

Overweight and Obesity Prevalence among Children Ages 2 through 4 Years Enrolled in the Colorado WIC Program* During 2017

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 - 2017 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>.

2017 State Prevalence: Based on the new point prevalence methodology, the 2017 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 2017, 12.8 percent of low income children ages 2 through 4 years in Colorado were overweight, 7.5 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 = 31,294), during April 2017

	N	Overweight 85 th -<95 th percentile [^] % (95% CI)	Obese >=95 th percentile [^] % (95% CI)	Overweight or Obese >=85 th percentile [^] % (95% CI)
Colorado	31,294	12.8 (12.4 – 13.2)	7.5 (7.2 – 7.8)	20.3 (19.8 – 20.7)

CI: Confidence Interval

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

Data Source: 2017 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 31,294. For this reason and an overall decrease in the caseload, 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.

2017 State Prevalence by Race/Ethnicity: Based on the point prevalence methodology, the 2017 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 = 31,294) by race/ethnicity, during April 2017

	N	Overweight 85 th -<95 th percentile [^] % (95% CI)	Obese >=95 th percentile [^] % (95% CI)	Overweight or Obese >=85 th percentile [^] % (95% CI)
White, Non-Hispanic	9,556	12.3 (11.6-12.9)	5.8 (5.3-6.3)	18.1 (17.3-18.8)
Black, Non-Hispanic	2,343	9.8 (8.6-11.0)	5.5 (4.6-6.5)	15.3 (13.9-16.8)
Hispanic	17,143	13.8 (13.3-14.4)	8.8 (8.4-9.2)	22.6 (22.0-23.3)
American Indian/Alaska Native, NH	408	15.4 (11.9-19.0)	8.6 (5.8-11.3)	24.0 (19.9-28.2)
Asian/Pacific Islander, NH	1,046	7.9 (6.3-9.6)	5.1 (3.7-6.4)	13.0 (11.0-15.0)
Multiple Races/Other, NH	798	11.7 (9.4-13.9)	6.6 (4.9-8.4)	18.3 (15.6-21.0)

CI: Confidence Interval

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

NH: Non-Hispanic

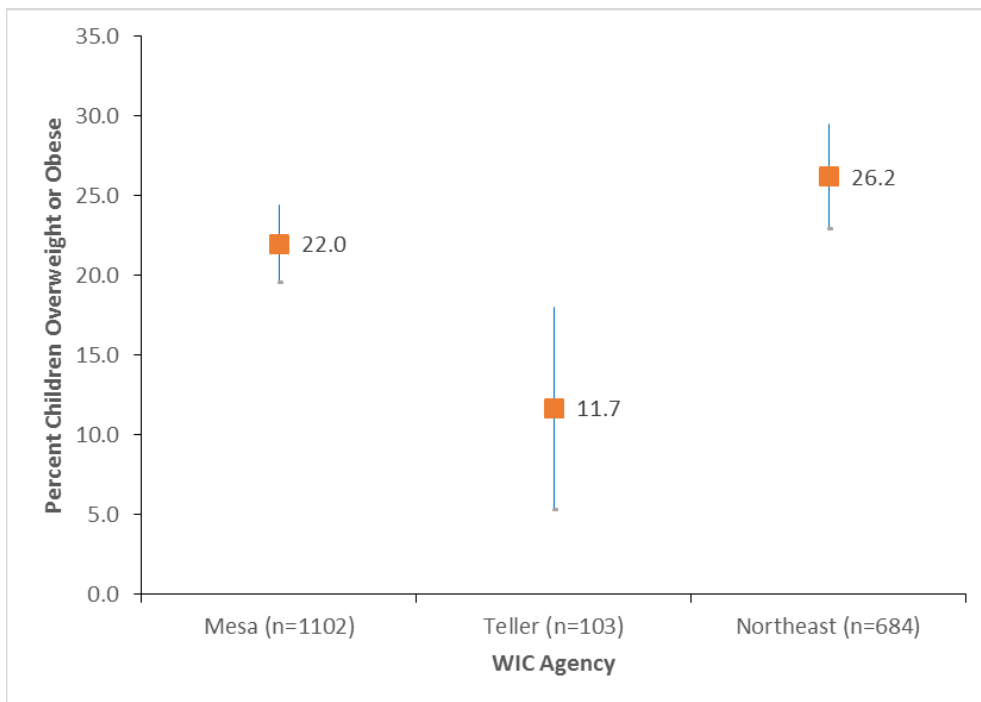
Data Source: 2017 WIC Participant and Program Characteristics (Colorado WIC PC) file

