

WIC PNNS & PedNSS

Table 1C 2018 Pediatric Nutrition Surveillance ⁽¹⁾ Michigan Summary of Demographic Indicators Children Aged < 5 Years ^(2,3)

Total Records	Number
Individual Children	212,233
Total Records (All Visits)	340,840

Source of Data	Number	%
WIC	212,233	100.0
EPSDT	0	0.0
Child Health-MCH	0	0.0
Child Health-HMO	0	0.0
HeadStart	0	0.0
School Health	0	0.0
Other	0	0.0
Total	212,233	100.0
<i>Excluded Unknown</i>	<i>0</i>	<i>0.0 %</i>

Race/Ethnic Distribution	Number	%
White, Not Hispanic	99,793	47.0
Black, Not Hispanic	58,637	27.6
Hispanic	28,818	13.6
American Indian/Alaska Native	643	0.3
Asian/Pacific Islander	4,297	2.0
Multiple Races	19,546	9.2
All Other	71	0.0
Total	211,805	100.0
<i>Excluded Unknown</i>	<i>428</i>	<i>0.2 %</i>

Age Distribution ⁽⁴⁾	Number	%
0 - 5 Months	37,802	17.8
6 - 11 Months	26,605	12.5
12 - 23 Months	45,847	21.6
24 - 35 Months	35,696	16.8
3 - 4 Years	66,283	31.2
Total	212,233	100.0

% of Poverty Level	Number	%
0 - 50	83,752	39.9
51 - 100	63,747	30.4
101 - 130	28,019	13.4
131 - 150	11,718	5.6
151 - 185	14,404	6.9
186 - 200	1,909	0.9
Over 200	6,287	3.0
Adjunctive Eligibility	1	0.0
Total	209,837	100.0
<i>Excluded Unknown</i>	<i>2,396</i>	<i>1.1 %</i>

Program Participation	Number	%
WIC	212,233	100.0
SNAP	210,862	44.5
Medicaid	208,468	82.4
Tanf	211,107	3.5
Excluded Unknown		
WIC	0	0.0
SNAP	1,371	0.6
Medicaid	3,765	1.8
Tanf	1,126	0.5

Migrant Status	Number	%
Yes	1,547	0.7
No	210,686	99.3
Total	212,233	100.0
<i>Excluded Unknown</i>	<i>0</i>	<i>0.0 %</i>

(1) Reporting period is January 1 through December 31

(2) Analyses based on one record per child

(3) Excludes records with unknown data or errors.

(4) Records rejected if date of birth and date of visit unknown

WIC PNNS & PedNSS

Table 2C 2018 Pediatric Nutrition Surveillance (1) Michigan Summary of Health Indicators Children Aged < 5 Years (2)

Summary of Health Indicators (3)				
	Michigan Prevalence		National (10) Prevalence (Prior Year)	
	Number	%	Number	%
Birthweight				
Low	48,804	11.0	64,446	10.8
High	48,804	6.6	64,446	7.0
Height and Weight (5,6) (3)				
< 5 Yrs Short Stature	205,990	7.6	313,489	7.4
< 5 Yrs Underweight	205,990	3.2	313,489	2.9
< 5 Yrs Obese	205,990	10.7	313,489	10.9
>= 2 Yrs Overweight	85,908	16.3	133,678	16.4
>=2 Yrs Obese	85,908	13.5	133,678	13.4
Anemia (7)				
Low Hb	136,885	23.4	211,675	19.3
Low Hct	32	*	35	54.3
Low Hb/Hct	136,909	23.4	211,699	19.3
Breastfeeding (8)				
Ever Breastfed	49,377	66.8	64,536	70.2
Breastfed At Least 6 Months	38,049	31.4	56,977	28.6
Breastfed At Least 12 Months	32,543	12.7	47,523	14.6
Smoking in Household	210,908	2.9	295,248	3.4
<= 2 Hours TV Viewing/ Day (9)	100,561	82.1	141,591	83.5

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

(2) Analyses based on one record per child.

(3) Excludes records with unknown data or errors.

(4) Infants born during the reporting period included in the analysis. Low birthweight is defined as < 2500 grams and high birthweight is defined as > 4000 grams.

(5) Based on 2006 WHO growth chart percentiles for children under 2 years of age; short stature is defined as length-for-age <= 2.3rd percentile, underweight is defined as weight-for-length <= 2.3rd percentile, and high weight-for-length (labeled as "Obese") is defined as >= 97.7th percentile.

(6) Based on 2000 CDC growth chart percentiles for children 2 years of age and older; short stature is defined as height-for-age < 5th percentile, underweight is defined as BMI-for-age < 5th percentile, overweight is defined as BMI-for-age >= 85th to < 95th percentile, and obesity is defined as >= 95th percentile.

(7) Based on 1998 CDC MMWR, "Recommendations to Prevent and Control Iron Deficiency in the United States", altitude adjusted, children 6 months of age and older included in the analysis.

(8) Infants born during the reporting period included in the Ever Breastfed analysis.

Infants who turned 6 months of age during the reporting period by/on their date of visit included in the Breastfed At Least 6 Months analysis.

Children who turned 12 months of age during the reporting period by/on their date of visit included in the Breastfed At Least 12 Months analysis.

(9) Children aged 2 years and older included in the analysis.

(10) 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.

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Table 3C 2018 Pediatric Nutrition Surveillance ⁽¹⁾ Michigan Summary of Breastfeeding Indicators Children Aged < 5 Years ⁽²⁾

Summary of Breastfeeding Indicators ⁽³⁾				
	Michigan Prevalence		National ⁽⁷⁾ Prevalence (Prior Year)	
	Number	%	Number	%
Breastfeeding Duration ^(4,5)				
Ever Breastfed	49,377	66.8	64,536	70.2
Breastfed 1+ Weeks	42,134	61.1	59,469	63.7
Breastfed 2+ Weeks	35,952	56.8	53,099	59.4
Breastfed 3+ Weeks	32,475	53.2	49,893	55.1
Breastfed 4+ Weeks	30,778	50.3	48,350	51.5
Breastfed 6+ Weeks	29,957	46.0	47,591	45.7
Breastfed 2+ Months	30,817	44.0	49,137	41.8
Breastfed 3+ Months	33,683	40.0	52,440	37.5
Breastfed 4+ Months	37,093	37.0	56,223	34.2
Breastfed 5+ Months	40,867	34.4	60,984	31.4
Breastfed 6+ Months	38,049	31.4	56,977	28.6
Breastfed 9+ Months	28,883	16.1	43,656	17.8
Breastfed 12+ Months	32,543	12.7	47,523	14.6
Breastfed 18+ Months	23,631	8.2	35,426	9.8
Exclusive Breastfeeding ⁽⁶⁾				
Exclusively Breastfed at Least 3 Months	26,949	16.3	45,032	16.4
Exclusively Breastfed at Least 6 Months	31,907	9.2	50,544	8.8

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

(2) Analyses based on one record per child.

(3) Excludes records with unknown data or errors.

(4) Infants born during the reporting period included in the Ever Breastfed analysis. For each breastfeeding duration category, the analysis includes only children who turned that age during the reporting period by/on their date of visit. For example, infants who turned 9 months old during the reporting period by/on their date of visit are included in the 9+ months analysis.

(5) It is possible the analysis will show that slightly more infants are breastfed at older ages, e.g. 1+ weeks of age, than at younger ages, e.g. at birth (ever breastfed), due to variation in infants included in each breastfeeding analysis category.

(6) The analysis includes infants who were ever breastfed and who turned that age during the reporting period by/on their date of visit.

(7) National includes previous year's data for all participating States and ITOs.

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

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Table 4C

2018 Pediatric Nutrition Surveillance ⁽¹⁾

Michigan

Comparison of Racial and Ethnic Distribution by Contributor to National ⁽⁴⁾

Children Aged < 5 Years ⁽²⁾

Comparison of Racial and Ethnic Distribution								
Contributor	Number Included in Analysis ⁽³⁾	White, Not Hispanic %	Black, Not Hispanic %	Hispanic %	American Indian/Alaska Native %	Asian/Pacific Islander %	Multiple Races %	All Other/Unknown %
Michigan	212,233	47.0	27.6	13.6	0.3	2.0	9.2	0.2
National (Prior Year)	323,319	46.5	21.0	14.9	2.1	2.2	7.7	5.6

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

(2) Analyses based on one record per child.

