

## Overweight and Obesity Prevalence among Children Ages 2 through 4 Years

### Enrolled in the Colorado WIC Program\* During 2016

**New methodology:** In 2010, the Centers for Disease Control and Prevention (CDC) announced they would no longer produce the PedNSS (Pediatric Nutrition Surveillance System) reports. CDC published the last PedNSS results for 2011. Since 2012 states conduct their own analysis on their data. Pediatric overweight/obese data elements are the most essential PedNSS had reported. CDC created an analysis methodology to obtain pediatric overweight/obese data that use a specific data set collected by all state WIC Programs, the WIC Participant and Program Characteristics (WIC PC) file. States have the option to use this methodology to produce their state-specific pediatric overweight/obese data.

During the summer of 2012, the Colorado WIC Program used CDC's analysis methodology to analyze its 2012 PC file to assess the prevalence of overweight and obese children ages 2 through 4 years. The 2012 Colorado WIC PC file includes all actively enrolled participants in the WIC data base during the month of April 2012. This methodology is called "point prevalence methodology" and differs from past methodologies CDC produced. It contains actual height and weight measurements of children enrolled in the Colorado WIC Program during one month only. It does not contain the entire number of children participating in WIC over a one year time period (as previously presented in PedNSS). Hence, the number of children with biologically plausible data (data that are assumed accurate and consistent with what makes sense biologically) to analyze from 2012 is smaller than the number from past PedNSS estimates.\*\* Because of this new analysis methodology, the prevalence of overweight and obesity among children ages 2 through 4 years receiving WIC services from the WIC PC file are not directly comparable to past PedNSS prevalence estimates.

Point prevalence methodology will be used to generate overweight and obese prevalence estimates in 2012 and beyond. It is recommended that the 2012 WIC PC estimates serve as a new baseline for monitoring trends in future years. The **2012 - 2015 Pediatric Overweight/Obese Data** can be found on the Colorado Department of Public Health and Environment's Women, Infants, and Children webpage under WIC Reports: <https://www.colorado.gov/cdphe/wic-reports>.

**2016 State Prevalence:** Based on the new point prevalence methodology, the 2016 state prevalence of overweight and obesity among Colorado WIC Program participants ages 2 through 4 years is shown in Table 1. The prevalence estimate is reported along with its corresponding confidence interval (refer to the description about confidence intervals below). In 2016, 13.3 percent of low income children ages 2 through 4 years in Colorado were overweight, 7.0 percent were obese, and 20.3 percent were overweight or obese.

\*The Colorado Special Supplemental Nutrition Program for Women, Infants, and Children is commonly referred to as the Colorado WIC Program.

\*\*The 2011 PedNSS data represented a partial sample as Colorado WIC changed its program software. During data collection in 2011, some agencies were oversampled thus contributing to a temporary rise in the overweight and obesity rates.

**Table 1. Prevalence of overweight and obesity among children ages 2 through 4 years enrolled in the Colorado WIC Program (N = 29,657), during April 2016**

	N	Overweight 85 <sup>th</sup> -<95 <sup>th</sup> percentile <sup>^</sup> % (95% CI)	Obese ≥95 <sup>th</sup> percentile <sup>^</sup> % (95% CI)	Overweight or Obese ≥85 <sup>th</sup> percentile <sup>^</sup> % (95% CI)
Colorado	29,657	13.3 (12.9 – 13.7)	7.0 (6.7 - 7.3)	20.3 (19.8 - 20.7)

CI: Confidence Interval

<sup>^</sup>Based on 2000 CDC growth chart percentiles for BMI-for-age for children 2 years of age and older.

Data Source: 2016 WIC Participant and Program Characteristics (Colorado WIC PC) file

Note that the total number of children ages 2 through 4 years available for analysis after exclusions of implausible records was 29,657. This sample size is smaller than the sample sizes analyzed in the past by the PedNSS. The decreased sample size results in increased variability in estimates, which is why it becomes important to look at the confidence intervals, especially when making comparisons. It should be noted that prevalence estimates are suppressed for counties, agencies, and clinics with a sample size less than 100.

**NEW 2016 State Prevalence by Race/Ethnicity:** Based on the new point prevalence methodology, the 2016 state prevalence of overweight and obesity among Colorado WIC Program participants ages 2 through 4 years by race/ethnicity is shown in Table 2. The prevalence estimate is reported along with its corresponding confidence interval (refer to the description about confidence intervals below).

**Table 2. Prevalence of overweight and obesity among children ages 2 through 4 years enrolled in the Colorado WIC Program (N = 29,657) by race/ethnicity, during April 2016**

	N	Overweight 85 <sup>th</sup> -<95 <sup>th</sup> percentile <sup>^</sup> % (95% CI)	Obese ≥95 <sup>th</sup> percentile <sup>^</sup> % (95% CI)	Overweight or Obese ≥85 <sup>th</sup> percentile <sup>^</sup> % (95% CI)
White, Non-Hispanic	8,910	12.4 (11.8-13.1)	5.3 (4.9-5.8)	17.8 (17.0-18.6)
Black, Non-Hispanic	2,125	11.2 (9.9-12.6)	4.9 (4.0-5.8)	16.1 (14.6-17.7)
Hispanic	16,650	14.4 (13.8-14.9)	8.2 (7.8-8.6)	22.6 (22.0-23.2)
American Indian/Alaska Native, NH	337	9.8 (6.6-13.0)	9.5 (6.3-12.6)	19.3 (15.1-23.5)
Asian/Pacific Islander, NH	945	9.5 (7.6-11.4)	5.2 (3.8-6.6)	14.7 (12.4-17.0)
Multiple Races/Other, NH	690	12.3 (9.9-14.8)	5.2 (3.6-6.9)	17.5 (14.7-20.4)

CI: Confidence Interval

<sup>^</sup>Based on 2000 CDC growth chart percentiles for BMI-for-age for children 2 years of age and older.

