewa	154	3.2 (14)	59.7 (10)	106	13.2 (2)	56.6 (34)	0	*	1	*	165	12.7 (53)	165	7.9 (3)

(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.

\* National includes previous year's data for all participating States and ITOs.

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

# WIC PNSS & PedNSS

Run Date: 5/29/2024

Table 5B

2021 Pregnancy Nutrition Surveillance (1)

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Michigan

## Comparison of Maternal Health Indicators by County

Comparison of Maternal Health Indicators (2,3)														
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)
Clare	144	4.2 (35)	66.0 (46)	72	*	*	0	*	0	*	168	5.4 (3)	170	10.6 (7)
Clinton	121	4.1 (31)	71.1 (53)	78	*	*	0	*	0	*	125	19.2 (59)	125	14.4 (35)
Crawford	84	*	*	48	*	*	0	*	1	*	87	*	87	*
Delta	192	3.1 (12)	60.4 (13)	142	20.4 (31)	45.1 (3)	12	*	31	*	183	8.7 (21)	183	14.8 (36)
Dickinson	83	*	*	40	*	*	0	*	1	*	131	4.6 (2)	131	17.6 (50)
Eaton	124	6.5 (49)	62.9 (30)	46	*	*	3	*	1	*	201	9.0 (28)	201	17.4 (49)
Emmet	101	1.0 (1)	63.4 (32)	38	*	*	11	*	20	*	117	7.7 (10)	117	12.8 (25)
Genesee	1,669	5.1 (44)	59.9 (11)	821	20.0 (29)	51.8 (16)	36	*	48	*	2,268	9.1 (30)	2,273	17.2 (47)
Gladwin	118	5.1 (44)	61.0 (14)	93	*	*	2	*	9	*	122	8.2 (17)	123	11.4 (13)
Gogebic	45	*	*	33	*	*	2	*	1	*	45	*	45	*
Gr Travers	322	5.9 (48)	55.6 (2)	243	19.8 (27)	52.3 (21)	3	*	1	*	367	9.5 (33)	368	9.5 (4)
Gratiot	154	3.9 (28)	71.4 (54)	110	27.3 (38)	42.7 (1)	0	*	1	*	167	13.8 (56)	167	16.2 (41)
Hillsdale	160	4.4 (37)	61.9 (21)	102	15.7 (12)	49.0 (8)	1	*	9	*	184	6.5 (6)	185	7.6 (2)
Houghton	173	2.9 (8)	58.4 (7)	131	16.0 (14)	46.6 (4)	2	*	1	*	179	7.8 (12)	179	16.2 (41)
Huron	113	5.3 (47)	65.5 (43)	89	*	*	4	*	14	*	120	10.0 (40)	120	16.7 (43)
Ingham	1,478	3.5 (21)	62.4 (26)	1,091	19.2 (26)	55.4 (27)	10	*	2	*	1,691	8.8 (23)	1,691	12.3 (20)
Ionia	199	3.5 (21)	68.3 (50)	149	20.1 (30)	51.7 (15)	17	*	20	*	273	10.6 (45)	276	22.8 (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) 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.

\* National includes previous year's data for all participating States and ITOs.

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# WIC PNSS & PedNSS

Run Date: 5/29/2024

## Table 5B

### 2021 Pregnancy Nutrition Surveillance (1)

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### Michigan

### Comparison of Maternal Health Indicators by County

Comparison of Maternal Health Indicators (2,3)														
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)
Iosco	102	3.9 (28)	64.7 (37)	62	*	*	0	*	1	*	125	8.0 (13)	125	10.4 (6)
Iron	26	*	*	5	*	*	0	*	0	*	43	*	43	*
Isabella	303	6.9 (52)	60.1 (12)	181	13.3 (3)	53.6 (24)	3	*	6	*	334	11.1 (48)	335	13.7 (30)
Jackson	630	3.3 (17)	57.0 (3)	421	15.4 (7)	51.8 (16)	15	*	36	*	901	8.2 (17)	902	12.4 (21)
Kalamazoo	916	3.2 (14)	65.9 (45)	443	14.2 (4)	58.0 (35)	0	*	6	*	1,126	9.0 (28)	1,128	12.9 (27)
Kalkaska	73	*	*	51	*	*	1	*	0	*	86	*	87	*
Kent	1,722	3.0 (9)	62.3 (23)	687	23.9 (35)	46.9 (5)	213	37.6 (1)	630	23.8 (1)	2,957	8.6 (20)	2,962	17.2 (47)
Lake	46	*	*	37	*	*	0	*	0	*	54	*	54	*
Lapeer	305	3.6 (24)	58.7 (8)	220	16.4 (15)	47.7 (6)	0	*	0	*	323	6.5 (6)	324	10.8 (8)
Leelanau	29	*	*	15	*	*	0	*	2	*	32	*	32	*
Lenawee	326	2.1 (5)	61.7 (19)	234	15.4 (7)	50.4 (11)	0	*	0	*	345	9.9 (38)	346	14.2 (34)
Livingston	310	4.8 (41)	57.7 (5)	200	20.5 (32)	54.0 (25)	1	*	0	*	308	8.1 (14)	309	20.1 (58)
Luce	33	*	*	27	*	*	0	*	0	*	37	*	37	*
Mackinac	26	*	*	19	*	*	0	*	0	*	25	*	25	*
Macomb	2,727	3.1 (12)	62.8 (28)	2,078	17.6 (21)	53.2 (22)	13	*	2	*	2,984	10.3 (42)	2,985	11.3 (12)
Manistee	35	*	*	16	*	*	0	*	0	*	82	*	82	*
Marquette	191	1.6 (2)	62.8 (28)	129	15.5 (9)	66.7 (38)	2	*	1	*	209	8.1 (14)	211	10.9 (9)

(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

Run Date: 5/29/2024

## Table 5B

### 2021 Pregnancy Nutrition Surveillance (1)

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### Michigan

### Comparison of Maternal Health Indicators by County

Comparison of Maternal Health Indicators (2,3)														
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)
Mason	109	2.8 (7)	66.1 (48)	78	*	*	1	*	2	*	104	16.3 (58)	104	18.3 (55)
Mecosta	149	4.0 (30)	62.4 (26)	38	*	*	0	*	3	*	242	9.1 (30)	242	17.8 (51)
Menominee	88	*	*	65	*	*	4	*	4	*	79	*	79	*
Midland	222	2.7 (6)	64.0 (35)	102	9.8 (1)	60.8 (37)	5	*	4	*	315	9.5 (33)	314	12.1 (17)
Missaukee	63	*	*	46	*	*	2	*	0	*	67	*	67	*
Monroe	582	4.1 (31)	65.3 (41)	461	15.6 (10)	55.7 (30)	0	*	0	*	579	8.8 (23)	579	17.8 (51)
Montcalm	289	4.5 (38)	65.1 (39)	211	15.6 (10)	55.9 (32)	4	*	2	*	309	10.4 (43)	309	18.1 (53)
Montmorenc	40	*	*	17	*	*	0	*	1	*	39	*	39	*
Muskegon	1,042	3.4 (18)	61.9 (21)	833	18.4 (23)	52.1 (20)	0	*	4	*	1,066	10.4 (43)	1,073	16.7 (43)
Newaygo	330	3.0 (9)	64.8 (38)	189	26.5 (37)	44.4 (2)	3	*	3	*	336	9.5 (33)	336	18.2 (54)
Oakland	2,629	4.5 (38)	61.2 (16)	1,513	16.8 (17)	51.8 (16)	3	*	0	*	3,162	7.7 (10)	3,162	12.1 (17)
Oceana	122	4.9 (42)	69.7 (52)	93	*	*	5	*	6	*	147	13.6 (55)	147	12.2 (19)
Ogemaw	102	2.0 (4)	68.6 (51)	54	*	*	0	*	4	*	112	4.5 (1)	113	16.8 (45)
Ontonagon	12	*	*	4	*	*	1	*	0	*	10	*	11	*
Osceola	88	*	*	36	*	*	0	*	1	*	145	8.3 (19)	146	11.0 (10)
Oscoda	28	*	*	11	*	*	0	*	1	*	39	*	39	*
Otsego	73	*	*	22	*	*	11	*	16	*	125	8.8 (23)	125	11.2 (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) 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

Run Date: 5/29/2024

## Table 5B

### 2021 Pregnancy Nutrition Surveillance (1)

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### Michigan

### Comparison of Maternal Health Indicators by County

Comparison of Maternal Health Indicators (2,3)														
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)
Ottawa	369	4.3 (36)	51.8 (1)	121	19.0 (25)	49.6 (9)	46	*	154	33.1 (2)	956	9.9 (38)	956	11.7 (14)
Presque Is	34	*	*	19	*	*	0	*	0	*	36	*	36	*
Roscommon	94	*	*	57	*	*	1	*	1	*	99	*	100	29.0 (60)
Saginaw	853	3.2 (14)	65.1 (39)	412	14.8 (6)	51.9 (19)	0	*	0	*	1,162	8.9 (27)	1,161	12.8 (25)
Sanilac	44	*	*	13	*	*	1	*	2	*	159	6.3 (5)	159	12.6 (22)
Schoolcraf	34	*	*	22	*	*	0	*	0	*	33	*	33	*
Shiawassee	292	5.1 (44)	63.4 (32)	238	23.1 (33)	51.3 (13)	1	*	1	*	308	5.8 (4)	308	6.5 (1)
St Clair	555	4.1 (31)	63.1 (31)	437	14.4 (5)	55.6 (29)	4	*	13	*	533	8.1 (14)	534	15.4 (39)
St Joseph	306	6.5 (49)	61.4 (18)	100	26.0 (36)	54.0 (25)	3	*	10	*	331	13.0 (54)	332	12.7 (24)
Tuscola	188	3.7 (26)	66.0 (46)	133	15.8 (13)	49.6 (9)	6	*	5	*	245	11.0 (47)	245	13.5 (29)
Van Buren	339	3.8 (27)	67.6 (49)	96	*	*	30	*	47	*	390	14.6 (57)	389	12.6 (22)
Washtenaw	866	3.5 (21)	61.8 (20)	546	17.2 (20)	51.6 (14)	34	*	52	*	989	10.6 (45)	989	15.1 (38)
Wayne	9,035	3.6 (24)	62.3 (23)	5,452	16.8 (17)	55.4 (27)	1	*	8	*	12,013	8.8 (23)	12,020	12.0 (16)
Wexford	175	7.4 (54)	57.7 (5)	130	23.1 (33)	50.8 (12)	0	*	0	*	207	12.1 (52)	207	16.9 (46)
Michigan	35,616	3.8	62.1	21,801	17.6	53.3	608	32.1	1,368	23.8	44,841	9.1	44,895	13.5
National (Prior Year)	76,624	4.0	60.8	54,177	21.0	48.0	13,936	20.1	4,844	20.1	52,072	11.4	51,357	13.8

(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) 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

Run Date: 5/29/2024

## Table 6B

### 2021 Pregnancy Nutrition Surveillance (1)

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### Michigan

### Comparison of Maternal Behavioral Indicators by County

Comparison of Maternal Behavioral Indicators (2,3)									
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	31	*	*	34	*	33	*	20	*
Alger	26	*	*	31	*	29	*	26	*
Allegan	400	93.8 (12)	1.5 (19)	450	32.2 (26)	430	27.0 (24)	326	92.6 (27)
Alpena	127	92.1 (25)	1.6 (20)	137	31.4 (30)	135	26.7 (26)	106	96.2 (8)
Antrim	74	*	*	80	*	77	*	50	*
Arenac	106	90.6 (30)	2.8 (36)	113	37.2 (10)	110	20.0 (47)	96	*
Baraga	40	*	*	42	*	41	*	28	*
Barry	167	92.2 (23)	1.2 (10)	184	27.7 (44)	180	36.1 (10)	121	98.3 (1)
Bay	432	86.3 (50)	3.9 (43)	506	37.2 (10)	493	25.2 (33)	385	94.3 (17)
Benzie	62	*	*	74	*	75	*	59	*
Berrien	637	82.1 (54)	3.0 (38)	748	26.1 (47)	701	21.1 (43)	531	91.9 (32)
Branch	276	85.5 (51)	5.8 (53)	315	31.4 (30)	277	41.5 (4)	229	92.1 (31)
Calhoun	867	97.0 (1)	0.7 (6)	932	29.9 (36)	888	28.0 (23)	681	93.0 (24)
Cass	236	94.1 (10)	1.7 (22)	263	37.3 (9)	245	19.2 (49)	198	76.3 (51)
Charlevoix	97	*	*	102	22.5 (57)	101	40.6 (6)	74	*
Cheboygan	99	*	*	121	37.2 (10)	121	28.9 (18)	100	96.0 (9)
Chippewa	157	96.8 (4)	1.3 (14)	175	37.7 (8)	171	43.9 (3)	142	93.7 (21)
Clare	157	89.8 (36)	3.2 (40)	181	39.2 (5)	169	28.4 (22)	148	89.2 (43)
Clinton	119	93.3 (18)	1.7 (22)	127	29.1 (38)	97	*	88	*
Crawford	84	*	*	92	*	87	*	66	*

(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.