(3) Excludes records with errors.

(4) National includes previous year's data for all participating States and ITOs.

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

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Table 5C

2018 Pediatric Nutrition Surveillance ⁽¹⁾

Michigan

Comparison of Age Distribution by Contributor to National ⁽⁵⁾

Children Aged < 5 Years ⁽²⁾

Comparison of Age Distribution				
Contributor	Number Included in Analysis (3,4)	0 - 11 Months %	12 - 23 Months %	24 - 59 Months %
Michigan	212,233	30.3	21.6	48.1
National (Prior Year)	323,319	29.3	22.1	48.6

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

(2) Analyses based on one record per child.

(3) Excludes records with unknown data or errors.

(4) Records rejected if date of birth and date of visit unknown.

(5) National includes previous year's data for all participating States and ITOs.

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

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Table 6C

2018 Pediatric Nutrition Surveillance ⁽¹⁾

Michigan

Comparison of Growth and Anemia Indicators by Contributor to National ⁽⁸⁾

Children Aged < 5 Years ⁽²⁾

Comparison of Growth and Anemia Indicators ⁽³⁾												
Contributor	Birth Weight ⁽⁴⁾			Height and Weight ^(5,6)						Anemia Low Hb/Hct ⁽⁷⁾		
	Low	High		Short Stature	Under-Weight	Obese		≥ 2 Yrs Overweight and Obese				
	Number	% <2500 g	% >4000 g	Number	%	%	%	Number	% Overweight	% Obese	Number	%
Michigan	48,804	11.0	6.6	205,990	7.6	3.2	10.7	85,908	16.3	13.5	136,909	23.4
National (Prior Year)	64,446	10.8	7.0	313,489	7.4	2.9	10.9	133,678	16.4	13.4	211,699	19.3

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

(2) Analyses based on one record per child.

(3) Excludes records with unknown data or errors.

(4) Infants born during the reporting period included in the analysis.

(5) Based on 2006 WHO growth chart percentiles for children under 2 years of age; short stature is defined as length-for-age ≤ 2.3rd percentile, underweight is defined as weight-for-length ≤ 2.3rd percentile, and high weight-for-length (labeled as "Obese") is defined as ≥ 97.7th percentile.

(6) Based on 2000 CDC growth chart percentiles for children 2 years of age and older; short stature is defined as height-for-age < 5th percentile, underweight is defined as BMI-for-age < 5th percentile, overweight is defined as BMI-for-age ≥ 85th to < 95th percentile, and obesity is defined as ≥ 95th percentile.

(7) Based on 1998 CDC MMWR, "Recommendations to Prevent and Control Iron Deficiency in the United States", altitude adjusted, children 6 months of age and older included in the analysis.

(8) National includes previous year's data for all participating States and ITOs.

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

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Table 7C

2018 Pediatric Nutrition Surveillance ⁽¹⁾

Michigan

Comparison of Breastfeeding, TV Viewing, and Smoking in Household by Contributor to National ^(2,8)

Children Aged < 5 Years ⁽³⁾

Comparison of Breastfeeding, TV Viewing, and Smoking in Household ⁽⁴⁾

Contributor	Breastfeeding ⁽⁵⁾				Exclusive Breastfeeding ⁽⁶⁾				≤ 2 Hours TV Viewing/Day ⁽⁷⁾		Smoking in Household			
	Number	% Ever Breastfed	Number	% Breastfed At Least 6 Months	Number	% Breastfed At Least 12 Months	Number	% Breastfed At Least 3 Months	Number	%	Number	%		
Michigan	49,377	66.8	38,049	31.4	32,543	12.7	26,949	16.3	31,907	9.2	100,561	82.1	210,908	2.9
National (Prior Year)	64,536	70.2	56,977	28.6	47,523	14.6	45,032	16.4	50,544	8.8	141,591	83.5	295,248	3.4

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

(2) TV Viewing and Smoking in Household data are not reported by all contributors.

(3) Analyses based on one record per child.

(4) Excludes records with unknown data or errors.

(5) Infants born during the reporting period included in the Ever Breastfed analysis.

Infants who turned 6 months of age during the reporting period by/on their date of visit included in the Breastfed At Least 6 Months analysis.

Children who turned 12 months of age during the reporting period by/on their date of visit included in the Breastfed At Least 12 Months analysis.

(6) The analysis includes infants who were ever breastfed and who turned that age during the reporting period by/on their date of visit.

(7) Children aged 2 years and older included in the analyses.

(8) National includes previous year's data for all participating States and ITOs.

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

WIC PNNS & PedNSS

Table 8C

2018 Pediatric Nutrition Surveillance ⁽¹⁾

Michigan

Growth and Anemia Indicators by Race/Ethnicity or Age

Children Aged < 5 Years ⁽²⁾

Growth and Anemia Indicators by Race/Ethnicity or Age ⁽³⁾

	Birth Weight ⁽⁴⁾			Height and Weight ^(5,6)						Anemia Low Hb/Hct ⁽⁷⁾		
	Low	High		Short Stature	Under-Weight	Obese	≥ 2 Yrs Overweight and Obese					
	Number	% <2500 g	% >4000 g	Number	%	%	%	Number	% Overweight	% Obese	Number	%
Race/Ethnicity												
White, Not Hispanic	22,119	9.0	8.1	97,159	7.5	2.8	10.6	41,027	17.0	13.5	65,413	17.9
Black, Not Hispanic	14,851	15.1	3.6	56,653	8.2	4.2	9.1	22,575	13.9	11.1	36,297	35.3
Hispanic	6,171	8.4	7.3	27,928	7.1	2.3	13.5	12,216	18.0	18.1	19,012	20.2
American Indian/Alaska Native	182	5.5	10.4	619	8.1	3.4	17.9	233	18.5	23.2	363	22.3
Asian/Pacific Islander	898	11.9	4.2	4,171	7.5	3.8	9.5	1,807	13.2	11.8	2,918	20.7
Multiple Races	4,332	10.9	7.8	18,979	7.5	2.9	11.4	7,947	17.1	13.5	12,747	23.0
All Other	25	*	*	66	*	*	*	21	*	*	37	*
Total	48,804	11.0	6.6	205,990	7.6	3.2	10.7	85,908	16.3	13.5	136,909	23.4
Age												
0 - 11 Months	-	*	*	62,004	12.4	5.4	5.8	-	*	*	5,483	27.9
12 - 23 Months	-	*	*	45,577	8.7	0.8	11.0	-	*	*	44,518	26.6
24 - 35 Months	-	*	*	35,240	5.2	2.0	12.9	22,746	15.7	12.3	31,365	25.3
36 - 47 Months	-	*	*	29,802	4.0	3.3	13.4	29,798	16.0	13.4	28,408	21.6
48 - 59 Months	-	*	*	33,367	3.1	3.4	14.5	33,364	16.9	14.5	27,135	17.0
Total	-	*	*	205,990	7.6	3.2	10.7	85,908	16.3	13.5	136,909	23.4

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

(2) Analyses based on one record per child.

(3) Excludes records with unknown data or errors.

(4) Infants born during the reporting period included in the analysis.

(5) Based on 2006 WHO growth chart percentiles for children under 2 years of age; short stature is defined as length-for-age ≤ 2.3rd percentile, underweight is defined as weight-for-length ≤ 2.3rd percentile, and high weight-for-length (labeled as "Obese") is defined as ≥ 97.7th percentile.

(6) Based on 2000 CDC growth chart percentiles for children 2 years of age and older; short stature is defined as height-for-age < 5th percentile, underweight is defined as BMI-for-age < 5th percentile, overweight is defined as BMI-for-age ≥ 85th to < 95th percentile, and obesity is defined as ≥ 95th percentile.

(7) Based on 1998 CDC MMWR, "Recommendations to Prevent and Control Iron Deficiency in the United States", altitude adjusted, children 6 months of age and older included in the analysis.

