#### Table 1C

## 2016 Pediatric Nutrition Survelliance (1)

#### Michigan

## **Summary of Demographic Indicators** (2,3)

#### Children Aged < 5 Years

Total Records	Number
Individual Children	231,594
Total Records (All Visits)	378,881

Race/Ethnic Distribution	Number	%
White, Not Hispanic	112245	48.5
Black, Not Hispanic	62925	27.2
Hispanic	31442	13.6
American Indian/Alaska Native	702	0.3
Asian/Pacific Islander	4529	2.0
Multiple Races	19306	8.3
All Other	61	0.0
Total	231,210	100.0
Excluded Unknown: 384 0.2		

% of Poverty Level	Number	%
0 - 50	92,354	40.0
51 - 100	70,964	30.7
101 - 130	29,245	12.7
131 - 150	12,086	5.2
151 - 185	15,712	6.8
186 - 200	2,208	1.0
Over 200	6,565	2.8
Adjunctive Eligibility	2,024	0.9
Total	231,158	100.0
Excluded Unknown: 436 0.2		

Source of Data	Number	%
WIC	231,594	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	231,594	100.0
Excluded Unknown: 0 0.0	ĺ	

03/23/2017

Run Date:

Number

0.0

1,568

230,026

231,594

%

0.7

99.3

100.0

Age Distribution (4)	Number	%
0 - 5 Months	61,784	26.7
6 - 11 Months	23,127	10.0
12 - 23 Months	45,498	19.6
24 - 35 Months	39,263	17.0
3 - 4 Years	61,922	26.7
Total	231,594	100.0

**Migrant Status** 

Program Participation	Number	%	Migrant Status
WIC	231,594	100.0	Yes
SNAP	230,378	50.0	No
Medicaid	228,097	81.0	Total
Tanf	230,659	4.3	Excluded Unknown:
Excluded Unknown			
WIC	0	0.0	
SNAP	1,216	0.5	
Medicaid	3,497	1.5	
Tanf	935	0.4	
1	ı		

<sup>(1)</sup> Reporting period is January 1 through December 31
(2) Analyses based on one record per child
(3) Excludes records with unknown data errors.
(4) Records rejected if date of birth and date of visit unknown
\* Percentages are not calculated if <100 records are available for analysis after exclusions</li>

## Table 2C

## 16 Pediatric Nutrition Survelliance

Michigan

Summary of Health Indicators (2)
Children Aged < 5 Years

Run Date: 03/23

Summary of Health Ind	licators (3)			
	Michigan Prevalance		National Prevalance (Prior Year)	
	Number	%	Number	%
Birthweight				
Low	52,567	10.8	121,132	10.2
High	52,567	6.8	121,132	6.9
Height and Weight (5,6) (3)				
< 5 Yrs Short Stature	224,401	7.1	484,714	6.8
< 5 Yrs Underweight	224,401	3.0	484,714	2.9
< 5 Yrs Obese	224,401	10.5	484,714	10.3
>= 2 Yrs Overweight	96,879	16.2	212,609	16.0
>=2 Yrs Obese	96,879	13.7	212,609	13.8
Anemia (7)				
Low Hb	151,663	18.4	325,122	15.1
Low Hct	31	*	65	12.3
Low Hb/Hct	151,685	18.4	325,158	15.1
Brestfeeding (8)				
Ever Brestfed	53,465	65.3	122,498	69.0
Breastfed At Least 6 Months	42,533	19.7	74,576	20.5
Breastfed At Least 12 Months	37,529	11.6	63,037	12.0
Smoking in Household	230,521	3.5	488,654	6.1
<= 2 Hours TV Viewing/ Day (9)	109,877	84.4	224,048	84.2

<sup>(1)</sup> Reporting period is January 1 through December 31.

<sup>(2)</sup> Analyses based on one record per child.

<sup>(3)</sup> Excludes records with unknown data or errors.

<sup>(4)</sup> 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.

<sup>(5)</sup> 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.

<sup>(6)</sup> 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.

<sup>(7)</sup> 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.

<sup>(8)</sup> Infants born during the reporting period by/on their date of visit 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.

<sup>(9)</sup> Children aged 2 years and older included in the analysis.

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

## Summary of Breastfeeding Indicators (2) Children Aged < 5 Years

	Michiga Prevalen		National Prevalence (Prior Year)	
	Number	%	Number	%
Bareastfeeding Duration (4,5)				
Ever Brestfed	53,465	65.3	122,498	69.0
Breastfed 1+ Weeks	46,942	60.0	103,990	63.7
Breastfed 2+ Weeks	39,449	55.3	83,400	60.3
Breastfed 3+ Weeks	35,408	49.7	72,936	55.3
Breastfed 4+ Weeks	33,686	44.6	67,906	50.4
Breastfed 6+ Weeks	32,786	36.7	61,619	41.8
Breastfed 2+ Months	33,883	32.8	59,387	36.4
Breastfed 3+ Months	37,179	27.2	63,332	30.1
Breastfed 4+ Months	40,983	23.6	69,605	25.1
Breastfed 5+ Months	45,126	21.0	76,718	21.9
Breastfed 6+ Months	42,533	19.7	74,576	20.5
Breastfed 9+ Months	32,932	14.5	61,581	15.5
Breastfed 12+ Months	37,529	11.6	63,037	12.0
Breastfed 18+ Months	27,655	6.9	44,570	7.0
Exclusive Breastfeeding (6)				
Exclusively Breastfed at Least 3 Months	35,259	14.3	61,267	15.4
Exclusively Breastfed at Least 6 Months	40,250	8.1	72,320	8.6

Run Date:

<sup>(1)</sup> Reporting period is January 1 through December 31.(2) Analyses based on one record per child.

<sup>(3)</sup> Excludes records with unknown data or errors.

<sup>(4)</sup> Infants born during the reporting period included in the Ever Breastfed analysis. For each breastfeding 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.

<sup>(5)</sup> 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.