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. Teller 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 Teller and the lines for Teller 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 Teller 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, 2017



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 2017 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 2017 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, 2017

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	*	*	*	*	*	*	*	*	*	38
Bent County Public Health	*	*	*	*	*	*	*	*	*	44
Boulder County Public Health	13.9	12.0	15.9	8.0	6.5	9.5	21.9	19.6	24.3	1200
Broomfield County Health & Human Services	11.3	6.2	16.5	6.7	2.6	10.7	18.0	11.8	24.2	150
Clear Creek County Public and Environmental Health	*	*	*	*	*	*	*	*	*	28
Community Health Services Pitkin County	*	*	*	*	*	*	*	*	*	3
Delta Department of Health	10.8	6.2	15.4	4.5	1.4	7.7	15.3	10.0	20.7	176
Denver Health Medical Center	12.2	11.2	13.2	8.3	7.5	9.1	20.5	19.3	21.7	4124
Dolores County Public Health	*	*	*	*	*	*	*	*	*	8
Eagle County Public Health	10.8	7.0	14.7	7.2	4.0	10.5	18.1	13.3	22.9	249
El Paso County Public Health	13.5	12.6	14.5	4.7	4.1	5.3	18.3	17.2	19.4	4844
Garfield County Public Health	7.8	5.1	10.6	6.8	4.2	9.3	14.6	11.0	18.2	370
Grand County Public Health	*	*	*	*	*	*	*	*	*	51
Gunnison County Public Health	*	*	*	*	*	*	*	*	*	59
Jefferson County Department of Public Health	13.0	11.5	14.6	8.1	6.9	9.3	21.1	19.3	23.0	1865
Kit Carson County Health & Human Services	8.3	3.5	13.0	4.5	0.9	8.1	12.8	7.0	18.5	133
Larimer County Dept of Health & Environment	13.5	11.5	15.5	9.4	7.7	11.0	22.9	20.4	25.3	1154
Las Animas--Huerfano Counties District Health Dept	10.2	5.5	14.8	12.0	7.0	17.0	22.2	15.8	28.5	167
Lincoln County Public Health	*	*	*	*	*	*	*	*	*	45
Mesa County Health Department	14.8	12.7	16.9	7.2	5.6	8.7	22.0	19.5	24.4	1102
Montezuma County Public Health Department	19.5	14.3	24.8	8.2	4.5	11.8	27.7	21.8	33.7	220
Montrose County Nursing Service	13.4	10.6	16.2	4.0	2.4	5.6	17.4	14.3	20.5	576
Northeast Colorado Health Department	15.2	12.5	17.9	11.0	8.6	13.3	26.2	22.9	29.5	684
Northwest Colorado Health	12.2	7.7	16.7	6.8	3.3	10.3	19.0	13.6	24.4	205
Otero County Health Department	16.1	12.3	19.9	12.4	9.0	15.9	28.5	23.8	33.3	354
Ouray County Public Health	*	*	*	*	*	*	*	*	*	8
Park County Public Health	*	*	*	*	*	*	*	*	*	55
Prowers County Public Health	9.9	5.4	14.4	15.1	9.7	20.5	25.0	18.5	31.5	172
Pueblo City-County Health Department	13.3	11.6	15.0	8.2	6.8	9.6	21.5	19.4	23.6	1535
Rio Blanco County Dept of Public Health & Envir	*	*	*	*	*	*	*	*	*	35
San Juan Basin Public Health	6.9	4.4	9.4	6.6	4.1	9.1	13.5	10.1	16.9	393
San Miguel County Dept of Health & Environment	*	*	*	*	*	*	*	*	*	24
Summit County Public Health	*	*	*	*	*	*	*	*	*	97
Sunrise Community Health	15.4	13.8	17.1	9.9	8.6	11.3	25.4	23.4	27.4	1833
Teller County Public Health	8.7	3.2	14.3	2.9	0.0	6.2	11.7	5.3	18.0	103
Tri-County Health Department	12.1	11.4	12.8	7.3	6.7	7.8	19.3	18.5	20.2	8143
Upper Arkansas Area Council of Governments	13.3	10.1	16.5	5.9	3.7	8.2	19.2	15.5	22.9	437
Valley-Wide Health Systems, Inc.	10.7	8.2	13.1	8.4	6.2	10.6	19.0	15.9	22.1	610
Colorado	12.8	12.4	13.2	7.5	7.2	7.8	20.3	19.8	20.7	31294

