

SUMMIT COUNTY ADOLESCENT HEALTH

2018 Summit County Youth Risk Behavior Survey

Middle School Report

September 2019



Prevention Research Center for Healthy Neighborhoods
at Case Western Reserve University



SCHOOL OF MEDICINE
CASE WESTERN RESERVE
UNIVERSITY

Acknowledgements

The 2018 Summit County Middle School Youth Risk Behavior Survey (YRBS) Report embodies the expertise, cooperation, and dedication of multiple partners.

Most notable are Summit County Public Health (SCPH); the Alcohol, Drug Addiction & Mental Health Services Board (ADM Board); and the Summit County Educational Services Center (ESC). We are especially grateful to the students, teachers, principals, and superintendents who agreed to participate in the survey.

To this end, the Prevention Research Center for Healthy Neighborhoods (PRCHN) at Case Western Reserve University is grateful for the collective financial support of this group.

Report prepared by:
Prevention Research Center for Healthy Neighborhoods (PRCHN)
Department of Population and Quantitative Health Sciences
Case Western Reserve University
11000 Cedar Ave., 4th floor
Cleveland, OH 44106-7069

Jean Frank, Director of Adolescent Surveillance and Evaluation
Audrey Kinsella, Community and Evaluation Data Coordinator
Catherine Osborn, School-Based Evaluation and Surveillance Coordinator
Lusine Gigoyan, Student Intern
Erika S. Trapl, PhD, Principal Investigator

Submitted on September 30, 2019

Introduction

Through collaborations between the Prevention Research Center for Healthy Neighborhoods (PRCHN) at Case Western Reserve University and a youth-focused consortium represented by Summit County Public Health and the County of Summit Alcohol, Drug Addiction & Mental Health Services Board (ADM Board), the Youth Risk Behavior Survey (YRBS) was administered during the fall of 2018 in Middle Schools and High Schools throughout Summit County. The YRBS is a cross-sectional tool developed by the Centers for Disease Control and Prevention (CDC) to track adolescent risk behavior over time. The national YRBS has tracked many of the major causes of morbidity and mortality for adolescents since 1991. Nationwide, the YRBS is conducted every two years among students in grades 9 through 12.

In the fall of 2018, the YRBS was administered to students in grades 7 and 8 throughout Summit County. The survey was tailored to fit local needs and addressed a wide range of topics. The 2018 Summit County Middle School YRBS asked questions covering the following health-related behavior categories:

- Section 2: Behaviors that contribute to unintentional injuries
- Section 3: Violence-related behaviors
- Section 4: Depressive symptoms and suicide-related behaviors
- Section 5: Tobacco use
- Section 6: Alcohol use
- Section 7: Marijuana use
- Section 8: Other drug use
- Section 9: Gambling
- Section 10: Sexual risk behaviors
- Section 11: Obesity, overweight, and weight control
- Section 12: Dietary behaviors
- Section 13: Physical activity
- Section 14: Positive youth development
- Section 15: Other health behaviors

This report summarizes results from the 2018 Summit County Middle School YRBS. A unique chapter has been written for each category of behaviors. Each chapter consists of a brief literature review that explains the rationale for including items in the survey. A table tracking Summit County progress toward achieving 2020 Healthy People indicators follows. Graphs with explanations are also included depicting risk behavior prevalence reported by Summit County overall, demographic characteristics and by City/Suburb regions. Graphs and explanations are also included for survey items that were not amenable to dichotomous analysis. Significant differences in prevalence observed by gender and by grade are noted in a chart. Immediately following the narrative sections are a series of tables which summarize the data presented in the report:

- Summit County progress toward achieving 2020 Healthy People indicators
- Overall prevalence tables (2013 vs. 2018)
- Regional prevalence tables
- Demographic tables

Methodology

Sampling and Weighting

The primary goal of the Summit County Youth Risk Behavior Survey project for the Summit County youth-focused consortium was to obtain adolescent risk behavior data representing each of the four pre-identified Summit County clusters. Because of this, the Prevention Research Center for Healthy Neighborhoods (PRCHN) at Case Western Reserve University dispensed with the conventional two-stage cluster sample design patterned from the Centers for Disease Control and Prevention (CDC) and its national Youth Risk Behavior Survey (YRBS).

For the 2018 Summit County Middle School YRBS sample, all public schools in Summit County that contained 7th and 8th grades were included in the sampling frame. All classrooms in a given subject or during a given period of the day were selected. All students in the selected classrooms were eligible to participate allowing for the survey to be administered to the entire student body.

Student participation was both anonymous and voluntary. Opt-Out forms were mailed to the homes of eligible students; parents or guardians that approved for their student to participate took no action while parents or guardians with questions or who did not wish for their student to participate called an identified school contact. Student nonparticipation was due to absence on the day of survey administration, parental refusal, or student refusal. Additionally, a small number of questionnaires failed quality control and were removed from the final data set.

Of the 25 Summit County middle schools selected for participation, 19 agreed to take part. Ultimately, the school response rate was not sufficient to permit weighting within all four pre-determined regions of the county (North Suburbs, Akron East, Akron West, and South Suburbs). Instead analysis was conducted for two clusters: City of Akron and County Suburbs. A total of 10093 students were eligible to complete the survey, and 6810 usable questionnaires remained after the data set was cleaned and edited for inconsistencies. Missing data were not statistically imputed. The school response rate was 76% and the student response rate was 90%. The overall response rate was 68% (79% x 60%).

The overall response rate allowed for data to be weighted to the population of 7th and 8th grade students in Summit County. Weighting makes the data representative of the population from which it was drawn. A weight was applied to each record to adjust for student non response and the distribution of students by grade, gender, race/ethnicity, and geographic region within Summit County.

Statistical analyses were conducted on weighted data using SPSS complex samples procedures to account for the complex sampling design. Prevalence estimates and 95% confidence intervals were computed for all variables that could be analyzed in a dichotomous fashion. Differences between prevalence estimates were considered statistically significant if the 95% confidence intervals did not overlap. Prevalence estimates with confidence intervals appear in the data tables which summarize the data presented following each narrative section.

The questionnaire included five risk behavior related items for which students could choose more than one answer. Analyses were completed which demonstrated the range of responses. Graphs were created and results descriptions were also included in the narrative sections.

Summit County Clusters

In order to provide a geographic representation of the prevalence of different risk behaviors in Summit County, the county was divided into two clusters. These two clusters are used in county planning, data analyses and interpretation, and in program development. The two clusters are:

- **Area 1: Akron** (response rate=79%)—John R. Buchtel Community Learning Center, East Community Learning Center, Hyre Community Learning Center, Innes Community Learning Center, Jennings Community Learning Center, Litchfield Middle School, Miller-South Visual Performing Arts, National Inventors Hall of Fame School Center for Science, Technology, Engineering and Mathematics.
- **Area 2: Suburbs** (response rate=60%)— Barberton Middle School, Bolich Middle School, Copley-Fairlawn Middle School, Coventry Junior Higher School, Green Middle School, Hudson Middle School, Kimpton Middle School, Manchester Middle School, Mogadore Middle School, Nardon Middle School, Norton Middle School, R.B. Chamberlin Middle School, Revere Middle School, Roberts Middle School, Spring Hill Middle School, Tallmadge Middle School, Woodridge Middle School

Sufficient schools within the city of Akron and Suburbs participated in the survey project to permit weighting to these regions, as well as to the county. The data were weighted but caution in interpretation is warranted and the stability of the prevalence estimates should be considered.

Sample Description

The table below presents a demographic profile of students who completed the 2018 Summit County Middle School YRBS. A total of 6810 usable surveys were completed.

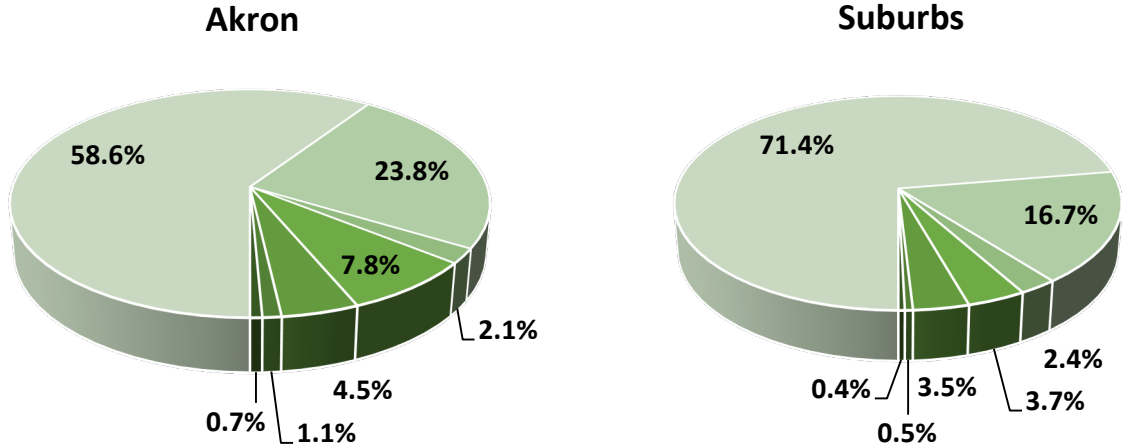
2018 Summit County Middle School YRBS			
	N	Population Estimate	Weighted %
Total	6810	10083	100%
Region			
Akron	2371	2783	27.6%
Suburbs	4431	7300	72.4%
Gender			
Female	3363	4716	47.1%
Male	3409	5303	52.9%
Race			
White*	3897	6379	64.6%
Black*	1221	2660	26.9%
Asian*	335	212	2.1%
Hispanic	447	133	1.3%
Other/Multiple	780	488	4.9%
Grade Level			
7 th	3393	4764	47.9%
8 th	3360	5188	52.1%
*Non-Hispanic			

The survey included several items intended to supplement standard demographic information. Students were asked who lived with them, the number of times they had changed homes since kindergarten, and the primary language used at home. The next set of tables depicts student responses to these items.

Students provided household composition information by responding to the item, “Think of where you live most of the time. Which of the following people live there with you? (Select all that apply.)”

Household Composition	Overall %	Population Estimate
Parents (Biological or Step-Parents)	68.8%	6842
Mom Only	19.0%	1886
Dad Only	2.3%	230
Parent and Other Adult Family Members	4.9%	491
Adult Family Members, No Parents	3.9%	383
Foster Family	0.7%	69
Other Living Situation	0.5%	48

Household Composition by Region



- Parents (Biological or Step-Parents)
- Mom only
- Dad only
- Parent and Other Adult Family Members
- Adult Family Members, No Parents
- Foster Family
- Other Living Situation

Students provided information intended to assess level of enrollment transience for Summit County school districts overall and for the two regions by responding to the item, “How many times have you changed homes since kindergarten?”

	Akron	Suburbs	Overall	Overall Population Estimate
Never	27.6%	39.2%	36.0%	3606
1 or 2 times	28.6%	32.0%	31.1%	3116
3 or 4 times	21.5%	15.8%	17.4%	1740
5 or 6 times	7.9%	5.1%	5.8%	586
7 + times	6.1%	3.5%	4.2%	420
Not sure	8.4%	4.5%	5.5%	556

Language at home was assessed by student response to the item, “What is the language you use most often at home?”

	Akron	Suburbs	Overall	Overall Population Estimate
English	93.0%	97.2%	96.1%	9634
Another language	7.0%	2.8%	3.9%	393

Terms and Conventions

The following terms are used in this report:

Cigar use: Having smoked any of the following products: cigars, cigarillos, or little cigars, such as Black and Milds, Swisher Sweets, or Phillies.

Obese/overweight: Classification based on a student's Body Mass Index (BMI) (kg/m^2), which was calculated from self-reported height and weight. The BMI values were compared with sex- and age-specific reference data from the 2000 CDC growth charts. Obese was defined as a BMI of >95th percentile for age and sex. Overweight was defined as a BMI of >85th percentile and <95th percentile for age and sex. Previous YRBS reports used the terms "overweight" to describe youth with a BMI >95th percentile for age and sex and "at risk for overweight" for those with a BMI >85th percentile and <95th percentile. However, this report uses the terms "obese" and "overweight" in accordance with the 2007 recommendations from the Expert Committee on the Assessment, Prevention, and Treatment of Child and Adolescent Overweight and Obesity convened by the American Medical Association (AMA) and co-funded by AMA in collaboration with the Health Resources and Services Administration and CDC. These classifications are not intended to diagnose obesity or overweight in individual students, rather to provide estimates of obesity and overweight for the population of students surveyed.

Race/ethnicity: Analysis included this process: computed from two questions: 1. "Are you Hispanic or Latino?" (Response options were "yes" or "no"), and 2. "What is your race?" (Response options were "American Indian or Alaska Native," "Asian," "Black or African American," "Native Hawaiian or Other Pacific Islander," or "White"). For the second question, students could select more than one response option. For this analysis, students were classified as "Hispanic/Latino" if they answered "yes" to the first question, regardless of how they answered the second question. Students were classified as "White" if they answered "no" to the first question and selected only "White" to the second question. Students were classified as "Black" if they answered "no" to the first question and selected only "Black or African American" to the second question. Students were classified as "Asian" if they answered "no" to the first question and selected only "Asian" to the second question. Students were classified as "Other" if they answered "no" to the first question and selected "American Indian or Alaska Native," and/or "Native Hawaiian or Other Pacific Islander" or selected more than one response to the second question. Race/ethnicity was classified as missing for students who did not answer the first question and for students who answered "no" to the first question but did not answer the second question.