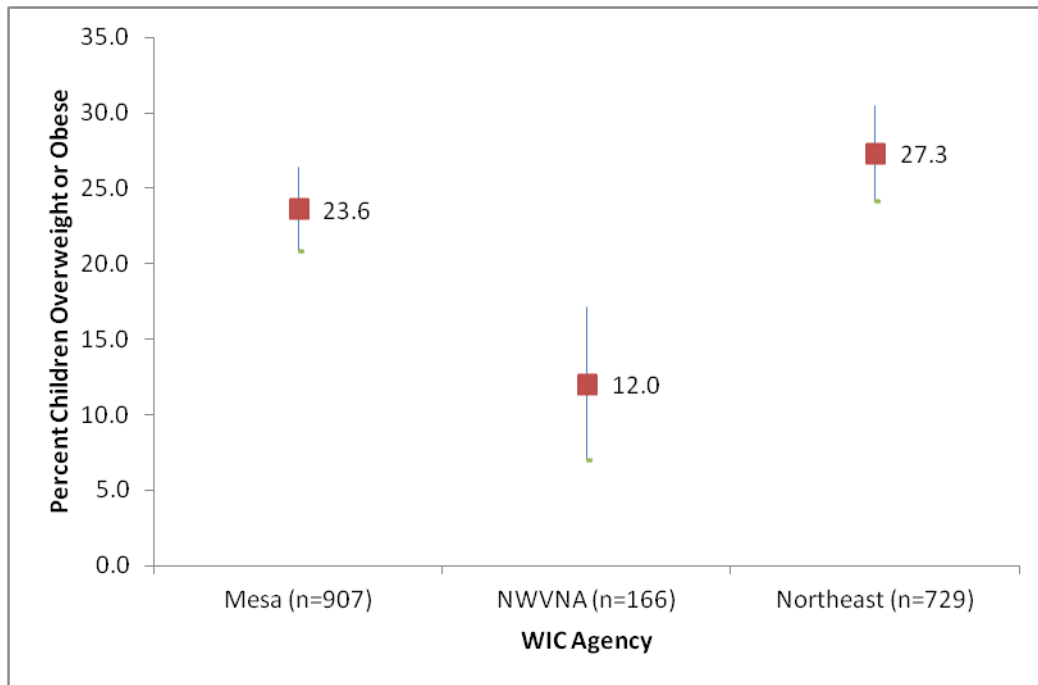
NH: Non-Hispanic

Data Source: 2016 WIC Participant and Program Characteristics (Colorado WIC PC) file

**Confidence Intervals (CI):** Confidence intervals are used to describe the possible margin of error of an estimated prevalence or rate. This report provides 95 percent confidence intervals. A 95 percent confidence interval indicates that 95 out of 100 times, the “true” prevalence value will be contained between the upper and lower limits of that confidence interval. Confidence intervals are directly affected by sample size. If the sample size is small, the confidence interval will likely be wide. Conversely, if the sample size is large, the confidence interval will likely be narrow. Confidence intervals are important for understanding if differences are statistically significant.

The CI Example below shows the prevalence of overweight or obese children for three WIC agencies. The prevalence estimate is indicated by the red marker and the confidence interval is indicated by the blue line. Northwest Colorado Visiting Nurse Association (NWWNA) has the longest line and the smallest sample size, while Mesa has the shortest line and the largest sample size. The lines for Mesa and NWWNA and the lines for NWWNA and Northeast do not overlap, so the prevalence estimates are statistically significantly different. In other words, the prevalence of overweight or obese children ages 2 through 4 years in NWWNA is statistically lower compared to Mesa and compared to Northeast. When comparing prevalence estimates for Mesa and Northeast, the blue lines (or confidence intervals) do overlap signifying that there is no statistical difference between the two agency estimates.

**CI Example: Prevalence of overweight or obese children ages 2 through 4 years enrolled in the Colorado WIC Program by select WIC agencies, 2016**



**Data Interpretation:** Due to changes in methodology, these are a few things that cannot and can be done with these new estimates.

**Cannot:**

- Compare 2012 and later Colorado WIC PC file estimates to the Colorado PedNSS estimates from 2011 and earlier.
- Compare Colorado WIC PC data to other states' PedNSS data.

**Can:**

- Use the 2012 estimates as the new baseline for overweight and obese children ages 2 through 4. Use post-2012 estimates when available to track trends.
- Compare data within the same year to other agencies, clinics, counties, and the state.

- Compare with future data when available – make sure to check the confidence interval overlap when making comparisons by year.