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# WIC PNSS & PedNSS

Run Date: 5/29/2024

Table 6B

2021 Pregnancy Nutrition Surveillance (1)

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Michigan

## Comparison of Maternal Behavioral Indicators by County

Comparison of Maternal Behavioral Indicators (2,3)									
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)
Delta	182	95.6 (7)	0.0 (1)	196	28.6 (40)	189	25.4 (32)	145	96.6 (5)
Dickinson	126	93.7 (14)	4.0 (45)	140	35.0 (18)	134	33.6 (13)	108	94.4 (16)
Eaton	197	90.4 (31)	2.0 (30)	214	22.0 (58)	199	35.2 (11)	146	92.5 (28)
Emmet	111	94.6 (9)	0.9 (8)	122	29.5 (37)	121	41.3 (5)	90	*
Genesee	2,159	89.9 (35)	1.2 (10)	2,416	23.6 (55)	1,945	16.9 (51)	1,747	93.1 (22)
Gladwin	111	79.3 (55)	7.2 (54)	128	35.9 (13)	124	25.0 (34)	93	*
Gogebic	45	*	*	53	*	48	*	32	*
Gr Travers	331	89.7 (38)	4.8 (51)	387	31.5 (29)	386	28.8 (19)	279	91.4 (34)
Gratiot	157	93.6 (15)	0.6 (3)	171	33.9 (21)	133	28.6 (20)	130	95.4 (11)
Hillsdale	177	93.8 (12)	0.6 (3)	202	27.2 (45)	189	39.7 (7)	148	97.3 (2)
Houghton	166	89.8 (36)	1.8 (25)	194	30.9 (33)	191	38.2 (9)	147	97.3 (2)
Huron	110	89.1 (41)	1.8 (25)	122	23.0 (56)	118	44.1 (2)	81	*
Ingham	1,523	92.0 (26)	1.8 (25)	1,744	27.0 (46)	1,590	10.3 (58)	1,242	90.3 (39)
Ionia	269	93.3 (18)	1.9 (29)	288	25.0 (49)	279	20.1 (46)	194	96.4 (6)
Iosco	115	90.4 (31)	1.7 (22)	134	35.8 (14)	128	26.6 (27)	96	*
Iron	38	*	*	46	*	44	*	37	*
Isabella	309	90.0 (34)	3.6 (41)	351	35.3 (17)	346	34.7 (12)	260	93.1 (22)
Jackson	815	90.9 (29)	3.6 (41)	944	38.5 (6)	918	24.4 (36)	719	90.5 (37)
Kalamazoo	1,054	91.8 (28)	1.8 (25)	1,199	32.1 (28)	1,149	19.6 (48)	879	90.2 (40)
Kalkaska	82	*	*	90	*	81	*	66	*
Kent	2,768	88.1 (44)	2.1 (31)	3,122	21.0 (61)	2,597	20.8 (45)	2,205	92.7 (25)

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

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(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.

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# WIC PNSS & PedNSS

Run Date: 5/29/2024

## Table 6B

### 2021 Pregnancy Nutrition Surveillance (1)

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### Michigan

### Comparison of Maternal Behavioral Indicators by County

Comparison of Maternal Behavioral Indicators (2,3)								
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)
Lake	50	*	*	54	*	54	*	45 *
Lapeer	299	92.6 (22)	3.0 (38)	342	32.2 (26)	331	29.3 (16)	246 93.9 (20)
Leelanau	28	*	*	34	*	31	*	25 *
Lenawee	338	93.2 (21)	0.0 (1)	379	24.8 (50)	371	23.7 (37)	273 92.7 (25)
Livingston	287	87.5 (46)	4.9 (52)	332	28.9 (39)	318	38.4 (8)	236 95.3 (12)
Luce	31	*	*	38	*	36	*	30 *
Mackinac	25	*	*	26	*	24	*	19 *
Macomb	2,870	94.1 (10)	1.1 (9)	3,109	25.1 (48)	2,355	14.1 (55)	2,205 95.1 (13)
Manistee	79	*	*	85	*	86	*	64 *
Marquette	194	88.7 (43)	4.6 (49)	221	35.7 (15)	174	22.4 (41)	185 95.1 (13)
Mason	93	*	*	119	31.1 (32)	111	29.7 (15)	91 *
Mecosta	222	96.4 (6)	1.4 (15)	252	34.1 (20)	242	11.6 (56)	187 90.4 (38)
Menominee	75	*	*	89	*	78	*	70 *
Midland	296	91.9 (27)	2.7 (35)	323	24.1 (53)	313	24.6 (35)	218 96.3 (7)
Missaukee	63	*	*	68	*	69	*	56 *
Monroe	565	92.2 (23)	1.2 (10)	613	24.5 (51)	594	28.6 (20)	422 94.1 (18)
Montcalm	291	93.5 (16)	1.4 (15)	325	30.8 (34)	274	30.3 (14)	245 96.7 (4)
Montmorenc	39	*	*	43	*	42	*	33 *
Muskegon	993	89.2 (39)	2.3 (32)	1,112	33.4 (23)	928	26.1 (30)	831 91.7 (33)
Newaygo	276	85.1 (52)	4.0 (45)	358	41.9 (4)	338	15.4 (53)	290 87.9 (45)
Oakland	3,050	93.3 (18)	1.4 (15)	3,372	24.4 (52)	2,744	22.6 (40)	2,396 92.5 (28)

(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

Run Date: 5/29/2024

Table 6B

2021 Pregnancy Nutrition Surveillance (1)

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Michigan

## Comparison of Maternal Behavioral Indicators by County

Comparison of Maternal Behavioral Indicators (2,3)									
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)
Oceana	121	79.3 (55)	9.9 (56)	154	28.6 (40)	142	26.8 (25)	108	85.2 (50)
Ogemaw	104	90.4 (31)	2.9 (37)	122	34.4 (19)	117	16.2 (52)	91	*
Ontonagon	11	*	*	13	*	13	*	9	*
Osceola	126	84.9 (53)	7.9 (55)	153	45.8 (1)	148	18.9 (50)	121	88.4 (44)
Oscoda	38	*	*	41	*	40	*	32	*
Otsego	123	96.7 (5)	1.6 (20)	130	30.8 (34)	128	23.4 (39)	101	94.1 (18)
Ottawa	914	95.1 (8)	1.2 (10)	1,023	28.5 (42)	925	26.2 (29)	679	89.7 (41)
Presque Is	36	*	*	37	*	37	*	30	*
Roscommon	93	*	*	102	43.1 (3)	94	*	86	*
Saginaw	1,095	88.9 (42)	2.4 (34)	1,206	33.2 (24)	1,160	23.7 (37)	942	91.0 (35)
Sanilac	159	96.9 (3)	0.6 (3)	168	23.8 (54)	160	48.1 (1)	121	95.9 (10)
Schoolcraf	33	*	*	36	*	36	*	35	*
Shiawassee	299	97.0 (1)	0.7 (6)	329	21.9 (59)	84	*	212	87.3 (46)
St Clair	443	86.5 (49)	4.7 (50)	582	44.2 (2)	561	26.6 (27)	474	87.1 (48)
St Joseph	265	72.5 (57)	12.8 (57)	370	35.7 (15)	363	20.9 (44)	283	87.3 (46)
Tuscola	225	88.0 (45)	4.0 (45)	248	28.2 (43)	238	29.0 (17)	171	92.4 (30)
Van Buren	315	87.3 (47)	4.1 (48)	421	38.0 (7)	396	11.6 (56)	326	86.2 (49)
Washtenaw	937	93.5 (16)	2.3 (32)	1,056	33.6 (22)	1,033	15.3 (54)	800	95.0 (15)
Wayne	11,598	89.2 (39)	1.4 (15)	12,572	21.5 (60)	9,779	21.6 (42)	8,599	90.7 (36)
Wexford	179	86.6 (48)	3.9 (43)	211	32.7 (25)	200	26.0 (31)	156	89.7 (41)

(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

Run Date: 5/29/2024

## Table 6B

### 2021 Pregnancy Nutrition Surveillance (1)

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#### Michigan

#### Comparison of Maternal Behavioral Indicators by County

Michigan	42,342	90.6	2.0	47,286	27.0	40,570	22.9	33,883	91.8
National (Prior Year)	77,410	69.2	7.1	83,553	19.4	60,693	22.5	61,433	89.2

(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

Run Date: 5/29/2024

Table 7B

2021 Pregnancy Nutrition Surveillance (1)

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Michigan

## Comparison of Smoking Indicators by County

Comparison of Smoking Indicators (2,3)										
County	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)	
Alcona	21	*	32	*	4	*	20	*	32	*
Alger	26	*	27	*	8	*	26	*	27	*
Allegan	339	24.5 (16)	420	11.9 (19)	78	*	326	4.9 (17)	426	2.1 (31)
Alpena	110	41.8 (50)	134	23.1 (53)	38	*	106	11.3 (44)	134	1.5 (21)
Antrim	55	*	77	*	16	*	50	*	77	*
Arenac	97	*	113	28.3 (60)	39	*	96	*	113	8.8 (60)
Baraga	30	*	41	*	14	*	28	*	41	*
Barry	130	40.8 (48)	176	15.3 (34)	48	*	121	5.8 (18)	178	2.2 (34)
Bay	401	34.2 (39)	479	18.2 (41)	124	35.5 (16)	385	8.3 (33)	484	2.7 (42)
Benzie	60	*	69	*	23	*	59	*	70	*
Berrien	552	25.0 (19)	689	11.3 (17)	118	47.5 (7)	531	9.8 (38)	691	3.3 (51)
Branch	243	21.4 (12)	295	13.6 (28)	39	*	227	10.1 (39)	297	1.3 (17)
Calhoun	707	24.8 (17)	878	9.1 (10)	159	35.8 (15)	678	2.7 (2)	901	0.8 (4)
Cass	205	17.6 (8)	244	8.2 (9)	35	*	198	4.0 (13)	244	0.4 (1)
Charlevoix	78	*	96	*	14	*	74	*	96	*
Cheboygan	102	38.2 (47)	114	20.2 (48)	35	*	100	6.0 (20)	114	1.8 (27)
Chippewa	145	27.6 (29)	164	19.5 (47)	36	*	141	7.8 (31)	165	3.0 (44)
Clare	155	36.8 (43)	169	26.0 (57)	47	*	148	10.8 (42)	168	2.4 (39)

(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

Run Date: 5/29/2024

## Table 7B

### 2021 Pregnancy Nutrition Surveillance (1)

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### Michigan

### Comparison of Smoking Indicators by County

Comparison of Smoking Indicators (2,3)										
County	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)	
Clinton	90	*	125	15.2 (33)	28	*	88	*	126	2.4 (39)
Crawford	69	*	87	*	19	*	66	*	87	*
Delta	156	35.3 (41)	183	22.4 (51)	46	*	145	10.3 (40)	183	1.6 (23)
Dickinson	112	28.6 (30)	130	13.8 (29)	29	*	108	2.8 (3)	130	0.8 (4)
Eaton	160	38.1 (46)	202	16.3 (35)	46	*	146	4.8 (16)	202	3.0 (44)
Emmet	95	*	117	12.8 (21)	20	*	90	*	116	2.6 (41)
Genesee	1,832	21.8 (14)	2,247	11.5 (18)	342	40.9 (11)	1,745	8.4 (34)	2,265	2.3 (38)
Gladwin	97	*	122	21.3 (50)	25	*	93	*	123	4.9 (57)
Gogebic	32	*	47	*	12	*	32	*	47	*
Gr Travers	307	35.8 (42)	362	11.9 (19)	96	*	279	4.3 (14)	368	1.9 (28)
Gratiot	134	34.3 (40)	165	18.8 (44)	46	*	130	9.2 (37)	167	1.2 (14)
Hillsdale	151	33.8 (38)	185	23.2 (54)	45	*	148	8.8 (35)	185	2.2 (34)
Houghton	152	30.9 (34)	179	18.4 (43)	41	*	147	6.1 (22)	179	2.2 (34)
Huron	89	*	120	24.2 (55)	34	*	81	*	120	3.3 (51)
Ingham	1,318	15.6 (6)	1,689	7.4 (7)	187	48.7 (6)	1,240	2.9 (6)	1,690	2.1 (31)
Ionia	211	33.6 (37)	274	17.9 (39)	62	*	194	6.7 (27)	276	0.7 (3)
Iosco	98	*	125	27.2 (59)	35	*	96	*	126	3.2 (48)
Iron	36	*	43	*	23	*	37	*	43	*
Isabella	270	23.0 (15)	335	13.4 (27)	55	*	259	6.6 (26)	334	0.6 (2)

(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

Run Date: 5/29/2024

Table 7B

2021 Pregnancy Nutrition Surveillance (1)

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Michigan

## Comparison of Smoking Indicators by County

Comparison of Smoking Indicators (2,3)										
County	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	751	29.4 (32)	903	18.3 (42)	204	30.4 (17)	719	6.0 (20)	902	2.1 (31)
Kalamazoo	917	21.6 (13)	1,124	10.9 (14)	176	39.8 (12)	878	4.4 (15)	1,127	1.2 (14)
Kalkaska	70	*	86	*	20	*	66	*	87	*
Kent	2,328	11.1 (2)	2,956	6.1 (4)	229	45.9 (8)	2,153	3.0 (8)	2,944	1.1 (12)
Lake	43	*	55	*	21	*	45	*	54	*
Lapeer	266	27.1 (28)	324	14.2 (30)	63	*	246	11.8 (47)	323	2.2 (34)
Leelanau	26	*	32	*	4	*	25	*	32	*
Lenawee	293	26.3 (25)	348	12.9 (23)	62	*	273	7.0 (28)	348	5.2 (58)
Livingston	250	26.0 (21)	307	11.1 (16)	57	*	236	3.8 (11)	307	1.0 (8)
Luce	31	*	37	*	11	*	30	*	35	*
Mackinac	21	*	25	*	4	*	18	*	25	*
Macomb	2,333	11.9 (4)	2,984	5.0 (3)	237	48.9 (5)	2,202	3.6 (10)	2,981	1.0 (8)
Manistee	69	*	82	*	18	*	64	*	83	*
Marquette	187	51.9 (51)	203	26.1 (58)	92	*	182	8.2 (32)	214	0.9 (6)
Mason	92	*	104	10.6 (12)	24	*	91	*	103	3.9 (53)
Mecosta	195	32.8 (36)	233	18.9 (45)	57	*	188	11.2 (43)	241	1.7 (26)
Menominee	75	*	79	*	23	*	70	*	79	*
Midland	233	26.2 (24)	312	12.8 (21)	53	*	218	2.8 (3)	313	1.0 (8)
Missaukee	56	*	67	*	14	*	56	*	67	*