*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: 2017 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, July 2017

Ouray County Public Health	White, non-Hispanic	*	*	*	*	*	*	*	*	*	6
	Hispanic, any race	*	*	*	*	*	*	*	*	*	2
	Other	*	*	*	*	*	*	*	*	*	0
Park County Public Health	White, non-Hispanic	*	*	*	*	*	*	*	*	*	42
	Hispanic, any race	*	*	*	*	*	*	*	*	*	11
	Other	*	*	*	*	*	*	*	*	*	2
Prowers County Public Health	White, non-Hispanic	*	*	*	*	*	*	*	*	*	51
	Hispanic, any race	8.5	3.4	13.7	20.5	13.1	27.9	29.1	20.7	37.4	117
	Other	*	*	*	*	*	*	*	*	*	4
Pueblo City-County Health Department	White, non-Hispanic	12.5	9.4	15.7	7.3	4.8	9.8	19.9	16.0	23.7	423
	Hispanic, any race	13.6	11.6	15.7	8.7	7.0	10.5	22.4	19.9	24.9	1063
	Other	*	*	*	*	*	*	*	*	*	49
Rio Blanco County Dept of Public Health & Envir	White, non-Hispanic	*	*	*	*	*	*	*	*	*	26
	Hispanic, any race	*	*	*	*	*	*	*	*	*	6
	Other	*	*	*	*	*	*	*	*	*	3
San Juan Basin Public Health	White, non-Hispanic	7.2	3.5	10.9	3.1	0.6	5.6	10.3	6.0	14.6	194
	Hispanic, any race	5.2	1.7	8.7	10.4	5.5	15.3	15.6	9.8	21.4	154
	Other	*	*	*	*	*	*	*	*	*	45
San Miguel County Dept of Health & Environment	White, non-Hispanic	*	*	*	*	*	*	*	*	*	4
	Hispanic, any race	*	*	*	*	*	*	*	*	*	18
	Other	*	*	*	*	*	*	*	*	*	2
Summit County Public Health	White, non-Hispanic	*	*	*	*	*	*	*	*	*	19
	Hispanic, any race	*	*	*	*	*	*	*	*	*	71
	Other	*	*	*	*	*	*	*	*	*	7
Sunrise Community Health	White, non-Hispanic	16.0	12.6	19.3	7.7	5.2	10.1	23.6	19.8	27.5	470
	Hispanic, any race	16.6	14.4	18.7	11.5	9.6	13.3	28.0	25.5	30.6	1170
	Other	7.3	3.6	10.9	6.2	2.8	9.7	13.5	8.6	18.3	193
Teller County Public Health	White, non-Hispanic	*	*	*	*	*	*	*	*	*	86
	Hispanic, any race	*	*	*	*	*	*	*	*	*	13
	Other	*	*	*	*	*	*	*	*	*	4
Tri-County Health Department	White, non-Hispanic	10.7	9.2	12.3	6.2	5.0	7.4	16.9	15.1	18.8	1576
	Hispanic, any race	13.4	12.4	14.4	8.3	7.5	9.1	21.7	20.6	22.9	4819
	Other	9.6	8.2	10.9	5.3	4.2	6.3	14.8	13.1	16.5	1748
Upper Arkansas Area Council of Governments	White, non-Hispanic	12.8	9.3	16.4	5.5	3.1	8.0	18.4	14.2	22.5	343
	Hispanic, any race	*	*	*	*	*	*	*	*	*	87
	Other	*	*	*	*	*	*	*	*	*	7
Valley-Wide Health Systems, Inc.	White, non-Hispanic	15.8	9.7	22.0	5.8	1.8	9.7	21.6	14.7	28.5	139
	Hispanic, any race	9.0	6.4	11.7	9.3	6.6	11.9	18.3	14.7	21.9	454
	Other	*	*	*	*	*	*	*	*	*	17
Colorado	White, non-Hispanic	12.3	11.6	12.9	5.8	5.3	6.3	18.1	17.3	18.8	9556
	Hispanic, any race	13.8	13.3	14.4	8.8	8.4	9.2	22.6	22.0	23.3	17143
	Other	10.2	9.3	11.1	5.9	5.2	6.6	16.1	15.0	17.1	4595