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

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

## Table 4C 2016 Pediatric Nutrition Survelliance (1)

Michigan

Run Date:

03/23/2017

## **Comparison of Racial and Ethnic Distribution by Contributor to Nation**

Children Aged < 5 Years

	Comparison of Racial and Ethnic Distribution													
	Number Included in Analysis	White, Not Hispanic			American Indian/Alaska Native	Asian/Pacific Islander	Multiple Races %	All Other / Unknown						
	, , , , ,	%	%	%	%	%		%						
Michigan	231,594	48.5	27.2	13.6	0.3	2.0	8.3	0.2						
Nation (Prior Year)	512,698	49.2	22.6	17.4	0.6	3.0	7.0	0.2						

<sup>(1)</sup> Reporting period is January 1 through December 31.
(2) Analyses based on one record per child.
(3) Excludes records with errors.
\* Percentages are not calculated if < 100 records are available for analysis after exclusions.</li>

Run Date:

03/23/2017

## **Comparison of Age Distribution by Contributor to Nation**

Children Aged < 5 Years

	Comparison of Age Distribution												
Contributor	Number Included in Analysis (3,4)	0 - 11 Months %	12 - 23 Months %	24 - 59 Months %									
Michigan	231,594	36.7	19.6	43.7									
Nation (Prior Year)	512,698	38.5	18.3	43.2									

 <sup>(1)</sup> 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.
 \* Percentages are not calculated if < 100 records are available for analysis after exclusions.</li>

**Comparison of Growth and Anemia Indicators by Contributor to Nation** Children Aged < 5 Years

Comparison of Growth and Anemia Indicators by Contributor to Nation (3)												
	Birth	Weight (	(4)		Height and W					Anemi Low Hb/ (7)		
		Low	High		Short Stature	Under- Weight	Obese		>= 2 Yrs Overweight and obese			
	Number	% <2500 g	% >4000 g	Number	%	%	%	Number	% Overweight	% Obese	Number	%
Michigan	52,567	10.8	6.8	224,401	7.1	3.0	10.5	96,879	16.2	13.7	151,685	18.4
Nation (Prior Year)	121,132	10.2	6.9	484,714	6.8	2.9	10.3	212,609	16.0	13.8	325,158	15.1

Run Date:

<sup>(1)</sup> Reporting period is January 1 through December 31.(2) Analyses based on one record per child.

<sup>(3)</sup> Excludes records with unknown data or errors.

<sup>(4)</sup> Infants born during the reporting period included in the analysis.

<sup>(5)</sup> 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.

<sup>(7)</sup> 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 and ranks are not calculated if < 100 records are available for analysis after exclusions.

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

Children Aged < 5 Years

	Comparison of Breastfeeding, TV Viewing, and Smoking in Household (4)													
	Breastfeeding (5)						Exclusive Breastfeeding (6)				>=2 Hours TV Viewing/Day (7)		Smoking in Household	
Contributor	Number	% Ever Breastfeed	Number	% Breastfeed At Least 6 Months	Number	% Breatsfeed At Least 12 Months	Number	% Breastfeed At Least 3 Months	Number	% Breatfeed At Least 6 Months	Number	%	Number	%
Michigan	53,465	65.3	42,533	19.7	37,529	11.6	35,259	14.3	40,250	8.1	109,877	84.4	230,521	3.5
Nation (Prior Year)	122,498	69.0	74,576	20.5	63,037	12.0	61,267	15.4	72,320	8.6	224,048	84.2	488,654	6.1

Run Date:

 <sup>(1)</sup> 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.
 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.

<sup>(7)</sup> Children aged 2 years and older included in the analyses.

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

Growth and Anemia Indicators by Race/Ethnicity or Age

Children Aged < 5 Years (2)

Run Date:

03/23/2017

Growth and Anemia Indicators by Race/Ethnicity or Age (3) Height and Weight (5.6) Birthweight (4) >=2 Yrs Anemia Short Under-Obese Overweight and Low Hb/Hct High Stature weight Obese Low (7) % % % Number Number % % % Number Number <2500 a >4000 a Obese Overweight Race Ethnicity 9.0 White, Not Hispanic 24,718 8.8 109,073 7.0 2.7 10.4 47,450 16.9 13.5 74,252 13.5 15.1 7.8 14.0 39,973 29.5 Black, Not Hispanic 15,331 3.5 60,788 4.2 8.8 25,261 11.0 Hispanic 6,692 8.5 7.5 30,351 6.7 2.1 13.8 13,799 18.3 18.8 21,211 15.6 American Indian/Alaska Native 151 10.6 7.3 668 6.6 3.6 17.5 294 20.7 22.8 439 18.0 Asian/Pacific Islander 11.3 4.5 8.4 16.6 949 3.8 4,371 6.1 2,011 10.9 11.6 3,148 Multiple Races 9.9 18,728 6.9 2.7 7,973 15.2 12,513 17.7 4,544 11.7 16.5 6.8 \* \* \* \* \* \* \* All Other 56 23 34 18 **Total** 10.8 224,401 10.5 96,879 13.7 151,685 18.4 52,567 7.1 3.0 16.2 6.8 Age 0 - 11 Months 0 82,241 11.6 4.2 6.2 0 22,026 23.9 0 \* 12 - 23 Months 45,190 6.6 0.5 12.7 44,176 20.1 24 - 35 Months 0 38,450 3.9 3.1 11.9 38,371 15.8 12.3 34,656 18.4 \* 36 - 47 Months 29,280 3.7 3.3 13.7 29,272 16.2 14.4 28,028 15.0 48 - 59 Months 0 29,240 3.1 3.2 14.0 29,236 14.9 22,799 16.7 14.2 7.1 10.5 96,879 Total 224,401 3.0 **16.2 13.7** 151,685 18.4

<sup>(1)</sup> Reporting period is January 1 through December 31.

<sup>(2)</sup> Analyses based on one record per child.

<sup>(3)</sup> Excludes records with unknown data or errors.

<sup>(4)</sup> Infants born during the reporting period included in the analysis.