(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

Run Date: 5/29/2024

Table 7B

2021 Pregnancy Nutrition Surveillance (1)

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Michigan

## Comparison of Smoking Indicators by County

Comparison of Smoking Indicators (2,3)										
County	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)	
Monroe	455	25.7 (20)	582	13.2 (26)	103	38.8 (13)	422	8.8 (35)	579	4.1 (54)
Montcalm	249	37.3 (45)	302	19.2 (46)	86	*	245	11.4 (45)	309	1.6 (23)
Montmorenc	34	*	38	*	12	*	33	*	39	*
Muskegon	870	29.2 (31)	1,067	14.8 (32)	225	38.7 (14)	833	6.5 (24)	1,070	1.0 (8)
Newaygo	298	24.8 (17)	335	17.0 (38)	65	*	291	3.8 (11)	336	1.2 (14)
Oakland	2,569	9.6 (1)	3,159	3.8 (1)	214	43.5 (9)	2,395	2.9 (6)	3,158	1.1 (12)
Oceana	109	19.3 (10)	147	12.9 (23)	21	*	108	6.5 (24)	147	2.0 (30)
Ogemaw	91	*	112	20.5 (49)	24	*	91	*	113	6.2 (59)
Ontonagon	9	*	11	*	2	*	9	*	11	*
Osceola	127	26.0 (21)	145	17.9 (39)	28	*	121	13.2 (49)	146	4.8 (56)
Oscoda	34	*	39	*	9	*	32	*	39	*
Otsego	105	37.1 (44)	125	24.8 (56)	33	*	101	18.8 (51)	125	3.2 (48)
Ottawa	733	18.6 (9)	956	7.1 (6)	118	42.4 (10)	676	2.5 (1)	955	1.4 (19)
Presque Is	31	*	35	*	7	*	30	*	36	*
Roscommon	86	*	100	23.0 (52)	28	*	86	*	100	3.0 (44)
Saginaw	960	30.3 (33)	1,130	9.2 (11)	282	51.8 (3)	941	11.4 (45)	1,163	3.2 (48)
Sanilac	127	13.4 (5)	159	10.7 (13)	15	*	121	5.8 (18)	159	1.3 (17)
Schoolcraf	35	*	32	*	15	*	35	*	33	*
Shiawassee	223	26.5 (26)	310	11.0 (15)	51	*	207	7.7 (30)	305	1.6 (23)

(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

Run Date: 5/29/2024

## Table 7B

### 2021 Pregnancy Nutrition Surveillance (1)

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### Michigan

### Comparison of Smoking Indicators by County

Comparison of Smoking Indicators (2,3)										
County	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)	
St Clair	490	41.0 (49)	528	14.4 (31)	171	51.5 (4)	474	12.4 (48)	534	4.3 (55)
St Joseph	290	26.6 (27)	332	13.0 (25)	65	*	283	7.1 (29)	330	3.0 (44)
Tuscola	181	32.6 (35)	245	16.3 (35)	58	*	171	14.0 (50)	245	2.9 (43)
Van Buren	335	21.2 (11)	377	7.4 (7)	66	*	326	2.8 (3)	390	1.5 (21)
Washtenaw	851	17.0 (7)	987	6.5 (5)	119	58.8 (2)	800	3.1 (9)	985	0.9 (6)
Wayne	9,127	11.5 (3)	12,042	3.9 (2)	898	59.5 (1)	8,586	6.1 (22)	12,031	1.9 (28)
Wexford	165	26.1 (23)	207	16.4 (37)	38	*	155	10.3 (40)	207	1.4 (19)
Michigan	35,714	19.7	44,742	9.2	6,188	42.4	33,791	6.1	44,858	1.9
National (Prior Year)	83,471	24.3	86,947	11.2	14,888	35.8	70,642	7.8	84,906	3.2

(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

Run Date: 5/29/2024

## Table 8B

### 2021 Pregnancy Nutrition Surveillance (1)

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### Michigan

### Comparison of Infant Health Indicators by County

Comparison of Infant Health Indicators (2,3)									
County	Birthweight			Preterm		Full Term LBW		Ever Breastfed	
	Low (4)		High (5)	(6)		(7)			
	Number	% (rank)	% (rank)	Number	% (rank)	Number	% (rank)	Number	% (rank)
Alcona	27	*	*	29	*	25	*	27	*
Alger	25	*	*	27	*	25	*	25	*
Allegan	395	8.9 (20)	8.1 (37)	413	15.0 (56)	334	1.8 (5)	399	77.7 (21)
Alpena	127	9.4 (25)	9.4 (44)	131	13.0 (38)	107	3.7 (17)	126	66.7 (51)
Antrim	68	*	*	74	*	59	*	70	*
Arenac	104	9.6 (29)	5.8 (9)	109	10.1 (12)	91	*	104	67.3 (49)
Baraga	38	*	*	38	*	34	*	38	*
Barry	161	8.7 (17)	8.1 (37)	173	12.7 (33)	141	2.8 (13)	163	87.1 (5)
Bay	445	9.7 (30)	8.5 (40)	473	10.1 (12)	402	4.0 (22)	446	68.6 (47)
Benzie	65	*	*	65	*	58	*	65	*
Berrien	646	10.4 (34)	6.0 (14)	671	10.9 (22)	567	5.1 (37)	648	68.8 (46)
Branch	284	9.5 (27)	8.1 (37)	291	10.7 (20)	249	6.8 (49)	285	77.5 (23)
Calhoun	843	9.3 (24)	6.6 (20)	874	9.8 (10)	753	5.0 (34)	846	74.9 (34)
Cass	228	8.3 (15)	10.1 (49)	237	10.5 (18)	205	3.9 (21)	228	76.3 (30)
Charlevoix	77	*	*	93	*	67	*	90	*
Cheboygan	109	13.8 (56)	4.6 (2)	108	12.0 (29)	93	*	109	82.6 (11)
Chippewa	147	5.4 (5)	10.2 (51)	159	6.3 (2)	136	2.2 (9)	146	78.1 (19)
Clare	152	10.5 (36)	6.6 (20)	168	13.7 (46)	132	6.8 (49)	152	66.4 (52)
Clinton	120	19.2 (59)	7.5 (32)	120	20.8 (59)	93	*	121	89.3 (2)

(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

Run Date: 5/29/2024

## Table 8B

### 2021 Pregnancy Nutrition Surveillance (1)

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### Michigan

### Comparison of Infant Health Indicators by County

Comparison of Infant Health Indicators (2,3)									
County	Birthweight			Preterm		Full Term LBW		Ever Breastfed	
	Low		High	(6)		(7)			
	Number	% (rank)	% (rank)	Number	% (rank)	Number	% (rank)	Number	% (rank)
Crawford	67	*	*	80	*	56	*	67	*
Delta	168	4.8 (3)	10.1 (49)	180	8.3 (6)	152	1.3 (3)	168	76.2 (31)
Dickinson	126	5.6 (8)	7.1 (25)	129	11.6 (27)	112	2.7 (12)	126	77.0 (27)
Eaton	187	12.8 (53)	8.0 (36)	197	13.2 (39)	161	5.0 (34)	189	85.7 (6)
Emmet	108	11.1 (45)	7.4 (30)	113	9.7 (9)	97	*	109	89.9 (1)
Genesee	2,144	11.8 (50)	4.8 (4)	2,242	13.9 (48)	1,841	5.4 (38)	2,147	59.6 (57)
Gladwin	111	9.0 (22)	6.3 (16)	113	14.2 (50)	95	*	111	73.0 (41)
Gogebic	42	*	*	46	*	39	*	45	*
Gr Travers	338	8.9 (20)	13.6 (59)	354	10.7 (20)	300	4.0 (22)	340	89.1 (4)
Gratiot	153	7.2 (10)	5.9 (10)	159	10.1 (12)	137	0.0 (1)	153	75.8 (32)
Hillsdale	173	10.4 (34)	6.4 (17)	182	15.9 (58)	145	4.1 (24)	173	77.5 (23)
Houghton	167	5.4 (5)	9.0 (42)	178	6.7 (3)	155	3.2 (14)	166	89.2 (3)
Huron	111	2.7 (1)	9.9 (48)	118	5.9 (1)	105	0.0 (1)	110	77.3 (25)
Ingham	1,560	10.6 (38)	5.6 (8)	1,642	13.3 (40)	1,354	4.3 (27)	1,572	78.1 (19)
Ionia	259	7.3 (11)	10.4 (52)	270	11.5 (26)	225	2.2 (9)	260	84.6 (7)
Iosco	113	11.5 (48)	11.5 (57)	120	13.3 (40)	98	*	112	71.4 (44)
Iron	40	*	*	42	*	38	*	40	*
Isabella	315	10.8 (42)	8.9 (41)	330	9.4 (7)	287	5.9 (45)	315	74.9 (34)
Jackson	839	10.6 (38)	7.0 (23)	873	11.9 (28)	740	4.7 (32)	841	71.6 (43)

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(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.

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# WIC PNSS & PedNSS

Run Date: 5/29/2024

## Table 8B

### 2021 Pregnancy Nutrition Surveillance (1)

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### Michigan

### Comparison of Infant Health Indicators by County

Comparison of Infant Health Indicators (2,3)									
County	Birthweight			Preterm		Full Term LBW		Ever Breastfed	
	Low		High	(6)		(7)			
	Number	% (rank)	% (rank)	Number	% (rank)	Number	% (rank)	Number	% (rank)
Kalamazoo	1,014	11.3 (47)	7.0 (23)	1,086	12.8 (35)	875	5.0 (34)	1,020	74.5 (36)
Kalkaska	81	*	*	84	*	70	*	81	*
Kent	2,747	12.5 (51)	5.9 (10)	2,901	14.9 (55)	2,332	5.4 (38)	2,777	73.9 (38)
Lake	50	*	*	51	*	37	*	50	*
Lapeer	300	8.7 (17)	5.3 (6)	308	12.7 (33)	257	4.3 (27)	299	76.6 (29)
Leelanau	28	*	*	31	*	27	*	28	*
Lenawee	327	9.5 (27)	6.1 (15)	346	11.0 (24)	290	4.1 (24)	327	74.0 (37)
Livingston	291	11.7 (49)	7.2 (27)	302	12.3 (30)	255	5.5 (40)	290	84.1 (8)
Luce	34	*	*	34	*	29	*	34	*
Mackinac	20	*	*	24	*	18	*	20	*
Macomb	2,822	11.0 (44)	5.4 (7)	2,894	14.1 (49)	2,406	4.6 (31)	2,831	65.9 (53)
Manistee	67	*	*	76	*	55	*	67	*
Marquette	204	7.8 (14)	11.3 (54)	207	8.2 (5)	184	3.8 (18)	205	75.1 (33)
Mason	101	6.9 (9)	6.9 (22)	103	12.6 (32)	88	*	101	68.3 (48)
Mecosta	228	10.5 (36)	10.5 (53)	238	10.1 (12)	204	4.4 (30)	228	78.9 (17)
Menominee	77	*	*	78	*	69	*	77	*
Midland	298	7.7 (13)	9.4 (44)	307	10.4 (16)	268	2.2 (9)	298	77.2 (26)
Missaukee	57	*	*	66	*	53	*	57	*
Monroe	546	9.9 (31)	7.9 (34)	566	10.4 (16)	488	4.7 (32)	547	69.3 (45)

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(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

Run Date: 5/29/2024

## Table 8B

### 2021 Pregnancy Nutrition Surveillance (1)

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### Michigan

### Comparison of Infant Health Indicators by County

Comparison of Infant Health Indicators (2,3)									
County	Birthweight			Preterm		Full Term LBW		Ever Breastfed	
	Low (4)		High (5)	(6)		(7)			
	Number	% (rank)	% (rank)	Number	% (rank)	Number	% (rank)	Number	% (rank)
Montcalm	290	14.8 (58)	7.9 (34)	303	15.8 (57)	239	3.8 (18)	293	82.9 (10)
Montmorenc	37	*	*	39	*	34	*	37	*
Muskegon	1,000	10.7 (40)	7.3 (29)	1,031	12.8 (35)	862	4.3 (27)	1,004	61.7 (56)
Newaygo	306	10.8 (42)	7.2 (27)	318	13.5 (43)	262	5.7 (43)	307	78.5 (18)
Oakland	2,921	12.8 (53)	5.9 (10)	3,077	13.6 (44)	2,501	5.6 (41)	2,957	73.9 (38)
Oceana	138	8.7 (17)	9.4 (44)	136	11.0 (24)	119	4.2 (26)	140	80.0 (15)
Ogemaw	103	10.7 (40)	3.9 (1)	105	7.6 (4)	93	*	103	71.8 (42)
Ontonagon	10	*	*	10	*	7	*	10	*
Osceola	135	11.1 (45)	7.4 (30)	139	13.7 (46)	113	6.2 (47)	135	77.0 (27)
Oscoda	34	*	*	38	*	30	*	34	*
Otsego	106	4.7 (2)	11.3 (54)	117	9.4 (7)	93	*	116	81.0 (14)
Ottawa	807	10.2 (32)	9.5 (47)	934	13.6 (44)	693	3.6 (16)	899	79.6 (16)
Presque Is	34	*	*	34	*	28	*	34	*
Roscommon	91	*	*	94	*	80	*	91	*
Saginaw	1,097	14.1 (57)	5.9 (10)	1,127	14.6 (54)	936	5.7 (43)	1,093	63.6 (55)
Sanilac	144	9.0 (22)	4.9 (5)	156	10.9 (22)	124	5.6 (41)	149	58.4 (58)
Schoolcraf	29	*	*	32	*	23	*	29	*
Shiawassee	293	7.5 (12)	6.5 (19)	306	9.8 (10)	263	3.4 (15)	294	67.3 (49)
St Clair	491	9.4 (25)	7.5 (32)	511	12.9 (37)	426	3.8 (18)	492	65.2 (54)

(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.

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# WIC PNSS & PedNSS

Run Date: 5/29/2024

## Table 8B

### 2021 Pregnancy Nutrition Surveillance (1)

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### Michigan

### Comparison of Infant Health Indicators by County

Comparison of Infant Health Indicators (2,3)									
County	Birthweight			Preterm		Full Term LBW		Ever Breastfed	
	Low (4)		High (5)	(6)		(7)			
	Number	% (rank)	% (rank)	Number	% (rank)	Number	% (rank)	Number	% (rank)
St Joseph	304	4.9 (4)	12.2 (58)	320	10.6 (19)	271	1.8 (5)	304	81.6 (13)
Tuscola	223	5.4 (5)	9.0 (42)	238	14.3 (52)	193	1.6 (4)	223	77.6 (22)
Van Buren	354	8.5 (16)	7.1 (25)	380	12.4 (31)	310	1.9 (8)	367	73.3 (40)
Washtenaw	904	12.7 (52)	6.4 (17)	955	13.4 (42)	780	6.0 (46)	912	81.9 (12)
Wayne	11,136	13.3 (55)	4.7 (3)	11,697	14.2 (50)	9,472	6.7 (48)	11,271	58.4 (58)
Wexford	194	10.3 (33)	11.3 (54)	202	14.4 (53)	165	1.8 (5)	194	84.0 (9)
<b>Michigan</b>	<b>41,563</b>	<b>11.5</b>	<b>6.3</b>	<b>43,647</b>	<b>13.2</b>	<b>35,837</b>	<b>5.2</b>	<b>41,966</b>	<b>69.0</b>
<b>National (Prior Year)</b>	<b>80,061</b>	<b>10.1</b>	<b>6.0</b>	<b>77,312</b>	<b>11.9</b>	<b>65,997</b>	<b>4.4</b>	<b>80,887</b>	<b>57.7</b>

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

(4) <2500 g.