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

WIC PNNS & PedNSS

Table 9C

2018 Pediatric Nutrition Surveillance ⁽¹⁾

Michigan

Breastfeeding, TV Viewing, and Smoking in Household by Race/Ethnicity or Age ⁽²⁾

Children Aged < 5 Years ⁽³⁾

Breastfeeding, TV Viewing, and Smoking in Household by Race/Ethnicity or Age ⁽⁴⁾										
	Breastfeeding ⁽⁵⁾						≤ 2 Hours TV Viewing/Day ⁽⁷⁾		Smoking in Household	
	Number	% Ever Breastfed	Number	% Breastfed At Least 6 Months	Number	% Breastfed At Least 12 Months	Number	%	Number	%
Race/Ethnicity										
White, Not Hispanic	22,367	71.8	17,658	35.0	15,817	15.1	48,424	87.5	99,293	2.8
Black, Not Hispanic	15,051	56.8	11,001	24.8	8,378	7.4	25,831	71.1	58,219	3.9
Hispanic	6,223	70.9	4,931	31.7	4,400	14.1	14,414	83.7	28,629	1.5
American Indian/Alaska Native	186	68.8	123	42.3	85	*	264	88.6	615	7.3
Asian/Pacific Islander	922	78.4	719	42.4	678	24.3	2,161	78.4	4,270	0.7
Multiple Races	4,372	66.7	3,441	30.3	3,155	10.5	9,356	83.3	19,410	3.4
All Other/Unknown	27	*	15	*	5	*	29	*	69	*
Total	49,377	66.8	38,049	31.4	32,543	12.7	100,561	82.1	210,908	2.9
Age										
0 - 11 Months	-	*	-	*	-	*	-	*	63,722	2.2
12 - 23 Months	-	*	-	*	-	*	-	*	45,717	2.9
24 - 35 Months	-	*	-	*	-	*	35,133	83.8	35,572	3.2
36 - 47 Months	-	*	-	*	-	*	31,917	81.7	32,118	3.5
48 - 59 Months	-	*	-	*	-	*	33,511	80.8	33,779	3.5
Total	49,377	66.8	38,049	31.4	32,543	12.7	100,561	82.1	210,908	2.9

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

(2) TV Viewing and Smoking in Household are not reported by all contributors.

(3) Analyses based on one record per child.

(4) Excludes records with unknown data or errors.

(5) Infants born during the reporting period included in the Ever Breastfed analysis.

Infants who turned 6 months of age during the reporting period by/on their date of visit included in the Breastfed At Least 6 Months analysis.

Children who turned 12 months of age during the reporting period by/on their date of visit included in the Breastfed At Least 12 Months analysis.

(6) Children aged 2 years and older included in the analysis

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

WIC PNNS & PedNSS

Table 10C

2018 Pediatric Nutrition Surveillance ⁽¹⁾

Michigan

Summary of Trends in Racial and Ethnic Distribution

Children Aged < 5 Years ⁽²⁾

Summary of Trends in Racial and Ethnic Distribution								
Year	Number Included in Analysis ⁽³⁾	White, Not Hispanic %	Black, Not Hispanic %	Hispanic %	American Indian/Alaska Native %	Asian/Pacific Islander %	Multiple Races %	All Other/Unknown %
2018	212,233	47.0	27.6	13.6	0.3	2.0	9.2	0.2
2017	208,288	47.7	27.8	13.5	0.3	2.0	8.5	0.1
2016	231,594	48.5	27.2	13.6	0.3	2.0	8.3	0.2
2015	240,590	49.0	27.1	13.5	0.3	1.9	8.1	0.2
2014	250,091	49.4	26.9	13.4	0.3	1.8	8.1	0.1
2013	253,913	49.6	26.8	13.6	0.3	1.6	7.9	0.1
2012	257,024	50.4	26.2	13.7	0.3	1.6	7.8	0.1
2011	257,910	51.0	25.7	14.0	0.3	1.5	7.5	0.1

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

(2) Analyses based on one record per child.

(3) Excludes records with errors.

WIC PNNS & PedNSS

Table 11C

2018 Pediatric Nutrition Surveillance (1)

Michigan

Summary of Trends in Age Distribution

Children Aged < 5 Years (2)

Summary of Trends in Age Distribution (3)				
Year	Number Included in Analysis (4)	0 - 11 Months	12 - 23 Months	24 - 59 Months
		%	%	%
2018	212,233	30.3	21.6	48.1
2017	208,288	26.1	22.9	51.0
2016	231,594	29.8	22.1	48.1
2015	240,590	29.7	22.3	48.0
2014	250,091	29.6	22.0	48.4
2013	253,913	29.3	22.5	48.3
2012	257,024	29.3	22.0	48.7
2011	257,910	29.5	21.9	48.7

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

(2) Analyses based on one record per child.

(3) Records rejected if date of birth and date of visit unknown.

(4) Excludes records with unknown data or errors.

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

WIC PNNS & PedNSS

Table 12C 2018 Pediatric Nutrition Surveillance ⁽¹⁾ Michigan

Summary of Trends in Growth and Anemia Indicators Children Aged < 5 Years ⁽²⁾

Summary of Trends in Growth and Anemia Indicators ⁽³⁾												
Year	Birth Weight ⁽⁴⁾			Height and Weight ^(5,6)							Anemia Low Hb/Hct ⁽⁷⁾	
	Low	High		Short Stature	Under-Weight	Obese		≥ 2 Yrs Overweight and Obese				
	Number	% <2500 g	% >4000 g	Number	%	%	%	Number	% Overweight	% Obese	Number	%
2018	48,804	11.0	6.6	205,990	7.6	3.2	10.7	85,908	16.3	13.5	136,909	23.4
2017	38,606	11.8	6.5	202,447	7.2	3.0	10.7	89,268	16.2	13.2	142,864	22.8
2016	52,567	10.8	6.8	225,134	7.3	3.1	10.4	93,377	16.1	13.1	151,630	21.2
2015	55,089	10.5	6.8	234,036	6.8	3.0	10.1	97,204	16.3	12.9	157,509	19.6
2014	57,712	9.8	6.8	243,452	6.5	2.9	10.2	101,840	16.8	13.3	165,162	19.1
2013	58,430	9.6	6.9	247,235	6.4	3.0	10.3	103,993	16.8	13.2	163,964	19.2
2012	58,707	9.7	7.1	249,969	6.2	3.1	10.4	105,902	16.4	13.2	167,212	17.9
2011	59,582	9.4	6.9	251,251	6.1	3.1	10.4	106,051	16.5	13.2	166,650	16.4

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

(2) Analyses based on one record per child.

(3) Excludes records with unknown data or errors.

(4) Infants born during the reporting period included in the analysis.

(5) Based on 2006 WHO growth chart percentiles for children under 2 years of age; short stature is defined as length-for-age ≤ 2.3rd percentile, underweight is defined as weight-for-length ≤ 2.3rd percentile, and high weight-for-length (labeled as "Obese") is defined as ≥ 97.7th percentile.

(6) Based on 2000 CDC growth chart percentiles for children 2 years of age and older; short stature is defined as height-for-age < 5th percentile, underweight is defined as BMI-for-age < 5th percentile, overweight is defined as BMI-for-age ≥ 85th to < 95th percentile, and obesity is defined as ≥ 95th percentile.

(7) Based on 1998 CDC MMWR, "Recommendations to Prevent and Control Iron Deficiency in the United States", altitude adjusted, children 6 months of age and older included in the analysis.

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

WIC PNNS & PedNSS

Table 13C
2018 Pediatric Nutrition Surveillance (1)
Michigan
Summary of Trends in Breastfeeding
Children Aged < 5 Years (2)

Summary of Trends in Breastfeeding (3)						
Year	Breastfeeding (4)					
	Number	% Ever Breastfed	Number	% Breastfed At Least 6 Months	Number	% Breastfed At Least 12 Months
2018	49,377	66.8	38,049	31.4	32,543	12.7
2017	39,192	66.1	39,435	28.8	33,989	12.4
2016	53,465	65.3	42,533	19.7	37,529	11.6
2015	55,956	64.3	44,452	18.4	38,816	10.8
2014	58,296	62.9	45,723	18.5	40,540	9.9
2013	59,096	62.2	46,092	17.6	41,082	9.1
2012	59,352	60.7	46,180	17.7	42,029	8.9
2011	60,153	59.5	46,409	18.4	41,436	8.5

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

(2) Analyses based on one record per child.