*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: 2017 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, July 2017

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 clinic, Colorado, 2017

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	*	*	*	*	*	*	*	*	*	17
Alamosa VWHS WIC Clinic	10.7	7.5	14.0	7.3	4.6	10.1	18.1	14.1	22.1	354
Alton/Colfax WIC Clinic	6.4	4.9	7.8	4.2	3.0	5.4	10.6	8.8	12.4	1113
Antonito WIC Clinic	*	*	*	*	*	*	*	*	*	67
Arvada WIC Clinic	14.1	11.5	16.7	9.2	7.1	11.4	23.4	20.2	26.5	693
Aspen WIC Clinic	*	*	*	*	*	*	*	*	*	3
Aurora South WIC Clinic	11.6	10.0	13.1	6.8	5.6	8.0	18.4	16.5	20.3	1616
Aurora WIC Clinic	12.6	10.6	14.6	8.3	6.7	10.0	20.9	18.5	23.3	1094
Avon WIC Clinic	8.4	3.6	13.2	6.1	2.0	10.3	14.5	8.4	20.6	131
Avondale WIC Clinic	*	*	*	*	*	*	*	*	*	9
Baca WIC Clinic	*	*	*	*	*	*	*	*	*	38
Bailey WIC Clinic	*	*	*	*	*	*	*	*	*	27
Bennett WIC Clinic	*	*	*	*	*	*	*	*	*	36
Bent County WIC Clinic	*	*	*	*	*	*	*	*	*	44
Boulder WIC Clinic	11.3	7.5	15.0	5.8	3.0	8.6	17.1	12.6	21.6	275
Brighton WIC Clinic	13.1	9.8	16.3	6.7	4.3	9.0	19.7	15.9	23.5	421
Broomfield WIC Clinic	11.3	6.2	16.5	6.7	2.6	10.7	18.0	11.8	24.2	150
Buena Vista WIC Clinic	*	*	*	*	*	*	*	*	*	28
Burlington WIC Clinic	8.3	3.5	13.0	4.5	0.9	8.1	12.8	7.0	18.5	133
Canon City WIC Clinic	15.3	11.3	19.3	7.3	4.4	10.3	22.7	18.0	27.3	313
Castle Rock WIC Clinic	8.7	4.4	12.9	3.5	0.7	6.2	12.1	7.2	17.1	173
Center WIC Clinic	*	*	*	*	*	*	*	*	*	72
Commerce City WIC Clinic	13.0	10.4	15.7	7.5	5.4	9.5	20.5	17.3	23.6	630
Conifer WIC Clinic	*	*	*	*	*	*	*	*	*	13
Cortez WIC Clinic	19.5	14.3	24.8	8.2	4.5	11.8	27.7	21.8	33.7	220
Craig WIC Clinic	11.5	6.0	17.1	5.4	1.5	9.3	16.9	10.4	23.5	130
Cripple Creek WIC Clinic	*	*	*	*	*	*	*	*	*	10
Delta WIC Clinic	11.9	6.9	17.0	4.4	1.2	7.6	16.4	10.5	22.2	159
Divide WIC Clinic	*	*	*	*	*	*	*	*	*	93
Dove Creek WIC Clinic	*	*	*	*	*	*	*	*	*	8