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# WIC PNSS & PedNSS

Run Date: 5/29/2024

## Table 3B

2019 - 2021 Pregnancy Nutrition Surveillance <sup>(1)</sup>

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## Michigan

### Comparison of Racial and Ethnic Distribution by County Combined 3 Years

Comparison of Racial and Ethnic Distribution <sup>(2)</sup>								
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	109	91.7	0.9	1.8	0.0	0.0	4.6	0.9
Alger	92	*	*	*	*	*	*	*
Allegan	1,385	75.7	1.5	17.2	0.2	0.5	3.8	1.1
Alpena	456	94.1	0.7	1.5	0.4	0.2	2.9	0.2
Antrim	254	90.6	0.4	3.1	0.4	0.8	4.7	0.0
Arenac	323	94.4	0.0	1.9	0.0	0.0	3.7	0.0
Baraga	132	51.5	0.8	5.3	30.3	0.8	10.6	0.8
Barry	630	92.5	0.2	5.1	0.2	0.5	1.1	0.5
Bay	1,565	80.0	1.9	11.4	0.0	0.2	6.1	0.4
Benzie	245	89.4	0.8	4.1	1.2	0.0	3.7	0.8
Berrien	2,586	49.1	36.7	8.1	0.3	1.1	4.1	0.6
Branch	1,015	85.7	0.7	10.3	0.0	0.4	1.7	1.2
Calhoun	2,823	60.6	20.0	7.3	0.4	4.9	6.3	0.5
Cass	894	60.6	7.5	21.8	0.3	0.2	7.9	1.6
Charlevoix	327	88.7	0.3	3.7	0.3	0.0	7.0	0.0
Cheboygan	383	88.3	0.8	2.9	0.3	0.0	7.8	0.0
Chippewa	594	53.9	0.7	3.0	21.0	0.8	20.0	0.3
Clare	578	94.3	0.3	2.4	0.3	0.5	2.1	0.0
Clinton	411	82.5	1.2	10.9	0.0	0.0	4.9	0.5
Crawford	271	91.5	0.7	4.8	0.0	0.0	2.6	0.4
Delta	631	84.0	0.5	2.5	1.1	0.5	11.3	0.2
Dickinson	403	92.6	0.2	2.5	0.0	0.0	3.2	1.5
Eaton	720	84.4	4.3	8.6	0.0	1.5	0.8	0.3

(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

Run Date: 5/29/2024

## Table 3B

2019 - 2021 Pregnancy Nutrition Surveillance <sup>(1)</sup>

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## Michigan

Comparison of Racial and Ethnic Distribution by County

Combined 3 Years

Comparison of Racial and Ethnic Distribution <sup>(2)</sup>								
County	Number Included in Analysis	White, Not Hispanic  %	Black, Not Hispanic  %	Hispanic  %	American Indian/Alaska Native %	Asian/Pacific Islander  %	Multiple Races  %	All Other/Unknown  %
Emmet	435	86.9	1.4	2.5	1.6	0.5	7.1	0.0
Genesee	7,799	47.4	39.4	5.7	0.1	0.2	6.9	0.3
Gladwin	400	95.0	0.0	2.5	0.0	0.5	2.0	0.0
Gogebic	179	80.4	2.2	2.2	5.0	1.1	6.7	2.2
Gr Travers	1,176	84.8	0.9	6.2	2.2	0.9	4.5	0.6
Gratiot	616	85.6	0.3	11.5	0.2	0.0	1.8	0.6
Hillsdale	674	93.8	0.3	2.7	0.1	0.1	1.9	1.0
Houghton	560	89.6	1.6	1.8	0.7	2.1	3.8	0.4
Huron	420	93.1	0.2	5.0	0.0	0.2	1.2	0.2
Ingham	5,329	41.8	28.5	15.7	0.2	5.2	8.4	0.3
Ionia	968	86.5	0.2	9.6	0.0	0.1	3.5	0.1
Iosco	449	89.5	1.1	2.4	0.4	0.2	6.2	0.0
Iron	171	88.9	0.0	1.8	0.6	0.0	5.8	2.9
Isabella	1,058	78.5	3.6	6.4	3.7	0.9	6.7	0.2
Jackson	2,945	71.5	14.4	5.8	0.2	0.5	7.4	0.2
Kalamazoo	4,007	46.2	34.6	9.9	0.2	1.0	7.6	0.5
Kalkaska	287	91.6	0.3	3.1	0.0	0.7	4.2	0.0
Kent	10,113	31.8	28.8	29.3	0.3	4.7	4.8	0.3
Lake	166	74.1	11.4	3.0	0.0	0.0	10.8	0.6
Lapeer	1,120	83.8	0.6	11.8	0.0	0.5	3.0	0.3
Leelanau	113	57.5	0.0	22.1	9.7	0.0	10.6	0.0
Lenawee	1,263	72.1	2.5	19.2	0.0	0.2	5.5	0.5
Livingston	1,027	91.2	1.2	3.8	0.0	0.6	2.3	0.9
Luce	125	83.2	0.8	2.4	2.4	0.0	11.2	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

Run Date: 5/29/2024

## Table 3B

2019 - 2021 Pregnancy Nutrition Surveillance <sup>(1)</sup>

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## Michigan

Comparison of Racial and Ethnic Distribution by County

Combined 3 Years

Comparison of Racial and Ethnic Distribution <sup>(2)</sup>								
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	98	*	*	*	*	*	*	*
Macomb	9,898	53.1	30.7	4.3	0.1	7.2	4.2	0.3
Manistee	303	81.2	1.3	6.3	2.6	0.3	7.9	0.3
Marquette	728	87.8	1.2	2.9	1.5	0.4	6.0	0.1
Mason	400	79.0	1.8	12.0	0.3	1.0	5.5	0.5
Mecosta	738	87.3	3.8	3.0	0.3	0.4	4.9	0.4
Menominee	273	65.2	1.1	10.3	9.9	0.0	11.7	1.8
Midland	965	89.6	1.6	3.9	0.0	1.8	3.0	0.1
Missaukee	207	87.4	0.0	7.7	0.0	0.0	4.8	0.0
Monroe	1,977	81.3	6.7	6.0	0.1	0.4	4.9	0.7
Montcalm	1,026	91.3	0.4	6.0	0.0	0.1	1.9	0.3
Montmorenc	149	96.0	0.7	1.3	0.7	0.0	0.7	0.7
Muskegon	3,712	54.4	27.6	9.3	0.3	0.5	7.5	0.4
Newaygo	1,067	75.5	0.5	19.8	0.4	0.4	3.0	0.5
Oakland	10,638	41.2	41.5	11.0	0.1	2.1	4.0	0.2
Oceana	497	59.2	0.8	37.0	0.4	0.0	2.6	0.0
Ogemaw	392	91.1	0.3	4.3	0.3	0.0	3.8	0.3
Ontonagon	55	*	*	*	*	*	*	*
Osceola	451	90.5	1.6	3.3	0.0	0.0	4.7	0.0
Oscoda	122	95.1	0.0	3.3	0.0	0.0	1.6	0.0
Otsego	466	95.9	0.0	1.5	0.0	0.2	2.4	0.0
Ottawa	3,272	54.5	4.8	32.2	0.2	3.0	4.6	0.7
Presque Is	101	93.1	1.0	0.0	1.0	0.0	5.0	0.0
Roscommon	324	93.8	0.0	1.2	0.0	0.3	3.7	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

Run Date: 5/29/2024

## Table 3B

2019 - 2021 Pregnancy Nutrition Surveillance (1)

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## Michigan

Comparison of Racial and Ethnic Distribution by County

Combined 3 Years

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 %
Saginaw	3,827	38.4	40.3	14.9	0.0	0.7	5.4	0.3
Sanilac	590	93.6	0.0	4.4	0.2	0.3	1.0	0.5
Schoolcraf	125	73.6	0.0	0.0	9.6	0.0	16.8	0.0
Shiawassee	1,087	88.2	0.5	6.6	0.0	0.1	4.4	0.2
St Clair	2,039	81.1	6.1	6.4	0.1	0.5	5.5	0.2
St Joseph	1,270	70.9	0.8	20.0	0.0	0.2	7.6	0.5
Tuscola	830	93.3	0.1	4.7	0.0	0.1	1.8	0.0
Van Buren	1,368	63.6	3.0	28.8	0.1	0.5	2.9	1.2
Washtenaw	3,222	37.1	40.6	10.2	0.1	2.5	9.1	0.4
Wayne	41,170	28.3	56.9	9.4	0.1	2.7	2.4	0.2
Wexford	754	90.7	0.5	2.7	0.0	0.4	5.3	0.4
<b>Michigan</b>	<b>152,475</b>	<b>51.1</b>	<b>30.5</b>	<b>10.9</b>	<b>0.4</b>	<b>2.3</b>	<b>4.6</b>	<b>0.3</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

Run Date: 5/29/2024

## Table 4B

2019 - 2021 Pregnancy Nutrition Surveillance <sup>(1)</sup>

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## Michigan

Comparison of Age Distribution by County

Combined 3 Years

Comparison of Age Distribution <sup>(2)</sup>								
County	Number Included in Analysis	< 15 Years %	15 - 17 Years %	18 - 19 Years %	20 - 29 Years %	30 - 39 Years %	>= 40 Years %	Unknown %
Alcona	109	0.0	0.9	2.8	66.1	27.5	2.8	0.0
Alger	92	*	*	*	*	*	*	*
Allegan	1,385	0.0	2.5	7.4	60.1	27.9	1.9	0.1
Alpena	456	0.0	2.4	8.6	63.2	24.6	1.3	0.0
Antrim	254	0.0	2.0	7.5	63.4	26.4	0.8	0.0
Arenac	323	0.0	2.2	7.1	69.7	19.8	1.2	0.0
Baraga	132	0.0	3.0	8.3	62.9	25.0	0.8	0.0
Barry	630	0.0	2.5	6.8	64.1	24.4	1.3	0.8
Bay	1,565	0.1	2.4	7.4	62.5	26.2	1.4	0.0
Benzie	245	0.0	3.3	5.3	63.7	27.3	0.4	0.0
Berrien	2,586	0.1	3.3	9.5	60.5	23.3	1.5	1.7
Branch	1,015	0.0	1.9	9.7	61.8	23.5	3.1	0.1
Calhoun	2,823	0.1	2.7	7.5	64.3	23.5	1.4	0.5
Cass	894	0.3	3.8	11.6	58.8	23.7	1.2	0.4
Charlevoix	327	0.0	1.2	6.4	67.3	22.9	1.8	0.3
Cheboygan	383	0.3	2.1	10.2	60.6	25.1	1.8	0.0
Chippewa	594	0.0	2.2	7.4	63.0	25.8	1.7	0.0
Clare	578	0.3	3.8	8.3	65.1	21.3	1.0	0.2
Clinton	411	0.0	1.5	5.1	58.6	33.6	1.2	0.0
Crawford	271	0.0	1.5	8.1	63.5	25.1	1.5	0.4
Delta	631	0.2	1.4	7.6	62.3	27.7	0.8	0.0
Dickinson	403	0.2	1.5	6.9	62.3	28.0	1.0	0.0
Eaton	720	0.1	3.1	8.3	59.3	26.8	1.9	0.4
Emmet	435	0.0	2.1	5.3	62.5	27.1	3.0	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

Run Date: 5/29/2024

## Table 4B

2019 - 2021 Pregnancy Nutrition Surveillance (1)

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## Michigan

Comparison of Age Distribution by County

Combined 3 Years

Comparison of Age Distribution (2)								
County	Number Included in Analysis	< 15 Years %	15 - 17 Years %	18 - 19 Years %	20 - 29 Years %	30 - 39 Years %	>= 40 Years %	Unknown %
Genesee	7,799	0.2	2.4	7.6	64.1	24.0	1.6	0.1
Gladwin	400	0.0	2.0	4.8	65.3	26.5	1.3	0.3
Gogebic	179	0.0	0.0	8.9	57.5	33.0	0.6	0.0
Gr Travers	1,176	0.1	1.7	6.3	60.4	29.0	2.2	0.3
Gratiot	616	0.3	1.9	8.8	64.4	23.2	1.1	0.2
Hillsdale	674	0.4	2.2	8.2	66.8	20.2	1.5	0.7
Houghton	560	0.0	1.8	7.5	55.2	33.0	2.5	0.0
Huron	420	0.0	1.0	5.0	61.9	30.5	1.7	0.0
Ingham	5,329	0.1	2.5	7.7	61.0	26.6	1.9	0.2
Ionia	968	0.1	2.2	8.6	64.7	23.1	1.1	0.2
Iosco	449	0.0	2.9	7.6	63.9	24.1	1.6	0.0
Iron	171	0.0	4.7	7.0	59.6	27.5	1.2	0.0
Isabella	1,058	0.1	2.5	7.8	66.3	22.1	1.2	0.1
Jackson	2,945	0.0	2.9	8.2	63.4	24.0	1.1	0.4
Kalamazoo	4,007	0.1	3.3	8.1	60.1	26.1	1.9	0.3
Kalkaska	287	0.0	3.5	10.1	61.7	24.7	0.0	0.0
Kent	10,113	0.1	2.5	7.1	58.5	29.2	2.1	0.5
Lake	166	0.0	2.4	5.4	66.3	24.7	1.2	0.0
Lapeer	1,120	0.0	2.6	5.7	62.7	27.3	1.5	0.2
Leelanau	113	0.0	0.9	2.7	52.2	40.7	2.7	0.9
Lenawee	1,263	0.1	1.4	8.1	63.5	25.7	1.0	0.2
Livingston	1,027	0.0	1.7	5.2	59.8	31.1	2.1	0.2
Luce	125	0.0	5.6	4.8	61.6	27.2	0.8	0.0
Mackinac	98	*	*	*	*	*	*	*