<sup>(5)</sup> 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.

<sup>(6)</sup> 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.

<sup>(7)</sup> 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.

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

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

0

11.6

37,529

Children Aged < 5 Years

0

19.7

42,533

(3)

Run Date:

(2)

\*

\*

86.0

83.1

82.6

84.4

84,484

45,361

39,160

31,866

29,650

230,521

3.0

3.6

3.9

3.7

4.3 **3.5** 

0

0

38,893

31,677

29,386

109,877

03/23/2017

Breastfeeding, TV Viewing, and Smoking in Household by Race/Ethnicity or Age (4) >=2 Hours TV Smoking in Breastfeeding Viewing/Day (6) Household (5) % Number % Number % Number % Number % Number Ever Breastfeed **Breatsfeed Breastfeed** Αt Αt Least Least 6 12 Months Months Race/Ethnicity White, Not Hispanic 25,269 70.4 20,561 23.1 18,792 14.2 54,085 88.4 111,790 3.2 Black, Not Hispanic 11,753 12.4 5.0 15,514 53.5 9,661 6.0 28,240 75.8 62,631 Hispanic 6,768 72.4 5,500 21.4 5,006 12.0 15,804 85.9 31,278 1.7 American Indian/Alaska Native 23.5 125 13.6 702 5.4 151 68.9 136 89.2 344 Asian/Pacific Islander 976 73.8 802 36.7 724 2,303 4,486 0.7 24.6 81.3 Multiple Races 4,588 65.4 3,636 18.3 3,180 9.6 9,004 85.4 19,215 4.2 All Other \* \* \* 28 \* 18 13 61 Total 53,465 65.3 42,533 19.7 37,529 230,521 3.5 11.6 109,877 84.4 Age

0 - 11 Months

12 - 23 Months

24 - 35 Months

36 - 47 Months

48 - 59 Months

Total

0

0

0

65.3

53,465

<sup>(1)</sup> Reporting period is January 1 through December 31.

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

<sup>(3)</sup> Analyses based on one record per child.

<sup>(4)</sup> Excludes records with unknown data or errors.

<sup>15)</sup> 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.

<sup>(6)</sup> Children aged 2 years and older included in the analysis

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

Run Date:

03/23/2017

## **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	White, Not Hispanic	Black, Not Hispanic	Hispanic	American Indian/Alaska Native	Asian/Pacific Islander	Multiple Races	All Other/Unknown					
	.,,	%	%	%	%	%	%	%					
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	49.7	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					
2010	259,641	51.5	25.4	14.2	0.2	1.4	7.2	0.1					

<sup>(1)</sup> Reporting period is January 1 through December 31.
(2) Analyses based on one record per child.
(3) Excludes records with errors.
\* Percentages are not calculated if < 100 records are available for analysis after exclusions.</li>

Run Date:

03/23/2017

## **Summary of Trends in Age Distribution**

Children Aged < 5 Years (2)

Summary of Trends in Age Distribution (3)											
Year	Number Included in Analysis	0 - 11 Months	12 - 23 Months	24 - 59 Months							
		%	%	%							
2016	231,594	36.7	19.6	43.7							
2015	240,590	37.6	18.0	44.3							
2014	250,091	34.6	21.1	44.2							
2013	253,913	31.3	23.8	44.9							
2012	257,024	33.4	21.0	45.6							
2011	257,910	29.7	22.0	48.3							
2010	259,641	29.9	22.8	47.3							

 <sup>(1)</sup> 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.</li>

Run Date:

03/23/2017

**Summary of Trends in Growth and Anemia Indicators** Children Aged < 5 Years

	Summary of Trends in Growth and Anemia Indicators (3)												
	Birt	hweight	(4)		Height and Weight (5,6)								
Year		Low	High		Short Stature	Under- Weight	Obese		>= 2 Yrs Overweight and obese				
	Number	%	%	Number	%	%	%	Number	% Overweight	% Obese	Number	%	
2016	52,567	10.8	6.8	224,401	7.1	3.0	10.5	96,879	16.2	13.7	151,685	18.4	
2015	55,089	10.5	6.8	233,217	6.7	2.9	10.2	102,221	16.3	13.6	151,524	17.2	
2014	57,712	9.8	6.8	242,743	6.2	2.6	10.6	105,879	16.7	14.2	165,188	17.0	
2013	58,430	9.6	6.9	247,265	5.7	2.4	11.0	109,600	16.8	14.1	163,994	17.5	
2012	58,707	9.7	7.1	249,036	5.8	2.9	10.7	112,234	16.4	13.8	167,258	16.1	
2011	59,577	9.4	6.9	253,759	6.0	3.0	10.5	109,357	16.5	14.1	166,740	16.3	
2010	59,684	9.4	6.9	254,272	5.9	3.2	10.9	109,884	16.5	14.2	146,487	15.0	

<sup>(1)</sup> Reporting period is January 1 through December 31.

<sup>(2)</sup> Analyses based on one record per child.

<sup>(3)</sup> Excludes records with unknown data or errors.

<sup>(4)</sup> Infants born during the reporting period included in the analysis.

 <sup>(5)</sup> 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</li>

as BMI-for-age < 5th percentile, overweight is defined as BMI-for-age >= 85th to < 95th percentile, and obesity is defined as >= 95th percentile.

<sup>(7)</sup> 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.

Run Date:

03/23/2017

## **Summary of Trends in Breastfeeding**

Children Aged < 5 Years (2)

	Summary of Trends in Breastfeeding (3)												
	Breastfeeding (4)												
Year	Number	% Ever Breastfeed	Number	% Breastfeed At Least 6 Months	Number	% Breatsfeed At Least 12 Months							
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	62.3	46,002	17.7	40,663	9.2							
2012	59,352	60.9	42,948	19.1	39,324	9.5							
2011	60,153	59.5	46,409	18.4	41,436	8.5							
2010	60,362	56.1	40,557	18.9	34,172	9.1							

<sup>(1)</sup> Reporting period is January 1 through December 31.(2) Analyses based on one record per child.