Executive Data Summary

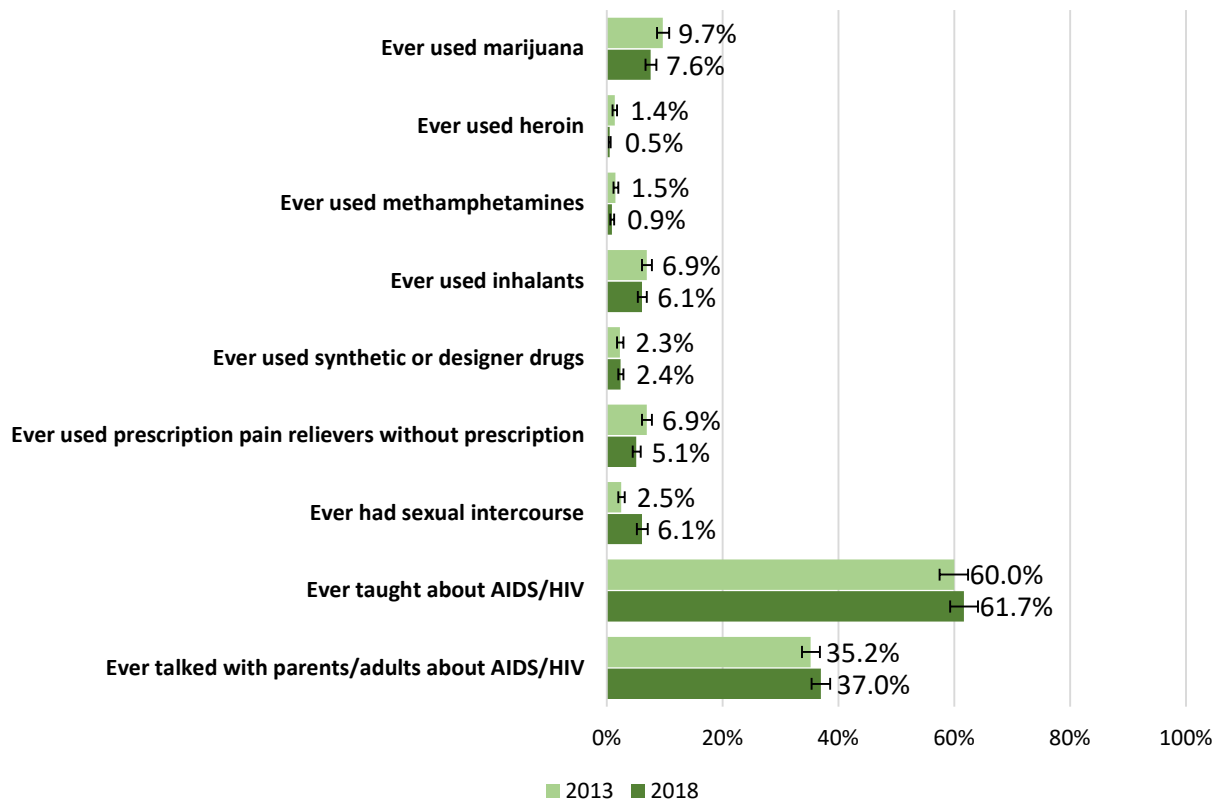
The Youth Risk Behavior Survey provides cross-sectional data about those categories of risk known to contribute most to morbidity and mortality among youth. Within risk behavior categories, questions are included to characterize the level of risk engagement and to determine the prevalence of risk engagement along several timeframes:

- “ever” or lifetime engagement,
- “during the past 12 months” engagement,
- “current” or past 30-day engagement,
- “past 7 days” engagement, and
- “early initiation” or before the age of 11 years

The series of graphs that follow reveal the prevalence of risk behavior engagement according to these timeframes.

The survey contains 9 items addressing behaviors that students may have engaged in over their lifetime. The chart below depicts the prevalence for each of these items, as reported in 2013 and again in 2018. The prevalence of ever used marijuana (9.7% vs. 7.6%), ever used heroin (1.4% vs. 0.5%), and ever used prescription pain medicine without a doctor’s prescription or differently than how a doctor prescribed (6.9% vs. 5.1%) all decreased significantly from 2013 to 2018. The prevalence of having ever had sexual intercourse (2.5% vs. 6.1%) increased significantly from 2013 to 2018.

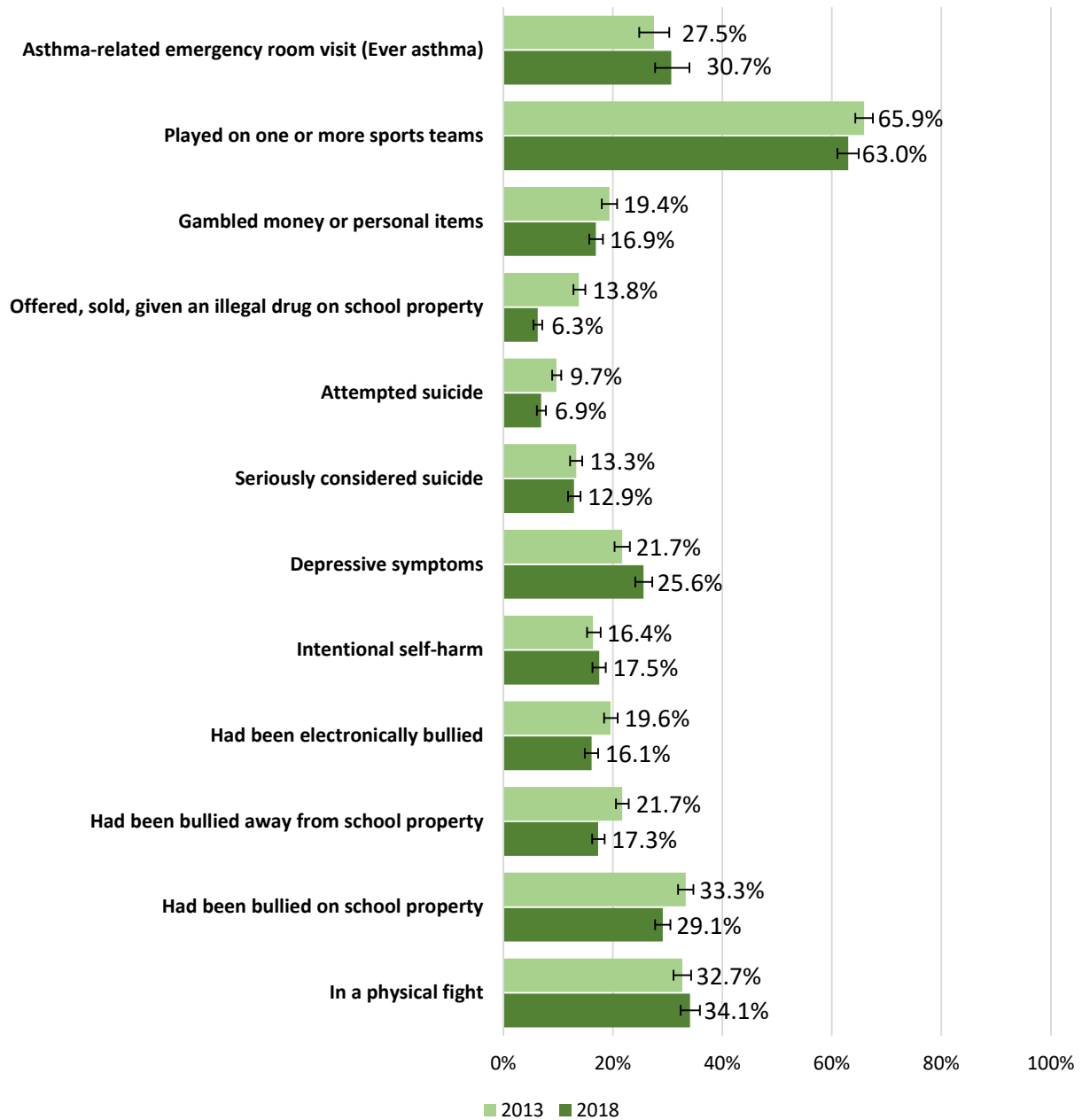
Lifetime behaviors



The survey contains 12 items addressing behaviors that students may have engaged in during the 12 months before the survey. The chart below depicts the prevalence for each of these items, as reported in 2013 and again in 2018. The prevalence of having been offered, sold, or given illegal drugs on school property (13.8% vs. 6.3%); having attempted suicide (9.7% vs. 6.9%); having been electronically bullied (19.6% vs. 16.1%); having been bullied away from school property (21.7% vs. 17.3%); and having been bullied on school property (33.3% vs. 29.1%) had decreased significantly from 2013 to 2018.

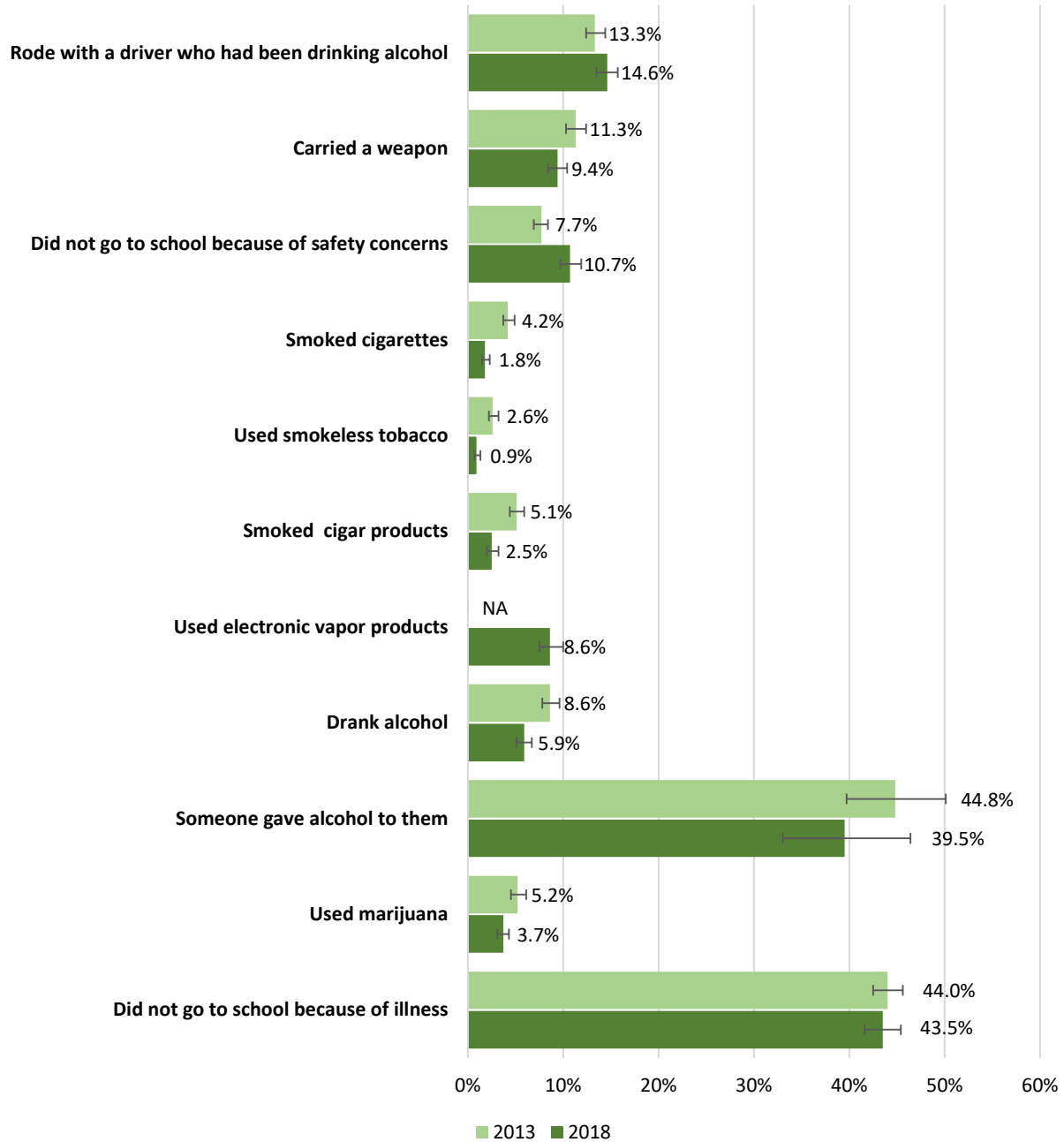
The prevalence of having experienced depressive symptoms increased significantly from 2013 to 2018 (21.7% vs. 25.6%).

Behaviors in the past 12 months



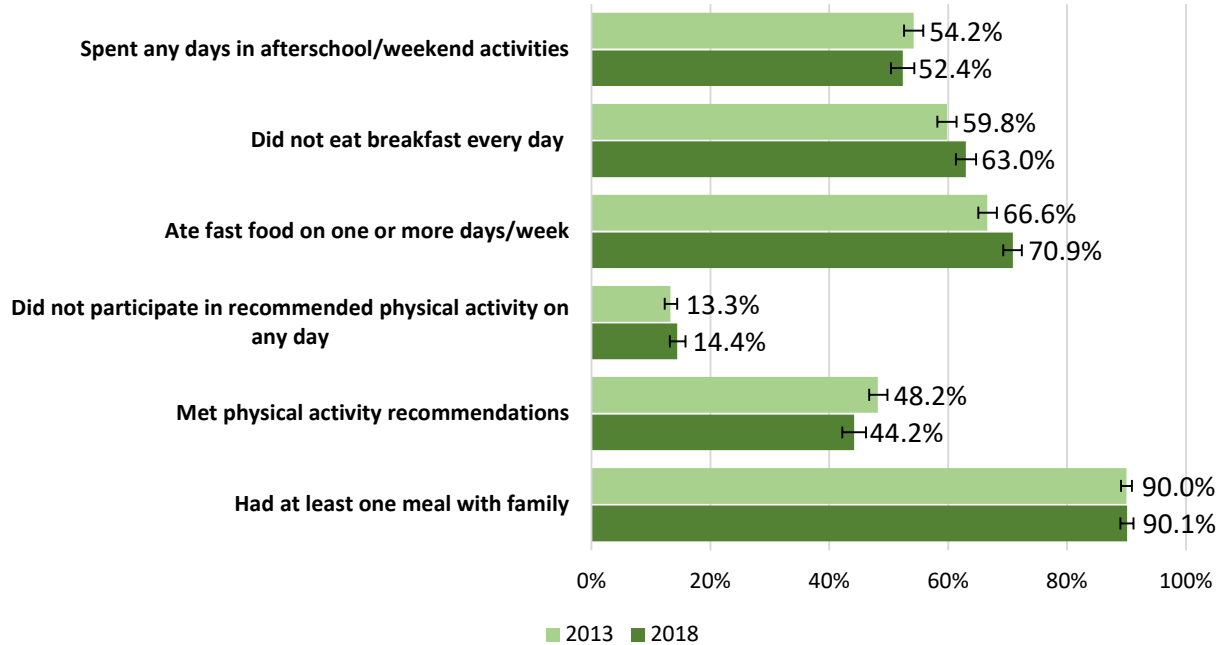
The survey contains 11 items addressing behaviors that students may have engaged in during the past 30 days, considered to be “current use”. The chart below depicts the prevalence for each of these items as reported in 2013 and again in 2018. There was a significant decrease from 2013 to 2018 for current cigarette use (4.2% vs. 1.8%), current chewing tobacco use (2.6% vs. 0.9%), current cigar use (5.1% vs. 2.5%), current alcohol use (8.6% vs. 5.9%), and current marijuana use (5.2% vs. 3.7%). There was a significant increase in prevalence from 2013 to 2018 for having avoided school because of safety concerns at or on the way to or from school (7.7% vs. 10.7%).