(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

Run Date: 5/29/2024

## Table 4B

2019 - 2021 Pregnancy Nutrition Surveillance (1)

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## Michigan

Comparison of Age Distribution by County

Combined 3 Years

Comparison of Age Distribution (2)								
County	Number Included in Analysis	< 15 Years %	15 - 17 Years %	18 - 19 Years %	20 - 29 Years %	30 - 39 Years %	>= 40 Years %	Unknown %
Macomb	9,898	0.0	1.1	4.4	58.6	33.3	2.6	0.0
Manistee	303	0.3	1.7	8.3	55.4	29.4	4.3	0.7
Marquette	728	0.1	1.4	5.6	61.5	28.8	2.5	0.0
Mason	400	0.0	3.3	7.8	65.5	22.0	1.0	0.5
Mecosta	738	0.1	1.5	6.5	67.1	23.2	1.4	0.3
Menominee	273	0.0	3.3	9.2	64.5	22.3	0.7	0.0
Midland	965	0.0	1.6	5.9	64.5	26.5	1.6	0.0
Missaukee	207	0.0	0.0	10.6	64.7	23.2	1.4	0.0
Monroe	1,977	0.0	2.4	7.8	63.0	25.1	1.6	0.1
Montcalm	1,026	0.1	3.2	8.6	64.7	21.5	1.7	0.2
Montmorenc	149	0.0	2.7	7.4	62.4	26.2	1.3	0.0
Muskegon	3,712	0.2	3.3	9.9	61.6	23.3	1.3	0.4
Newaygo	1,067	0.1	2.0	7.8	63.2	24.2	2.4	0.4
Oakland	10,638	0.0	1.4	5.1	58.2	32.5	2.5	0.2
Oceana	497	0.0	2.8	8.5	65.0	20.7	2.8	0.2
Ogemaw	392	0.0	3.1	8.9	65.1	21.9	1.0	0.0
Ontonagon	55	*	*	*	*	*	*	*
Osceola	451	0.2	3.3	8.9	63.6	22.0	1.3	0.7
Oscoda	122	0.0	6.6	7.4	64.8	20.5	0.8	0.0
Otsego	466	0.2	1.3	8.6	64.2	24.9	0.9	0.0
Ottawa	3,272	0.1	2.1	6.2	61.8	27.6	2.0	0.2
Presque Is	101	0.0	1.0	4.0	60.4	33.7	1.0	0.0
Roscommon	324	0.0	3.1	9.6	58.6	27.2	1.2	0.3
Saginaw	3,827	0.1	3.0	8.1	64.2	23.0	1.3	0.3

(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

Run Date: 5/29/2024

## Table 4B

2019 - 2021 Pregnancy Nutrition Surveillance (1)

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## Michigan

Comparison of Age Distribution by County

Combined 3 Years

Comparison of Age Distribution (2)								
County	Number Included in Analysis	< 15 Years %	15 - 17 Years %	18 - 19 Years %	20 - 29 Years %	30 - 39 Years %	>= 40 Years %	Unknown %
Sanilac	590	0.0	2.7	8.6	66.4	21.9	0.3	0.0
Schoolcraf	125	0.0	3.2	9.6	68.8	16.8	1.6	0.0
Shiawassee	1,087	0.0	3.3	7.8	66.3	21.5	1.0	0.0
St Clair	2,039	0.1	2.5	7.8	64.3	23.1	1.9	0.3
St Joseph	1,270	0.1	2.7	8.7	64.0	22.8	1.8	0.0
Tuscola	830	0.1	2.8	6.1	64.9	23.6	2.2	0.2
Van Buren	1,368	0.0	2.0	7.9	62.6	25.1	1.8	0.6
Washtenaw	3,222	0.1	1.5	6.2	57.8	31.8	2.3	0.2
Wayne	41,170	0.1	2.0	6.1	58.9	29.9	2.8	0.2
Wexford	754	0.0	2.5	8.9	64.9	22.4	1.2	0.1
<b>Michigan</b>	<b>152,475</b>	<b>0.1</b>	<b>2.2</b>	<b>6.9</b>	<b>60.8</b>	<b>27.7</b>	<b>2.1</b>	<b>0.3</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

Run Date: 5/29/2024

## Table 5B

2019 - 2021 Pregnancy Nutrition Surveillance <sup>(1)</sup>

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## Michigan

Comparison of Maternal Health Indicators by County

Combined 3 Years

Comparison of Maternal Health Indicators <sup>(2,3)</sup>														
County	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	70	*	*	34	*	*	10	*	11	*	97	*	97	*
Alger	70	*	*	26	*	*	6	*	8	*	81	*	81	*
Allegan	1,064	4.9 (55)	61.8 (45)	497	18.9 (42)	52.9 (36)	142	37.3 (3)	272	24.6 (8)	1,253	8.2 (28)	1,255	11.3 (20)
Alpena	416	5.5 (66)	63.2 (57)	241	18.3 (38)	54.4 (50)	31	*	29	*	414	8.2 (28)	415	18.6 (75)
Antrim	179	3.4 (16)	58.1 (18)	55	*	*	24	*	24	*	240	9.6 (51)	239	10.9 (14)
Arenac	266	2.6 (6)	63.5 (62)	202	20.3 (53)	53.0 (38)	23	*	29	*	315	9.8 (55)	316	17.1 (68)
Baraga	118	0.8 (2)	60.2 (27)	71	*	*	9	*	14	*	122	5.7 (4)	122	13.9 (48)
Barry	328	6.4 (71)	54.9 (7)	110	16.4 (18)	53.6 (43)	56	*	59	*	577	9.9 (57)	580	13.3 (42)
Bay	1,283	3.1 (11)	62.3 (51)	769	17.4 (27)	54.9 (54)	115	23.5 (1)	83	*	1,441	7.0 (12)	1,441	11.1 (18)
Benzie	201	4.5 (47)	50.2 (1)	124	12.1 (2)	55.6 (58)	20	*	22	*	227	7.9 (23)	227	11.9 (29)
Berrien	2,219	4.3 (40)	61.2 (38)	1,574	18.9 (42)	53.4 (42)	240	37.5 (4)	227	21.6 (6)	2,304	8.6 (36)	2,306	17.9 (72)
Branch	533	4.5 (47)	61.5 (42)	220	21.4 (55)	50.5 (16)	82	*	71	*	926	9.8 (55)	927	9.8 (6)
Calhoun	2,165	3.9 (32)	61.5 (42)	1,324	18.9 (42)	52.9 (36)	159	39.6 (7)	223	27.4 (10)	2,573	8.0 (25)	2,573	9.9 (8)
Cass	764	4.6 (51)	60.7 (32)	554	17.9 (32)	50.2 (15)	77	*	66	*	825	8.7 (37)	828	14.0 (49)
Charlevoix	223	3.6 (21)	61.9 (46)	67	*	*	27	*	36	*	309	6.5 (7)	309	15.9 (65)
Cheboygan	339	5.9 (69)	57.5 (14)	88	*	*	22	*	35	*	348	9.2 (42)	348	11.8 (27)
Chippewa	520	3.8 (29)	59.2 (24)	362	13.8 (6)	54.4 (50)	31	*	53	*	532	8.5 (34)	534	10.3 (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.

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

# WIC PNSS & PedNSS

Run Date: 5/29/2024

## Table 5B

2019 - 2021 Pregnancy Nutrition Surveillance <sup>(1)</sup>

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## Michigan

Comparison of Maternal Health Indicators by County

Combined 3 Years

Comparison of Maternal Health Indicators (2,3)														
County	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	508	4.5 (47)	59.1 (23)	293	14.0 (8)	53.9 (47)	32	*	42	*	535	7.1 (14)	537	10.4 (12)
Clinton	376	4.8 (54)	66.8 (73)	256	15.6 (12)	48.4 (7)	30	*	49	*	382	15.2 (77)	382	15.4 (59)
Crawford	237	0.8 (2)	58.6 (19)	144	23.6 (59)	50.7 (18)	13	*	28	*	249	10.0 (59)	249	11.2 (19)
Delta	593	3.0 (10)	61.4 (40)	444	18.0 (34)	51.6 (25)	57	*	90	*	574	10.1 (61)	574	15.2 (56)
Dickinson	275	6.5 (72)	54.5 (5)	110	18.2 (36)	49.1 (8)	33	*	39	*	363	3.0 (1)	364	15.7 (61)
Eaton	450	6.2 (70)	60.9 (35)	226	19.9 (50)	47.8 (6)	54	*	64	*	658	10.9 (67)	659	16.2 (67)
Emmet	376	3.7 (25)	62.5 (55)	161	13.7 (5)	52.8 (34)	39	*	42	*	409	6.8 (9)	409	15.6 (60)
Genesee	5,597	4.9 (55)	59.5 (26)	2,721	18.8 (41)	51.9 (29)	707	47.0 (17)	604	32.1 (16)	7,141	8.0 (25)	7,151	15.8 (63)
Gladwin	371	3.2 (14)	62.3 (51)	275	13.1 (3)	56.7 (61)	25	*	31	*	371	9.4 (46)	373	15.0 (55)
Gogebic	155	2.6 (6)	58.7 (21)	94	*	*	15	*	14	*	161	13.7 (74)	161	14.3 (52)
Gr Travers	989	4.9 (55)	53.6 (4)	769	15.9 (13)	51.9 (29)	79	*	70	*	1,084	8.7 (37)	1,087	8.7 (3)
Gratiot	572	2.8 (9)	67.7 (74)	425	24.2 (60)	47.5 (5)	45	*	51	*	572	14.5 (76)	574	15.3 (57)
Hillsdale	566	5.5 (66)	62.4 (54)	407	17.0 (22)	51.6 (25)	40	*	77	*	620	6.9 (10)	621	6.1 (1)
Houghton	464	2.6 (6)	56.7 (11)	305	17.7 (31)	44.9 (3)	33	*	59	*	500	7.6 (20)	500	12.0 (32)
Huron	370	5.4 (64)	65.9 (72)	275	17.1 (24)	57.1 (62)	34	*	52	*	399	8.3 (32)	401	12.0 (32)
Ingham	4,382	3.9 (32)	62.1 (49)	3,384	19.2 (46)	53.6 (43)	444	44.4 (12)	389	31.9 (15)	5,017	7.7 (21)	5,018	12.0 (32)
Ionia	715	4.2 (38)	64.1 (68)	505	17.4 (27)	54.1 (49)	72	*	120	8.3 (1)	889	10.3 (63)	891	18.6 (75)

(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

Run Date: 5/29/2024

## Table 5B

2019 - 2021 Pregnancy Nutrition Surveillance <sup>(1)</sup>

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## Michigan

Comparison of Maternal Health Indicators by County

Combined 3 Years

Comparison of Maternal Health Indicators (2,3)														
County	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	289	5.2 (62)	62.3 (51)	121	16.5 (19)	51.2 (22)	34	*	28	*	405	6.7 (8)	405	10.9 (14)
Iron	120	9.2 (74)	53.3 (3)	43	*	*	11	*	14	*	146	9.6 (51)	146	13.0 (41)
Isabella	892	5.4 (64)	61.3 (39)	580	15.0 (10)	51.2 (22)	71	*	89	*	968	9.5 (47)	970	11.9 (29)
Jackson	2,031	4.0 (34)	60.3 (28)	1,309	16.7 (20)	53.9 (47)	195	39.0 (5)	199	30.2 (12)	2,728	7.9 (23)	2,733	10.9 (14)
Kalamazoo	3,141	3.5 (20)	62.1 (49)	1,570	16.1 (14)	54.9 (54)	249	45.0 (13)	373	33.0 (17)	3,574	9.5 (47)	3,576	11.5 (21)
Kalkaska	232	4.3 (40)	57.8 (16)	172	13.4 (4)	63.4 (63)	22	*	35	*	271	10.3 (63)	272	12.5 (37)
Kent	6,218	3.8 (29)	60.6 (30)	2,524	25.7 (62)	44.1 (2)	1,094	40.8 (9)	1,965	29.2 (11)	9,305	8.3 (32)	9,317	14.8 (54)
Lake	148	10.1 (75)	61.5 (42)	112	19.6 (49)	50.9 (20)	10	*	10	*	152	11.8 (72)	153	15.7 (61)
Lapeer	1,026	3.4 (16)	58.6 (19)	826	17.3 (25)	50.8 (19)	86	*	115	34.8 (20)	1,029	5.8 (5)	1,030	10.2 (9)
Leelanau	99	*	*	61	*	*	7	*	8	*	103	11.7 (71)	103	6.8 (2)
Lenawee	940	3.1 (11)	61.0 (36)	459	15.3 (11)	50.1 (14)	118	52.5 (19)	127	40.9 (24)	1,137	9.5 (47)	1,139	13.3 (42)
Livingston	972	4.4 (46)	54.6 (6)	661	18.9 (42)	51.7 (28)	71	*	137	12.4 (2)	933	10.7 (66)	934	18.0 (74)
Luce	117	5.1 (58)	57.3 (13)	86	*	*	7	*	7	*	109	13.8 (75)	109	11.9 (29)
Mackinac	95	*	*	82	*	*	8	*	12	*	89	*	89	*
Macomb	8,412	3.6 (21)	61.0 (36)	6,463	18.3 (38)	53.0 (38)	836	39.7 (8)	1,018	26.0 (9)	9,224	9.3 (43)	9,227	10.3 (10)
Manistee	164	4.3 (40)	55.5 (9)	67	*	*	24	*	39	*	283	9.9 (57)	284	12.7 (39)
Marquette	650	3.4 (16)	60.8 (33)	460	16.3 (15)	56.3 (60)	55	*	69	*	649	7.1 (14)	655	13.3 (42)