<sup>(3)</sup> 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.</li>

## Table 16C 2016 Pediatric Nutrition Survelliance

Michigan

Run Date:

03/23/2017

## **Growth Indicators by Race/Ethnicity or Age**

Childer Aged <5 Years (2)

	Grov	vth Inc	dicators by	Race/Et	hnicity and	Age (3)			
	Short Sta		Underweig (4,5)	ht	Obese (4,5)		>= 2 Yrs O	obese	
	Number	%	Number	%	Number	%	Number	% Overweight	% Obese
White, Not Hispanic									
0 - 11 Months	39,269	11.1	39,269	4.0	39,269	5.9	0	*	*
12 - 23 Months	22,354	6.5	22,354	0.4	22,354	12.7	0	*	*
24 - 59 Months	47,187	3.8	47,187	2.6	47,187	12.9	47,187	16.9	13.5
Total	108,810	7.0	108,810	2.7	108,810	10.4	47,187	16.9	13.5
Black, Not Hispanic									
0 - 11 Months	23,697	13.5	23,697	5.2	23,697	5.7	0	*	*
12 - 23 Months	11,830	6.6	11,830	0.7	11,830	11.2	0	*	*
24 - 59 Months	25,035	3.1	25,035	4.8	25,035	10.5	25,035	14.0	11.0
Total	60,562	7.9	60,562	4.2	60,562	8.7	25,035	14.0	11.0
Hispanic									
0 - 11 Months	10,478	9.8	10,478	3.4	10,478	7.9	0	*	*
12 - 23 Months	6,074	7.3	6,074	0.2	6,074	15.5	0	*	*
24 - 59 Months	13,703	4.1	13,703	1.9	13,703	17.4	13,703	18.3	18.8
Total	30,255	6.7	30,255	2.1	30,255	13.7	13,703	18.3	18.8
American Indian/Alaska Native		Ī							
0 - 11 Months	241	11.2	241	6.6	241	10.4	0	*	*
12 - 23 Months	133	6.0	133	0.0	133	25.6	0	*	*
24 - 59 Months	294	3.1	294	2.7	294	19.7	294	20.7	22.8
Total	668	6.6	668	3.6	668	17.5	294	20.7	22.8

<sup>(1)</sup> Reporting period is January 1 through December 31.

<sup>(2)</sup> Analyses based on one record per child.(3) Excludes records with unknown data or errors.

<sup>(3)</sup> 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.</li>

Michigan

Run Date:

03/23/2017

## **Growth Indicators by Race/Ethnicity or Age**

Childer Aged <5 Years (2)

	Grov	vth Inc	dicators by	Race/Et	hnicity and	Age (3)				
	Short Sta (4,5)		Underweig (4,5)	jht	Obese (4,5)			>= 2 Yrs Overweight and obe		
	Number	%	Number	%	Number	%	Number	% Overweight	% Obese	
Asian/Pacific Islander										
0 - 11 Months	1,502	8.9	1,502	3.4	1,502	5.3	0	*	*	
12 - 23 Months	858	6.1	858	1.2	858	8.3	0	*	*	
24 - 59 Months	2,000	4.1	2,000	6.8	2,000	10.7	2,019	10.8	11.3	
Total	4,360	6.1	4,360	4.5	4,360	8.3	2,000	11.0	11.5	
Multiple Races										
0 - 11 Months	6,957	11.9	6,957	3.9	6,957	7.1	0	*	*	
12 - 23 Months	3,798	5.9	3,798	0.2	3,798	14.1	0	*	*	
24 - 59 Months	7,935	2.9	7,935	2.7	7,935	14.6	7,935	0.2	15.2	
Total	18,690	6.9	18,690	2.7	18,690	11.7	7,935	0.2	15.2	
All Other/Unknown										
0 - 11 Months	23	*	23	*	23	*	0	*	*	
12 - 23 Months	10	*	10	*	10	*	0	*	*	
24 - 59 Months	22	*	22	*	22	*	22	*	*	
Total	55	*	55	*	55	*	22	*	*	
Total All Race/Ethnic Groups										
0 - 11 Months	82,403	11.6	82,403	4.3	82,403	6.2	0	*	*	
12 - 23 Months	45,119	6.6	45,119	0.4	45,119	12.7	0	*	*	
24 - 59 Months	96,244	3.6	96,244	3.2	96,244	13.0	96,244	16.2	13.7	
Total	223,766	7.1	223,766	3.0	223,766	10.5	96,244	16.2	13.7	

<sup>(1)</sup> Reporting period is January 1 through December 31.(2) Analyses based on one record per child.(3) Excludes records with unknown data or errors.

<sup>(4)</sup> 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.</li>

Michigan

(2)

Run Date: 03/23/2017

Anemia Indicators by Race/Ethnicity and Age	
Children Aged < 5 Years	

	Ane	emia Indicators by	Race/Ethnicity and Age (3,4)		
	Number	Anemia Low Hb/Hct %		Number	Anemia Low Hb/Hct %
White, Not Hispanic			Asian/Pacific Islander		
6 - 11 Months	7,820	19.5	6 - 11 Months	347	19.6
12 - 17 Months	11,710	16.6	12 - 17 Months	455	19.8
18 - 23 Months	10,175	13.7	18 - 23 Months	386	16.8
24 - 35 Months	17,035	12.7	24 - 35 Months	719	15.9
36 - 59 Months	24,709	9.8	36 - 59 Months	1,114	14.4
Total	71,449	13.2	Total	3,021	16.5
Black, Not Hispanic			Multiple Races		
6 - 11 Months	4,392	32.9	6 - 11 Months	1,368	21.6
12 - 17 Months	5,974	32.0	12 - 17 Months	1,943	20.6
18 - 23 Months	5,597	29.7	18 - 23 Months	1,771	18.6
24 - 35 Months	9,038	30.9	24 - 35 Months	2,864	17.8
36 - 59 Months	13,230	25.4	36 - 59 Months	4,127	14.2
Total	38,231	29.2	Total	12,073	17.6
Hispanic			All Other/Unknown		
6 - 11 Months	2,189	19.9	0 - 11 Months	6	*
12 - 17 Months	3,032	19.7	12 - 17 Months	15	*
18 - 23 Months	2,936	15.4	18 - 23 Months	55	*
24 - 35 Months	4,859	16.0	24 - 35 Months	32	*
36 - 59 Months	7,478	11.9	36 - 59 Months	41	*
Total	20,494	15.4	Total	148	16.2
American Indian/Alaska Native			Total All Race/Ethnic Groups		
6 - 11 Months	59	*	6 - 11 Months	16,180	23.4
12 - 17 Months	71	*	12 - 17 Months	23,200	21.4
18 - 23 Months	56	*	18 - 23 Months	20,976	18.7
24 - 35 Months	109	24.8	24 - 35 Months	34,656	18.4
2. 33 (10)1013	1 109	27.0	36 - 59 Months	50,827	14.6