(3) Excludes records with unknown data or errors.

(4) Infants born during the reporting period included in the Ever Breastfed analysis.

Infants who turned 6 months of age during the reporting period by/on their date of visit included in the Breastfed At Least 6 Months analysis.

Children who turned 12 months of age during the reporting period by/on their date of visit included in the Breastfed At Least 12 Months analysis.

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

WIC PNNS & PedNSS

Table 16C 2018 Pediatric Nutrition Surveillance ⁽¹⁾ Michigan Growth Indicators by Race/Ethnicity and Age Children Aged < 5 Years ⁽²⁾

Growth Indicators by Race/Ethnicity and Age ⁽³⁾									
	Short Stature (4,5)		Underweight (4,5)		Obese (4,5)		≥ 2 Yrs Overweight and Obese (4,5)		
	Number	%	Number	%	Number	%	Number	% Overweight	% Obese
White, Not Hispanic									
0 - 11 Months	36,560	11.5	36,560	4.2	36,560	6.0	0	*	*
12 - 23 Months	19,572	7.4	19,572	0.3	19,572	13.3	0	*	*
24 - 59 Months	40,840	4.0	40,840	2.7	40,840	13.5	40,840	17.0	13.5
Total	96,972	7.5	96,972	2.8	96,972	10.6	96,972	7.2	5.7
Black, Not Hispanic									
0 - 11 Months	23,712	13.3	23,712	5.3	23,712	6.3	0	*	*
12 - 23 Months	10,366	7.0	10,366	0.7	10,366	11.4	0	*	*
24 - 59 Months	22,430	3.2	22,430	4.7	22,430	11.1	22,430	13.9	11.1
Total	56,508	8.2	56,508	4.2	56,508	9.1	22,430	13.9	11.1
Hispanic									
0 - 11 Months	10,114	10.1	10,114	3.9	10,114	7.3	0	*	*
12 - 23 Months	5,598	7.7	5,598	0.2	5,598	14.6	0	*	*
24 - 59 Months	12,156	4.2	12,156	2.0	12,156	18.2	12,156	17.9	18.2
Total	27,868	7.1	27,868	2.4	27,868	13.5	12,156	17.9	18.2
American Indian/Alaska Native									
0 - 11 Months	280	12.5	280	5.4	280	8.9	0	*	*
12 - 23 Months	106	6.6	106	0.9	106	30.2	0	*	*
24 - 59 Months	230	3.5	230	2.2	230	23.5	230	18.7	23.5
Total	616	8.1	616	3.4	616	18.0	230	18.7	23.5

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

(2) Analyses based on one record per child.

(3) Excludes records with unknown data or errors.

(4) Based on 2006 WHO growth chart percentiles for children under 2 years of age; short stature is defined as length-for-age ≤ 2.3rd percentile, underweight is defined as weight-for-length ≤ 2.3rd percentile, and high weight-for-length (labeled as "Obese") is defined as ≥ 97.7th percentile.

(5) Based on 2000 CDC growth chart percentiles for children 2 years of age and older; short stature is defined as height-for-age < 5th percentile, underweight is defined as BMI-for-age < 5th percentile, overweight is defined as BMI-for-age ≥ 85th to < 95th percentile, and obesity is defined as ≥ 95th percentile.

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

WIC PNNS & PedNSS

Table 16C 2018 Pediatric Nutrition Surveillance ⁽¹⁾ Michigan Growth Indicators by Race/Ethnicity and Age Children Aged < 5 Years ⁽²⁾

Growth Indicators by Race/Ethnicity and Age ⁽³⁾									
	Short Stature (4,5)		Underweight (4,5)		Obese (4,5)		≥ 2 Yrs Overweight and Obese (4,5)		
	Number	%	Number	%	Number	%	Number	% Overweight	% Obese
Asian/Pacific Islander									
0 - 11 Months	1,538	10.9	1,538	3.1	1,538	6.2	0	*	*
12 - 23 Months	826	8.0	826	0.8	826	10.8	0	*	*
24 - 59 Months	1,796	4.3	1,796	5.7	1,796	11.9	1,822	13.0	11.7
Total	4,160	7.5	4,160	3.8	4,160	9.5	1,796	13.1	11.9
Multiple Races									
0 - 11 Months	7,110	12.6	7,110	4.2	7,110	7.0	0	*	*
12 - 23 Months	3,922	6.9	3,922	0.6	3,922	15.0	0	*	*
24 - 59 Months	7,907	3.2	7,907	3.0	7,907	13.5	7,907	17.1	14.7
Total	18,939	7.5	18,939	2.9	18,939	11.4	7,907	17.1	13.5
All Other/Unknown									
0 - 11 Months	30	*	30	*	30	*	0	*	*
12 - 23 Months	15	*	15	*	15	*	0	*	*
24 - 59 Months	21	*	21	*	21	*	21	*	*
Total	66	*	66	*	66	*	21	*	*
Total All Race/Ethnic Groups									
0 - 11 Months	79,629	12.0	79,629	4.5	79,629	6.3	0	*	*
12 - 23 Months	40,453	7.3	40,453	0.4	40,453	13.1	0	*	*
24 - 59 Months	85,460	3.8	85,460	3.2	85,460	13.5	85,460	16.3	13.5
Total	205,542	7.6	205,542	3.2	205,542	10.7	85,460	16.3	13.5

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

(2) Analyses based on one record per child.

(3) Excludes records with unknown data or errors.

(4) Based on 2006 WHO growth chart percentiles for children under 2 years of age; short stature is defined as length-for-age ≤ 2.3rd percentile, underweight is defined as weight-for-length ≤ 2.3rd percentile, and high weight-for-length (labeled as "Obese") is defined as ≥ 97.7th percentile.

(5) Based on 2000 CDC growth chart percentiles for children 2 years of age and older; short stature is defined as height-for-age < 5th percentile, underweight is defined as BMI-for-age < 5th percentile, overweight is defined as BMI-for-age ≥ 85th to < 95th percentile, and obesity is defined as ≥ 95th percentile.

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

WIC PNNS & PedNSS

Table 17C 2018 Pediatric Nutrition Surveillance ⁽¹⁾ Michigan Anemia Indicators by Race/Ethnicity and Age Children Aged < 5 Years ⁽²⁾

Anemia Indicators by Race/Ethnicity and Age ^(3,4)					
	Anemia Low Hb/Hct			Anemia Low Hb/Hct	
	Number	%		Number	%
White, Not Hispanic			Asian/Pacific Islander		
6 - 11 Months	2,361	22.8	6 - 11 Months	108	21.3
12 - 17 Months	12,628	22.2	12 - 17 Months	515	21.7
18 - 23 Months	8,817	22.1	18 - 23 Months	390	22.3
24 - 35 Months	14,962	18.7	24 - 35 Months	653	20.4
36 - 59 Months	26,644	13.7	36 - 59 Months	1,252	19.9
Total	65,412	17.9	Total	2,918	20.7
Black, Not Hispanic			Multiple Races		
6 - 11 Months	1,892	37.1	6 - 11 Months	429	25.4
12 - 17 Months	6,832	35.5	12 - 17 Months	2,515	25.6
18 - 23 Months	4,915	38.1	18 - 23 Months	1,746	26.0
24 - 35 Months	8,204	39.5	24 - 35 Months	3,042	25.8
36 - 59 Months	14,454	31.6	36 - 59 Months	5,015	18.8
Total	36,297	35.3	Total	12,747	23.0
Hispanic			All Other/Unknown		
6 - 11 Months	671	22.4	6 - 11 Months	4	*
12 - 17 Months	3,460	25.1	12 - 17 Months	16	*
18 - 23 Months	2,529	22.9	18 - 23 Months	38	*
24 - 35 Months	4,387	21.6	24 - 35 Months	38	*
36 - 59 Months	7,965	16.3	36 - 59 Months	63	*
Total	19,012	20.2	Total	159	17.0
American Indian/Alaska Native			Total All Race/Ethnic Groups		
6 - 11 Months	17	*	6 - 11 Months	5,482	27.9
12 - 17 Months	69	*	12 - 17 Months	26,035	26.4
18 - 23 Months	48	*	18 - 23 Months	18,483	26.8
24 - 35 Months	79	*	24 - 35 Months	31,365	25.3
36 - 59 Months	150	17.3	36 - 59 Months	55,543	19.3
Total	363	22.3	Total	136,908	23.4

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

(2) Analyses based on one record per child.