The following pages indicate the prevalence of overweight and obesity among children ages 2 through 4 years in 2016 by local WIC agency (Table 2), WIC clinic (Table 3), and county of WIC clinic (Table 4) along with their respective confidence intervals.

**Note to Users of these Data:** Use the data as you monitor efforts to achieve healthy weight among the children you serve in your agency. It is helpful to look at the prevalence of overweight and obesity together because the sum of these values tells a much broader story of the burden among the population being served. Remember that although the 2016 data are valid, WIC PC overweight and obese estimates are not comparable to PedNSS overweight and obese estimates.

Other partner programs within your broader agencies or external organizations may also find the data to be a useful surveillance tool as programmatic efforts targeting the health of children in early childhood emerge. Specifically, local WIC agencies can use the data to monitor progress related to early childhood obesity prevention nutrition education plans.

The data are posted on the Colorado WIC Program’s web site. Click “Local agencies”, then “Early childhood obesity prevention ”, then “Colorado early childhood obesity data reports”.

Table 2. Prevalence of overweight and obesity among children ages 2 through 4 years enrolled in the Women, Infants, and Children (WIC) Program by WIC agency, Colorado, 2016

WIC Agency	Overweight 85th-<95th percentile^			Obese >=95th percentile^			Overweight or Obese >=85th percentile^			N
	%	Lower CI	Upper CI	%	Lower CI	Upper CI	%	Lower CI	Upper CI	
Baca County Public Health Agency	*	*	*	*	*	*	*	*	*	41
Bent County Public Health	*	*	*	*	*	*	*	*	*	44
Boulder County Public Health	13.6	11.7	15.6	8.2	6.7	9.8	21.9	19.5	24.2	1166
Broomfield County Health and Human Services	12.3	7.3	17.2	5.8	2.3	9.4	18.1	12.3	24.0	171
Clear Creek County Public and Environmental Health	*	*	*	*	*	*	*	*	*	36
Community Health Services Pitkin County	*	*	*	*	*	*	*	*	*	14
Delta Department of Health	9.1	4.8	13.4	5.7	2.2	9.1	14.8	9.5	20.1	176
Denver Health Medical Center	12.8	11.8	13.8	6.6	5.8	7.4	19.4	18.2	20.6	4034
Dolores County Public Health	*	*	*	*	*	*	*	*	*	11
Eagle County Public Health	6.3	3.2	9.4	4.2	1.6	6.8	10.5	6.6	14.4	238
El Paso County Public Health	14.1	13.1	15.1	4.3	3.7	4.9	18.4	17.3	19.6	4434
Garfield County Public Health	11.4	8.2	14.7	4.3	2.2	6.3	15.7	12.0	19.4	376
Grand County Public Health	*	*	*	*	*	*	*	*	*	55
Gunnison County Public Health	*	*	*	*	*	*	*	*	*	57
Jefferson County Department of Public Health	14.2	12.6	15.8	8.2	7.0	9.5	22.5	20.6	24.4	1820
Kit Carson County Health and Human Services	9.6	3.9	15.4	4.8	0.6	9.0	14.4	7.6	21.3	104
Larimer County Department of Health and Environment	13.2	11.2	15.2	8.7	7.1	10.4	21.9	19.5	24.3	1135
Las Animas--Huerfano Counties District Health Department	14.4	9.2	19.5	9.4	5.1	13.7	23.8	17.5	30.0	181
Lincoln County Public Health	*	*	*	*	*	*	*	*	*	48
Mesa County Health Department	14.3	12.0	16.6	9.3	7.4	11.2	23.6	20.8	26.4	907
Montezuma County Public Health Department	15.3	9.9	20.6	7.9	3.9	11.9	23.2	16.9	29.4	177
Montrose County Nursing Service	12.5	9.8	15.3	4.2	2.5	5.9	16.7	13.6	19.9	550
Northeast Colorado Health Department	19.1	16.2	21.9	8.2	6.2	10.2	27.3	24.1	30.5	729
Northwest Colorado Visiting Nurse Association	7.2	3.2	11.2	4.8	1.5	8.1	12.0	7.0	17.1	166
Otero County Health Department	14.8	11.2	18.4	13.8	10.3	17.2	28.6	24.0	33.1	385
Ouray County Public Health	*	*	*	*	*	*	*	*	*	11
Park County Public Health	*	*	*	*	*	*	*	*	*	56
Prowers County Public Health	13.2	7.9	18.5	17.6	11.6	23.6	30.8	23.6	38.1	159
Pueblo City-County Health Department	14.9	13.0	16.8	7.6	6.2	8.9	22.5	20.3	24.6	1416
Rio Blanco County Department of Public Health and Environment	*	*	*	*	*	*	*	*	*	25
San Juan Basin Health Department	9.0	5.8	12.1	4.3	2.1	6.6	13.3	9.6	17.0	323
San Miguel County Department of Health and Environment	*	*	*	*	*	*	*	*	*	24
Summit County Public Health	*	*	*	*	*	*	*	*	*	89
Sunrise Community Health	15.0	13.2	16.8	9.6	8.2	11.1	24.6	22.5	26.8	1560
Teller County Public Health	*	*	*	*	*	*	*	*	*	84
Tri-County Health Department	12.4	11.6	13.1	7.0	6.4	7.6	19.4	18.5	20.2	7857
Upper Arkansas Area Council of Governments	13.4	10.1	16.7	4.6	2.6	6.7	18.0	14.3	21.7	411
Valley-Wide Health Systems, Inc.	12.8	10.1	15.5	8.3	6.1	10.6	21.1	17.8	24.4	587
<b>Colorado</b>	<b>13.3</b>	<b>12.9</b>	<b>13.7</b>	<b>7.0</b>	<b>6.7</b>	<b>7.3</b>	<b>20.3</b>	<b>19.8</b>	<b>20.7</b>	<b>29657</b>

\*Percentages are not calculated if &lt;100 records are available for analysis after exclusions.