 <sup>(1)</sup> 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.

<sup>\*</sup> Percentages are not calculated if < 100 records are available for analysis after exclusions

#### Table 17C

## **2016** Pediatric Nutrition Survelliance (1)

Michigan

Run Date:

03/23/2017

Anemia Indicators by Race/Ethnicity and Age Children Aged < 5 Years

(2)

Anemia Indicators by Race/Ethnicity and Age (3,4)									
36 - 59 Months	128	14.1	Total	145,839	18.2				
Total 423 17.5									

 <sup>(1)</sup> 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.

<sup>\*</sup> Percentages are not calculated if < 100 records are available for analysis after exclusions

Summary Trends in Growth and Anemia Indicators by Race/Ethnicity

Children Aged < 5 Years (2)

Summary Trends in Growth and Anemia Indicators by Race/Ethnicity (3) Race/Ethnicity and Year Birthweight (4) Height and Weight (5,6) >=2 Yrs Anemia Short Under-Obese Overweight and Low Hb/Hct Stature weight High Obese Low (7) % % % % % Number % Number Number Number White, Not Hispanic 2016 24,718 9.0 8.8 109,073 7.0 2.7 10.4 47,450 16.9 13.5 74,252 13.5 2015 8.8 2.5 9.9 26,289 8.6 114,518 6.5 50,094 16.9 13.4 74,856 12.2 28,392 8.1 120,187 6.0 2.2 10.3 51,961 17.0 13.9 82,055 12.3 2014 8.3 2013 28,825 8.2 8.6 123,080 5.7 2.1 10.7 54,015 17.3 13.6 81,532 12.8 11.8 2012 29,775 8.2 8.8 125,896 5.6 2.6 10.2 56,207 13.2 83,741 16.8 55,921 2011 30,433 7.8 8.4 129,736 5.8 2.7 10.0 16.9 13.5 84,935 11.9 2010 30,392 7.7 8.5 131,192 5.7 2.9 10.2 56,688 16.8 13.2 73,483 11.0 2016 15,331 60,788 8.8 25,261 39,973 29.5 Black, Not Hispanic 15.1 3.5 7.8 4.2 14.0 11.0 2015 16,219 14.9 3.4 62,928 7.4 3.9 8.5 26,573 14.0 10.8 39,551 28.6 9.0 27,462 27.6 2014 16,488 13.9 3.7 65,123 6.5 3.6 14.7 11.3 43,134 2013 17,015 13.1 3.7 66,248 6.0 3.2 9.5 28,266 14.7 11.6 42,571 28.3 2012 16,431 13.6 3.7 65,053 6.4 4.0 9.2 28,218 14.2 11.2 42,695 26.0 2011 16,626 13.6 4.0 64,892 6.8 4.1 9.2 26,359 13.9 11.3 41,205 26.4 16,599 13.6 64,332 6.9 4.3 9.9 26,065 13.9 37,174 2010 3.8 11.8 24.1

03/23/2017

Run Date:

<sup>(1)</sup> Reporting period is January 1 through December 31.

<sup>(2)</sup> Analyses based on one record per child.

<sup>(3)</sup> Excludes records with unknown data or errors.

<sup>(4)</sup> Infants born during the reporting period included in the analysis.

<sup>(5)</sup> 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.

<sup>(6)</sup> 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.

<sup>(7)</sup> 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.

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

Summary Trends in Growth and Anemia Indicators by Race/Ethnicity Children Aged < 5 Years

**Summary Trends in Growth and Anemia Indicators by Race/Ethnicity** (3) Race/Ethnicity and Year Birthweight (4) Height and Weight (5.6)

03/23/2017

Run Date:

Race/Lumicity and Tear		טוו נוו	iweight (4	)			ricig	ili aliu weigili (5,	0)			_	
			Low	High		Short Stature	Under- weight	Obese	O	>=2 Yrs verweight Obese	and	Anemi Low Hb/	
		Number	%	%	Number	%	%	%	Number	%	%	Number	%
Hispanic	2016	6,692	8.5	7.5	30,351	6.7	2.1	13.8	13,799	18.3	18.8	21,211	15.6
	2015	6,913	7.9	8.0	31,361	6.4	2.1	13.7	14,853	18.3	18.7	21,272	14.3
	2014	6,940	7.4	8.0	32,364	6.1	1.7	14.6	15,335	19.2	19.7	22,995	14.8
	2013	6,946	7.3	8.0	33,472	5.6	1.6	14.8	16,229	19.2	19.5	23,553	15.0
	2012	7,156	7.2	8.0	34,008	5.6	1.9	14.5	16,744	18.5	19.7	24,418	14.5
	2011	7,286	7.3	7.5	35,522	5.4	2.0	14.6	16,759	19.2	20.0	24,954	14.7
	2010	7,399	7.2	7.3	36,104	5.2	2.3	14.6	17,424	19.0	20.0	22,724	13.3
American Indian/Alaska	2016	151	10.6	7.3	668	6.6	3.6	17.5	294	20.7	22.8	439	18.0
Native	2015	185	6.5	9.2	730	6.6	2.2	15.5	307	23.5	21.2	446	15.2
	2014	179	11.2	10.1	744	4.8	2.0	16.8	318	22.6	24.5	466	18.7
	2013	157	5.1	12.7	673	5.2	2.2	18.3	292	21.9	22.9	420	17.4
	2012	159	6.3	15.7	701	5.0	2.4	15.0	300	22.0	17.3	424	14.6
	2011	153	5.2	13.1	695	4.2	1.6	16.1	317	21.8	22.1	420	16.0
	2010	160	5.6	11.9	608	6.6	2.5	17.6	246	20.3	20.7	307	11.4

<sup>(1)</sup> Reporting period is January 1 through December 31.