(3) Excludes records with unknown data or errors.

(4) Based on 1998 CDC MMWR, "Recommendations to Prevent and Control Iron Deficiency in the United States", altitude adjusted, children 6 months of age and older included in the analysis.

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

WIC PNNS & PedNSS

Table 18C

2018 Pediatric Nutrition Surveillance ⁽¹⁾

Michigan

Summary of Trends in Growth and Anemia Indicators by Race/Ethnicity

Children Aged < 5 Years ⁽²⁾

Summary of Trends in Growth and Anemia Indicators by Race/Ethnicity ⁽³⁾															
Race/Ethnicity	Year	Birth Weight ⁽⁴⁾			Height and Weight ^(5,6)							Anemia Low Hb/Hct ⁽⁷⁾			
		Low		High	Short Stature		Under-Weight		Obese		≥ 2 Yrs Overweight and Obese				
		Number	%	%	Number	%	%	%	Number	%	%	Number	%		
		<2500 g	>4000 g								Overweight	Obese			
White, Not Hispanic	2018	22,119	9.0	8.1	97,159	7.5	2.8	10.6	41,027	17.0	13.5	65,413	17.9		
	2017	17,655	9.9	8.3	96,835	7.0	2.6	10.8	43,079	16.8	13.3	68,808	17.3		
	2016	24,718	9.0	8.8	109,421	7.1	2.6	10.3	45,659	16.9	13.1	74,240	15.9		
	2015	26,289	8.8	8.6	114,948	6.7	2.6	9.9	47,623	16.9	12.9	77,714	14.3		
	2014	28,393	8.1	8.3	120,575	6.4	2.5	9.9	49,937	17.2	13.0	82,042	14.2		
	2013	28,825	8.2	8.6	123,092	6.4	2.7	9.9	51,046	17.2	12.8	81,420	14.2		
	2012	29,759	8.2	8.8	126,315	6.0	2.8	9.9	52,887	17.0	12.9	83,708	13.3		
	2011	30,418	7.8	8.4	128,453	5.9	2.8	9.9	54,175	16.9	12.6	84,861	12.1		
Black, Not Hispanic	2018	14,851	15.1	3.6	56,653	8.2	4.2	9.1	22,575	13.9	11.1	36,297	35.3		
	2017	11,946	15.8	3.2	55,990	7.6	4.0	8.9	23,897	14.1	10.5	38,405	34.8		
	2016	15,331	15.1	3.5	60,949	7.9	4.2	8.7	24,395	13.9	10.4	39,952	33.0		
	2015	16,219	14.9	3.4	63,104	7.5	4.1	8.4	25,277	14.0	10.1	41,390	31.6		
	2014	16,486	13.9	3.7	65,179	7.0	4.0	8.6	26,469	14.7	10.6	43,113	30.3		
	2013	17,015	13.1	3.7	65,995	6.8	4.0	8.9	26,866	14.8	10.9	42,551	30.4		
	2012	16,431	13.6	3.7	65,159	6.8	4.3	9.0	26,658	13.9	10.4	42,673	28.4		
	2011	16,616	13.6	4.0	64,322	7.0	4.2	9.0	25,699	13.9	10.6	41,184	26.5		

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

(2) Analyses based on one record per child.

(3) Excludes records with unknown data or errors.

(4) Infants born during the reporting period included in the analysis.

(5) Based on 2006 WHO growth chart percentiles for children under 2 years of age; short stature is defined as length-for-age ≤ 2.3rd percentile, underweight is defined as weight-for-length ≤ 2.3rd percentile, and high weight-for-length (labeled as "Obese") is defined as ≥ 97.7th percentile.

(6) Based on 2000 CDC growth chart percentiles for children 2 years of age and older; short stature is defined as height-for-age < 5th percentile, underweight is defined as BMI-for-age < 5th percentile, overweight is defined as BMI-for-age ≥ 85th to < 95th percentile, and obesity is defined as ≥ 95th percentile.

(7) Based on 1998 CDC MMWR, "Recommendations to Prevent and Control Iron Deficiency in the United States", altitude adjusted, children 6 months of age and older included in the analysis.

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

WIC PNNS & PedNSS

Table 18C

2018 Pediatric Nutrition Surveillance ⁽¹⁾

Michigan

Summary of Trends in Growth and Anemia Indicators by Race/Ethnicity

Children Aged < 5 Years ⁽²⁾

Summary of Trends in Growth and Anemia Indicators by Race/Ethnicity ⁽³⁾															
Race/Ethnicity	Year	Birth Weight ⁽⁴⁾			Height and Weight ^(5,6)							Anemia Low Hb/Hct ⁽⁷⁾			
		Low		High	Short Stature		Under-Weight		Obese		≥ 2 Yrs Overweight and Obese				
		Number	%	%	Number	%	%	%	Number	%	%	Number	%		
		<2500 g	>4000 g					Overweight	Obese						
Hispanic	2018	6,171	8.4	7.3	27,928	7.1	2.3	13.5	12,216	18.0	18.1	19,012	20.2		
	2017	4,802	9.1	7.3	27,285	7.0	2.2	13.4	12,530	18.3	17.1	19,815	19.8		
	2016	6,692	8.5	7.5	30,497	6.8	2.1	13.7	13,337	18.3	17.7	21,198	18.1		
	2015	6,913	7.9	8.0	31,467	6.4	2.2	13.6	14,101	18.4	17.4	21,962	16.7		
	2014	6,941	7.4	8.0	32,579	6.2	1.9	14.4	14,826	19.2	18.5	23,001	16.6		
	2013	6,946	7.3	8.0	33,576	6.0	1.9	13.9	15,510	19.1	18.0	23,582	16.8		
	2012	7,159	7.2	8.0	34,292	5.9	2.2	14.1	15,878	18.6	18.4	24,421	16.4		
	2011	7,298	7.3	7.5	35,084	5.5	2.1	14.3	16,192	19.2	18.4	24,944	14.9		
American Indian/Alaska Native	2018	182	5.5	10.4	619	8.1	3.4	17.9	233	18.5	23.2	363	22.3		
	2017	128	10.9	8.6	627	5.7	3.2	18.3	276	21.0	20.7	425	23.1		
	2016	151	10.6	7.3	672	6.7	3.6	18.0	285	21.1	21.1	438	20.5		
	2015	185	6.5	9.2	735	6.7	2.4	16.1	294	23.5	19.7	467	16.1		
	2014	179	11.2	10.1	745	5.6	2.7	16.6	304	21.7	23.4	466	20.4		
	2013	157	5.1	12.7	669	5.5	2.7	17.3	276	21.7	22.1	416	19.7		
	2012	159	6.3	15.7	695	5.6	2.7	14.5	279	22.6	16.5	420	14.8		
	2011	153	5.2	13.1	685	4.1	1.6	15.9	306	21.9	19.0	416	15.4		

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

(2) Analyses based on one record per child.

(3) Excludes records with unknown data or errors.

(4) Infants born during the reporting period included in the analysis.

(5) Based on 2006 WHO growth chart percentiles for children under 2 years of age; short stature is defined as length-for-age ≤ 2.3rd percentile, underweight is defined as weight-for-length ≤ 2.3rd percentile, and high weight-for-length (labeled as "Obese") is defined as ≥ 97.7th percentile.

(6) Based on 2000 CDC growth chart percentiles for children 2 years of age and older; short stature is defined as height-for-age < 5th percentile, underweight is defined as BMI-for-age < 5th percentile, overweight is defined as BMI-for-age ≥ 85th to < 95th percentile, and obesity is defined as ≥ 95th percentile.

(7) Based on 1998 CDC MMWR, "Recommendations to Prevent and Control Iron Deficiency in the United States", altitude adjusted, children 6 months of age and older included in the analysis.