^Based on 2000 CDC growth chart percentiles for BMI-for-age for children 2 years of age and older.

CI: Confidence Interval (95%)

Data Source: 2016 WIC Participant and Program Characteristics (WIC PC) file

Prepared by Health Surveys and Evaluation Branch, Center for Health and Environmental Data, Colorado Department of Public Health and Environment, October 2016

Table 2b. Prevalence of overweight and obesity among children ages 2 through 4 years enrolled in the Women, Infants, and Children (WIC) Program by WIC agency and race/ethnicity, Colorado, 2016

WIC Agency	Race/Ethnicity	Overweight 85th-<95th percentile^			Obese >=95th percentile^			Overweight or Obese >=85th percentile^			N
		%	Lower CI	Upper CI	%	Lower CI	Upper CI	%	Lower CI	Upper CI	
Baca County Public Health Agency	White, non-Hispanic	*	*	*	*	*	*	*	*	*	28
	Hispanic, any race	*	*	*	*	*	*	*	*	*	9
	Other	*	*	*	*	*	*	*	*	*	4
Bent County Public Health	White, non-Hispanic	*	*	*	*	*	*	*	*	*	17
	Hispanic, any race	*	*	*	*	*	*	*	*	*	22
	Other	*	*	*	*	*	*	*	*	*	5
Boulder County Public Health	White, non-Hispanic	12.8	9.0	16.6	6.4	3.6	9.2	19.2	14.7	23.7	297
	Hispanic, any race	14.3	11.9	16.8	9.0	7.0	11.0	23.3	20.3	26.3	781
	Other	*	*	*	*	*	*	*	*	*	88
Broomfield County Health & Human Services	White, non-Hispanic	*	*	*	*	*	*	*	*	*	59
	Hispanic, any race	*	*	*	*	*	*	*	*	*	92
	Other	*	*	*	*	*	*	*	*	*	20
Clear Creek County Public and Environmental Health	White, non-Hispanic	*	*	*	*	*	*	*	*	*	25
	Hispanic, any race	*	*	*	*	*	*	*	*	*	8
	Other	*	*	*	*	*	*	*	*	*	3
Community Health Services Pitkin County	White, non-Hispanic	*	*	*	*	*	*	*	*	*	2
	Hispanic, any race	*	*	*	*	*	*	*	*	*	9
	Other	*	*	*	*	*	*	*	*	*	3
Delta Department of Health	White, non-Hispanic	*	*	*	*	*	*	*	*	*	79
	Hispanic, any race	*	*	*	*	*	*	*	*	*	90
	Other	*	*	*	*	*	*	*	*	*	7
Denver Health Medical Center	White, non-Hispanic	10.6	7.5	13.8	3.3	1.4	5.1	13.9	10.3	17.5	367
	Hispanic, any race	14.0	12.7	15.4	7.8	6.8	8.8	21.8	20.2	23.4	2649
	Other	10.3	8.4	12.2	4.7	3.4	6.0	15.0	12.8	17.2	1018
Dolores County Public Health	White, non-Hispanic	*	*	*	*	*	*	*	*	*	10
	Hispanic, any race	*	*	*	*	*	*	*	*	*	1
	Other	*	*	*	*	*	*	*	*	*	0
Eagle County Public Health	White, non-Hispanic	*	*	*	*	*	*	*	*	*	22
	Hispanic, any race	7.0	3.6	10.5	4.7	1.8	7.6	11.7	7.4	16.1	213
	Other	*	*	*	*	*	*	*	*	*	3
El Paso County Public Health	White, non-Hispanic	13.0	11.6	14.5	3.8	3.0	4.7	16.9	15.2	18.5	2001
	Hispanic, any race	15.5	13.9	17.2	4.8	3.8	5.8	20.4	18.5	22.2	1801
	Other	13.4	10.8	16.1	4.3	2.7	5.9	17.7	14.7	20.7	632
Garfield County Public Health	White, non-Hispanic	*	*	*	*	*	*	*	*	*	76
	Hispanic, any race	13.1	9.2	17.0	4.8	2.3	7.3	17.9	13.4	22.3	291
	Other	*	*	*	*	*	*	*	*	*	9
Grand County Public Health	White, non-Hispanic	*	*	*	*	*	*	*	*	*	36
	Hispanic, any race	*	*	*	*	*	*	*	*	*	17
	Other	*	*	*	*	*	*	*	*	*	2
Gunnison County Public Health	White, non-Hispanic	*	*	*	*	*	*	*	*	*	32
	Hispanic, any race	*	*	*	*	*	*	*	*	*	21
	Other	*	*	*	*	*	*	*	*	*	4
Jefferson County Department of Public Health	White, non-Hispanic	14.7	12.1	17.2	7.3	5.4	9.1	21.9	19.0	24.9	743
	Hispanic, any race	14.3	12.0	16.6	9.1	7.3	11.0	23.4	20.6	26.2	897