Behaviors in the past 30 days



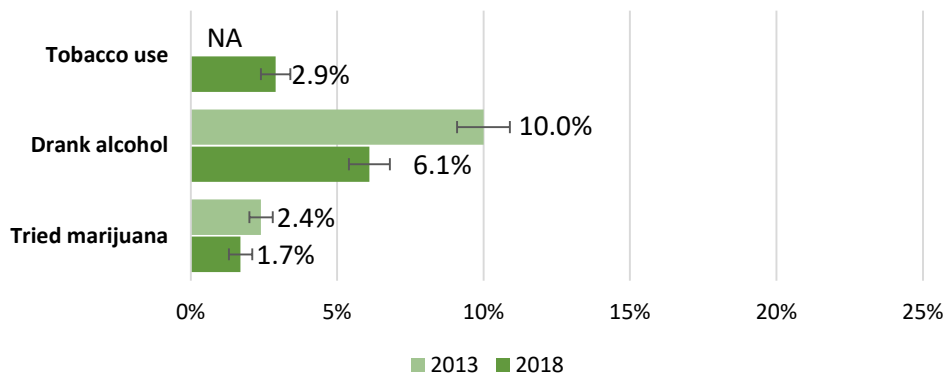
The survey contains 6 items addressing behaviors that students may have engaged in during the 7 days before the survey. The chart below depicts the prevalence for each of these items, as reported in 2013 and again in 2018. The prevalence decreased significantly from 2013 to 2018 for having met physical activity recommendations (48.2% vs. 44.2%). The prevalence increased significantly from 2013 to 2018 for having eaten fast food on one or more days (66.6% vs. 70.9%).

Behaviors in the past 7 days



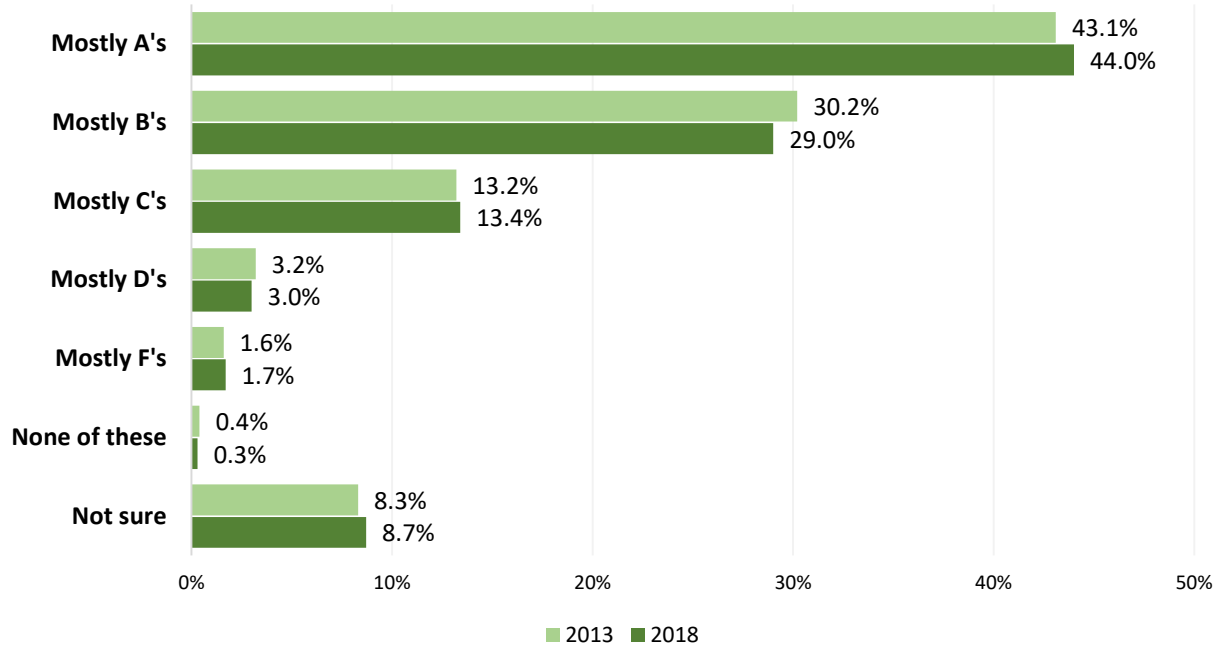
The survey contains 3 items addressing behaviors that students may have engaged in for the first time before the age of 11 years. Students who participate in risk behaviors before the age of 11 years are considered to be at higher risk for these behaviors to become habitual and to be more likely to engage in multiple risk behaviors. The chart below depicts the prevalence for each of these items, as reported in 2013 and again in 2018. There was a significant decrease from 2013 to 2018 for having drunk a whole drink of alcohol for the first time before the age of 11 years (10.0% vs. 6.1%).

Behaviors before the age of 11 years



To measure academic achievement, Summit County middle school students were asked to describe their grades in school. The following chart depicts the breakdown of self-described school grades by Summit County Middle School students, as reported in 2013 and again in 2018.

Academic achievement



Section 2: Behaviors that Contribute to Unintentional Injuries

The 2018 Summit County Middle School YRBS asked students how often they had worn a seat belt when riding in a car, how often they had been a passenger in a car driven by someone who had been drinking alcohol, and if they had suffered a concussion in the past 12 months. Head injury is the leading cause of death in bicycle crashes and use of bicycle helmets is the single most effective way of reducing head injuries and fatalities.^{i,ii} In 2004, children 14 years and younger accounted for 13% of all bicycle fatalities, making this one of the most frequent causes of injury-related deaths for young children.ⁱⁱⁱ

Motor vehicle accidents are the leading cause of death for children and youth ages 5 to 24.^{iv} The use of seat belts and child safety restraints greatly reduces the chance of fatalities and serious injuries in motor vehicle crashes.¹⁸

Healthy People 2020 Objectives	Summit County 2018	Status
IVP-15: Increase the use of safety belts to 92.4%	93.6 % of Summit County Middle School students reported usually or always wearing a seatbelt when riding in a car.	This objective has been met.
SA-1: Reduce the proportion of adolescents who report that they rode, during the previous 30 days, with a driver who had been drinking alcohol to no more than 25.5%	14.6% of Summit County Middle School students reported that they rode, during the previous 30 days, with a driver who had been drinking alcohol.	This objective has been met.



Overall and Regional Prevalence

Akron		Suburbs		County	
% (Confidence Interval) Population N		% (Confidence Interval) Population N		% (Confidence Interval) Population N	
2013	2018	2013	2018	2013	2018
Rarely or never wore a seatbelt (When riding in a car driven by someone else.)					
16.2% (14.4 – 18.2) 472	10.5% (8.9 – 12.3) 290	7.0% (6.0 – 8.1) 559	4.9% (3.9 – 6.1) 357	9.5% (8.6 – 10.4) 1031	6.4% (5.6 – 7.5) 647
Rode with a driver who had been drinking alcohol (During the past 30 days before the survey.)					
15.9% (14.1 – 17.8) 457	18.7% (17.1 – 20.5) 515	12.4% (11.3 – 13.7) 984	13.0% (11.7 – 14.4) 937	13.3% (12.4 – 14.4) 1441	14.6% (13.5 – 15.7) 1452
Had a concussion from playing sports or physical activity (During the past 12 months before the survey.)					
N/A	18.8% (16.8 – 21.1) 517	N/A	13.1% (11.8 – 14.6) 952	N/A	14.7% (13.5 – 16.0) 1470

Compared to 2013, Summit County middle school students in 2018 were significantly less likely to report rarely or never wearing a seatbelt (9.5% vs. 6.4%) when riding in a car driven by someone else. There were no significant differences between 2013 and 2018 in rates of having rode with a driver who had been drinking alcohol in the past 30 days (13.3% vs. 14.6%). In 2018, 14.7% of Summit County middle school students reported they had a concussion from playing sports or physical activity in the past 12 months.

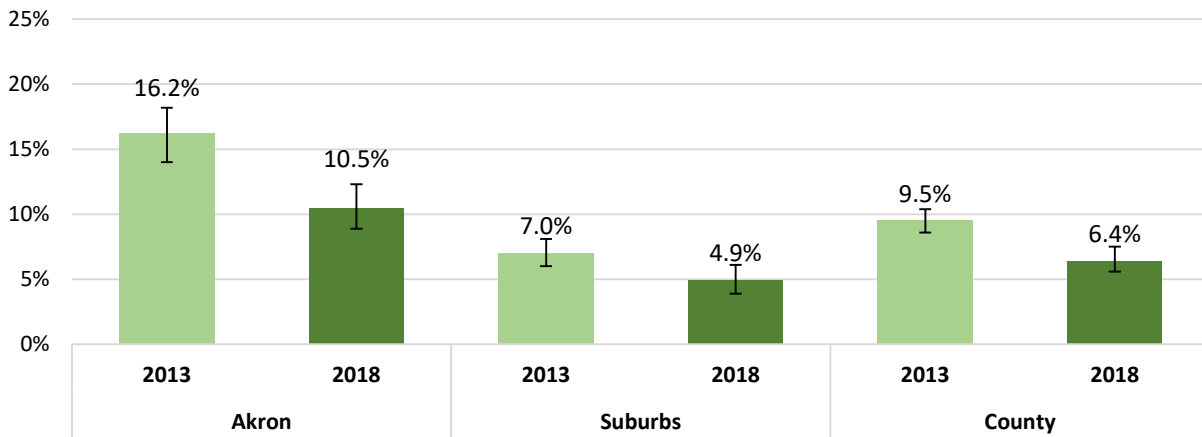
Students in Summit County were asked how often they wore a seat belt while riding in a car driven by someone else. In 2018, the prevalence of having never or rarely worn a seat belt while riding in a car driven by someone else was significantly higher in Akron (10.5%) than in the suburbs (4.9%), however these rates have significantly decreased in both Akron and the suburbs since 2013 (16.2% and 7.0%, respectively).

Students in Summit County were asked how often they rode with a driver who had been drinking alcohol, in the 30 days before the survey. In 2018, the prevalence of having rode with a driver who had been drinking alcohol was significantly higher in Akron (18.7%) than in the suburbs (13.0%).

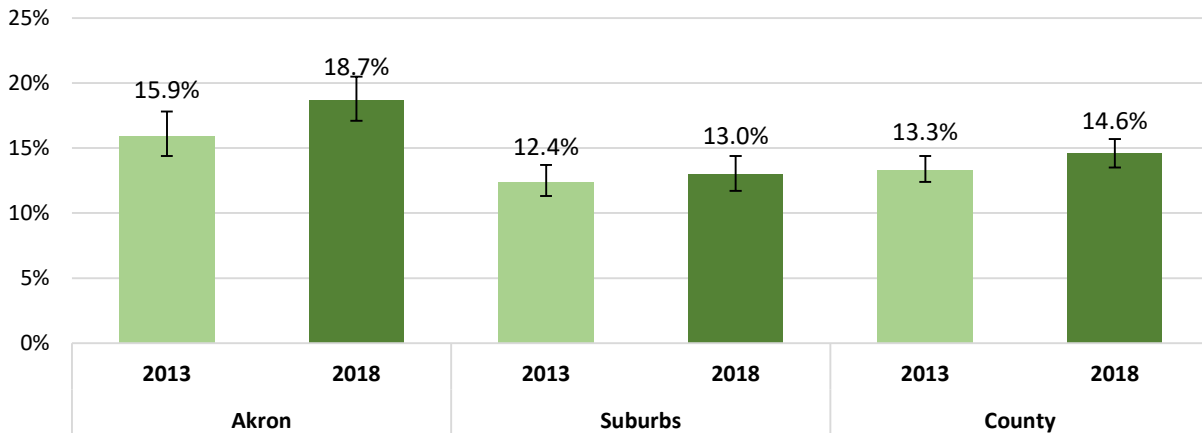
Students in Summit County were asked how many times they had a concussion from playing a sport or being physically active, during the past 12 months. In 2018, the prevalence of having had a concussion from playing a sport or being physically active was significantly higher in Akron (18.8%) than in the suburbs (13.1%).

The below graphs illustrate regional differences in the 2013 and 2018 rates of students who rarely or never wore a seatbelt and had ridden with a driver who had been drinking alcohol in the past 30 days.

Rarely or never wore a seat belt By region, 2013 vs. 2018



Rode with someone who had been drinking alcohol By region, 2013 vs. 2018



Demographics

Rarely or never wore a seatbelt			
Category	%	CI	
Gender			
Female	6.3	5.0	7.8
Male	6.6	5.6	7.8
Race/Ethnicity			
White	3.2	2.6	3.9
Black	13.8	11.3	16.7
Asian	10.1	7.1	14.3
Hispanic	8.7	5.1	14.3
Other	7.6	6.0	9.7
Grade			
7th	5.7	4.7	7.0
8th	7.2	5.8	8.8
Total	6.4	5.6	7.5

Rode with a driver who had been drinking alcohol			
Category	%	CI	
Gender			
Female	13.9	12.5	15.4
Male	15.1	13.6	16.8
Race/Ethnicity			
White	13.0	11.8	14.2
Black	17.1	14.3	20.2
Asian	20.0	14.9	26.4
Hispanic	19.8	14.2	26.9
Other	17.6	14.5	21.2
Grade			
7th	14.1	12.3	16.0
8th	14.7	13.3	16.2
Total	14.6	13.5	15.7

In Summit County, 6.4% of students rarely or never wore a seatbelt when riding in a car driven by someone else. The prevalence of rarely or never wearing a seat belt was higher among Black, Asian, Hispanic, and Other/Multiple race (13.8%, 10.1%, 8.7%, 7.6%) students than White (3.2%) students; and higher among Black students (13.8%) than Other/Multiple race students (7.6%).