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

WIC PNNS & PedNSS

Table 18C

2018 Pediatric Nutrition Surveillance ⁽¹⁾

Michigan

Summary of Trends in Growth and Anemia Indicators by Race/Ethnicity

Children Aged < 5 Years ⁽²⁾

Summary of Trends in Growth and Anemia Indicators by Race/Ethnicity ⁽³⁾															
Race/Ethnicity	Year	Birth Weight ⁽⁴⁾			Height and Weight ^(5,6)							Anemia Low Hb/Hct ⁽⁷⁾			
		Low		High	Short Stature		Under-Weight		Obese		≥ 2 Yrs Overweight and Obese				
		Number	%	%	Number	%	%	%	Number	%	%	Number	%		
		<2500 g	>4000 g								Overweight	Obese			
Asian/Pacific Islander	2018	898	11.9	4.2	4,171	7.5	3.8	9.5	1,807	13.2	11.8	2,918	20.7		
	2017	712	13.5	5.6	4,123	7.1	5.4	8.9	1,885	11.7	11.7	3,035	19.3		
	2016	948	11.3	3.8	4,400	6.3	4.5	8.1	1,952	10.9	10.8	3,144	19.9		
	2015	949	10.4	3.4	4,350	6.0	4.2	8.7	1,918	11.0	11.1	3,044	18.5		
	2014	977	10.2	5.2	4,447	6.4	4.0	8.7	1,916	12.4	13.1	3,138	17.2		
	2013	957	9.4	3.9	4,075	6.9	4.0	8.8	1,718	12.8	12.2	2,781	16.9		
	2012	917	11.6	3.8	3,903	6.8	4.2	8.0	1,693	14.1	11.3	2,676	17.2		
	2011	842	9.4	2.7	3,678	7.3	4.3	8.7	1,521	13.3	11.9	2,504	16.3		
Multiple Races	2018	4,332	10.9	7.8	18,979	7.5	2.9	11.4	7,947	17.1	13.5	12,747	23.0		
	2017	3,294	10.8	7.3	17,304	7.0	2.7	11.6	7,518	16.4	14.5	12,240	22.2		
	2016	4,545	9.9	6.8	18,771	6.9	2.7	11.5	7,660	16.3	14.4	12,509	20.5		
	2015	4,403	9.0	7.2	19,078	6.7	2.6	11.4	7,916	17.0	14.2	12,810	18.8		
	2014	4,665	9.5	7.4	19,661	6.4	2.5	11.1	8,307	17.7	14.1	13,289	18.3		
	2013	4,427	9.2	7.6	19,581	6.0	2.6	11.4	8,523	17.3	14.3	13,135	18.2		
	2012	4,224	9.7	7.2	19,472	5.7	2.6	11.5	8,485	17.0	14.5	13,283	16.6		
	2011	4,198	9.0	7.1	18,898	5.4	2.9	11.7	8,139	17.2	14.7	12,711	15.9		

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

(2) Analyses based on one record per child.

(3) Excludes records with unknown data or errors.

(4) Infants born during the reporting period included in the analysis.

(5) Based on 2006 WHO growth chart percentiles for children under 2 years of age; short stature is defined as length-for-age ≤ 2.3rd percentile, underweight is defined as weight-for-length ≤ 2.3rd percentile, and high weight-for-length (labeled as "Obese") is defined as ≥ 97.7th percentile.

(6) Based on 2000 CDC growth chart percentiles for children 2 years of age and older; short stature is defined as height-for-age < 5th percentile, underweight is defined as BMI-for-age < 5th percentile, overweight is defined as BMI-for-age ≥ 85th to < 95th percentile, and obesity is defined as ≥ 95th percentile.

(7) Based on 1998 CDC MMWR, "Recommendations to Prevent and Control Iron Deficiency in the United States", altitude adjusted, children 6 months of age and older included in the analysis.

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

WIC PNNS & PedNSS

Table 18C

2018 Pediatric Nutrition Surveillance ⁽¹⁾

Michigan

Summary of Trends in Growth and Anemia Indicators by Race/Ethnicity

Children Aged < 5 Years ⁽²⁾

Summary of Trends in Growth and Anemia Indicators by Race/Ethnicity ⁽³⁾													
Race/Ethnicity	Year	Birth Weight ⁽⁴⁾			Height and Weight ^(5,6)						Anemia Low Hb/Hct ⁽⁷⁾		
		Low		High	Short Stature		Under-Weight		Obese		≥ 2 Yrs Overweight and Obese		
		Number	%	%	Number	%	%	%	Number	%	%	Number	%
		<2500 g	>4000 g						Overweight	Obese			
All Other/Unknown	2018	25	*	*	66	*	*	*	21	*	*	37	*
	2017	7	*	*	51	*	*	*	21	*	*	44	*
	2016	18	*	*	56	*	*	*	21	*	*	34	*
	2015	15	*	*	50	*	*	*	18	*	*	28	*
	2014	15	*	*	48	*	*	*	21	*	*	31	*
	2013	13	*	*	45	*	*	*	22	*	*	31	*
	2012	7	*	*	45	*	*	*	19	*	*	25	*
	2011	10	*	*	45	*	*	*	17	*	*	28	*
Total All Race/Ethnic Groups	2018	48,804	11.0	6.6	205,990	7.6	3.2	10.7	85,908	16.3	13.5	136,909	23.4
	2017	38,606	11.8	6.5	202,447	7.2	3.0	10.7	89,268	16.2	13.2	142,864	22.8
	2016	52,567	10.8	6.8	225,134	7.3	3.1	10.4	93,377	16.1	13.1	151,630	21.2
	2015	55,089	10.5	6.8	234,036	6.8	3.0	10.1	97,204	16.3	12.9	157,509	19.6
	2014	57,712	9.8	6.8	243,452	6.5	2.9	10.2	101,840	16.8	13.3	165,162	19.1
	2013	58,430	9.6	6.9	247,235	6.4	3.0	10.3	103,993	16.8	13.2	163,964	19.2
	2012	58,707	9.7	7.1	249,969	6.2	3.1	10.4	105,902	16.4	13.2	167,212	17.9
	2011	59,582	9.4	6.9	251,251	6.1	3.1	10.4	106,051	16.5	13.2	166,650	16.4

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

(2) Analyses based on one record per child.

(3) Excludes records with unknown data or errors.

(4) Infants born during the reporting period included in the analysis.

(5) Based on 2006 WHO growth chart percentiles for children under 2 years of age; short stature is defined as length-for-age ≤ 2.3rd percentile, underweight is defined as weight-for-length ≤ 2.3rd percentile, and high weight-for-length (labeled as "Obese") is defined as ≥ 97.7th percentile.

(6) Based on 2000 CDC growth chart percentiles for children 2 years of age and older; short stature is defined as height-for-age < 5th percentile, underweight is defined as BMI-for-age < 5th percentile, overweight is defined as BMI-for-age ≥ 85th to < 95th percentile, and obesity is defined as ≥ 95th percentile.

(7) Based on 1998 CDC MMWR, "Recommendations to Prevent and Control Iron Deficiency in the United States", altitude adjusted, children 6 months of age and older included in the analysis.

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

WIC PNNS & PedNSS

Table 19C

2018 Pediatric Nutrition Surveillance (1)

Michigan

Summary of Trends in Breastfeeding Indicators by Race/Ethnicity

Children Aged < 5 Years (2)

Summary of Trends in Breastfeeding Indicators by Race/Ethnicity (3)							
Race/Ethnicity	Year	Breastfeeding (4)					
		Number	% Ever Breastfed	Number	% Breastfed At Least 6 Months	Number	% Breastfed At Least 12 Months
White, Not Hispanic	2018	22,367	71.8	17,658	35.0	15,817	15.1
	2017	18,018	71.6	18,693	33.3	16,797	14.8
	2016	25,269	70.4	20,561	23.1	18,792	14.2
	2015	26,851	69.9	22,041	22.2	19,870	13.1
	2014	28,707	69.0	22,860	22.2	20,845	12.2
	2013	29,213	68.4	23,565	21.0	21,192	11.0
	2012	30,142	66.9	23,888	20.7	21,888	10.6
	2011	30,730	65.7	23,705	21.0	21,483	9.8
Black, Not Hispanic	2018	15,051	56.8	11,001	24.8	8,378	7.4
	2017	12,058	54.7	11,296	20.6	8,719	7.0
	2016	15,514	53.5	11,753	12.4	9,661	6.0
	2015	16,379	51.6	12,371	11.1	9,769	5.8
	2014	16,595	49.7	12,610	11.6	10,364	4.8
	2013	17,129	49.0	12,468	11.0	10,403	4.7
	2012	16,564	47.4	12,264	11.2	10,525	4.4
	2011	16,729	46.3	12,617	11.9	10,329	4.6

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

(2) Analyses based on one record per child.