	Other	12.2	7.4	17.1	7.8	3.8	11.7	20.0	14.1	25.9	180
Kit Carson County Health & Human Services	White, non-Hispanic	*	*	*	*	*	*	*	*	*	53
	Hispanic, any race	*	*	*	*	*	*	*	*	*	48
	Other	*	*	*	*	*	*	*	*	*	3
Larimer County Dept of Health & Environment	White, non-Hispanic	12.5	9.8	15.2	7.4	5.3	9.5	19.9	16.7	23.2	582
	Hispanic, any race	14.8	11.6	18.0	10.4	7.7	13.2	25.2	21.3	29.1	480
	Other	*	*	*	*	*	*	*	*	*	73
Las Animas--Huerfano Counties District Health Dept	White, non-Hispanic	*	*	*	*	*	*	*	*	*	50
	Hispanic, any race	13.4	7.4	19.4	8.7	3.7	13.6	22.0	14.7	29.4	127
	Other	*	*	*	*	*	*	*	*	*	4
Lincoln County Public Health	White, non-Hispanic	*	*	*	*	*	*	*	*	*	40
	Hispanic, any race	*	*	*	*	*	*	*	*	*	6
	Other	*	*	*	*	*	*	*	*	*	2
Mesa County Health Department	White, non-Hispanic	12.2	9.4	15.0	7.4	5.1	9.6	19.5	16.1	23.0	517
	Hispanic, any race	17.8	13.8	21.8	12	8.6	15.4	29.8	25.1	34.6	359
	Other	*	*	*	*	*	*	*	*	*	31
Montezuma County Public Health Department	White, non-Hispanic	*	*	*	*	*	*	*	*	*	82
	Hispanic, any race	*	*	*	*	*	*	*	*	*	67
	Other	*	*	*	*	*	*	*	*	*	28
Montrose County Nursing Service	White, non-Hispanic	7.5	3.8	11.1	2.5	0.3	4.7	10.0	5.8	14.1	201
	Hispanic, any race	16.1	12.0	20.3	4.6	2.2	7.0	20.7	16.1	25.3	304
	Other	*	*	*	*	*	*	*	*	*	45
Northeast Colorado Health Department	White, non-Hispanic	16.2	11.8	20.7	8.5	5.1	11.8	24.7	19.6	29.9	271
	Hispanic, any race	21.5	17.5	25.4	8.7	6.0	11.4	30.2	25.8	34.6	424
	Other	*	*	*	*	*	*	*	*	*	34
Northwest Colorado Visiting Nurse Association	White, non-Hispanic	*	*	*	*	*	*	*	*	*	83
	Hispanic, any race	*	*	*	*	*	*	*	*	*	74
	Other	*	*	*	*	*	*	*	*	*	9
Otero County Health Department	White, non-Hispanic	16.1	9.2	23.0	12.5	6.3	18.7	28.6	20.1	37.1	112
	Hispanic, any race	14.1	9.8	18.3	14.4	10.2	18.7	28.5	23.0	34.0	263
	Other	*	*	*	*	*	*	*	*	*	10
Ouray County Public Health	White, non-Hispanic	*	*	*	*	*	*	*	*	*	5
	Hispanic, any race	*	*	*	*	*	*	*	*	*	6
	Other	*	*	*	*	*	*	*	*	*	0
Park County Public Health	White, non-Hispanic	*	*	*	*	*	*	*	*	*	49
	Hispanic, any race	*	*	*	*	*	*	*	*	*	3
	Other	*	*	*	*	*	*	*	*	*	4
Prowers County Public Health	White, non-Hispanic	*	*	*	*	*	*	*	*	*	49
	Hispanic, any race	13.2	6.7	19.8	19.8	12.1	27.5	33.0	23.9	42.1	106
	Other	*	*	*	*	*	*	*	*	*	4
Pueblo City-County Health Department	White, non-Hispanic	15.2	11.6	18.8	5.5	3.2	7.8	20.7	16.6	24.8	382
	Hispanic, any race	14.7	12.5	17.0	8.2	6.5	9.9	22.9	20.3	25.6	990
	Other	*	*	*	*	*	*	*	*	*	44
Rio Blanco County Dept of Public Health & Envir	White, non-Hispanic	*	*	*	*	*	*	*	*	*	18
	Hispanic, any race	*	*	*	*	*	*	*	*	*	7
	Other	*	*	*	*	*	*	*	*	*	0
San Juan Basin Health Department	White, non-Hispanic	7.9	3.6	12.3	1.3	-0.5	3.2	9.3	4.6	14.0	151
	Hispanic, any race	9.4	4.5	14.3	8.6	3.9	13.4	18.0	11.5	24.5	139