<sup>(2)</sup> Analyses based on one record per child.(3) Excludes records with unknown data or errors.

 <sup>(4)</sup> 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.

<sup>(6)</sup> 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.

Summary Trends in Growth and Anemia Indicators by Race/Ethnicity

Children Aged < 5 Years (2)

Summary Trends in Growth and Anemia Indicators by Race/Ethnicity (3) Race/Ethnicity and Year Birthweight (4) Height and Weight (5,6) >=2 Yrs Anemia Short Under-Obese Overweight and Low Hb/Hct Stature weight High Obese Low (7) % % % % % Number % Number Number Number Asian/Pacific Islander 2016 949 11.3 3.8 4,371 6.1 4.5 8.4 2,011 10.9 11.6 3,148 16.6 2015 8.6 949 10.4 3.4 4,330 5.8 4.4 2,013 11.6 2,917 15.5 11.0 2014 977 10.2 4,430 5.9 4.2 8.8 2,032 12.8 12.8 3,138 15.1 5.2 2013 957 9.4 3.9 4,052 6.0 3.6 8.7 1,831 13.0 12.4 2,782 15.6 2012 918 11.5 3.8 3,887 6.8 4.7 8.3 1,797 13.6 11.7 2,674 15.3 9.0 2011 840 9.4 2.7 3,713 7.1 4.1 1,582 13.1 12.8 2,506 16.0 2010 874 9.4 5.3 3,676 7.2 4.8 8.7 1,563 13.3 12.0 2,194 15.5 Multiple Races 2016 4,544 9.9 18,728 2.7 7,973 16.5 12,513 17.7 6.8 6.9 11.7 15.2 2015 4,403 9.0 7.2 18,998 6.5 2.5 8,303 17.2 14.7 12,361 16.6 11.4 9.5 5.9 2.2 2014 4,665 7.4 19,632 11.6 8,688 18.0 14.9 13,287 16.1 2013 4,427 9.2 7.6 19,489 5.1 2.1 12.2 8,910 17.4 15.4 13,055 16.4 2012 4,208 9.7 7.2 19,357 5.2 2.4 12.0 8,945 17.2 15.2 13,276 15.0 2011 4,180 9.0 7.1 19,065 5.2 2.8 11.7 8,399 17.1 15.4 12,689 15.7 7.2 4,205 8.7 18,225 5.3 3.0 12.7 17.0 16.0 10,575 2010 7,877 14.4

03/23/2017

Run Date:

<sup>(1)</sup> Reporting period is January 1 through December 31.

<sup>(2)</sup> Analyses based on one record per child.

<sup>(3)</sup> Excludes records with unknown data or errors.

<sup>(4)</sup> Infants born during the reporting period included in the analysis.

<sup>(5)</sup> 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.

<sup>(6)</sup> Based on 2000 CDC growth chart percentile, overweight is defined as BMI-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.

<sup>(7)</sup> 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.

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

Summary Trends in Growth and Anemia Indicators by Race/Ethnicity

Children Aged < 5 Years (2)

Summary Trends in Growth and Anemia Indicators by Race/Ethnicity (3) Race/Ethnicity and Year Birthweight (4) Height and Weight (5,6) >=2 Yrs Anemia Short Under-Obese Overweight and Low Hb/Hct Stature weight High Obese Low (7) % % % % % % Number Number Number Number All Other/Unknown 2016 182 7.1 7.7 422 7.8 1.7 10.4 91 149 16.1 2015 131 11.5 7.6 352 7.4 1.1 11.4 78 121 18.2 \* 2014 71 263 8.0 8.0 12.5 83 113 12.4 57 \* 2013 103 9.7 9.7 251 5.6 1.6 9.2 81 23 2012 60 134 6.7 1.5 12.7 30 20 2011 59 136 8.1 1.5 12.5 31 \* 2010 55 135 5.2 1.5 11.1 21 30 Total All Race/Ethnic Groups 2016 52,567 224,401 10.5 96,879 13.7 151,685 10.8 6.8 7.1 3.0 16.2 18.4 2015 55,089 10.5 6.8 233,217 6.7 2.9 10.2 102,221 13.6 151,524 17.2 16.3 57,712 105,879 17.0 2014 9.8 6.8 242,743 6.2 2.6 10.6 16.7 14.2 165,188 2013 58,430 9.6 6.9 247,265 5.7 2.4 11.0 109,600 16.8 14.1 163,994 17.5 2012 58,707 9.7 7.1 249,036 5.8 2.9 10.7 112,234 16.4 13.8 167,258 16.1 2011 59,577 9.4 6.9 253,759 6.0 3.0 10.5 109,357 14.1 166,740 16.3 16.5 2010 59,684 9.4 6.9 254,272 5.9 3.2 10.9 109,884 14.2 146,487 15.0 16.5

Run Date:

<sup>(1)</sup> Reporting period is January 1 through December 31.

<sup>(2)</sup> Analyses based on one record per child.

<sup>(3)</sup> Excludes records with unknown data or errors.

<sup>(4)</sup> Infants born during the reporting period included in the analysis.

<sup>(5)</sup> 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.

<sup>(6)</sup> Based on 2000 CDC growth chart percentile, overweight is defined as BMI-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.

<sup>(7)</sup> 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.