(3) Excludes records with unknown data or errors.

(4) Infants born during the reporting period included in the Ever Breastfed analysis.

Infants who turned 6 months of age during the reporting period by/on their date of visit included in the Breastfed At Least 6 Months analysis.

Children who turned 12 months of age during the reporting period by/on their date of visit included in the Breastfed At Least 12 Months analysis.

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

WIC PNNS & PedNSS

Table 19C

2018 Pediatric Nutrition Surveillance (1)

Michigan

Summary of Trends in Breastfeeding Indicators by Race/Ethnicity

Children Aged < 5 Years (2)

Summary of Trends in Breastfeeding Indicators by Race/Ethnicity (3)							
Race/Ethnicity	Year	Breastfeeding (4)					
		Number	% Ever Breastfed	Number	% Breastfed At Least 6 Months	Number	% Breastfed At Least 12 Months
Hispanic	2018	6,223	70.9	4,931	31.7	4,400	14.1
	2017	4,843	71.9	5,023	30.1	4,576	13.4
	2016	6,768	72.4	5,500	21.4	5,006	12.0
	2015	6,995	70.4	5,364	19.1	5,014	10.5
	2014	7,028	68.2	5,525	18.6	5,174	10.0
	2013	7,043	67.1	5,616	17.5	5,461	9.3
	2012	7,236	64.3	5,580	19.3	5,527	10.2
	2011	7,377	62.7	5,755	22.3	5,676	10.1
American Indian/Alaska Native	2018	186	68.8	123	42.3	85	*
	2017	128	75.8	112	28.6	100	17.0
	2016	151	68.9	136	23.5	125	13.6
	2015	188	67.6	127	20.5	135	11.9
	2014	182	60.4	156	19.2	129	10.9
	2013	165	58.8	123	23.6	112	12.5
	2012	162	67.3	143	14.7	112	9.8
	2011	167	57.5	127	18.9	106	10.4

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

(2) Analyses based on one record per child.

(3) Excludes records with unknown data or errors.

(4) Infants born during the reporting period included in the Ever Breastfed analysis.

Infants who turned 6 months of age during the reporting period by/on their date of visit included in the Breastfed At Least 6 Months analysis.

Children who turned 12 months of age during the reporting period by/on their date of visit included in the Breastfed At Least 12 Months analysis.

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WIC PNNS & PedNSS

Table 19C

2018 Pediatric Nutrition Surveillance (1)

Michigan

Summary of Trends in Breastfeeding Indicators by Race/Ethnicity

Children Aged < 5 Years (2)

Summary of Trends in Breastfeeding Indicators by Race/Ethnicity (3)							
Race/Ethnicity	Year	Breastfeeding (4)					
		Number	% Ever Breastfed	Number	% Breastfed At Least 6 Months	Number	% Breastfed At Least 12 Months
Asian/Pacific Islander	2018	922	78.4	719	42.4	678	24.3
	2017	730	79.9	735	39.9	703	22.8
	2016	975	73.7	801	36.6	724	24.6
	2015	960	77.2	757	38.2	690	26.8
	2014	1,002	72.0	770	35.3	699	25.2
	2013	972	72.1	739	35.5	690	24.3
	2012	927	71.7	646	35.4	629	21.5
	2011	870	69.3	674	35.3	643	22.4
Multiple Races	2018	4,372	66.7	3,441	30.3	3,155	10.5
	2017	3,335	65.7	3,479	27.6	3,056	11.1
	2016	4,589	65.4	3,637	18.3	3,180	9.6
	2015	4,440	64.8	3,660	15.1	3,301	8.6
	2014	4,698	62.1	3,708	15.9	3,303	8.3
	2013	4,452	61.8	3,466	14.3	3,208	7.3
	2012	4,255	60.4	3,594	14.6	3,337	7.2
	2011	4,217	58.7	3,476	14.9	3,191	6.5

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

(2) Analyses based on one record per child.

(3) Excludes records with unknown data or errors.

(4) Infants born during the reporting period included in the Ever Breastfed analysis.

Infants who turned 6 months of age during the reporting period by/on their date of visit included in the Breastfed At Least 6 Months analysis.

Children who turned 12 months of age during the reporting period by/on their date of visit included in the Breastfed At Least 12 Months analysis.

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

WIC PNNS & PedNSS

Table 19C

2018 Pediatric Nutrition Surveillance (1)

Michigan

Summary of Trends in Breastfeeding Indicators by Race/Ethnicity

Children Aged < 5 Years (2)

Summary of Trends in Breastfeeding Indicators by Race/Ethnicity (3)							
Race/Ethnicity	Year	Breastfeeding (4)					
		Number	% Ever Breastfed	Number	% Breastfed At Least 6 Months	Number	% Breastfed At Least 12 Months
All Other/Unknown	2018	27	*	15	*	5	*
	2017	7	*	14	*	11	*
	2016	18	*	13	*	8	*
	2015	15	*	6	*	9	*
	2014	16	*	9	*	10	*
	2013	13	*	6	*	7	*
	2012	7	*	12	*	11	*
	2011	10	*	8	*	8	*
Total All Race/Ethnic Groups	2018	49,377	66.8	38,049	31.4	32,543	12.7
	2017	39,192	66.1	39,435	28.8	33,989	12.4
	2016	53,465	65.3	42,533	19.7	37,529	11.6
	2015	55,956	64.3	44,452	18.4	38,816	10.8
	2014	58,296	62.9	45,723	18.5	40,540	9.9
	2013	59,096	62.2	46,092	17.6	41,082	9.1
	2012	59,352	60.7	46,180	17.7	42,029	8.9
	2011	60,153	59.5	46,409	18.4	41,436	8.5

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

(2) Analyses based on one record per child.

(3) Excludes records with unknown data or errors.

(4) Infants born during the reporting period included in the Ever Breastfed analysis.

Infants who turned 6 months of age during the reporting period by/on their date of visit included in the Breastfed At Least 6 Months analysis.

Children who turned 12 months of age during the reporting period by/on their date of visit included in the Breastfed At Least 12 Months analysis.