Durango WIC Clinic	8.1	4.9	11.3	5.6	2.9	8.3	13.7	9.7	17.8	284
Eads WIC Clinic	*	*	*	*	*	*	*	*	*	3
Eagle WIC Clinic	*	*	*	*	*	*	*	*	*	78
Eastside Neighborhood Health Center	11.5	9.4	13.6	5.6	4.1	7.1	17.1	14.7	19.6	905
El Jebel WIC Clinic	*	*	*	*	*	*	*	*	*	40
El Paso WIC Clinic	12.2	10.5	13.8	5.6	4.4	6.7	17.8	15.9	19.7	1536
Elizabeth WIC Clinic	*	*	*	*	*	*	*	*	*	21
Englewood WIC Clinic	8.3	5.7	10.8	3.6	1.8	5.3	11.8	8.8	14.8	448
Estes Park WIC Clinic	*	*	*	*	*	*	*	*	*	29
Evans WIC Clinic	16.1	13.9	18.3	10.2	8.4	12.0	26.3	23.7	28.9	1087
Fairplay WIC Clinic	*	*	*	*	*	*	*	*	*	15
Firestone WIC Clinic	12.3	7.3	17.2	5.3	1.9	8.6	17.5	11.8	23.3	171
Fort Collins WIC Clinic	13.6	11.2	16.1	9.7	7.6	11.8	23.4	20.4	26.4	770
Fort Lupton WIC Clinic	14.4	8.3	20.5	6.1	1.9	10.2	20.5	13.5	27.4	132
Fort Morgan WIC Clinic	18.2	14.1	22.4	12.6	9.1	16.2	30.9	25.9	35.8	340
Fountain Valley WIC Clinic	15.8	14.0	17.6	4.1	3.1	5.1	19.8	17.9	21.8	1547
Fraser/Kremmling WIC Clinics	*	*	*	*	*	*	*	*	*	20
Glenwood Springs WIC Clinic	11.4	6.2	16.6	10.1	5.2	15.0	21.5	14.8	28.1	149
Grand Junction WIC Clinic	14.8	12.7	16.9	7.2	5.6	8.7	22.0	19.5	24.4	1102
Greeley WIC Clinic	15.3	12.0	18.7	12.2	9.1	15.2	27.5	23.4	31.7	443
Gunnison WIC Clinic	*	*	*	*	*	*	*	*	*	59
Holyoke WIC Clinic	*	*	*	*	*	*	*	*	*	58
Hot Sulphur Springs WIC Clinic	*	*	*	*	*	*	*	*	*	31
Hotchkiss WIC Clinic	*	*	*	*	*	*	*	*	*	17
Hugo WIC Clinic	*	*	*	*	*	*	*	*	*	19
Idaho Springs WIC Clinic	*	*	*	*	*	*	*	*	*	28
Ignacio WIC Clinic	*	*	*	*	*	*	*	*	*	16
Jackson County WIC Clinic	*	*	*	*	*	*	*	*	*	8
Julesburg WIC Clinic	*	*	*	*	*	*	*	*	*	19
La Junta WIC Clinic	17.4	11.8	23.0	19.1	13.3	24.9	36.5	29.4	43.7	178
Lafayette WIC Clinic	10.1	6.0	14.3	10.1	6.0	14.3	20.3	14.8	25.8	207
Lakewood WIC Clinic	12.1	9.9	14.4	6.4	4.8	8.1	18.6	15.9	21.2	840
Lamar WIC Clinic	10.1	5.5	14.6	15.4	9.9	20.9	25.4	18.8	32.1	169