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

Run Date: 03/23/2017

Summary Trends in Brestfeeding Indicators by Race/Ethnicity

Children Aged < 5 Years

	Summary	of Trends in	n Breastfeed	ling Indic	ators by Rac	ce/Ethnicity	(3)
Race/Ethnicity and Year				Breas	stfeeding (4)		
		Number	% Ever Breastfeed	Number	% Breastfeed At Least 6 Months	Number	% Breatsfeed At Least 12 Months
White, Not Hispanic	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	28,706	69.0	22,859	22.2	20,845	12.2
	2013	29,213	68.5	23,527	21.1	21,049	11.1
	2012	30,158	67.0	22,566	21.9	20,742	11.2
	2011	30,747	65.7	23,717	21.0	21,506	9.8
	2010	30,758	61.6	20,890	21.6	17,682	10.6
Black, Not Hispanic	2016	15,514	53.5	11,753	12.4	9,661	6.0
	2015	16,379	51.6	12,372	11.1	9,769	5.8
	2014	16,597	49.7	12,612	11.6	10,365	4.8
	2013	17,129	49.2	12,439	11.0	10,252	4.8
	2012	16,564	47.5	11,008	12.6	9,539	4.9
	2011	16,740	46.3	12,627	11.9	10,329	4.6
	2010	16,721	43.0	10,948	12.0	8,844	5.3

<sup>(1)</sup> Reporting period is January 1 through December 31.(2) Analyses based on one record per child.

<sup>(2)</sup> 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.</li>

(1)

03/23/2017

Run Date:

#### Summary Trends in Brestfeeding Indicators by Race/Ethnicity

Children Aged < 5 Years

	Summary	of Trends ir	Breastfeed	ling Indic	ators by Rac	ce/Ethnicity	(3)
Race/Ethnicity and Year				Breas	etfeeding (4)		
		Number	% Ever Breastfeed	Number	% Breastfeed At Least 6 Months	Number	% Breatsfeed At Least 12 Months
Hispanic	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	7,027	68.2	5,525	18.6	5,173	10.0
	2013	7,043	67.2	5,607	17.6	5,422	9.4
	2012	7,233	64.5	5,201	20.6	5,235	10.8
	2011	7,366	62.7	5,747	22.3	5,668	10.1
	2010	7,527	62.6	5,097	22.8	4,611	10.9
American Indian/Alaska Native	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	136	16.2	106	11.3
	2011	167	57.5	127	18.9	107	10.3
	2010	163	57.7	101	22.8	93	*

 <sup>(1)</sup> 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.

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

## Table 19C 2016 Pediatric Nutrition Survelliance

Michigan

Run Date:

03/23/2017

#### Summary Trends in Brestfeeding Indicators by Race/Ethnicity

Children Aged < 5 Years

(1)

	Summary	of Trends ir	n Breastfeed	ding Indic	ators by Rac	ce/Ethnicity	(3)				
Race/Ethnicity and Year		Breastfeeding (4)									
		Number	% Ever Breastfeed	Number	% Breastfeed At Least 6 Months	Number	% Breatsfeed At Least 12 Months				
Asian/Pacific Islander	2016	976	73.8	802	36.7	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	72.2	738	35.5	682	24.6				
	2012	928	71.9	619	37.0	595	22.7				
	2011	868	69.4	674	35.3	643	22.4				
	2010	891	62.7	592	32.9	507	20.3				
Multiple Races	2016	4,588	65.4	3,636	18.3	3,180	9.6				
	2015	4,440	64.8	3,659	15.1	3,301	8.6				
	2014	4,698	62.1	3,707	15.9	3,303	8.3				
	2013	4,452	61.9	3,453	14.4	3,130	7.5				
	2012	4,239	60.6	3,351	15.8	3,096	7.7				
	2011	4,198	58.7	3,456	14.9	3,176	6.5				
	2010	4,233	55.2	2,874	15.5	2,424	6.6				

<sup>(1)</sup> Reporting period is January 1 through December 31.(2) Analyses based on one record per child.

<sup>(3)</sup> 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.

## Table 19C **2016 Pediatric Nutrition Survelliance**

Michigan

Run Date:

03/23/2017

#### Summary Trends in Brestfeeding Indicators by Race/Ethnicity

Children Aged < 5 Years

(1)

	Summary	of Trends ir	Breastfeed	ling Indic	ators by Rac	ce/Ethnicity	(3)				
Race/Ethnicity and Year		Breastfeeding (4)									
		Number	% Ever Breastfeed	Number	% Breastfeed At Least 6 Months	Number	% Breatsfeed At Least 12 Months				
All Other/Unknown	2016	199	61.3	145	20.0	41	*				
	2015	143	68.5	132	25.0	37	*				
	2014	84	*	94	*	26	*				
	2013	122	72.1	115	23.5	16	*				
	2012	68	*	67	*	11	*				
	2011	67	*	61	*	7	*				
	2010	69	*	55	*	11	*				
Total All Race/Ethnic Groups	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	62.3	46,002	17.7	40,663	9.2				
	2012	59,352	60.9	42,948	19.1	39,324	9.5				
	2011	60,153	59.5	46,409	18.4	41,436	8.5				
	2010	60,362	56.1	40,557	18.9	34,172	9.1				

<sup>(1)</sup> 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.