(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

Run Date: 5/29/2024

## Table 5B

2019 - 2021 Pregnancy Nutrition Surveillance <sup>(1)</sup>

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## Michigan

Comparison of Maternal Health Indicators by County

Combined 3 Years

Comparison of Maternal Health Indicators (2,3)														
County	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	360	1.9 (5)	60.6 (30)	258	16.3 (15)	54.7 (53)	37	*	38	*	366	11.5 (70)	366	15.3 (57)
Mecosta	521	3.8 (29)	63.9 (65)	214	18.7 (40)	50.5 (16)	46	*	64	*	691	7.5 (19)	690	17.1 (68)
Menominee	253	4.3 (40)	54.9 (7)	184	16.8 (21)	49.5 (12)	20	*	31	*	231	6.9 (10)	233	13.7 (47)
Midland	768	3.1 (11)	63.3 (58)	139	9.4 (1)	56.1 (59)	69	*	135	15.6 (3)	899	9.6 (51)	898	11.6 (25)
Missaukee	195	4.1 (36)	62.6 (56)	144	24.3 (61)	49.3 (9)	11	*	17	*	184	4.9 (2)	184	13.6 (45)
Monroe	1,732	4.3 (40)	63.9 (65)	1,250	18.2 (36)	52.5 (32)	157	47.8 (18)	159	30.8 (13)	1,807	8.2 (28)	1,809	17.5 (70)
Montcalm	930	4.5 (47)	61.4 (40)	646	16.3 (15)	53.7 (45)	78	*	127	17.3 (4)	959	9.3 (43)	959	15.8 (63)
Montmorenc	138	5.1 (58)	58.0 (17)	68	*	*	10	*	15	*	135	11.1 (68)	135	8.9 (4)
Muskegon	3,339	3.7 (25)	63.4 (60)	2,455	18.0 (34)	52.1 (31)	220	45.5 (14)	194	22.7 (7)	3,417	9.6 (51)	3,421	17.9 (72)
Newaygo	963	3.6 (21)	63.8 (64)	671	21.5 (56)	46.8 (4)	69	*	92	*	992	10.2 (62)	992	16.1 (66)
Oakland	8,343	4.1 (36)	59.3 (25)	4,849	17.4 (27)	52.8 (34)	872	46.4 (16)	901	34.5 (19)	9,688	7.0 (12)	9,688	11.5 (21)
Oceana	388	3.4 (16)	68.6 (75)	283	17.3 (25)	54.4 (50)	40	*	37	*	444	11.9 (73)	443	14.0 (49)
Ogemaw	330	5.2 (62)	64.2 (69)	169	14.8 (9)	55.0 (56)	27	*	39	*	357	5.0 (3)	358	12.6 (38)
Ontonagon	53	*	*	36	*	*	5	*	7	*	47	*	48	*
Osceola	341	1.8 (4)	63.3 (58)	201	22.4 (58)	51.2 (22)	32	*	36	*	419	7.4 (18)	421	12.4 (35)
Oscoda	89	*	*	34	*	*	4	*	11	*	112	6.3 (6)	113	12.4 (35)
Otsego	305	4.6 (51)	55.7 (10)	81	*	*	47	*	41	*	439	8.2 (28)	439	11.6 (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) 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

Run Date: 5/29/2024

## Table 5B

2019 - 2021 Pregnancy Nutrition Surveillance <sup>(1)</sup>

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## Michigan

Comparison of Maternal Health Indicators by County

Combined 3 Years

Comparison of Maternal Health Indicators (2,3)														
County	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	1,735	5.1 (58)	56.7 (11)	819	13.8 (6)	52.7 (33)	282	41.8 (10)	583	35.0 (21)	2,973	9.1 (41)	2,975	9.6 (5)
Presque Is	96	*	*	65	*	*	5	*	3	*	95	*	95	*
Roscommon	300	4.0 (34)	60.3 (28)	219	21.0 (54)	51.6 (25)	24	*	17	*	289	10.0 (59)	291	22.0 (77)
Saginaw	3,046	3.3 (15)	63.5 (62)	1,848	17.6 (30)	51.1 (21)	307	44.0 (11)	519	30.8 (13)	3,571	8.0 (25)	3,572	11.8 (27)
Sanilac	109	8.3 (73)	53.2 (2)	41	*	*	49	*	43	*	523	7.1 (14)	523	9.8 (6)
Schoolcraf	105	0.0 (1)	65.7 (71)	74	*	*	3	*	8	*	114	8.8 (39)	114	17.5 (70)
Shiawassee	996	4.3 (40)	63.9 (65)	817	20.0 (51)	49.4 (10)	77	*	95	*	983	8.5 (34)	985	11.5 (21)
St Clair	1,925	4.7 (53)	58.8 (22)	1,615	17.0 (22)	55.2 (57)	155	39.4 (6)	151	38.4 (23)	1,857	7.8 (22)	1,860	14.7 (53)
St Joseph	1,080	5.1 (58)	61.9 (46)	400	22.0 (57)	53.3 (41)	85	*	97	*	1,134	9.3 (43)	1,134	10.6 (13)
Tuscola	631	3.6 (21)	63.4 (60)	471	19.3 (47)	53.7 (45)	61	*	73	*	787	10.5 (65)	788	14.0 (49)
Van Buren	1,132	4.2 (38)	65.3 (70)	448	37.3 (63)	36.8 (1)	123	31.7 (2)	149	19.5 (5)	1,235	11.4 (69)	1,235	10.9 (14)
Washtenaw	2,627	3.7 (25)	60.8 (33)	1,693	19.4 (48)	49.6 (13)	286	45.5 (14)	401	33.7 (18)	2,911	8.9 (40)	2,913	13.6 (45)
Wayne	29,443	3.7 (25)	62.0 (48)	17,404	17.9 (32)	53.2 (40)	3,559	53.1 (20)	3,051	38.3 (22)	38,244	7.3 (17)	38,255	11.5 (21)
Wexford	641	5.5 (66)	57.6 (15)	411	20.2 (52)	49.4 (10)	54	*	56	*	702	9.5 (47)	702	12.8 (40)
Michigan	116,274	4.0	61.2	70,748	18.3	52.3	12,540	43.2	14,527	30.1	140,267	8.2	140,379	12.6

(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

Run Date: 5/29/2024

## Table 6B

2019 - 2021 Pregnancy Nutrition Surveillance <sup>(1)</sup>

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## Michigan

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

Comparison of Maternal Behavioral Indicators <sup>(2,3)</sup>									
County	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	97	*	*	107	23.4 (76)	98	*	77	*
Alger	79	*	*	91	*	83	*	73	*
Allegan	1,231	93.4 (2)	2.3 (4)	1,366	33.2 (46)	1,192	23.1 (50)	1,004	90.6 (34)
Alpena	403	84.1 (52)	10.7 (61)	444	39.6 (13)	418	23.7 (48)	361	93.6 (13)
Antrim	237	86.1 (39)	4.6 (25)	247	30.0 (59)	228	26.3 (34)	191	85.9 (66)
Arenac	308	87.3 (30)	6.2 (38)	321	34.9 (33)	294	25.5 (39)	248	84.7 (71)
Baraga	121	92.6 (6)	2.5 (7)	128	33.6 (40)	121	30.6 (15)	98	*
Barry	565	91.2 (16)	4.2 (19)	624	29.5 (62)	582	28.5 (21)	449	96.7 (3)
Bay	1,397	78.4 (69)	14.5 (71)	1,552	39.3 (16)	1,457	18.2 (68)	1,253	89.3 (45)
Benzie	219	86.8 (34)	8.7 (49)	240	33.3 (43)	219	32.9 (12)	188	88.8 (50)
Berrien	2,208	75.4 (71)	9.8 (53)	2,535	29.7 (61)	2,285	18.3 (66)	1,863	89.8 (43)
Branch	815	82.6 (58)	8.6 (48)	991	31.8 (53)	863	27.0 (28)	745	86.0 (64)
Calhoun	2,500	92.9 (5)	3.7 (16)	2,765	33.1 (47)	2,223	23.8 (45)	2,047	86.3 (62)
Cass	809	86.7 (35)	7.3 (42)	882	42.3 (5)	766	25.1 (42)	694	79.4 (74)
Charlevoix	311	88.4 (23)	5.1 (29)	322	32.0 (52)	302	29.5 (17)	250	86.0 (64)
Cheboygan	339	79.1 (68)	11.8 (64)	373	35.9 (28)	349	26.1 (35)	304	91.8 (24)
Chippewa	525	92.4 (8)	4.8 (26)	578	41.2 (7)	523	40.5 (4)	467	86.5 (61)
Clare	524	82.3 (60)	10.1 (56)	572	43.9 (3)	498	26.5 (32)	475	87.8 (54)
Clinton	375	88.3 (26)	5.3 (33)	403	30.8 (56)	315	33.0 (11)	296	92.2 (21)
Crawford	244	90.2 (18)	4.1 (18)	269	35.7 (30)	251	28.3 (23)	211	90.5 (35)
Delta	571	93.2 (3)	1.2 (1)	624	35.9 (28)	579	25.9 (36)	489	94.3 (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) 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

Run Date: 5/29/2024

## Table 6B

2019 - 2021 Pregnancy Nutrition Surveillance <sup>(1)</sup>

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## Michigan

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

Comparison of Maternal Behavioral Indicators <sup>(2,3)</sup>									
County	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	360	91.7 (13)	5.3 (33)	400	34.5 (36)	373	32.4 (13)	315	93.3 (14)
Eaton	651	87.3 (30)	3.5 (15)	714	27.3 (68)	651	28.9 (19)	512	92.6 (19)
Emmet	405	89.4 (21)	4.4 (21)	430	29.5 (62)	409	34.5 (7)	329	90.9 (31)
Genesee	7,002	87.5 (29)	3.1 (10)	7,675	25.3 (73)	5,898	9.0 (75)	5,540	88.9 (49)
Gladwin	364	72.8 (73)	19.2 (75)	395	40.5 (9)	374	30.7 (14)	313	87.9 (53)
Gogebic	158	91.1 (17)	2.5 (7)	176	31.8 (53)	157	29.9 (16)	125	98.4 (1)
Gr Travers	1,050	82.9 (57)	10.5 (59)	1,157	28.7 (64)	1,061	25.8 (38)	814	89.2 (46)
Gratiot	563	83.5 (54)	9.9 (54)	603	37.1 (24)	508	26.8 (31)	475	94.7 (6)
Hillsdale	608	85.2 (45)	7.7 (45)	667	32.4 (50)	592	24.8 (43)	501	90.2 (39)
Houghton	487	83.6 (53)	9.9 (54)	552	34.2 (38)	510	38.0 (6)	433	94.2 (9)
Huron	390	84.6 (51)	5.4 (35)	416	27.9 (67)	364	33.5 (10)	294	90.1 (40)
Ingham	4,825	88.4 (23)	4.8 (26)	5,273	28.2 (66)	4,719	8.6 (76)	3,884	90.0 (41)
Ionia	880	93.0 (4)	3.8 (17)	956	30.8 (56)	870	20.8 (60)	680	93.7 (11)
Iosco	395	85.8 (40)	6.8 (39)	431	34.6 (35)	408	22.5 (53)	355	89.9 (42)
Iron	145	86.9 (32)	9.7 (52)	169	40.2 (11)	145	55.9 (2)	136	89.0 (47)
Isabella	951	86.6 (36)	7.3 (42)	1,048	34.7 (34)	957	29.4 (18)	814	91.8 (24)
Jackson	2,630	85.8 (40)	7.4 (44)	2,903	38.4 (18)	2,618	20.6 (62)	2,289	87.4 (58)
Kalamazoo	3,491	86.9 (32)	5.7 (37)	3,945	35.7 (30)	3,600	17.6 (69)	3,018	85.9 (66)
Kalkaska	267	82.0 (62)	12.4 (66)	280	37.5 (21)	251	25.9 (36)	215	87.0 (59)
Kent	9,045	85.6 (43)	4.5 (24)	9,975	23.0 (77)	8,433	20.9 (58)	7,303	90.9 (31)
Lake	150	69.3 (75)	14.7 (72)	162	42.0 (6)	151	20.5 (63)	133	82.7 (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) 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

Run Date: 5/29/2024

## Table 6B

2019 - 2021 Pregnancy Nutrition Surveillance <sup>(1)</sup>

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## Michigan

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

Comparison of Maternal Behavioral Indicators <sup>(2,3)</sup>									
County	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	1,006	85.0 (47)	8.5 (46)	1,098	32.7 (49)	1,016	21.7 (54)	823	92.0 (23)
Leelanau	98	*	*	109	39.4 (15)	91	*	80	*
Lenawee	1,117	92.4 (8)	2.4 (6)	1,247	26.3 (70)	1,124	21.3 (56)	922	91.2 (29)
Livingston	910	88.2 (27)	5.2 (32)	1,007	25.3 (73)	839	39.8 (5)	692	92.9 (18)
Luce	103	81.6 (65)	13.6 (70)	123	52.0 (1)	100	34.0 (8)	105	93.3 (14)
Mackinac	89	*	*	96	*	85	*	69	*
Macomb	9,073	91.7 (13)	3.3 (13)	9,700	24.8 (75)	6,940	14.0 (73)	6,908	93.7 (11)
Manistee	283	84.8 (50)	12.0 (65)	297	34.3 (37)	271	80.1 (1)	229	91.3 (28)
Marquette	628	89.6 (19)	5.1 (29)	718	35.4 (32)	542	33.9 (9)	581	90.5 (35)
Mason	351	82.1 (61)	11.1 (63)	394	36.3 (27)	355	25.4 (41)	312	90.7 (33)
Mecosta	669	92.1 (10)	4.3 (20)	729	37.9 (19)	617	14.3 (72)	571	90.5 (35)
Menominee	223	87.9 (28)	8.5 (46)	268	32.1 (51)	215	27.0 (28)	190	94.7 (6)
Midland	880	92.5 (7)	2.2 (3)	954	26.0 (71)	885	28.9 (19)	687	95.1 (4)
Missaukee	180	85.0 (47)	9.4 (50)	200	39.0 (17)	193	28.5 (21)	164	89.0 (47)
Monroe	1,788	86.4 (38)	5.6 (36)	1,949	28.4 (65)	1,792	23.8 (45)	1,426	90.5 (35)
Montcalm	939	83.3 (55)	10.8 (62)	1,009	33.3 (43)	874	26.5 (32)	778	95.0 (5)
Montmorenc	136	85.3 (44)	1.5 (2)	147	27.2 (69)	131	23.7 (48)	108	97.2 (2)
Muskegon	3,297	88.4 (23)	4.4 (21)	3,622	37.2 (22)	2,954	20.9 (58)	2,782	86.3 (62)
Newaygo	921	81.7 (64)	10.1 (56)	1,054	39.5 (14)	749	24.7 (44)	841	91.1 (30)
Oakland	9,499	89.6 (19)	4.4 (21)	10,500	25.6 (72)	7,721	19.5 (65)	7,537	89.8 (43)
Oceana	413	72.4 (74)	19.6 (76)	485	34.2 (38)	443	25.5 (39)	370	81.9 (73)

(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.