Leadville WIC Clinic	*	*	*	*	*	*	*	*	*	49
Limon WIC Clinic	*	*	*	*	*	*	*	*	*	26
Lone Tree WIC Clinic	12.4	8.2	16.7	6.4	3.3	9.6	18.9	13.8	23.9	233
Longmont WIC Clinic	16.0	13.3	18.7	8.2	6.2	10.2	24.2	21.1	27.4	718
Loveland WIC Clinic	13.2	9.7	16.8	8.7	5.8	11.7	22.0	17.6	26.3	355
Lowry Family Health Center	9.9	7.6	12.1	7.7	5.7	9.7	17.5	14.7	20.4	690
MCPN/Wheat Ridge WIC Clinic	13.0	9.3	16.6	9.9	6.7	13.2	22.9	18.3	27.4	332
Meeker WIC Clinic	*	*	*	*	*	*	*	*	*	18
Montbello WIC Clinic	10.9	8.8	13.0	9.3	7.3	11.2	20.2	17.5	22.9	862
Monte Vista WIC Clinic	8.9	3.3	14.6	11.9	5.5	18.3	20.8	12.7	28.8	101
Montrose WIC Clinic	12.4	9.5	15.3	3.6	2.0	5.2	16.0	12.7	19.2	501
North Broadway WIC Clinic	17.4	15.2	19.7	9.5	7.8	11.3	27.0	24.4	29.6	1112
North WIC Clinic	12.8	11.2	14.3	4.6	3.6	5.6	17.4	15.6	19.2	1760
Norwood WIC Clinic	*	*	*	*	*	*	*	*	*	4
Nucla WIC Clinic	*	*	*	*	*	*	*	*	*	19
Olathe WIC Clinic	*	*	*	*	*	*	*	*	*	56
Ordway WIC Clinic	*	*	*	*	*	*	*	*	*	33
Ouray WIC Clinic	*	*	*	*	*	*	*	*	*	8
Pagosa Springs WIC Clinic	*	*	*	*	*	*	*	*	*	93
Pueblo WIC Clinic	13.4	11.7	15.1	8.2	6.8	9.6	21.6	19.5	23.6	1526
Rangely WIC Clinic	*	*	*	*	*	*	*	*	*	17
Rifle WIC Clinic	5.4	2.4	8.4	4.5	1.8	7.3	10.0	6.0	13.9	221
Rocky Ford WIC Clinic	13.3	7.7	18.9	4.2	0.9	7.5	17.5	11.2	23.8	143
Rocky Mountain Youth Clinic - Thornton WIC Clinic	*	*	*	*	*	*	*	*	*	16
Salida WIC Clinic	*	*	*	*	*	*	*	*	*	34
San Luis WIC Clinic	*	*	*	*	*	*	*	*	*	16
Southeast WIC Clinic	*	*	*	*	*	*	*	*	*	1
Steamboat Springs WIC Clinic	*	*	*	*	*	*	*	*	*	67
Sterling WIC Clinic	12.7	7.3	18.1	12.0	6.7	17.3	24.7	17.7	31.6	150
Summit County WIC Clinic	*	*	*	*	*	*	*	*	*	97
Telluride WIC Clinic	*	*	*	*	*	*	*	*	*	20
The Peña Family Health Center	16.5	13.5	19.5	9.6	7.2	12.0	26.1	22.6	29.7	593
Trinidad WIC Clinic	11.2	5.4	17.0	11.2	5.4	17.0	22.4	14.7	30.1	116
Walsenburg WIC Clinic	*	*	*	*	*	*	*	*	*	51
Westcliffe WIC Clinic	*	*	*	*	*	*	*	*	*	13
Westminster WIC Clinic	13.3	11.4	15.1	9.5	7.9	11.2	22.8	20.4	25.1	1230
Westside Family Health Center	13.0	11.0	15.1	9.4	7.7	11.2	22.4	19.9	24.9	1074
Yuma WIC Clinic	12.0	5.5	18.5	7.0	1.9	12.1	19.0	11.2	26.8	100
Colorado	12.8	12.4	13.2	7.5	7.2	7.8	20.3	19.8	20.7	31294