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

## **Summary Trends in Growth Indicators by Age**

Children Aged < 5 Years

						Summary of	of Trends in G	rowth Indica	tors by Age (3)					<u> </u>			
Age and Year		Height and Weught (4,5)						Age and Year		Height and Weught (4,5)							
			Short Stature	Under- weight	Obese		>=2 Yrs Overweight and Obese					Short Stature	Under- weight	Obese		>=2 Yrs Overweight and Obese	
		Number	%	%	%	Number	% Overweight	% Obese			Number	%	%	%	Number	% Overweight	% Obese
0 - 11 Months	2016	82,241	11.6	4.2	6.2	0	*	*	24 - 35 Months	2016	38,450	3.9	3.1	11.9	38,371	15.8	12.3
	2015	87,652	10.7	3.9	6.0	0	*	*		2015	38,414	4.0	2.9	11.4	38,154	15.7	11.7
	2014	84,129	9.7	3.7	6.2	0	*	*		2014	37,835	3.7	2.8	11.7	37,624	15.8	12.1
	2013	77,596	8.8	3.4	6.8	0	*	*		2013	40,435	3.6	2.6	11.6	40,426	16.2	12.0
	2012	83,373	9.2	4.2	6.5	0	*	*		2012	41,102	3.6	3.2	11.1	41,079	15.5	11.5
	2011	74,332	9.7	5.2	5.9	0	*	*		2011	42,092	4.1	2.1	12.1	27,560	15.8	12.1
	2010	74,954	9.6	5.9	6.2	0	*	*		2010	44,469	3.8	2.2	12.4	31,367	15.8	12.3
	2009	0	*	*	*	0	*	*		2009	0	*	*	*	0	*	*
12 - 23 Months	2016	45,190	6.6	0.5	12.7	0	*	*	36 - 47 Months	2016	29,280	4	3.3	13.7	29,272	16.2	14.4
	2015	43,073	6.4	0.5	12.0	0	*	*		2015	33,435	3	3.0	13.4	33,427	16.1	14.1
	2014	52,523	6.3	0.4	12.1	0	*	*		2014	32,993	3	2.8	13.6	32,992	16.8	14.4
	2013	60,058	6.0	0.5	12.1	0	*	*		2013	34,696	3	2.8	13.8	34,694	16.8	14.6
	2012	53,397	5.8	0.3	12.1	0	*	*		2012	35,311	3	3.2	13.7	35,304	16.3	14.5
	2011	56,493	6.4	0.7	10.8	0	*	*		2011	39,177	3	3.1	13.0	39,175	16.2	13.8
	2010	58,919	6.3	0.7	11.7	0	*	*		2010	38,045	3	3.2	13.4	38,035	16.3	14.2
	2009	0	*	*	*	0	*	*		2009	0	*	*	*	0	*	*

Run Date:

<sup>(1)</sup> Reporting period is January 1 through December 31.(2) Analyses based on one record per child.

<sup>(3)</sup> Excludes records with unknown data or errors.

<sup>(4)</sup> 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</li>

## Summary Trends in Growth Indicators by Age

Children Aged < 5 Years

**Summary of Trends in Growth Indicators by Age** Age and Year Height and Weught (4,5) >=2 Yrs Short Under-Obese Overweight and Stature weight Obese % % % Number % Number Overweight Obese 48 - 59 Months 2016 29,240 3.1 3.2 14.0 29,236 16.7 14.9 2015 30,643 3.0 2.8 14.4 30,640 17.2 15.4 2014 35,263 2.9 2.5 15.0 35,263 17.6 16.1 2013 34,480 3.1 2.5 15.0 34,480 17.6 16.0 2012 35,851 2.9 15.8 2.9 14.7 35,849 17.5 2011 41,665 3.2 2.9 14.7 41,665 17.3 15.9 2010 37,883 3.0 37,879 15.9 3.0 14.9 17.3 2009 0 0 10.5 96,879 13.7 Total All Age Groups 2016 224,401 7.1 3.0 16.2 2015 233,217 6.7 2.9 10.2 102,221 16.3 13.6 2014 242,743 6.2 2.6 10.6 105,879 16.7 14.2 2013 247,265 5.7 109,600 16.8 14.1 2.4 11.0 2012 249,034 112,232 13.8 5.8 2.9 10.7 16.4 2011 253,759 6.0 3.0 10.5 109,357 16.5 14.1 2010 254,270 5.9 3.2 10.9 109,882 16.5 14.2 2009 0

(3)											
Age and Year	Height and Weught (4,5)										
		Short Stature	Under- weight	Obese		>=2 Yrs Overweight and Obese					
	Number	%	%	%	Number	% Overweight	% Obese				

Run Date:

<sup>(1)</sup> Reporting period is January 1 through December 31.

<sup>(2)</sup> Analyses based on one record per child.

<sup>(3)</sup> Excludes records with unknown data or errors.

<sup>(4)</sup> 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.

<sup>(5)</sup> 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.

<sup>\*</sup> Percentages are not calculated if < 100 records are available for analysis after exclusions

## Summary of Trends in Anemia by Age

Children Aged < 5 Years

(2)

		Sumr	nary of
Age and Year			
		Anemi Low Hb/H	
		Number	%
11 Months	2016	16,180	23.4
	2015	18,664	22.2
	2014	15,716	21.4
	2013	10,210	22.7
	2012	13,615	20.5
	2011	6,601	20.0
	2010	6,281	18.8
- 17 Months	2016	23,200	21.4
	2015	25,482	20.0
	2014	29,076	20.2
	2013	36,210	21.4
	2012	29,477	19.9
	2011	32,612	19.4
	2010	30,537	18.6

Run Date: 03/23/2017

 <sup>(1)</sup> 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</li>

(2)

## **Summary of Trends in Anemia by Age** Children Aged < 5 Years

Run Date: 03/23/2017

		Summa	rv of T	rends in Anemia by Age	(3)		
Age and Year				Age and Year	(0)		
		Anemi Low Hb/H				Anemi Low Hb/H	
		Number	%			Number	%
36 - 59 Months	2016	50,827	14.6	Total All Age Groups	2016	151,685	18.4
	2015	56,279	13.8		2015	151,524	17.2
	2014	60,833	13.7		2014	165,188	17.0
	2013	59,208	13.6		2013	163,994	17.5
	2012	61,837	12.1		2012	167,256	16.1
	2011	68,766	12.7		2011	166,740	16.3
	2010	53,842	11.1		2010	146,485	15.0
All Other/Unknown	2016	0	*				
	2015	0	*				
	2014	0	*				
	2013	0	*				
	2012	2	*				
	2011	0	*				
	2010	2	*				

 <sup>(1)</sup> 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</li>