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# WIC PNSS & PedNSS

Run Date: 5/29/2024

## Table 6B

2019 - 2021 Pregnancy Nutrition Surveillance <sup>(1)</sup>

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## Michigan

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

Comparison of Maternal Behavioral Indicators <sup>(2,3)</sup>									
County	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	346	82.4 (59)	9.5 (51)	389	33.4 (42)	356	18.3 (66)	303	92.1 (22)
Ontonagon	48	*	*	54	*	53	*	45	*
Osceola	400	80.5 (66)	13.0 (67)	444	42.8 (4)	412	21.1 (57)	352	85.2 (70)
Oscoda	112	85.7 (42)	7.1 (41)	121	40.5 (9)	109	22.9 (52)	95	*
Otsego	438	94.1 (1)	2.3 (4)	457	33.3 (43)	410	27.3 (26)	345	92.5 (20)
Ottawa	2,908	92.1 (10)	3.3 (13)	3,209	30.4 (58)	2,758	27.5 (25)	2,265	87.8 (54)
Presque Is	95	*	*	99	*	91	*	75	*
Roscommon	280	89.3 (22)	3.2 (11)	315	41.0 (8)	283	26.9 (30)	257	91.4 (27)
Saginaw	3,476	85.0 (47)	5.1 (29)	3,794	33.6 (40)	3,430	17.6 (69)	2,970	87.5 (57)
Sanilac	519	91.3 (15)	5.0 (28)	583	36.7 (25)	544	44.1 (3)	472	93.0 (17)
Schoolcraf	114	83.3 (55)	7.0 (40)	121	48.8 (2)	115	21.7 (54)	108	91.7 (26)
Shiawassee	968	85.2 (45)	10.5 (59)	1,076	31.8 (53)	682	23.8 (45)	797	85.9 (66)
St Clair	1,761	75.2 (72)	17.2 (73)	2,018	40.1 (12)	1,769	23.1 (50)	1,631	85.7 (69)
St Joseph	1,036	69.2 (76)	17.6 (74)	1,248	36.6 (26)	1,161	20.3 (64)	985	88.6 (51)
Tuscola	772	82.0 (62)	10.4 (58)	819	33.1 (47)	748	28.1 (24)	604	93.9 (10)
Van Buren	1,157	80.0 (67)	13.2 (68)	1,350	37.7 (20)	1,093	11.5 (74)	1,067	87.7 (56)
Washtenaw	2,857	92.0 (12)	3.2 (11)	3,144	29.8 (60)	2,867	14.9 (71)	2,359	93.3 (14)
Wayne	37,618	86.6 (36)	2.9 (9)	40,446	22.2 (78)	28,562	20.7 (61)	28,233	88.3 (52)
Wexford	669	77.4 (70)	13.3 (69)	736	37.2 (22)	661	27.2 (27)	572	86.9 (60)
<b>Michigan</b>	<b>136,924</b>	<b>86.9</b>	<b>5.1</b>	<b>149,995</b>	<b>28.3</b>	<b>120,804</b>	<b>20.8</b>	<b>110,018</b>	<b>89.4</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

Run Date: 5/29/2024

## Table 7B

### 2019 - 2021 Pregnancy Nutrition Surveillance <sup>(1)</sup> Michigan Comparison of Smoking Indicators by County Combined 3 Years

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Comparison of Smoking Indicators (2,3)										
County	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)	
Alcona	86	*	97	*	23	*	77	*	97	*
Alger	80	*	81	*	28	*	73	*	81	*
Allegan	1,146	28.4 (17)	1,249	14.8 (20)	273	39.9 (14)	1,005	6.0 (13)	1,255	1.8 (21)
Alpena	395	45.6 (73)	415	28.0 (68)	147	28.6 (44)	361	12.2 (44)	414	2.2 (31)
Antrim	206	38.3 (53)	240	22.9 (53)	67	*	191	20.4 (71)	240	6.7 (75)
Arenac	282	42.2 (63)	316	29.1 (71)	105	33.3 (29)	248	20.6 (72)	316	9.5 (77)
Baraga	110	45.5 (71)	123	31.7 (75)	39	*	98	*	123	3.3 (50)
Barry	533	37.0 (50)	579	17.4 (27)	157	49.0 (4)	448	8.7 (25)	581	2.8 (43)
Bay	1,370	35.5 (40)	1,447	20.9 (41)	423	28.8 (43)	1,252	12.0 (43)	1,451	3.8 (58)
Benzie	214	40.7 (59)	226	21.2 (42)	75	*	188	12.8 (50)	227	4.4 (65)
Berrien	2,137	29.9 (21)	2,303	14.4 (17)	484	43.0 (11)	1,863	12.4 (48)	2,306	3.7 (54)
Branch	852	27.7 (16)	928	15.0 (21)	182	33.5 (28)	741	10.3 (36)	930	1.3 (10)
Calhoun	2,324	26.9 (15)	2,537	13.9 (15)	512	31.1 (38)	2,059	6.1 (14)	2,567	1.4 (15)
Cass	770	22.2 (9)	828	10.9 (9)	155	32.3 (34)	694	5.9 (12)	828	0.7 (1)
Charlevoix	279	33.3 (31)	309	19.1 (34)	81	*	249	8.0 (22)	307	5.2 (72)
Cheboygan	331	42.0 (62)	347	22.5 (51)	116	38.8 (18)	304	10.9 (38)	348	3.7 (54)
Chippewa	515	36.1 (45)	531	25.4 (62)	158	17.1 (54)	463	11.9 (42)	534	4.5 (68)
Clare	509	44.6 (70)	537	28.7 (69)	192	26.6 (48)	475	15.6 (61)	536	2.4 (36)
Clinton	332	30.1 (23)	380	15.5 (22)	91	*	296	4.7 (4)	383	1.8 (21)

(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

Run Date: 5/29/2024

## Table 7B

2019 - 2021 Pregnancy Nutrition Surveillance <sup>(1)</sup>

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## Michigan

### Comparison of Smoking Indicators by County

### Combined 3 Years

Comparison of Smoking Indicators (2,3)										
County	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)
Crawford	233	34.3 (36)	249	25.3 (61)	69	*	210	10.0 (34)	248	1.2 (8)
Delta	546	42.9 (65)	574	24.2 (57)	189	37.6 (21)	489	12.3 (46)	574	3.0 (46)
Dickinson	352	33.0 (29)	363	21.2 (42)	98	*	315	5.4 (8)	362	1.1 (4)
Eaton	612	39.1 (56)	660	19.8 (36)	183	41.5 (13)	512	6.3 (15)	660	2.6 (38)
Emmet	386	36.5 (48)	409	19.1 (34)	114	34.2 (26)	329	8.8 (26)	408	2.9 (44)
Genesee	6,393	23.9 (13)	7,142	13.4 (14)	1,215	37.4 (22)	5,531	8.6 (24)	7,150	2.1 (30)
Gladwin	350	34.9 (39)	374	21.4 (45)	98	*	313	14.7 (58)	375	3.7 (54)
Gogebic	143	45.5 (71)	163	31.3 (74)	54	*	125	20.8 (73)	163	3.7 (54)
Gr Travers	982	35.7 (42)	1,084	16.3 (25)	286	44.1 (9)	814	7.6 (19)	1,090	2.4 (36)
Gratiot	522	33.7 (33)	571	20.1 (39)	155	32.9 (32)	476	10.7 (37)	575	1.4 (15)
Hillsdale	556	40.8 (60)	621	27.5 (66)	189	29.1 (42)	501	13.8 (54)	620	2.3 (32)
Houghton	477	34.4 (37)	500	22.8 (52)	136	31.6 (36)	433	7.4 (18)	500	1.8 (21)
Huron	354	38.7 (54)	401	22.4 (49)	116	31.0 (39)	294	14.6 (57)	401	4.5 (68)
Ingham	4,467	17.2 (5)	5,018	9.3 (7)	644	39.6 (15)	3,868	5.0 (5)	5,007	2.3 (32)
Ionia	801	32.5 (28)	889	20.0 (38)	218	28.0 (46)	680	7.8 (21)	894	1.9 (27)
Iosco	379	40.4 (58)	406	29.1 (71)	129	20.2 (53)	354	16.1 (63)	407	2.9 (44)
Iron	142	49.3 (75)	146	37.7 (77)	60	*	135	16.3 (64)	145	4.8 (70)
Isabella	914	31.8 (27)	974	18.8 (31)	241	33.2 (30)	813	10.0 (34)	973	2.0 (28)
Jackson	2,509	34.8 (38)	2,734	22.1 (47)	757	30.3 (40)	2,287	9.2 (30)	2,734	2.0 (28)

(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

Run Date: 5/29/2024

Table 7B

2019 - 2021 Pregnancy Nutrition Surveillance <sup>(1)</sup>

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Michigan

Comparison of Smoking Indicators by County

Combined 3 Years

Comparison of Smoking Indicators (2,3)										
County	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)
Kalamazoo	3,384	23.2 (11)	3,567	12.4 (11)	634	33.8 (27)	3,011	6.3 (15)	3,564	1.3 (10)
Kalkaska	239	43.5 (67)	271	24.0 (56)	85	*	214	18.2 (67)	272	4.4 (65)
Kent	8,428	15.5 (3)	9,318	7.4 (4)	1,018	44.1 (9)	7,156	4.1 (2)	9,270	1.1 (4)
Lake	140	55.0 (76)	154	35.1 (76)	73	*	133	23.3 (74)	153	7.2 (76)
Lapeer	952	28.5 (19)	1,029	14.7 (18)	201	44.3 (8)	823	8.5 (23)	1,029	1.7 (20)
Leelanau	92	*	103	12.6 (12)	23	*	81	*	103	1.0 (3)
Lenawee	1,052	30.9 (25)	1,141	14.2 (16)	245	45.3 (6)	918	9.4 (31)	1,142	4.1 (62)
Livingston	857	28.8 (20)	928	16.9 (26)	191	36.6 (23)	694	5.2 (7)	930	1.3 (10)
Luce	110	44.5 (69)	109	23.9 (55)	41	*	105	14.3 (55)	107	0.9 (2)
Mackinac	83	*	89	*	17	*	68	*	89	*
Macomb	8,260	15.8 (4)	9,222	7.1 (3)	1,003	45.8 (5)	6,900	5.8 (11)	9,221	1.2 (8)
Manistee	259	36.3 (47)	284	24.3 (58)	84	*	229	12.2 (44)	285	4.2 (63)
Marquette	646	41.3 (61)	653	25.7 (63)	240	32.9 (32)	579	8.8 (26)	663	1.8 (21)
Mason	339	37.2 (51)	366	21.3 (44)	109	31.2 (37)	312	13.5 (51)	365	3.6 (52)
Mecosta	617	33.7 (33)	681	21.9 (46)	183	25.1 (50)	572	13.5 (51)	689	2.3 (32)
Menominee	228	43.0 (66)	233	29.2 (73)	74	*	190	14.7 (58)	232	2.6 (38)
Midland	806	28.4 (17)	896	16.2 (24)	186	36.6 (23)	687	5.7 (9)	893	1.8 (21)
Missaukee	181	30.9 (25)	184	19.0 (32)	45	*	164	11.0 (40)	183	1.6 (19)
Monroe	1,658	33.7 (33)	1,811	17.7 (28)	449	39.2 (17)	1,426	10.9 (38)	1,806	4.0 (61)

(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

Run Date: 5/29/2024

Table 7B

## 2019 - 2021 Pregnancy Nutrition Surveillance (1) Michigan Comparison of Smoking Indicators by County Combined 3 Years

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Comparison of Smoking Indicators (2,3)										
County	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)	
Montcalm	866	38.8 (55)	952	22.9 (53)	279	32.3 (34)	778	14.3 (55)	960	3.6 (52)
Montmorenc	123	42.3 (64)	133	27.8 (67)	40	*	108	18.5 (68)	135	5.2 (72)
Muskegon	3,084	29.9 (21)	3,411	18.3 (30)	781	29.8 (41)	2,787	9.9 (33)	3,422	3.1 (48)
Newaygo	933	26.4 (14)	990	15.6 (23)	218	35.8 (25)	842	7.6 (19)	992	1.5 (17)
Oakland	8,962	11.5 (1)	9,687	5.2 (1)	808	41.6 (12)	7,525	5.0 (5)	9,680	1.3 (10)
Oceana	409	23.5 (12)	444	12.8 (13)	77	*	369	6.8 (17)	444	2.3 (32)
Ogemaw	331	36.6 (49)	356	26.7 (65)	100	23.0 (51)	303	19.1 (69)	356	6.2 (74)
Ontonagon	49	*	48	*	14	*	45	*	48	*
Osceola	391	35.8 (43)	420	22.4 (49)	114	28.1 (45)	352	15.9 (62)	421	3.8 (58)
Oscoda	104	35.6 (41)	113	24.8 (59)	29	*	95	*	113	2.7 (41)
Otsego	390	37.2 (51)	440	26.6 (64)	122	26.2 (49)	345	19.7 (70)	440	3.0 (46)
Ottawa	2,686	19.2 (6)	2,976	8.9 (6)	414	44.7 (7)	2,250	3.7 (1)	2,970	1.3 (10)
Presque Is	86	*	94	*	19	*	75	*	95	*
Roscommon	277	44.0 (68)	291	28.9 (70)	97	*	257	17.1 (66)	291	3.4 (51)
Saginaw	3,237	33.1 (30)	3,546	12.0 (10)	936	52.1 (2)	2,967	11.1 (41)	3,577	2.7 (41)
Sanilac	515	22.3 (10)	523	14.7 (18)	90	*	470	8.9 (28)	523	1.5 (17)
Schoolcraf	114	45.6 (73)	113	24.8 (59)	44	*	108	16.7 (65)	114	4.4 (65)
Shiawassee	905	35.9 (44)	988	19.0 (32)	267	33.0 (31)	790	12.3 (46)	981	4.2 (63)
St Clair	1,795	39.6 (57)	1,858	19.9 (37)	584	39.4 (16)	1,629	15.4 (60)	1,859	5.1 (71)