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

WIC PNNS & PedNSS

Table 20C

2018 Pediatric Nutrition Surveillance ⁽¹⁾

Michigan

Summary of Trends in Growth Indicators by Age

Children Aged < 5 Years ⁽²⁾

Summary of Trends in Growth Indicators by Age ⁽³⁾																	
Age	Year	Height and Weight ^(4,5)							Age	Year	Height and Weight ^(4,5)						
		Short Under- Obese				≥ 2 Yrs					Short Under- Obese				≥ 2 Yrs		
		Stature	Weight	%	%	%	%	%			%	%	%	%	%	%	%
		Number	%	%	%	Number	%	%			Number	%	%	%	Number	%	%
0 - 11 Months	2018	62,004	12.4	5.4	5.8	0	*	*	24 - 35 Months	2018	35,240	5.2	2.0	12.9	22,746	15.7	12.3
	2017	52,268	12.3	5.3	5.8	0	*	*		2017	37,023	5.0	1.9	12.4	23,658	16.1	11.6
	2016	66,609	12.0	5.2	5.6	0	*	*		2016	39,147	4.6	2.0	12.5	24,917	16.2	11.9
	2015	68,629	11.2	5.2	5.3	0	*	*		2015	40,356	4.4	2.0	12.0	25,567	15.8	11.2
	2014	71,262	10.7	5.4	5.3	0	*	*		2014	42,023	4.5	1.8	12.1	26,576	16.4	11.5
	2013	71,638	10.4	5.7	5.5	0	*	*		2013	42,016	4.2	1.8	12.1	27,183	16.3	11.4
	2012	72,641	10.0	5.9	5.5	0	*	*		2012	42,357	4.4	2.0	11.8	27,135	15.7	11.1
	2011	73,544	10.1	5.6	5.5	0	*	*		2011	42,939	4.1	2.0	12.1	27,397	15.8	11.2
	2010	0	*	*	*	0	*	*		2010	0	*	*	*	0	*	*
12 - 23 Months	2018	45,577	8.7	0.8	11.0	0	*	*	36 - 47 Months	2018	29,802	4.0	3.3	13.4	29,798	16.0	13.4
	2017	47,537	8.3	0.8	10.5	0	*	*		2017	30,732	3.7	3.3	13.2	30,725	15.6	13.2
	2016	50,907	8.2	0.8	10.8	0	*	*		2016	31,951	3.8	3.4	13.2	31,944	15.7	13.2
	2015	53,403	7.8	0.8	10.4	0	*	*		2015	33,528	3.7	3.1	12.6	33,520	15.8	12.6
	2014	54,900	7.3	0.7	10.1	0	*	*		2014	35,083	3.4	2.8	12.8	35,081	16.3	12.8
	2013	56,763	7.0	0.8	10.4	0	*	*		2013	35,462	3.7	2.7	12.7	35,458	16.5	12.7
	2012	56,190	6.7	0.6	10.5	0	*	*		2012	36,189	3.6	3.1	13.1	36,177	15.9	13.1
	2011	56,112	6.5	0.7	10.7	0	*	*		2011	37,006	3.4	3.1	13.0	37,004	16.3	13.0
	2010	0	*	*	*	0	*	*		2010	0	*	*	*	0	*	*

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

(2) Analyses based on one record per child.

(3) Excludes records with unknown data or errors.

(4) Based on 2006 WHO growth chart percentiles for children under 2 years of age; short stature is defined as length-for-age ≤ 2.3rd percentile, underweight is defined as weight-for-length ≤ 2.3rd percentile, and high weight-for-length (labeled as "Obese") is defined as ≥ 97.7th percentile.

(5) Based on 2000 CDC growth chart percentiles for children 2 years of age and older; short stature is defined as height-for-age < 5th percentile, underweight is defined as BMI-for-age < 5th percentile, overweight is defined as BMI-for-age ≥ 85th to < 95th percentile, and obesity is defined as ≥ 95th percentile.

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

WIC PNNS & PedNSS

Table 20C

2018 Pediatric Nutrition Surveillance ⁽¹⁾

Michigan

Summary of Trends in Growth Indicators by Age

Children Aged < 5 Years ⁽²⁾

Summary of Trends in Growth Indicators by Age ⁽³⁾																							
Age	Year	Height and Weight ^(4,5)							Age	Year	Height and Weight ^(4,5)												
		Short Stature			Under-Weight		Obese				≥ 2 Yrs Overweight and Obese			Short Stature			Under-Weight		Obese		≥ 2 Yrs Overweight and Obese		
		Number	%	%	%	%	%	%			Number	%	%	%	Number	%	%	%	Number	%	%	%	Number
48 - 59 Months	2018	33,367	3.1	3.4	14.5	33,364	16.9	14.5	Total All Age Groups	2018	205,990	7.6	3.2	10.7	85,908	16.3	13.5						
	2017	34,886	3.4	3.4	14.2	34,884	16.7	14.2		2017	202,446	7.2	3.0	10.7	89,267	16.2	13.2						
	2016	36,520	3.3	3.3	14.0	36,516	16.5	14.0		2016	225,134	7.3	3.1	10.4	93,377	16.1	13.1						
	2015	38,120	3.1	2.8	14.3	38,117	17.1	14.3		2015	234,036	6.8	3.0	10.1	97,204	16.3	12.9						
	2014	40,184	3.0	2.6	14.9	40,183	17.6	14.9		2014	243,452	6.5	2.9	10.2	101,840	16.8	13.3						
	2013	41,356	3.1	2.7	14.8	41,352	17.4	14.8		2013	247,235	6.4	3.0	10.3	103,993	16.8	13.2						
	2012	42,590	3.0	2.8	14.7	42,588	17.3	14.7		2012	249,967	6.2	3.1	10.4	105,900	16.4	13.2						
	2011	41,650	3.2	2.9	14.7	41,650	17.3	14.7		2011	251,251	6.1	3.1	10.4	106,051	16.5	13.2						
	2010	0	*	*	*	0	*	*		2010	0	*	*	*	0	*	*						

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

(2) Analyses based on one record per child.

(3) Excludes records with unknown data or errors.

(4) Based on 2006 WHO growth chart percentiles for children under 2 years of age; short stature is defined as length-for-age ≤ 2.3rd percentile, underweight is defined as weight-for-length ≤ 2.3rd percentile, and high weight-for-length (labeled as "Obese") is defined as ≥ 97.7th percentile.

(5) Based on 2000 CDC growth chart percentiles for children 2 years of age and older; short stature is defined as height-for-age < 5th percentile, underweight is defined as BMI-for-age < 5th percentile, overweight is defined as BMI-for-age ≥ 85th to < 95th percentile, and obesity is defined as ≥ 95th percentile.

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

WIC PNNS & PedNSS

Table 21C

2018 Pediatric Nutrition Surveillance (1)

Michigan

Summary of Trends in Anemia by Age

Children Aged < 5 Years (2)

Summary of Trends in Anemia by Age (3)							
Age	Year	Anemia Low Hb/Hct (4)		Age	Year	Anemia Low Hb/Hct (4)	
		Number	%			Number	%
6 - 11 Months	2018	5,482	27.9	18 - 23 Months	2018	18,483	26.8
	2017	5,591	25.6		2017	19,582	26.2
	2016	6,395	23.7		2016	21,061	23.7
	2015	6,044	23.2		2015	22,073	22.3
	2014	6,109	23.7		2014	22,664	22.1
	2013	5,563	22.2		2013	22,735	22.4
	2012	6,250	21.8		2012	23,054	21.5
	2011	6,120	20.2		2011	23,223	19.6
12 - 17 Months	2018	26,035	26.4	24 - 35 Months	2018	31,365	25.3
	2017	26,896	26.8		2017	33,054	24.3
	2016	28,711	24.7		2016	34,974	22.6
	2015	29,986	22.6		2015	35,990	21.3
	2014	30,904	22.3		2014	38,199	20.8
	2013	31,997	22.7		2013	37,258	20.4
	2012	31,259	21.6		2012	37,748	19.5
	2011	30,406	19.8		2011	38,033	17.9

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

(2) Analyses based on one record per child.

(3) Excludes records with unknown data or errors.

(4) Based on 1998 CDC MMWR, "Recommendations to Prevent and Control Iron Deficiency in the United States", altitude adjusted, children 6 months of age and older included in the analysis.

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

WIC PNNS & PedNSS

Table 21C

2018 Pediatric Nutrition Surveillance (1)

Michigan

Summary of Trends in Anemia by Age

Children Aged < 5 Years (2)

Summary of Trends in Anemia by Age (3)							
Age	Year	Anemia Low Hb/Hct (4)		Age	Year	Anemia Low Hb/Hct (4)	
		Number	%			Number	%
36 - 59 Months	2018	55,543	19.3	Total All Age Groups	2018	136,909	23.4
	2017	57,717	18.8		2017	142,863	22.8
	2016	60,489	17.5		2016	151,630	21.2
	2015	63,412	16.1		2015	157,509	19.6
	2014	67,284	15.3		2014	165,162	19.1
	2013	66,409	15.4		2013	163,964	19.2
	2012	68,897	13.9		2012	167,210	17.9
	2011	68,863	12.8		2011	166,650	16.4
All Other/Unknown	2018	0	*				
	2017	1	*				
	2016	0	*				
	2015	0	*				
	2014	0	*				
	2013	0	*				
	2012	2	*				
2011	0	*					

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

(2) Analyses based on one record per child.

(3) Excludes records with unknown data or errors.

(4) Based on 1998 CDC MMWR, "Recommendations to Prevent and Control Iron Deficiency in the United States", altitude adjusted, children 6 months of age and older included in the analysis.

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