In Summit County, 14.6% of students had ridden in a car or other vehicle driven by someone who had been drinking alcohol, one or more times in the 30 days prior to the survey. The prevalence of having ridden with a driver who had been drinking alcohol in the 30 days prior to the survey was higher among Black, Asian, and Other/Multiple race (17.1%, 20.0%, 17.6%) students than White (13.0%) students.



Had a concussion from playing a sport or being physically active			
Category	%	CI	
Gender			
Female	11.6	10.3 - 13.0	
Male	17.5	15.8 - 19.3	
Race/Ethnicity			
White	12.8	11.6 - 14.2	
Black	17.6	14.9 - 20.7	
Asian	25.0	17.9 - 33.9	
Hispanic	17.9	13.7 - 23.2	
Other	20.2	17.0 - 23.8	
Grade			
7th	15.2	13.5 - 17.0	
8th	14.2	12.6 - 16.0	
Total	14.7	13.5 - 16.0	

In Summit County, 14.7% of students had a concussion one or more times in the 12 months prior to the survey, from playing a sport or being physically active. The prevalence of having a concussion was higher for male students than females (17.5% vs. 11.6%). The prevalence of having a concussion was higher among Black, Asian, and Other/Multiple race (17.6%, 25.0%, 20.2%) students than White (12.8%) students.

ⁱ Centers for Disease Control and Prevention. 1995. Injury-control recommendations: Bicycle helmets. *Morbidity and Mortality Weekly Report*. 44(RR-1):1-17.

ⁱⁱ Sosin, D., Sacks, J., Webb, K. 1996. Pediatric head injuries and deaths from bicycling in the United States. *Pediatrics*. 98:868-870.

ⁱⁱⁱ National Highway Traffic Safety Administration. Traffic Safety Facts, Laws: Bicycle Helmet Use Laws. National Highway Traffic Safety Administration Web site. Available at http://www.nhtsa.dot.gov/portal/nhtsa_static_file_downloader.jsp?file=/staticfiles/DOT/NHTSA/Communication%20&%20Consumer%20Information/Articles/Associated%20Files/810886.pdf. Accessed July 22, 2008.

^{iv} Web-based Injury Statistics Query and Reporting System (WISQARS) [database online]. Atlanta, GA: National Center for Injury Prevention and Control, Centers for Disease Control and Prevention.

Section 3: Violence-Related Behaviors

The 2018 Summit County Middle School YRBS asked students about violent behaviors, such as physical fighting, weapon carrying, bullying, intentional self-harm, and suicide. Adolescents can experience violence along a continuum that may begin with verbal harassment and advance into physical acts of violence.ⁱ Bullying and being bullied at school are associated with key violence-related behaviors including carrying weapons, fighting and sustaining injuries from fighting.ⁱⁱ

Healthy People 2020 Objectives	Summit County 2018	Status
IVP-34: Reduce physical fighting among adolescents to no more than 28.4%.	34.1% of Summit County Middle School students reported being involved in at least one physical fight during the past 12 months.	This objective has not been met.
IVP-35: Reduce bullying among adolescents to no more than 17.9%	37.2% of Summit County Middle School students reported being bullied electronically, on school property, or away from school property during the past 12 months.	This objective has not been met.



Overall and Regional Prevalence

Akron		Suburbs		County	
% (Confidence Interval)		% (Confidence Interval)		% (Confidence Interval)	
Population N		Population N		Population N	
2013	2018	2013	2018	2013	2018
Carried a weapon					
(Such as a gun, knife, or club; one or more times during the past 30 days before the survey.)					
9.2% (7.7 – 10.8) 266	8.3% (7.0 – 9.9) 229	12.1% (10.8 – 13.5) 958	9.8% (8.6 – 11.1) 707	11.3% (10.3 – 12.4) 1224	9.4% (8.4 – 10.4) 935
Did not go to school because they felt unsafe at or on the way to or from school					
(One or more times during the 30 days before the survey.)					
10.7% (9.2 – 12.4) 310	14.9% (13.1 – 17.0) 411	6.6% (5.7 – 7.5) 522	9.2% (7.9 – 10.6) 663	7.7% (6.9 – 8.4) 832	10.7% (9.7 – 11.9) 1074
Rarely or never feel safe and secure at school					
N/A	16.2% (14.4 – 18.1) 390	N/A	7.7% (6.5 – 9.1) 435	N/A	9.9% (8.9 – 11.0) 925
In a physical fight					
(One or more times during the 12 months before the survey.)					
40.3% (37.5 – 43.1) 1154	43.5% (40.8 – 46.2) 1194	29.9% (28.1 – 31.9) 2373	30.6% (28.5 – 32.8) 2212	32.7% (31.1 – 34.3) 3527	34.1% (32.4 – 35.9) 3405
Ever bullied on school property					
(During the past 12 months before the survey.)					
29.6% (27.2 – 32.2) 859	27.3% (25.0 – 29.7) 750	34.6% (33.0 – 36.3) 2758	29.8% (28.1 – 31.5) 2156	33.3% (31.9 – 34.7) 3618	29.1% (27.7 – 30.5) 2907
Ever bullied away from school property					
(During the past 12 months before the survey.)					
17.4% (15.4 – 19.4) 504	14.9% (13.4 – 16.7) 411	23.3% (21.9 – 24.8) 1854	18.2% (16.8 – 19.8) 1318	21.7% (20.6 – 22.9) 2358	17.3% (16.2 – 18.5) 1728
Ever electronically bullied					
(Such as through email, chat rooms, instant messaging, websites, or text messaging; during the 12 months before the survey.)					
15.5% (13.5 – 17.7) 445	13.4% (11.8 – 15.1) 365	21.2% (19.7 – 22.7) 1673	17.2% (15.7 – 18.7) 1234	19.6% (18.4 – 20.9) 2118	16.1% (14.9 – 17.3) 1600

Compared to 2013, Summit County middle school students in 2018 were significantly less likely to report that they had been bullied away from school property during the past 12 months (21.7% vs. 17.3%), or that they had been electronically bullied during the past 12 months (19.6% vs. 16.1%).

Unfortunately, compared to 2013, Summit County middle school students in 2018 were more likely to report that they had not gone to school at least once in the past 30 days because they felt unsafe there or on their way to or from school (7.7% vs. 10.7%). In 2018, a new question asked students how often they felt safe at school, and 9.9% of students responded that they never or rarely felt safe and secure at school.

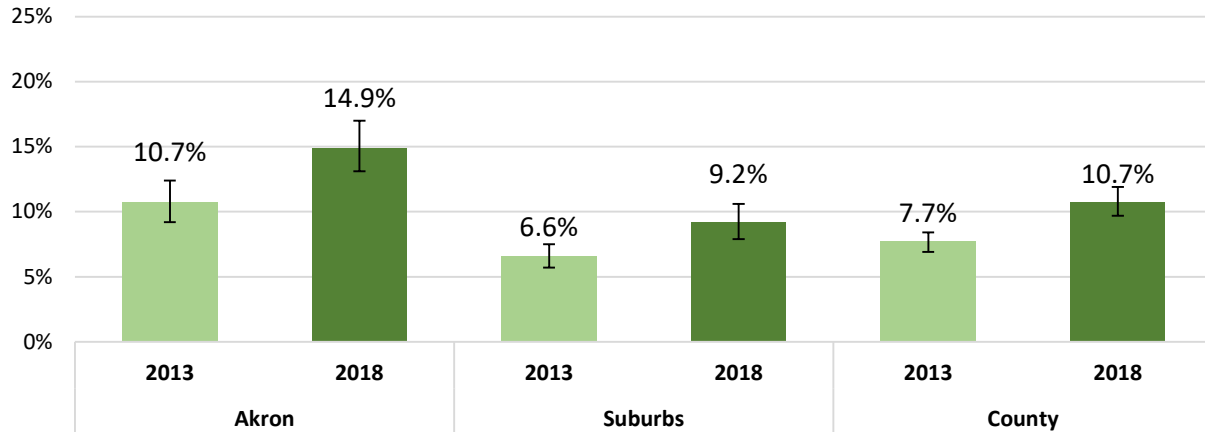
There were no significant changes from 2013 to 2018 in the prevalence of students reporting weapon carrying during past 30 days (11.3% vs. 9.4%), having been in a physical fight during the past 12 months (32.7% vs. 34.1%), or having been bullied on school property during the past 12 months (33.3% vs. 29.1%).

Looking regionally, the prevalence of having not gone to school at least once in the past 30 days because students felt unsafe there or on their way to or from school was significantly higher in Akron (14.9%) than in the suburbs (9.2%), although the prevalence increased from 2013 to 2018 for both regions. The 2018 prevalence of rarely or never feeling safe and secure at school was significantly higher in Akron than in the suburbs (16.2% vs. 7.7%). The 2018 prevalence of having been in a physical fight during the past 12 months was significantly higher in Akron (43.5%) than in the suburbs (30.6%).

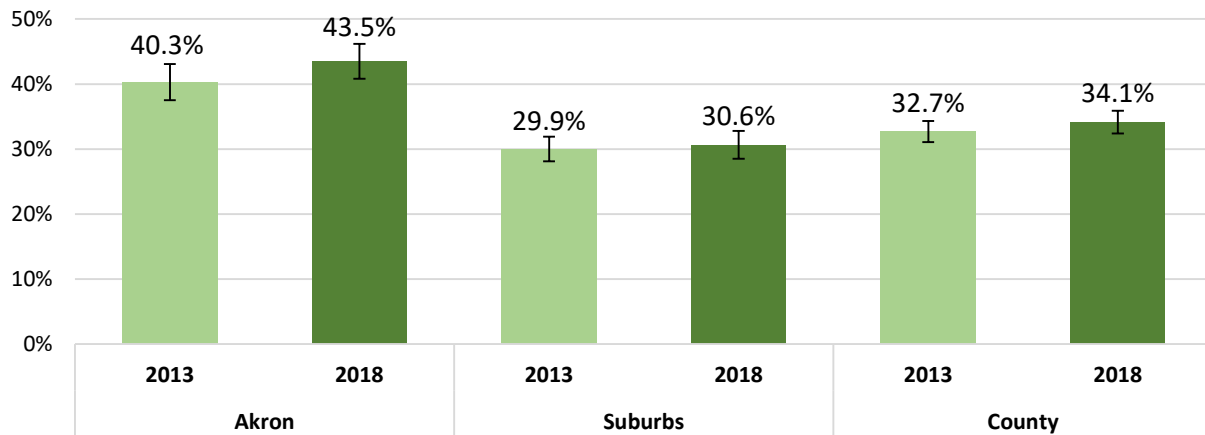
The 2018 prevalence of having been bullied away from school property during the past 12 months was significantly higher in the suburbs than in Akron (18.2% vs. 14.9%), in spite of a significant suburban decrease in this behavior from 2013 to 2018 (23.3% vs. 18.2%). Similarly, the 2018 prevalence of having been electronically bullied during the past 12 months was significantly higher in the suburbs than in Akron (17.2% vs. 13.4%), in spite of a significant decrease in electronic bullying reported by suburban schools from 2013 to 2018 (21.2% vs. 17.2%).

The below graphs illustrate regional differences in the 2013 (when available) and 2018 rates of the survey's violence-related variables.

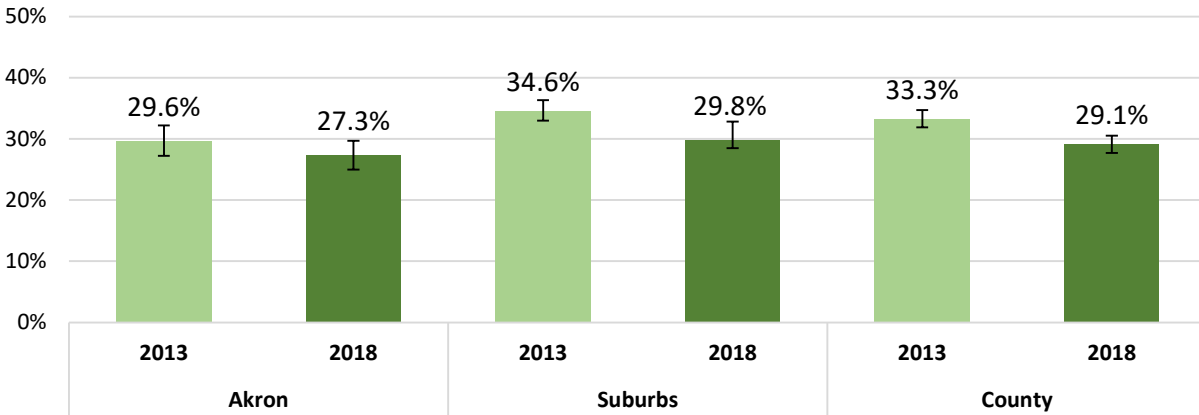
Missed school because of safety concerns By region, 2013 vs. 2018