(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

Run Date: 5/29/2024

## Table 7B

2019 - 2021 Pregnancy Nutrition Surveillance <sup>(1)</sup>

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## Michigan

Comparison of Smoking Indicators by County

Combined 3 Years

Comparison of Smoking Indicators <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)
St Joseph	1,086	33.5 (32)	1,134	17.8 (29)	291	38.8 (18)	983	9.8 (32)	1,128	3.1 (48)
Tuscola	692	36.1 (45)	792	20.5 (40)	215	38.1 (20)	604	12.7 (49)	792	1.8 (21)
Van Buren	1,169	21.2 (8)	1,222	10.5 (8)	204	27.5 (47)	1,061	4.2 (3)	1,237	1.1 (4)
Washtenaw	2,709	19.5 (7)	2,908	8.3 (5)	427	51.1 (3)	2,354	5.7 (9)	2,910	1.1 (4)
Wayne	33,183	14.3 (2)	38,295	5.5 (2)	3,754	54.5 (1)	28,150	9.0 (29)	38,271	2.6 (38)
Wexford	632	30.7 (24)	703	22.3 (48)	160	20.6 (52)	571	13.5 (51)	702	3.8 (58)
Michigan	126,731	22.5	140,279	11.5	23,244	39.8	109,690	8.4	140,315	2.3

(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

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## Table 8B

### 2019 - 2021 Pregnancy Nutrition Surveillance <sup>(1)</sup> Michigan Comparison of Infant Health Indicators by County Combined 3 Years

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Comparison of Infant Health Indicators <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	90	*	*	93	*	84	*	90	*
Alger	77	*	*	79	*	71	*	77	*
Allegan	1,172	8.1 (31)	8.3 (42)	1,213	13.4 (65)	1,009	2.1 (4)	1,187	76.7 (38)
Alpena	388	8.2 (33)	10.1 (67)	395	10.1 (16)	342	3.5 (28)	386	72.0 (55)
Antrim	217	7.4 (15)	10.6 (70)	226	11.1 (35)	190	3.7 (34)	222	82.4 (17)
Arenac	295	10.8 (63)	7.1 (21)	306	11.4 (43)	258	5.0 (62)	296	72.3 (54)
Baraga	118	6.8 (9)	11.0 (73)	118	8.5 (4)	106	3.8 (37)	118	76.3 (40)
Barry	540	9.1 (45)	8.1 (37)	568	11.4 (43)	477	4.0 (40)	546	82.8 (16)
Bay	1,361	9.5 (48)	8.2 (40)	1,416	11.0 (33)	1,215	4.2 (42)	1,368	65.6 (67)
Benzie	212	5.7 (2)	9.4 (58)	219	11.0 (33)	190	2.6 (12)	212	84.4 (7)
Berrien	2,173	8.5 (38)	5.2 (4)	2,234	9.9 (13)	1,926	4.7 (55)	2,178	70.2 (62)
Branch	884	8.6 (42)	8.3 (42)	909	10.0 (14)	783	4.2 (42)	891	75.1 (43)
Calhoun	2,442	9.6 (51)	7.2 (23)	2,493	10.0 (14)	2,174	4.8 (56)	2,455	73.2 (51)
Cass	775	7.2 (11)	8.3 (42)	796	10.8 (29)	687	3.6 (30)	776	74.6 (45)
Charlevoix	266	11.3 (66)	6.8 (15)	294	13.3 (63)	230	4.8 (56)	287	83.6 (14)
Cheboygan	331	8.5 (38)	6.9 (16)	331	10.6 (26)	288	4.2 (42)	331	78.9 (28)
Chippewa	486	8.0 (29)	11.9 (75)	501	10.6 (26)	424	2.8 (13)	485	68.0 (64)
Clare	502	6.4 (5)	5.8 (7)	526	10.3 (23)	449	3.6 (30)	501	73.1 (52)
Clinton	368	13.6 (75)	10.6 (70)	371	14.3 (72)	311	4.5 (52)	370	85.1 (4)

(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

Run Date: 5/29/2024

## Table 8B

### 2019 - 2021 Pregnancy Nutrition Surveillance (1) Michigan Comparison of Infant Health Indicators by County Combined 3 Years

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Comparison of Infant Health Indicators (2,3)									
County	Birthweight			Preterm		Full Term LBW		Ever Breastfed	
	Low		High	(6)		(7)			
	Number	% (rank)	% (rank)	Number	% (rank)	Number	% (rank)	Number	% (rank)
Crawford	202	9.4 (47)	9.9 (66)	239	11.7 (48)	179	3.9 (39)	203	83.7 (12)
Delta	534	6.6 (7)	8.8 (52)	559	9.7 (12)	479	2.5 (10)	535	79.6 (23)
Dickinson	353	7.6 (19)	7.9 (32)	359	12.0 (51)	311	3.5 (28)	354	75.4 (42)
Eaton	616	10.2 (55)	8.1 (37)	650	11.8 (49)	541	4.4 (48)	630	83.8 (10)
Emmet	383	7.8 (24)	7.0 (20)	396	11.1 (35)	338	2.1 (4)	389	87.9 (1)
Genesee	6,846	11.6 (67)	5.1 (2)	7,025	13.5 (66)	5,886	5.6 (69)	6,857	56.6 (73)
Gladwin	343	7.6 (19)	7.9 (32)	354	12.7 (58)	299	2.3 (7)	344	80.8 (20)
Gogebic	153	6.5 (6)	9.2 (57)	157	9.6 (9)	136	1.5 (2)	156	76.3 (40)
Gr Travers	1,013	7.7 (22)	11.5 (74)	1,049	9.5 (8)	909	3.1 (21)	1,017	84.4 (7)
Gratiot	538	6.3 (3)	8.7 (48)	548	9.3 (6)	479	1.5 (2)	539	81.4 (19)
Hillsdale	585	8.2 (33)	8.7 (48)	606	10.9 (30)	518	3.3 (25)	586	78.8 (29)
Houghton	464	7.5 (18)	10.8 (72)	486	7.6 (3)	425	4.9 (58)	464	87.1 (2)
Huron	373	8.6 (42)	9.1 (55)	391	10.7 (28)	336	3.0 (19)	372	77.7 (33)
Ingham	4,686	10.3 (57)	5.9 (10)	4,879	12.7 (58)	4,087	4.3 (47)	4,721	76.5 (39)
Ionia	856	7.9 (27)	9.6 (63)	874	10.9 (30)	756	2.9 (17)	856	83.4 (15)
Iosco	368	9.5 (48)	8.7 (48)	381	10.2 (19)	326	5.5 (68)	368	64.4 (69)
Iron	134	8.2 (33)	9.7 (64)	139	10.1 (16)	120	3.3 (25)	134	76.9 (35)
Isabella	919	9.7 (52)	9.1 (55)	955	11.3 (41)	819	5.0 (62)	920	75.0 (44)
Jackson	2,582	9.9 (53)	7.9 (32)	2,648	11.4 (43)	2,289	4.5 (52)	2,586	70.8 (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) <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

Run Date: 5/29/2024

## Table 8B

2019 - 2021 Pregnancy Nutrition Surveillance <sup>(1)</sup>

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## Michigan

Comparison of Infant Health Indicators by County

Combined 3 Years

Comparison of Infant Health Indicators <sup>(2,3)</sup>									
County	Birthweight			Preterm		Full Term LBW		Ever Breastfed	
	Low		High	(6)		(7)			
	Number	% (rank)	% (rank)	Number	% (rank)	Number	% (rank)	Number	% (rank)
Kalamazoo	3,308	10.9 (64)	6.9 (16)	3,472	12.2 (53)	2,884	4.2 (42)	3,347	70.0 (63)
Kalkaska	256	10.2 (55)	9.4 (58)	260	10.4 (24)	224	4.9 (58)	257	86.0 (3)
Kent	8,751	12.5 (71)	5.8 (7)	9,096	15.1 (73)	7,402	5.0 (62)	8,827	74.4 (48)
Lake	143	11.9 (68)	9.8 (65)	147	17.0 (76)	115	5.2 (67)	143	73.4 (50)
Lapeer	975	8.5 (38)	7.7 (31)	988	12.0 (51)	844	4.0 (40)	976	78.1 (30)
Leelanau	96	*	*	99	*	85	*	96	*
Lenawee	1,082	7.0 (10)	7.2 (23)	1,129	9.6 (9)	974	2.8 (13)	1,081	71.0 (58)
Livingston	896	10.5 (60)	6.7 (14)	911	12.5 (56)	781	3.8 (37)	894	83.9 (9)
Luce	105	9.5 (48)	9.5 (61)	104	13.5 (66)	90	*	105	81.9 (18)
Mackinac	82	*	*	88	*	78	*	82	*
Macomb	8,802	10.6 (61)	5.5 (6)	8,948	12.9 (61)	7,576	4.4 (48)	8,854	62.8 (70)
Manistee	248	13.3 (74)	6.9 (16)	263	15.6 (74)	205	4.4 (48)	250	76.8 (37)
Marquette	637	7.4 (15)	10.4 (69)	644	9.2 (5)	573	3.7 (34)	639	83.7 (12)
Mason	341	10.0 (54)	7.9 (32)	351	12.5 (56)	294	4.4 (48)	341	72.4 (53)
Mecosta	661	8.2 (33)	8.8 (52)	673	10.1 (16)	591	3.0 (19)	663	73.8 (49)
Menominee	222	8.1 (31)	8.6 (46)	226	10.2 (19)	198	5.1 (66)	222	61.7 (72)
Midland	862	7.2 (11)	10.1 (67)	884	9.6 (9)	777	2.3 (7)	862	79.1 (27)
Missaukee	152	6.6 (7)	7.2 (23)	169	6.5 (1)	138	2.9 (17)	152	84.9 (6)
Monroe	1,718	9.0 (44)	7.2 (23)	1,761	11.2 (39)	1,517	3.6 (30)	1,720	66.9 (65)

(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

Run Date: 5/29/2024

## Table 8B

### 2019 - 2021 Pregnancy Nutrition Surveillance (1) Michigan Comparison of Infant Health Indicators by County Combined 3 Years

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Comparison of Infant Health Indicators (2,3)									
County	Birthweight			Preterm		Full Term LBW		Ever Breastfed	
	Low		High	(6)		(7)			
	Number	% (rank)	% (rank)	Number	% (rank)	Number	% (rank)	Number	% (rank)
Montcalm	900	10.4 (59)	6.9 (16)	928	13.3 (63)	773	3.2 (24)	904	85.1 (4)
Montmorenc	126	10.3 (57)	8.7 (48)	127	9.4 (7)	112	6.3 (70)	126	79.4 (24)
Muskegon	3,250	10.6 (61)	5.8 (7)	3,302	13.1 (62)	2,775	4.6 (54)	3,259	65.1 (68)
Newaygo	924	7.7 (22)	7.5 (29)	949	11.8 (49)	811	3.6 (30)	927	79.3 (25)
Oakland	9,048	12.2 (70)	5.9 (10)	9,476	13.5 (66)	7,794	4.9 (58)	9,209	71.5 (56)
Oceana	420	7.4 (15)	7.4 (28)	420	11.2 (39)	365	3.3 (25)	424	77.8 (32)
Ogemaw	333	7.8 (24)	7.5 (29)	341	6.5 (1)	308	6.5 (72)	333	70.6 (61)
Ontonagon	46	*	*	47	*	40	*	46	*
Osceola	395	11.1 (65)	6.3 (13)	405	11.1 (35)	347	6.9 (73)	398	76.9 (35)
Oscoda	99	*	*	110	10.9 (30)	90	*	99	*
Otsego	384	9.1 (45)	9.4 (58)	429	10.5 (25)	337	4.2 (42)	420	74.5 (46)
Ottawa	2,560	8.5 (38)	8.6 (46)	2,890	12.2 (53)	2,231	3.1 (21)	2,826	80.6 (21)
Presque Is	92	*	*	92	*	78	*	92	*
Roscommon	274	4.7 (1)	7.3 (27)	274	10.2 (19)	239	1.3 (1)	274	74.5 (46)
Saginaw	3,403	12.5 (71)	5.1 (2)	3,487	13.7 (69)	2,935	4.9 (58)	3,407	62.5 (71)
Sanilac	496	7.3 (13)	6.0 (12)	517	11.4 (43)	434	2.5 (10)	503	54.7 (75)
Schoolcraf	110	7.3 (13)	8.2 (40)	109	15.6 (74)	91	*	110	77.3 (34)
Shiawassee	940	7.9 (27)	7.1 (21)	965	11.3 (41)	831	3.1 (21)	942	70.8 (59)
St Clair	1,767	8.3 (37)	7.9 (32)	1,812	11.4 (43)	1,560	3.7 (34)	1,771	66.3 (66)

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# WIC PNSS & PedNSS

Run Date: 5/29/2024

## Table 8B

2019 - 2021 Pregnancy Nutrition Surveillance (1)

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## Michigan

Comparison of Infant Health Indicators by County

Combined 3 Years

Comparison of Infant Health Indicators (2,3)									
County	Birthweight			Preterm		Full Term LBW		Ever Breastfed	
	Low (4)		High (5)	(6)		(7)			
	Number	% (rank)	% (rank)	Number	% (rank)	Number	% (rank)	Number	% (rank)
St Joseph	1,059	6.3 (3)	8.8 (52)	1,093	10.2 (19)	942	2.2 (6)	1,067	83.8 (10)
Tuscola	742	7.8 (24)	8.1 (37)	761	12.7 (58)	644	2.8 (13)	741	78.1 (30)
Van Buren	1,143	7.6 (19)	8.4 (45)	1,193	11.1 (35)	1,007	2.8 (13)	1,173	71.4 (57)
Washtenaw	2,737	12.0 (69)	5.4 (5)	2,817	13.9 (71)	2,339	5.0 (62)	2,753	79.3 (25)
Wayne	35,624	12.9 (73)	4.7 (1)	37,220	13.8 (70)	30,380	6.3 (70)	36,311	55.1 (74)
Wexford	654	8.0 (29)	9.5 (61)	664	12.2 (53)	561	2.3 (7)	655	80.6 (21)
<b>Michigan</b>	<b>131,523</b>	<b>10.9</b>	<b>6.3</b>	<b>136,468</b>	<b>12.7</b>	<b>113,828</b>	<b>4.8</b>	<b>133,104</b>	<b>56.3</b>

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