	Other	*	*	*	*	*	*	*	*	*	33
San Miguel County Dept of Health & Environment	White, non-Hispanic	*	*	*	*	*	*	*	*	*	8
	Hispanic, any race	*	*	*	*	*	*	*	*	*	14
	Other	*	*	*	*	*	*	*	*	*	2
Summit County Public Health	White, non-Hispanic	*	*	*	*	*	*	*	*	*	13
	Hispanic, any race	*	*	*	*	*	*	*	*	*	72
	Other	*	*	*	*	*	*	*	*	*	4
Sunrise Community Health	White, non-Hispanic	14.8	11.3	18.2	5.4	3.2	7.6	20.2	16.3	24.1	406
	Hispanic, any race	15.2	13.0	17.4	11.9	9.9	13.9	27.1	24.3	29.8	1012
	Other	14.1	8.3	19.9	5.6	1.8	9.5	19.7	13.1	26.3	142
Teller County Public Health	White, non-Hispanic	*	*	*	*	*	*	*	*	*	71
	Hispanic, any race	*	*	*	*	*	*	*	*	*	8
	Other	*	*	*	*	*	*	*	*	*	5
Tri-County Health Department	White, non-Hispanic	11.6	10.0	13.2	5.4	4.3	6.5	17.0	15.1	18.9	1521
	Hispanic, any race	13.4	12.4	14.4	8.2	7.4	9.0	21.6	20.4	22.8	4714
	Other	10.1	8.6	11.6	5.1	4.0	6.1	15.2	13.4	16.9	1622
Upper Arkansas Area Council of Governments	White, non-Hispanic	13.4	9.6	17.2	3.5	1.5	5.5	16.9	12.7	21	314
	Hispanic, any race	*	*	*	*	*	*	*	*	*	91
	Other	*	*	*	*	*	*	*	*	*	6
Valley-Wide Health Systems, Inc.	White, non-Hispanic	5.8	1.8	9.7	5.8	1.8	9.7	11.6	6.2	17.0	138
	Hispanic, any race	15.2	11.8	18.6	8.7	6.1	11.4	23.9	19.9	27.9	435
	Other	*	*	*	*	*	*	*	*	*	14
Colorado	White, non-Hispanic	12.4	11.8	13.1	5.3	4.9	5.8	17.8	17.0	18.6	8910
	Hispanic, any race	14.4	13.8	14.9	8.2	7.8	8.6	22.6	22.0	23.2	16650
	Other	10.9	10.0	11.9	5.4	4.7	6.1	16.3	15.2	17.4	4097

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

^Based on 2000 CDC growth chart percentiles for BMI-for-age for children 2 years of age and older.

CI: Confidence Interval (95%)

Data Source: 2016 WIC Participant and Program Characteristics (WIC PC) file

Prepared by Health Surveys and Evaluation Branch, Center for Health and Environmental Data, Colorado Department of Public Health and Environment, October 2016



Table 3. Prevalence of overweight and obesity among children ages 2 through 4 years enrolled in the Women, Infants, and Children (WIC) Program by WIC clinic, Colorado, 2016