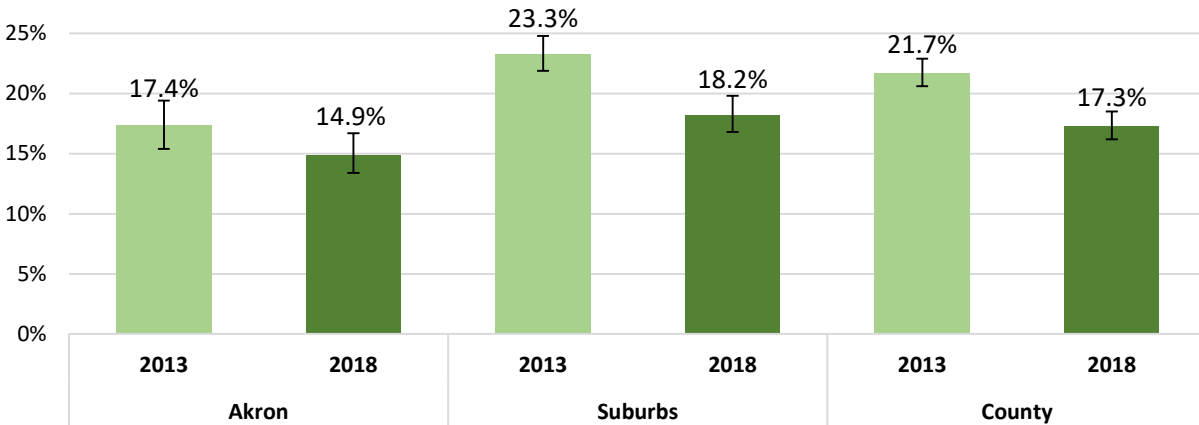
In a physical fight By region, 2013 vs. 2018



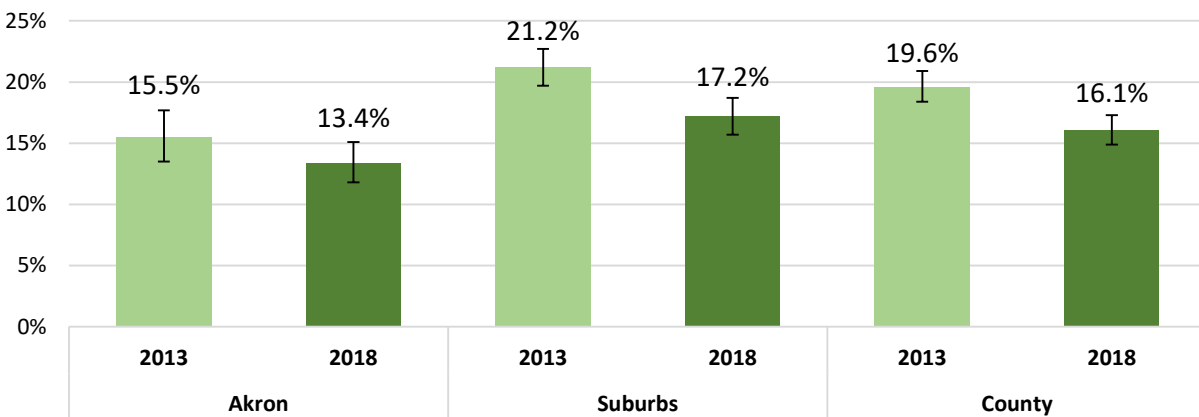
Bullied on school property By region, 2013 vs. 2018



Bullied away from school property By region, 2013 vs. 2018



Electronically bullied By region, 2013 vs. 2018



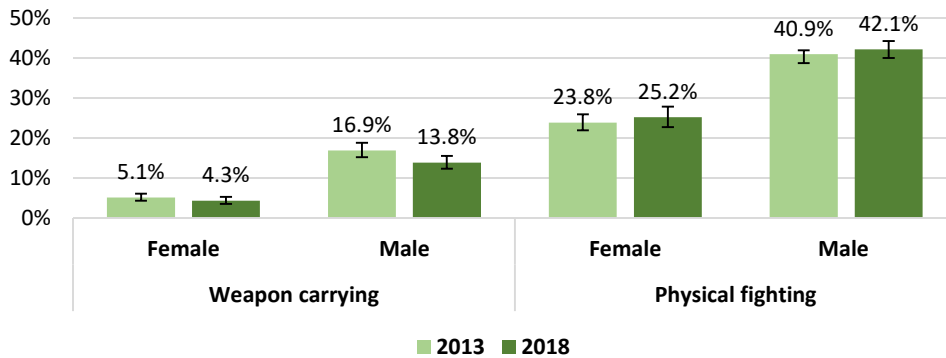
Gender Differences

Females % (Confidence Interval)		Males % (Confidence Interval)	
2013	2018	2013	2018
Carried a weapon (Such as a gun, knife, or club; one or more times during the past 30 days before the survey.)			
5.1% (4.3 – 6.1)	4.3% (3.5 – 5.3)	16.9% (15.2 – 18.8)	13.8% (12.3 – 15.5)
Did not go to school because they felt unsafe at or on the way to or from school (One or more times during the 30 days before the survey.)			
9.2% (8.1 – 10.4)	12.2% (10.6 – 14.2)	6.2% (5.3 – 7.2)	9.5% (8.3 – 10.9)
Rarely or never feel safe and secure at school			
N/A	9.7% (8.5 – 11.1)	N/A	10.0% (8.7 – 11.5)
In a physical fight (One or more times during the 12 months before the survey.)			
23.8% (21.9 – 25.9)	25.2% (22.7 – 27.8)	40.9% (38.7 – 43.1)	42.1% (40.0 – 44.2)
Ever bullied on school property (During the past 12 months before the survey.)			
37.6% (35.6 – 39.6)	33.2% (31.2 – 35.2)	29.2% (27.3 – 31.1)	25.3% (23.5 – 27.2)
Ever bullied away from school property (During the past 12 months before the survey.)			
27.0% (25.1 – 28.9)	21.2% (19.5 – 23.1)	16.8% (15.2 – 18.5)	13.6% (12.3 – 15.1)
Ever electronically bullied (Such as through email, chat rooms, instant messaging, websites, or text messaging; during the 12 months before the survey.)			
27.2% (25.3 – 29.3)	20.4% (18.5 – 22.3)	12.6% (11.2 – 14.0)	12.2% (10.8 – 13.7)

Looking within the demographic category of gender, the prevalence of having not gone to school at least once in the past 30 days because students felt unsafe there or on their way to or from school increased from 2013 to 2018 for both females (9.2% vs. 12.2%) and males (6.2% vs. 9.5%), although the difference in prevalence between females and males was no longer significant in 2018 (12.2% vs. 9.5%).

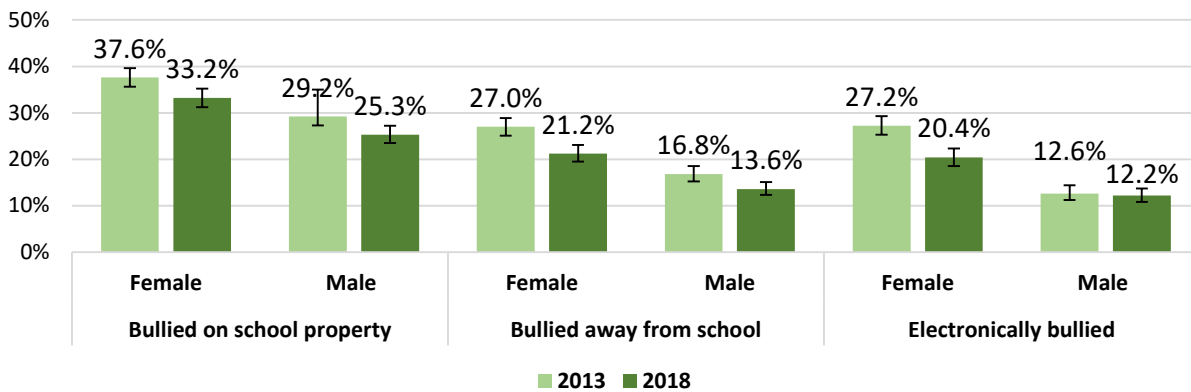
Two violence-related behaviors have higher prevalence among males. The prevalence of weapon carrying was significantly higher among male students than female students in both 2013 (16.9% vs. 5.1%) and 2018 (13.8% vs. 4.3%). The prevalence of physical fighting was also higher among male students than female students in both 2013 (40.9% vs. 23.8%) and 2018 (42.1% vs. 25.2%).

Violence-related behaviors -- Males Significantly Higher, 2013 vs. 2018



The 2018 prevalence of three violence-related behaviors related to bullying were significantly higher among females. The prevalence of having been bullied on school property during the past 12 months was significantly higher among females than males (33.2% vs. 25.3%), although the prevalence decreased from 2013 to 2018 for both groups. The prevalence of having bullied away from school property during the past 12 months was significantly higher among females than males (21.2% vs. 13.6%), although the prevalence decreased from 2013 to 2018 for both groups. The prevalence of having been electronically bullied during the past 12 months was significantly higher among females than males (20.4% vs. 12.2%), even though the prevalence decreased from 2013 to 2018 among females.

Violence-related behaviors -- Females Significantly Higher, 2013 vs. 2018



Grade-level changes were noted for having carried a weapon in the past 30 days; having been bullied on school property, bullied away from school, and having been electronically bullied during the past 12 months.

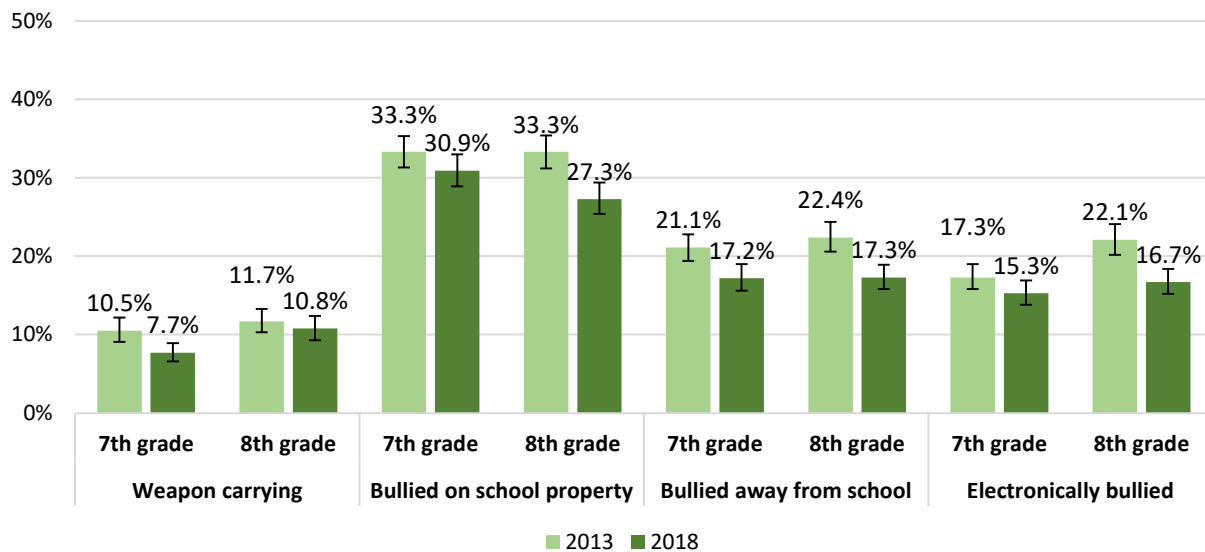
In 2018, the prevalence of having carried a weapon during the past 30 days was significantly higher among 8th grade students than 7th grade students (10.8% vs. 7.7%), in keeping with the significant decrease in weapon carrying among 7th grade students from 2013 to 2018 (10.5% vs. 7.7%).

The prevalence of having been bullied on school property during the past 12 months was significantly lower among 8th grade students in 2018 than in 2013 (33.3% vs. 27.3%).

The prevalence of having been bullied away from school during the past 12 months was significantly lower in 2018 from 2013 among 7th grade students (21.1% vs. 17.2%) and among 8th grade students (22.4% vs. 17.3%).

The prevalence of having been electronically bullied during the past 12 months was significantly lower among 8th grade students in 2018 than in 2013 (22.1% vs. 16.7%).

Violence-related behaviors By grade, 2013 vs. 2018

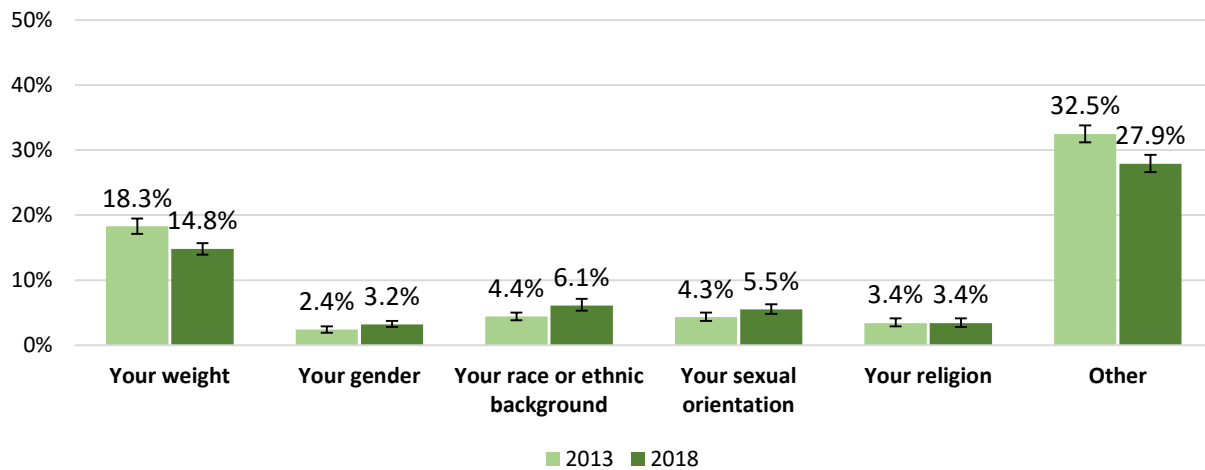


Summit County students were asked if they had been teased or called names during the 12 months before completing the survey for any of the reasons indicated in the graph below. Students were able to select all that applied. In both 2013 and 2018, more than 40.0% of students said that they had been teased or called names during the 12 months before the survey.

The prevalence of having been teased for one’s weight was significantly higher in 2013 than in 2018 (18.3% vs. 14.8%). The prevalence of having been teased for some other reason was significantly higher in 2013 than in 2018 (32.5% vs. 27.9%).