*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: 2017 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, July 2017

Table 2. Prevalence of overweight and obesity among children ages 2 through 4 years enrolled in the Women, Infants, and Children (WIC) Program by county, Colorado, 2017

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	
Adams	14.5	13.4	15.7	8.8	7.8	9.8	23.3	21.9	24.8	3409
Alamosa	10.3	7.5	13.1	8.4	5.8	10.9	18.7	15.1	22.3	455
Arapahoe	10.2	9.3	11.1	6.2	5.5	6.9	16.4	15.3	17.5	4307
Archuleta	*	*	*	*	*	*	*	*	*	93
Baca	*	*	*	*	*	*	*	*	*	38
Bent	*	*	*	*	*	*	*	*	*	44
Boulder	13.9	12.0	15.9	8.0	6.5	9.5	21.9	19.6	24.3	1200
Broomfield	11.3	6.2	16.5	6.7	2.6	10.7	18.0	11.8	24.2	150
Chaffee	*	*	*	*	*	*	*	*	*	62
Clear Creek	*	*	*	*	*	*	*	*	*	28
Conejos	*	*	*	*	*	*	*	*	*	67
Costilla	*	*	*	*	*	*	*	*	*	16
Crowley	*	*	*	*	*	*	*	*	*	33
Custer	*	*	*	*	*	*	*	*	*	13
Delta	10.8	6.2	15.4	4.5	1.4	7.7	15.3	10.0	20.7	176
Denver	12.2	11.2	13.2	8.3	7.5	9.1	20.5	19.3	21.7	4124
Dolores	*	*	*	*	*	*	*	*	*	8
Douglas	10.8	7.8	13.9	5.2	3.0	7.3	16.0	12.4	19.6	406
Eagle	10.8	7.0	14.7	7.2	4.0	10.5	18.1	13.3	22.9	249
El Paso	13.5	12.6	14.5	4.7	4.1	5.3	18.3	17.2	19.4	4844
Elbert	*	*	*	*	*	*	*	*	*	21
Fremont	15.3	11.3	19.3	7.3	4.4	10.3	22.7	18.0	27.3	313
Garfield	7.8	5.1	10.6	6.8	4.2	9.3	14.6	11.0	18.2	370
Grand	*	*	*	*	*	*	*	*	*	51
Gunnison	*	*	*	*	*	*	*	*	*	59
Huerfano	*	*	*	*	*	*	*	*	*	51
Jackson	*	*	*	*	*	*	*	*	*	8
Jefferson	13.0	11.5	14.6	8.1	6.9	9.3	21.1	19.3	23.0	1865
Kiowa	*	*	*	*	*	*	*	*	*	3
Kit Carson	8.3	3.5	13.0	4.5	0.9	8.1	12.8	7.0	18.5	133
La Plata	8.0	4.9	11.1	6.7	3.8	9.5	14.7	10.6	18.7	300
Lake	*	*	*	*	*	*	*	*	*	49
Larimer	13.5	11.5	15.5	9.4	7.7	11.0	22.9	20.4	25.3	1154
Las Animas	11.2	5.4	17.0	11.2	5.4	17.0	22.4	14.7	30.1	116
Lincoln	*	*	*	*	*	*	*	*	*	45
Logan	12.7	7.3	18.1	12.0	6.7	17.3	24.7	17.7	31.6	150
Mesa	14.8	12.7	16.9	7.2	5.6	8.7	22.0	19.5	24.4	1102
Moffat	11.5	6.0	17.1	5.4	1.5	9.3	16.9	10.4	23.5	130
Montezuma	19.5	14.3	24.8	8.2	4.5	11.8	27.7	21.8	33.7	220
Montrose	13.4	10.6	16.2	4.0	2.4	5.6	17.4	14.3	20.5	576
Morgan	18.2	14.1	22.4	12.6	9.1	16.2	30.9	25.9	35.8	340
Otero	15.6	11.6	19.6	12.5	8.8	16.1	28.0	23.1	33.0	321
Ouray	*	*	*	*	*	*	*	*	*	8
Park	*	*	*	*	*	*	*	*	*	55
Phillips	*	*	*	*	*	*	*	*	*	58
Pitkin	*	*	*	*	*	*	*	*	*	3
Prowers	10.1	5.5	14.6	15.4	9.9	20.9	25.4	18.8	32.1	169
Pueblo	13.3	11.6	15.0	8.2	6.8	9.6	21.5	19.4	23.6	1535
Rio Blanco	*	*	*	*	*	*	*	*	*	35
Routt	*	*	*	*	*	*	*	*	*	67
Saguache	*	*	*	*	*	*	*	*	*	72
San Miguel	*	*	*	*	*	*	*	*	*	24
Sedgwick	*	*	*	*	*	*	*	*	*	19
Summit	*	*	*	*	*	*	*	*	*	97
Teller	8.7	3.2	14.3	2.9	-0.4	6.2	11.7	5.3	18.0	103
Washington	*	*	*	*	*	*	*	*	*	17
Weld	15.4	13.8	17.1	9.9	8.6	11.3	25.4	23.4	27.4	1833
Yuma	12.0	5.5	18.5	7.0	1.9	12.1	19.0	11.2	26.8	100
Colorado	12.8	12.4	13.2	7.5	7.2	7.8	20.3	19.8	20.7	31294

*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: 2017 WIC Participant and Program Characteristics (WIC PC) file

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