WIC Clinic	Overweight 85th-95th percentile^			Obese >=95th percentile^			Overweight or Obese >=85th percentile^			N
	%	Lower CI	Upper CI	%	Lower CI	Upper CI	%	Lower CI	Upper CI	
Akron WIC Clinic	*	*	*	*	*	*	*	*	*	19
Alamosa VWHS WIC Clinic	15.1	11.3	18.9	9.3	6.2	12.4	24.4	19.9	29.0	344
Alton/Colfax WIC Clinic	6.3	4.8	7.8	5.8	4.4	7.3	12.2	10.2	14.2	1043
Antonito WIC Clinic	*	*	*	*	*	*	*	*	*	51
Arvada WIC Clinic	16.7	14.0	19.5	9.2	7.1	11.3	25.9	22.7	29.2	706
Aspen WIC Clinic	*	*	*	*	*	*	*	*	*	14
Aurora WIC Clinic	13.0	10.9	15.0	5.9	4.5	7.4	18.9	16.5	21.3	1032
Avon WIC Clinic	4.1	0.5	7.6	4.9	1.0	8.7	8.9	3.8	14.1	123
Avondale WIC Clinic	*	*	*	*	*	*	*	*	*	8
Baca WIC Clinic	*	*	*	*	*	*	*	*	*	41
Bailey WIC Clinic	*	*	*	*	*	*	*	*	*	25
Bennett WIC Clinic	*	*	*	*	*	*	*	*	*	33
Bent County WIC Clinic	*	*	*	*	*	*	*	*	*	44
Boulder WIC Clinic	11.0	7.5	14.5	5.8	3.2	8.5	16.8	12.6	21.0	309
Brighton WIC Clinic	13.8	10.5	17.0	6.0	3.7	8.2	19.8	16.0	23.5	435
Broomfield WIC Clinic	12.3	7.3	17.2	5.8	2.3	9.4	18.1	12.3	24.0	171
Buena Vista WIC Clinic	*	*	*	*	*	*	*	*	*	24
Burlington WIC Clinic	9.6	3.9	15.4	4.8	0.6	9.0	14.4	7.6	21.3	104
Canon City WIC Clinic	13.7	9.8	17.6	5.0	2.5	7.5	18.7	14.2	23.1	300
Castle Rock WIC Clinic	10.1	5.5	14.6	3.0	0.4	5.5	13.0	7.9	18.1	169
Center WIC Clinic	*	*	*	*	*	*	*	*	*	73
Commerce City WIC Clinic	13.7	11.1	16.3	8.9	6.8	11.0	22.6	19.5	25.7	686
Conifer WIC Clinic	*	*	*	*	*	*	*	*	*	17
Cortez WIC Clinic	15.3	9.9	20.6	7.9	3.9	11.9	23.2	16.9	29.4	177
Craig WIC Clinic	8.0	2.9	13.1	3.6	0.1	7.1	11.6	5.6	17.6	112
Cripple Creek WIC Clinic	*	*	*	*	*	*	*	*	*	6
Delta WIC Clinic	9.8	5.2	14.3	6.1	2.4	9.8	15.9	10.2	21.5	164
Divide WIC Clinic	*	*	*	*	*	*	*	*	*	78
Dove Creek WIC Clinic	*	*	*	*	*	*	*	*	*	11
Durango WIC Clinic	8.5	4.8	12.2	4.0	1.4	6.6	12.6	8.2	16.9	223
Eads WIC Clinic	*	*	*	*	*	*	*	*	*	4
Eagle WIC Clinic	*	*	*	*	*	*	*	*	*	79
Eastside Neighborhood Health Center	11.5	9.5	13.5	6.5	5.0	8.1	18.0	15.6	20.5	965
Edgewater WIC Clinic	15.3	11.1	19.4	10.8	7.3	14.4	26.1	21.1	31.1	295
El Jebel WIC Clinic	*	*	*	*	*	*	*	*	*	36
El Paso WIC Clinic	12.6	10.8	14.5	4.3	3.2	5.4	16.9	14.8	19.0	1259
Elizabeth WIC Clinic	*	*	*	*	*	*	*	*	*	24
Englewood WIC Clinic	7.7	5.3	10.1	4.9	3.0	6.8	12.6	9.6	15.5	493
Estes Park WIC Clinic	*	*	*	*	*	*	*	*	*	26
Evans WIC Clinic	15.6	13.3	17.9	10.1	8.2	12.1	25.7	22.9	28.5	929
Fairplay WIC Clinic	*	*	*	*	*	*	*	*	*	14
Firestone WIC Clinic	9.2	4.7	13.7	5.5	2.0	9.1	14.7	9.2	20.2	163
Fort Collins WIC Clinic	13.8	11.4	16.3	9.5	7.4	11.6	23.3	20.3	26.3	760
Fort Lupton WIC Clinic	*	*	*	*	*	*	*	*	*	80
Fort Morgan WIC Clinic	19.0	14.9	23.1	v	5.3	10.9	27.1	22.5	31.7	358
Fountain Valley WIC Clinic	17.3	15.3	19.3	3.9	2.9	4.9	21.2	19.0	23.3	1394
Fraser/Kremmling WIC Clinics	*	*	*	*	*	*	*	*	*	24
Glenwood Springs WIC Clinic	16.8	11.1	22.4	6.4	2.7	10.0	23.1	16.8	29.5	173
Grand Junction WIC Clinic	14.3	12.0	16.6	9.3	7.4	11.2	23.6	20.8	26.4	907
Greeley WIC Clinic	17.3	13.5	21.0	11.1	7.9	14.2	28.4	23.8	32.9	388
Gunnison WIC Clinic	*	*	*	*	*	*	*	*	*	57
Holyoke WIC Clinic	*	*	*	*	*	*	*	*	*	61
Hot Sulphur Springs WIC Clinic	*	*	*	*	*	*	*	*	*	31
Hotchkiss WIC Clinic	*	*	*	*	*	*	*	*	*	12
Hugo WIC Clinic	*	*	*	*	*	*	*	*	*	12
Idaho Springs WIC Clinic	*	*	*	*	*	*	*	*	*	36
Ignacio WIC Clinic	*	*	*	*	*	*	*	*	*	19
Iliff WIC Clinic	11.2	9.6	12.7	5.5	4.4	6.7	16.7	14.9	18.6	1550
Jackson County WIC Clinic	*	*	*	*	*	*	*	*	*	3
Julesburg WIC Clinic	*	*	*	*	*	*	*	*	*	30
La Junta WIC Clinic	15.3	10.2	20.5	21.2	15.3	27.0	36.5	29.6	43.4	189
Lafayette WIC Clinic	12.1	7.6	16.6	7.8	4.1	11.5	19.9	14.4	25.4	206
Lake Plaza WIC Clinic	9.6	4.6	14.7	4.4	0.9	8.0	14.1	8.1	20.0	135
Lakewood WIC Clinic	11.7	9.5	13.9	6.5	4.8	8.2	18.2	15.5	20.8	819
Lamar WIC Clinic	13.5	8.1	19.0	18.1	11.9	24.2	31.6	24.2	39.0	155
Leadville WIC Clinic	*	*	*	*	*	*	*	*	*	49
Limon WIC Clinic	*	*	*	*	*	*	*	*	*	36
Lone Tree WIC Clinic	12.7	8.1	17.3	6.8	3.3	10.3	19.5	14.0	25.0	205