The prevalence of having been teased for one’s race or ethnic background was significantly higher in 2018 than in 2013 (4.4% vs. 6.1%).

Reasons for being teased or called names, 2013 vs. 2018



Demographics

Carried a weapon			
Category	%	CI	
Gender			
Female	4.3	3.5	5.3
Male	13.8	12.3	15.5
Race/Ethnicity			
White	9.9	8.8	11.1
Black	7.1	5.3	9.6
Asian	4.5	2.6	7.9
Hispanic	17.0	12.8	22.1
Other	12.2	9.5	15.6
Grade			
7th	7.7	6.6	8.9
8th	10.8	9.3	12.4
Total	9.4	8.4	10.4

In Summit County, 9.4% of students had carried a weapon (e.g., gun, knife, or club) in the 30 days prior to the survey. The prevalence of carrying a weapon in the 30 days prior to the survey was higher among male (13.8%) than female (4.3%) students. The prevalence of carrying a weapon was higher for Hispanic (17.0%) students than White, Black, or Asian (9.9%, 7.1%, 4.5%) students; and higher for White and Other/Multiple race students than Asian students. The prevalence of weapon carrying was higher 8th grade students (10.8%) than 7th grade students (7.7%).

Did not go to school because of safety concerns			
Category	%	CI	
Gender			
Female	12.2	10.6	14.2
Male	9.5	8.3	10.9
Race/Ethnicity			
White	8.5	7.6	9.5
Black	15.0	12.1	18.5
Asian	14.2	10.3	19.2
Hispanic	17.7	12.5	24.4
Other	14.0	11.6	16.8
Grade			
7th	11.2	9.7	12.8
8th	10.3	8.6	12.3
Total	10.7	9.7	11.9

In Summit County, 10.7% of students did not go to school at least one day during the 30 days before the survey because they felt they would be unsafe at school or on their way to or from school. The prevalence of having not gone to school because of safety concerns was higher among Black, Asian, Hispanic, and Other/Multiple race students (15.0%, 14.2%, 17.7%, 14.0%) than White (8.5%) students.

Never or rarely feels safe at school			
Category	%	CI	
Gender			
Female	9.7	8.5	- 11.1
Male	10.0	8.7	- 11.5
Race/Ethnicity			
White	7.2	6.3	- 8.2
Black	16.3	13.7	- 19.4
Asian	9.5	6.4	- 13.9
Hispanic	13.8	10.4	- 18.1
Other	13.5	10.9	- 16.6
Grade			
7th	9.5	8.1	- 11.0
8th	10.5	9.0	- 12.2
Total	9.9	8.9	- 11.0

In Summit County, 9.9% of students rarely or never felt safe and secure at school. The prevalence of rarely or never feeling safe and secure at school was higher among Black, Hispanic, and Other/multiple race (16.3%, 13.8%, 13.5%) students than among White (7.2%) students.

In a physical fight			
Category	%	CI	
Gender			
Female	25.2	22.7	- 27.8
Male	42.1	40.0	- 44.2
Race/Ethnicity			
White	27.3	25.8	- 28.8
Black	50.2	46.3	- 54.1
Asian	24.7	19.7	- 30.5
Hispanic	41.7	35.0	- 48.7
Other	42.4	38.5	- 46.5
Grade			
7th	34.7	31.6	- 37.8
8th	33.3	31.1	- 35.5
Total	34.1	32.4	- 35.9

In Summit County, 34.1% of students were in a physical fight one or more times in the 12 months prior to the survey. The prevalence of physical fighting was higher among male (42.1%) than female (25.2%) students. The prevalence of physical was higher among Black, Hispanic and Other/Multiple race students (50.2%, 41.7%, 42.7%) than White (27.3%) or Asian (24.7%) students.

Bullied on school property			
Category	%	CI	
Gender			
Female	33.2	31.2	- 35.2
Male	25.3	23.5	- 27.2
Race/Ethnicity			
White	31.2	29.5	- 32.9
Black	22.8	19.9	- 26.0
Asian	23.2	18.9	- 28.1
Hispanic	35.5	29.1	- 42.4
Other	35.7	31.2	- 40.6
Grade			
7th	30.9	28.9	- 33.0
8th	27.3	25.4	- 29.4
Total	29.1	27.7	- 30.5

In Summit County, 29.1% of students were bullied on school property one or more times in the 12 months prior to the survey. The prevalence of being bullied on school property higher among female (33.2%) than male (25.3%) students. The prevalence of being bullied on school property was higher for White, Hispanic and Other/Multiple race students (31.2%, 35.5%, 35.7%) than Black (22.8%) or Asian (23.2%) students.

Bullied away from school property			
Category	%	CI	
Gender			
Female	21.2	19.5	- 23.1
Male	13.6	12.3	- 15.1
Race/Ethnicity			
White	19.5	18.0	- 21.0
Black	11.4	9.2	- 14.0
Asian	12.1	8.7	- 16.6
Hispanic	28.7	22.8	- 35.6
Other	20.0	16.8	- 23.7
Grade			
7th	17.2	15.6	- 19.0
8th	17.3	15.8	- 18.9
Total	17.3	16.2	- 18.5

In Summit County, 17.3% of students were bullied away from school property one or more times in the 12 months prior to the survey. The prevalence of being bullied away from school property was higher among female (21.2%) than male (13.6%) students. The prevalence of being bullied away from school property was higher among White, Hispanic and Other/Multiple race (19.5%, 28.7%, 20.0%) students than Black (11.4%) and Asian (12.1%) students; and higher among Hispanic (28.7%) students than White (19.5%) students.

Electronically bullied			
Category	%	CI	
Gender			
Female	20.4	18.5	- 22.3
Male	12.2	10.8	- 13.7
Race/Ethnicity			
White	17.9	16.6	- 19.3
Black	11.2	8.9	- 14.1
Asian	10.1	6.7	- 15.0
Hispanic	25.1	19.0	- 32.3
Other	22.6	19.0	- 26.7
Grade			
7th	15.3	13.8	- 16.9
8th	16.7	15.2	- 18.4
Total	16.1	14.9	- 17.3

In Summit County, 16.1% of students were electronically bullied one or more times in the 12 months prior to the survey. The prevalence of being electronically bullied was higher among female (20.4%) than male (12.2%) students. The prevalence of being electronically bullied was higher for White, Hispanic, and Other/Multiple race (17.9%, 25.1%, 22.6%) students than Black and Asian (11.2%, 10.1%) students.

ⁱ Ohio Department of Health. 2003. Ohio Youth Risk Behavior Survey. Columbus, OH: Ohio Department of Health.

ⁱⁱ National Center for Education Statistics. 2007. *Indicators of School Crime and Safety: 2007*. Washington, DC: U.S. Department of Education.

Section 4: Depressive Symptoms and Suicide-Related Behaviors

The 2018 Summit County Middle School YRBS asked students about intentional self-harm, depressive symptoms, and suicide.

Persistent sadness and hopelessness are criteria for and predictors of clinical depression, though by themselves they are insufficient for a diagnosis of depression. Depressed youth are much more likely to use drugs or alcohol, drop out of school, or engage in promiscuous sex than a young person who is not depressed.ⁱ Youth are much more likely to think about and attempt suicide if they are depressed.ⁱⁱ

Healthy People 2020 Objectives	Summit County 2018	Status
MHMP-2: Reduce suicide attempts by adolescents to no more than 1.7%.	6.9% of Summit County Middle School students attempted suicide one or more times during the 12 months before the survey.	This objective has not been met.

Overall and Regional Prevalence

Akron		Suburbs		County	
% (Confidence Interval)		% (Confidence Interval)		% (Confidence Interval)	
Population N		Population N		Population N	
2013	2018	2013	2018	2013	2018
Hurt themselves without wanting to die (Such as cutting or burning themselves, during the 12 months before the survey.)					
17.7% (15.8 – 19.9) 507	20.4% (18.7 – 22.2) 549	16.0% (14.7 – 17.3) 1256	16.3% (14.9 – 17.9) 1164	16.4% (15.3 – 17.6) 1763	17.5% (16.3 – 18.7) 1713
Felt sad and hopeless (Almost every day for two weeks or more that they stopped some usual activities during the 12 months before the survey.)					
24.9% (22.8 – 27.2) 709	28.9% (26.7 – 31.2) 779	20.5% (18.9 – 22.2) 1619	24.4% (22.6 – 26.4) 1743	21.7% (20.3 – 23.1) 2328	25.6% (24.1 – 27.2) 2523
Seriously considered suicide (During the 12 months before the survey.)					
15.6% (13.8 – 17.7) 440	14.6% (13.0 – 16.5) 395	12.4% (11.2 – 13.8) 976	12.2% (10.9 – 13.7) 865	13.3% (12.2 – 14.4) 1416	12.9% (11.8 – 14.1) 1260
Made a plan about how they would attempt suicide (During the 12 months before the survey.)					
N/A	11.6% (10.2 – 13.1) 310	N/A	9.1% (8.1 – 10.2) 640	N/A	9.8% (8.9 – 10.7) 950
Attempted suicide (During the 12 months before the survey.)					
12.1% (10.3 – 14.2) 341	8.8% (7.6 – 10.2) 236	8.8% (7.9 – 9.9) 697	6.1% (5.2 – 7.3) 433	9.7% (8.9 – 10.6) 1038	6.9% (6.1 – 7.8) 670



2018 SUMMIT COUNTY MS YRBS: Depressive Symptoms and Suicide-Related Behaviors

Between 2013 and 2018 in Summit County, middle school students were significantly more likely to report that they had felt sad and hopeless almost every day for two weeks or more so that they stopped some usual activities (considered depressive symptoms) during the 12 months before the survey (21.7% vs. 25.6%). From 2013 to 2018, the prevalence of students reporting that they had hurt themselves without wanting to die (16.4% vs. 17.5%) or seriously considered suicide (13.3% vs. 12.9%) did not change significantly. The county-wide prevalence of students who attempted suicide at least one time during the 12 months before the survey decreased significantly from 2013 to 2018 (9.7% vs. 6.9%). In 2018, 9.8% of Summit County high school students reported they had made a suicide plan during the 12 months before the survey.

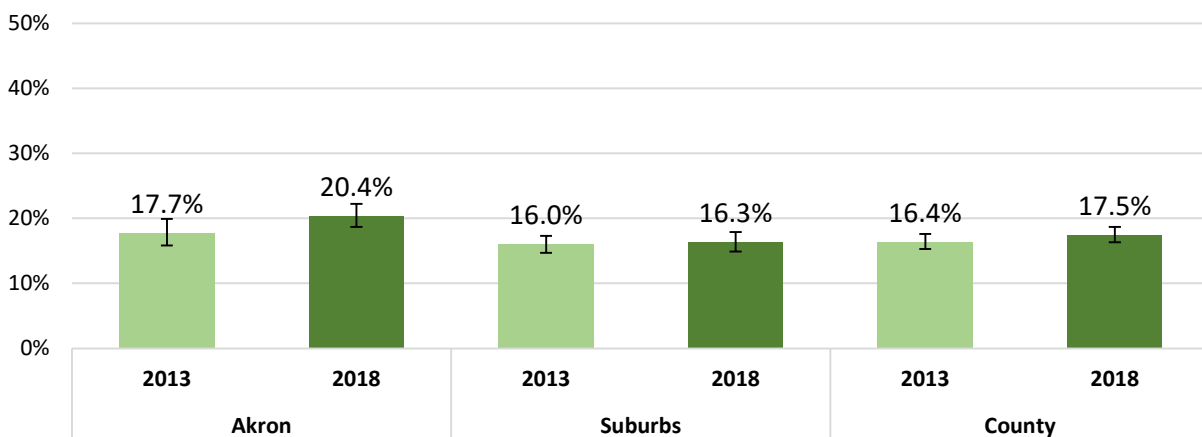
By region, the 2018 prevalence of students hurting themselves on purpose during the past 12 months was significantly higher in Akron than in the suburbs (20.4% vs. 16.3%). Similarly, the prevalence of students reporting that they had felt sad or hopeless for two weeks or more in the past 12 months was higher in Akron than in the suburbs (28.9% vs. 24.4%), even though the prevalence increased significantly from 2013 to 2018 in the suburbs (20.5% vs. 24.4%).

There was no significant difference in the prevalence of students seriously considering suicide between Akron and the suburbs (14.6% vs. 12.2%), nor was there any significant change in either region between 2013 and 2018.

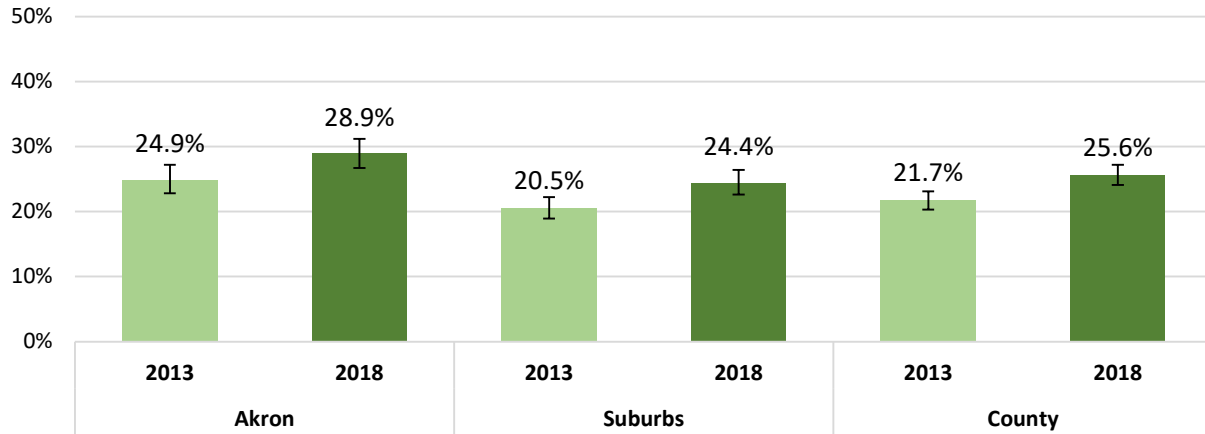
In 2018, the prevalence of attempting suicide during the past 12 months was significantly higher in Akron than in the suburbs (8.8% vs. 6.1%), although the prevalence has decreased from 2013 to 2018 for both regions.

The below graphs illustrate regional differences in the 2013 (when available) and 2018 rates of the survey's depressive symptoms and suicide-related variables.

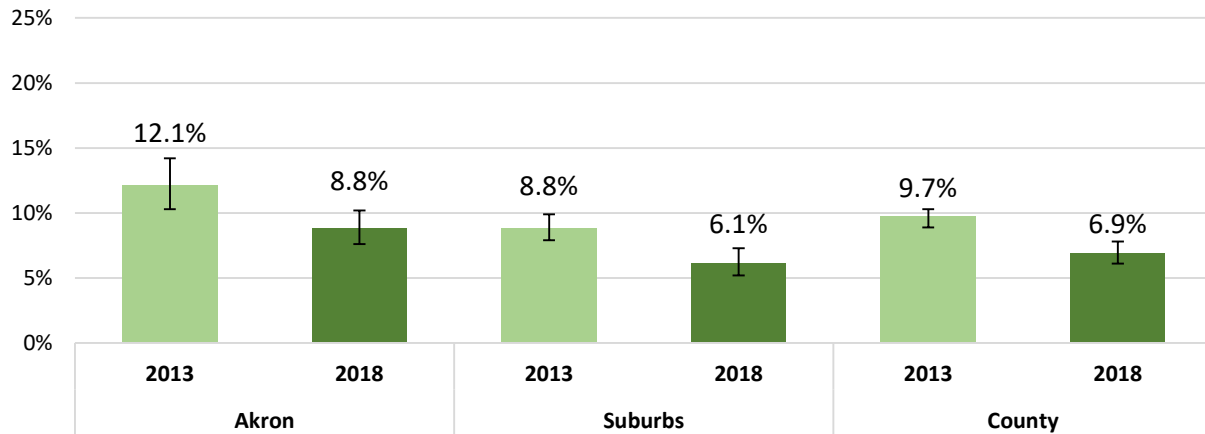
Intentional self-harm By region, 2013 vs. 2018



Depressive symptoms By region, 2013 vs. 2018



Attempted suicide By region, 2013 vs. 2018



Prevalence by Gender

Females % (Confidence Interval)		Males % (Confidence Interval)	
2013	2018	2013	2018
Hurt themselves without wanting to die (Such as cutting or burning themselves, during the 12 months before the survey.)			
24.2% (22.3 – 26.3)	22.9% (21.3 – 24.6)	9.1% (7.9 – 10.3)	12.3% (10.9 – 13.8)
Felt sad and hopeless (Almost every day for two weeks or more that they stopped some usual activities during the 12 months before the survey.)			
29.2% (27.0 – 31.6)	33.5% (31.3 – 35.8)	14.5% (13.1 – 16.1)	18.3% (16.5 – 20.3)
Seriously considered suicide (During the 12 months before the survey.)			
18.4% (16.7 – 20.3)	16.5% (14.9 – 18.3)	8.3% (7.2 – 9.5)	9.4% (8.0 – 10.9)
Made a plan about how they would attempt suicide (During the 12 months before the survey.)			
N/A	12.5% (11.0 – 14.1)	N/A	7.0% (6.0 – 8.1)
Attempted suicide (During the 12 months before the survey.)			
11.4% (10.0 – 12.9)	8.9% (7.6 – 10.5)	8.0% (7.0 – 9.2)	4.7% (3.9 – 5.7)

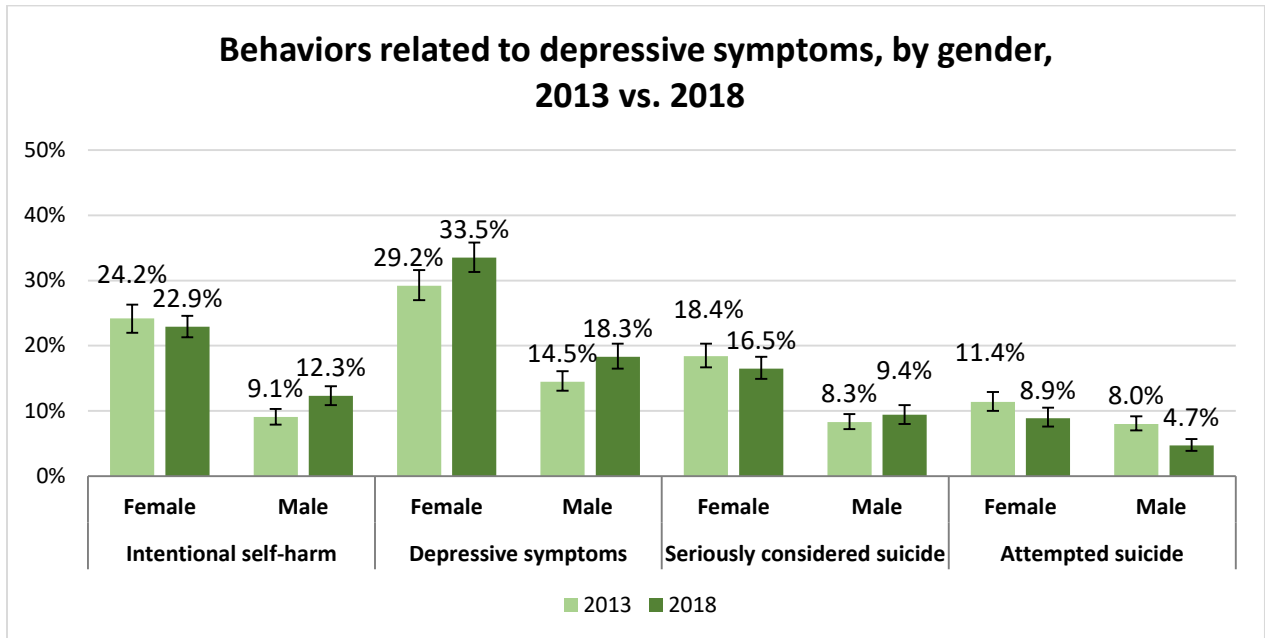
Looking within the demographic category of gender, all five behaviors examined in this chapter, have significantly higher prevalence among female students in 2018. The prevalence of hurting oneself on purpose during the past 12 months was significantly higher among females than males (22.9% vs. 12.3%) although there was a significant increase from 2013 to 2108 among males (9.1% vs. 12.3%). Similarly, the prevalence of students reporting that they had experienced depressive symptoms in the past 12 months was higher among female students than male students (33.5% vs. 18.3%), although the prevalence increased significantly from 2013 to 2018 among male students (14.5% vs. 18.3%).

The 2018 prevalence of having seriously considered suicide (16.5% vs. 9.4%) and having made a suicide plan (12.5% vs. 7.0%) during the past 12 months was significantly higher among female than male students.

2018 SUMMIT COUNTY MS YRBS: Depressive Symptoms and Suicide-Related Behaviors

The 2018 prevalence of having attempted suicide one or more times during the past 12 months was significantly higher among female students than male students (8.9% vs. 4.7%). There was no significant change in prevalence from 2013 to 2018 among female students (11.4% vs. 8.9%), while the prevalence among male students was significantly lower in 2018 (8.0% vs. 4.7%).

The below graphs illustrate gender differences in the 2013 (when available) and 2018 rates of the survey's depressive symptoms and suicide-related variables.



Demographics

Intentional self-harm			
Category	%	CI	
Gender			
Female	22.9	21.3	- 24.6
Male	12.3	10.9	- 13.8
Race/Ethnicity			
White	16.7	15.3	- 18.1
Black	18.6	15.7	- 21.9
Asian	15.2	11.1	- 20.3
Hispanic	24.5	19.5	- 30.3
Other	22.7	19.5	- 26.3
Grade			
7th	16.6	15.0	- 18.4
8th	18.4	16.6	- 20.2
Total	17.5	16.3	- 18.7

In Summit County, 17.5% of students purposely hurt themselves one or more times without wanting to die in the 12 months prior to the survey. The prevalence of purposely hurting oneself was higher among female (22.9%) than male (12.3%) students. The prevalence of purposely hurting oneself was higher for Hispanic and Other/Multiple race (24.5%, 22.7%) students than White (16.7%) students.

Felt sad or hopeless			
Category	%	CI	
Gender			
Female	33.5	31.3	- 35.8
Male	18.3	16.5	- 20.3
Race/Ethnicity			
White	24.2	22.6	- 25.8
Black	28.3	24.9	- 32.0
Asian	23.9	19.7	- 28.6
Hispanic	31.1	24.8	- 38.1
Other	31.8	28.5	- 35.3
Grade			
7th	25.0	22.6	- 27.6
8th	26.5	24.3	- 28.8
Total	25.6	24.1	- 27.2

In Summit County, 25.6% of students felt sad or hopeless almost every day for two weeks or more in a row and stopped doing usual activities, in the 12 months prior to the survey (i.e., depressive symptoms). The prevalence of experiencing depressive symptoms was higher among female (33.5%) than male (18.3%) students. The prevalence of experiencing depressive symptoms was higher for Other/Multiple race (31.8%) students than White (24.2%) students.



2018 SUMMIT COUNTY MS YRBS: Depressive Symptoms and Suicide-Related Behaviors

Seriously considered attempting suicide			
Category	%	CI	
Gender			
Female	16.5	14.9	- 18.3
Male	9.4	8.0	- 10.9
Race/Ethnicity			
White	11.6	10.5	- 12.9
Black	15.7	13.2	- 18.5
Asian	7.9	5.1	- 12.0
Hispanic	18.8	14.1	- 24.7
Other	17.1	14.2	- 20.3
Grade			
7th	12.2	10.5	- 14.0
8th	13.7	12.3	- 15.3
Total	12.9	11.8	- 14.1

In Summit County, 12.9% of students seriously considered attempting suicide one or more times in the 12 months prior to the survey. The prevalence of seriously considering attempting suicide was higher among female (16.5%) than male (9.4%) students. The prevalence of seriously considering attempting suicide was higher for Hispanic and Other/Multiple race (18.8%, 17.1%) students than White and Asian (11.6%, 7.9%) students; and higher for Black students (15.7%) than Asian students (7.9%).

Made a suicide plan			
Category	%	CI	
Gender			
Female	12.5	11.0	- 14.1
Male	7.0	6.0	- 8.1
Race/Ethnicity			
White	8.8	7.8	- 9.9
Black	11.2	9.1	- 13.6
Asian	7.9	4.8	- 12.6
Hispanic	14.6	10.5	- 20.0
Other	13.6	11.0	- 16.6
Grade			
7th	9.5	8.2	- 11.0
8th	10.2	9.1	- 11.4
Total	9.8	8.9	- 10.7

In Summit County, 9.8% of students made a plan about how they would commit suicide, one or more times in the 12 months prior to the survey. The prevalence of making a plan about how to commit suicide was higher among female (12.5%) than male (7.0%) students. The prevalence for making a plan about how to commit suicide was higher for Hispanic and Other/Multiple race (14.6%, 13.6%) students than White (8.8%) students.



2018 SUMMIT COUNTY MS YRBS: Depressive Symptoms and Suicide-Related Behaviors

Attempted suicide			
Category	%	CI	
Gender			
Female	8.9	7.6	- 10.5
Male	4.7	3.9	- 5.7
Race/Ethnicity			
White	5.1	4.4	- 6.0
Black	10.6	8.4	- 13.2
Asian	4.8	2.6	- 8.9
Hispanic	11.4	7.7	- 16.7
Other	10.4	8.2	- 13.1
Grade			
7th	6.9	5.6	- 8.5
8th	6.8	5.8	- 8.0
Total	6.9	6.1	- 7.8

In Summit County, 6.9% of students attempted suicide one or more times in the 12 months prior to the survey. The prevalence of attempting suicide was higher among female (8.9%) than male (4.7%) students. The prevalence of attempting suicide was higher among Black, Hispanic and Other/Multiple race (10.6% 11.4%, 10.4%) students than White students (5.1%).

ⁱ Child Trends Databank. (2014). *Adolescents who felt sad or hopeless*. Available at: <http://www.childtrends.org/?indicators=adolescents-who-felt-sad-or-hopeless>.

ⁱⁱ Child Trends Databank. (2014). *Suicidal teens*. Available at: <http://www.childtrends.org/?indicators=suicidal-teens>.

Section 5: Tobacco Use

The 2018 Summit County Middle School YRBS asked students about the usage of cigarettes, cigars, smokeless tobacco, and electronic vapor products. Using tobacco can have serious effects on long-term health. The use of cigarettes is the single leading preventable cause of death in the United States.ⁱ Almost 90% of adult smokers initiate use before or at age 18.ⁱⁱ Tobacco use in adolescence is associated with many other health risk behaviors, including higher-risk sexual behavior and use of alcohol or other drugs.

ii

Healthy People 2020 Objectives	Summit County 2018	Status
TU-2.2: Reduce use of cigarettes by adolescents to no more than 16.0%.	1.8% of Summit County Middle School students reported using cigarettes in the past 30 days.	The objective has been met.
TU-2.4: Reduce use of cigars by adolescents to no more than 8.0%	2.5% of Summit County Middle School students reported using cigars in the past 30 days.*	The objective has been met.

*The wording of the 2018 Summit County Middle School YRBS cigar use item differs from the item used to obtain the HP2020 Objective. For Summit County “cigar use” includes cigars, cigarillos, little cigars, or flavored cigars such as Black & Milds, Swisher Sweets, or Phillies.