WIC Clinic	Overweight 85th-95th percentile^			Obese >=95th percentile^			Overweight or Obese >=85th percentile^			N
	%	Lower CI	Upper CI	%	Lower CI	Upper CI	%	Lower CI	Upper CI	
Longmont WIC Clinic	15.4	12.6	18.1	9.5	7.3	11.8	24.9	21.6	28.2	651
Loveland WIC Clinic	12.6	9.1	16.1	7.7	4.9	10.6	20.3	16.1	24.6	349
Lowry Family Health Center	11.4	8.9	14.0	5.1	3.3	6.8	16.5	13.5	19.5	594
Meeker WIC Clinic	*	*	*	*	*	*	*	*	*	11
Montbello WIC Clinic	12.4	10.2	14.6	6.2	4.6	7.8	18.6	16.0	21.3	853
Monte Vista WIC Clinic	11.8	5.4	18.1	5.9	1.2	10.5	17.6	10.1	25.2	102
Montrose WIC Clinic	12.7	9.7	15.7	4.4	2.5	6.2	17.0	13.7	20.4	481
North Broadway WIC Clinic	17.1	14.8	19.5	10.4	8.4	12.3	27.5	24.7	30.3	975
North WIC Clinic	12.9	11.3	14.6	4.7	3.7	5.7	17.6	15.8	19.5	1646
Norwood WIC Clinic	*	*	*	*	*	*	*	*	*	5
Nucla WIC Clinic	*	*	*	*	*	*	*	*	*	19
Olathe WIC Clinic	*	*	*	*	*	*	*	*	*	50
Ordway WIC Clinic	*	*	*	*	*	*	*	*	*	36
Ouray WIC Clinic	*	*	*	*	*	*	*	*	*	11
Pagosa Springs WIC Clinic	*	*	*	*	*	*	*	*	*	81
Park Center WIC Clinic	15.8	13.8	17.9	9.0	7.4	10.6	24.8	22.4	27.3	1212
Pueblo WIC Clinic	14.9	13.1	16.8	7.5	6.1	8.9	22.4	20.3	24.6	1408
Rangely WIC Clinic	*	*	*	*	*	*	*	*	*	14
Rifle WIC Clinic	6.9	3.4	10.4	2.5	0.3	4.6	9.4	5.3	13.4	203
Rocky Ford WIC Clinic	14.4	8.9	19.9	5.0	1.6	8.4	19.4	13.2	25.6	160
Salida WIC Clinic	*	*	*	*	*	*	*	*	*	30
San Luis WIC Clinic	*	*	*	*	*	*	*	*	*	17
Steamboat Springs WIC Clinic	*	*	*	*	*	*	*	*	*	51
Sterling WIC Clinic	17.3	11.3	23.3	6.4	2.5	10.3	23.7	17.0	30.5	156
Summit County WIC Clinic	*	*	*	*	*	*	*	*	*	89
Telluride WIC Clinic	*	*	*	*	*	*	*	*	*	19
The Peña Family Health Center	*	*	*	*	*	*	*	*	*	35
Trinidad WIC Clinic	13.0	7.0	19.0	6.5	2.1	10.9	19.5	12.4	26.6	123
Walsenburg WIC Clinic	*	*	*	*	*	*	*	*	*	58
Westcliffe WIC Clinic	*	*	*	*	*	*	*	*	*	8
Westside Family Health Center	14.3	12.6	16.0	7.4	6.1	8.7	21.7	19.7	23.8	1587
<b>Colorado</b>	<b>13.3</b>	<b>12.9</b>	<b>13.7</b>	<b>7.0</b>	<b>6.7</b>	<b>7.3</b>	<b>20.3</b>	<b>19.8</b>	<b>20.7</b>	<b>29657</b>

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

^Based on 2000 CDC growth chart percentiles for BMI-for-age for children 2 years of age and older.

CI: Confidence Interval (95%)

Data Source: 2016 WIC Participant and Program Characteristics (WIC PC) file

Prepared by Health Surveys and Evaluation Branch, Center for Health and Environmental Data, Colorado Department of Public Health and Environment, October 2016



County of WIC Clinic	Overweight 85th-<95th percentile^			Obese >=95th percentile^			Overweight or Obese >=85th percentile^			N
	%	Lower CI	Upper CI	%	Lower CI	Upper CI	%	Lower CI	Upper CI	
Prowers	13.5	8.1	19.0	18.1	11.9	24.2	31.6	24.2	39.0	155
Pueblo	14.9	13.0	16.8	7.6	6.2	8.9	22.5	20.3	24.6	1416
Rio Blanco	*	*	*	*	*	*	*	*	*	25
Routt	*	*	*	*	*	*	*	*	*	51
Saguache	*	*	*	*	*	*	*	*	*	73
San Miguel	*	*	*	*	*	*	*	*	*	24
Sedgwick	*	*	*	*	*	*	*	*	*	30
Summit	*	*	*	*	*	*	*	*	*	89
Teller	*	*	*	*	*	*	*	*	*	84
Washington	*	*	*	*	*	*	*	*	*	19
Weld	15.0	13.2	16.8	9.6	8.2	11.1	24.6	22.5	26.8	1560
Yuma	20.0	12.2	27.8	8.6	3.1	14.0	28.6	19.8	37.4	105
<b>Colorado</b>	<b>13.3</b>	<b>12.9</b>	<b>13.7</b>	<b>7.0</b>	<b>6.7</b>	<b>7.3</b>	<b>20.3</b>	<b>19.8</b>	<b>20.7</b>	<b>29657</b>

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

^Based on 2000 CDC growth chart percentiles for BMI-for-age for children 2 years of age and older.

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