Overall and Regional Prevalence

Akron		Suburbs		County	
% (Confidence Interval)		% (Confidence Interval)		% (Confidence Interval)	
Population N		Population N		Population N	
2013	2018	2013	2018	2013	2018
Used their first tobacco product before the age of 11					
N/A	4.9% (3.9 – 6.2) 130	N/A	2.1% (1.6 – 2.8) 150	N/A	2.9% (2.4 – 3.4) 279
Current cigarette use (Smoked cigarettes during the 30 days before the survey.)					
5.4% (4.4 – 6.7) 153	2.9% (2.2 – 3.9) 79	3.8% (3.1 – 4.7) 302	1.4% (1.0 – 2.0) 101	4.2% (3.7 – 4.9) 455	1.8% (1.5 – 2.3) 180
Current use of smokeless tobacco (Used chewing tobacco, snuff or dip, during the 30 days before the survey.)					
4.0% (2.9 – 5.5) 112	1.6% (1.0 – 2.4) 42	2.1% (1.7 – 2.7) 170	0.7% (0.4 – 1.1) 50	2.6% (2.2 – 3.2) 282	0.9% (0.7 – 1.3) 92
Current cigar use (Smoked cigars, cigarillos, little cigars, or flavored cigars, during the 12 months before the survey.)					
10.9% (9.2 – 12.8) 309	4.2% (3.2 – 5.5) 111	3.0% (2.4 – 3.8) 241	1.9% (1.3 – 2.8) 137	5.1% (4.4 – 5.9) 550	2.5% (2.0 – 3.2) 248
Used their first electronic vapor product before the age of 11					
N/A	3.8% (3.0 – 5.0) 102	N/A	2.0% (1.5 – 2.7) 146	N/A	2.5% (2.1 – 3.1) 247
Current electronic vapor product use (Used an electronic vapor product during the 30 days before the survey.)					
N/A	6.6% (5.5 – 7.9) 174	N/A	9.4% (7.9 – 11.1) 675	N/A	8.6% (7.5 – 10.0) 850
Students' parents think it is very wrong for them to use tobacco					
85.3% (83.0 – 87.3) 2021	83.3% (81.1 – 85.2) 2044	87.0% (85.7 – 88.2) 6616	86.4% (85.0 – 87.7) 6048	86.6% (85.5 – 87.6) 8637	85.6% (84.4 – 86.7) 8092
Current tobacco use (2013: Used cigarettes, cigars, and/or chewing tobacco in the past 30 days, 2018: Used cigarettes, cigars, chewing tobacco, and/or electronic vapor products in the past 30 days)					
12.0% (10.3 – 13.9) 334	8.3% (6.9 – 9.9) 214	5.2% (4.4 – 6.2) 408	9.8% (8.3 – 11.5) 698	7.0% (6.2 – 7.8) 742	9.4% (8.3 – 10.7) 912

From 2013 to 2018, middle school students in Summit County reported significant decreases in the prevalence of current use of cigarettes (4.2% vs. 1.8%), current use of chewing tobacco, snuff, or dip (2.6% vs. 0.9%), and current cigar use (5.1% vs. 2.5%). However, the 2018 survey included questions regarding

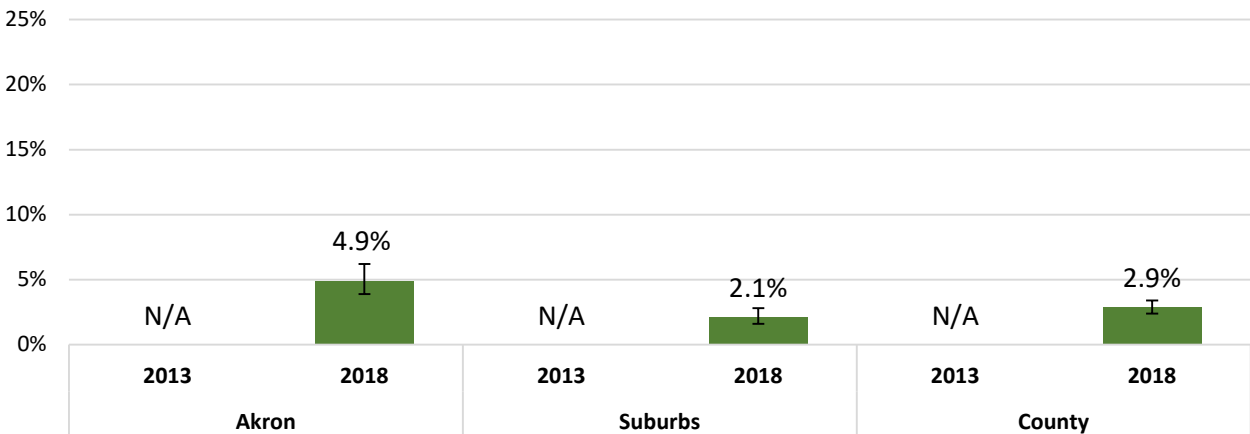
use of electronic vapor products and 2.5% of Summit County middle school students reported they had first used an electronic vapor before the age of 11 and 8.6% reported current electronic vapor product use. Thus, while use of other forms of tobacco seems to have declined, electronic vapor product use represents a new, prevalent, and concerning way for middle school students to consume nicotine.

Regionally, there is no significant difference in 2018 between Akron and Summit county suburbs in current smokeless tobacco use (1.6% vs. 0.7%), although the prevalence fell from 2013 to 2018 for both regions. The prevalence of current electronic vapor product use was similar for Akron and suburbs (6.6% vs. 9.4%).

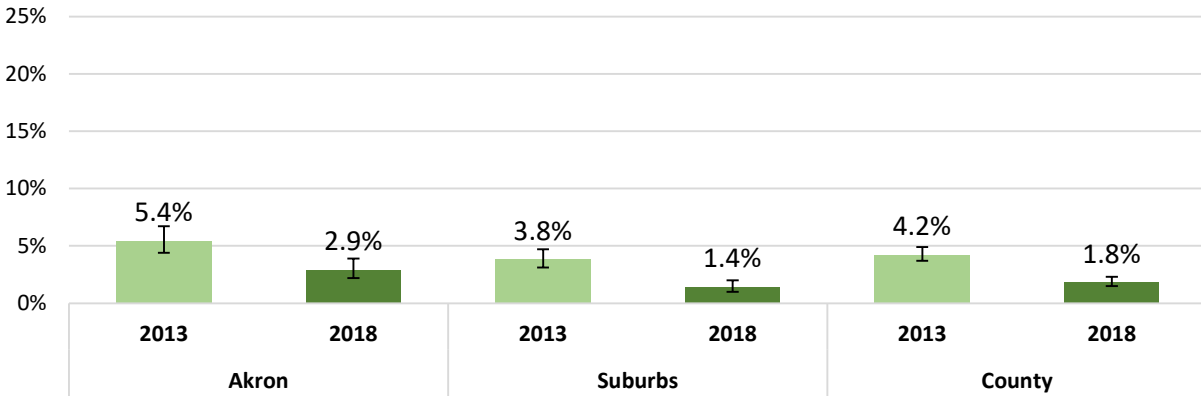
Regionally, middle school students in Akron were significantly more likely in 2018 to report that they had used their first tobacco product before the age of 11 (4.9%) than middle school students in the suburbs (2.1%). The 2018 prevalence of current cigarette smoking was higher in Akron than in the suburbs (2.9% vs. 1.4%), although the prevalence fell from 2013 to 2018 for both regions. Similarly, the 2018 prevalence of current cigar use was higher in Akron than in the suburbs (4.2% vs. 1.9%), although there was a significant decrease in prevalence from 2013 to 2018 in Akron (10.9% vs. 4.2%). The prevalence of first use of an electronic vapor product before the age of 11 was higher in Akron than in the suburbs (3.8% vs. 2.0%). There were no differences in prevalence of students' perception of parents thinking it is very wrong for them to use tobacco from 2013 to 2018 or regionally.

The following graphs will depict the regional differences in early use of tobacco products, current cigarette use, current cigar use, and parents' perception of tobacco use.

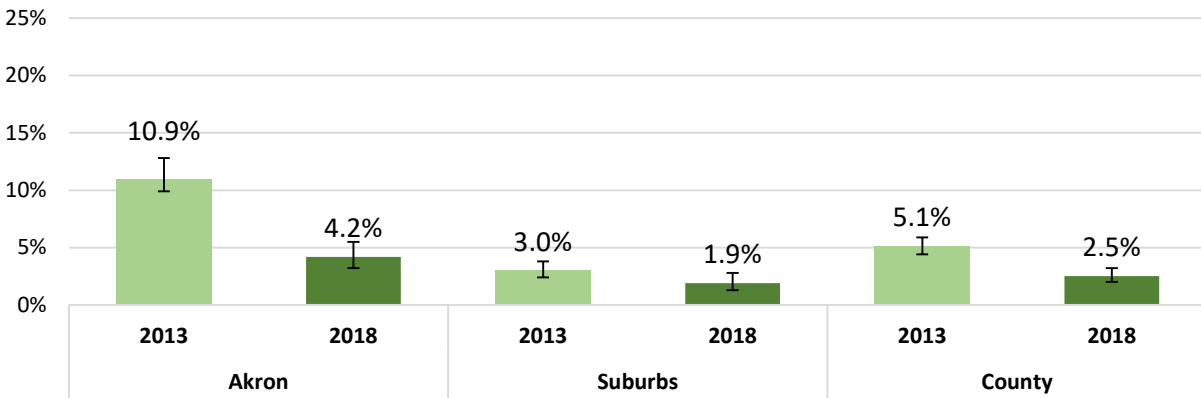
**Used first tobacco product before age 11,
By region, 2013 vs. 2018**



Current cigarette use By region, 2013 vs. 2018



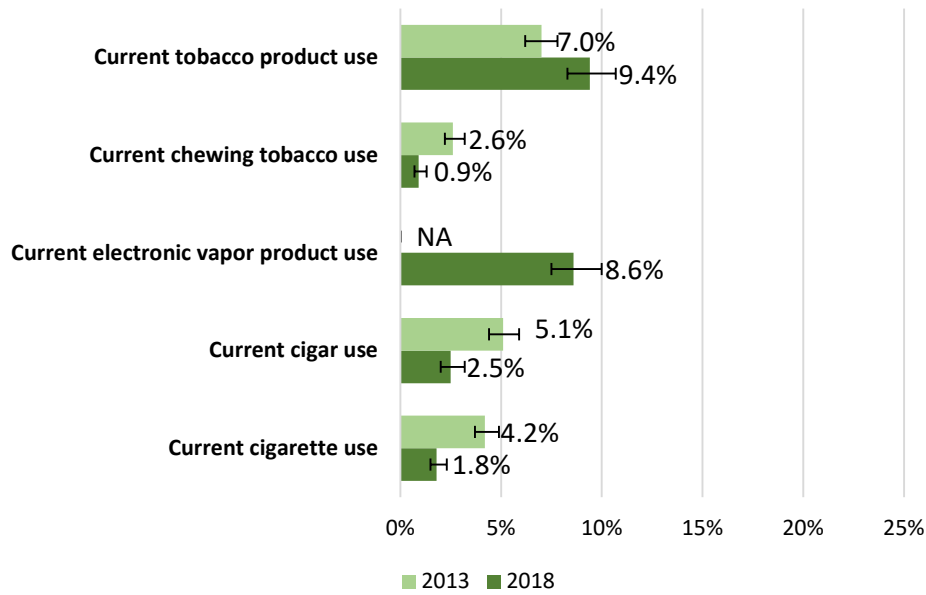
Current cigar use By region, 2013 vs. 2018



The bar chart below demonstrates the change in prevalence from 2013 to 2018 for any current tobacco use, current chewing tobacco use, current electronic vapor product use, current cigar use, and current cigarette use. This chart demonstrates that the increase in any tobacco product use from 2013 to 2018 (7.0% vs. 9.4%) is a result of the increase in current electronic vapor product use (8.6%). The prevalence of current use of cigarettes (4.2% vs. 1.8%), cigars (5.1% vs. 2.5%), and chewing tobacco (2.6% vs. 0.9%) decreased significantly from 2013 to 2018. The prevalence of current electronic vapor product use was not measured in 2013.

Further, the chart indicates that some Summit County middle school students who are current tobacco users, are using more than one tobacco product.

Any current tobacco product use, 2013 vs. 2018



Demographics

Tried first tobacco product before age 11 years			
Category	%	CI	
Gender			
Female	2.5	1.8	3.3
Male	3.2	2.6	4.1
Race/Ethnicity			
White	2.1	1.6	2.7
Black	4.0	2.8	5.6
Asian	3.6	2.1	6.2
Hispanic	9.1	5.7	14.3
Other	5.5	4.0	7.5
Grade			
7th	2.6	1.9	3.5
8th	2.9	2.3	3.7
Total	2.9	2.4	3.4

Current cigarette use			
Category	%	CI	
Gender			
Female	1.3	0.9	1.7
Male	2.3	1.7	3.1
Race/Ethnicity			
White	1.5	1.1	1.9
Black	1.9	1.2	3.1
Asian	1.9	0.8	4.6
Hispanic	6.7	3.3	12.9
Other	4.5	3.0	6.7
Grade			
7th	1.4	0.9	2.1
8th	2.0	1.5	2.7
Total	1.8	1.5	2.3

In Summit County, 2.9% of students tried a tobacco product for the first time before 11 years of age. The prevalence of first tobacco product use before 11 years of age was higher among Black, Hispanic or Other/Multiple race (4.0%, 9.1%, 5.5%) students than White (2.1%) students; and higher for Other/Multiple race (5.5%) students than White (2.1%) students; and higher among Hispanic students (9.1%) than Black students (4.0%).

In Summit County, 1.8% of students smoked a cigarette on at least one day during the 30 days before the survey (i.e., current cigarette use). The prevalence of current cigarette use was higher among Hispanic (6.7%) students than White and Black (1.5%, 1.9%) students; and higher among Other/Multiple race students (4.5%) than White students (1.5%).

Current smokeless tobacco use			
Category	%	CI	
Gender			
Female	0.6	0.3	- 1.0
Male	1.2	0.8	- 1.9
Race/Ethnicity			
White	0.7	0.4	- 1.1
Black	1.0	0.6	- 1.7
Asian	0.7	0.1	- 5.2
Hispanic	4.6	1.9	- 10.8
Other	2.7	1.6	- 4.5
Grade			
7th	0.6	0.4	- 1.1
8th	1.0	0.7	- 1.5
Total	0.9	0.7	- 1.3

Current cigar use			
Category	%	CI	
Gender			
Female	2.4	1.7	- 3.3
Male	2.7	2.0	- 3.5
Race/Ethnicity			
White	1.5	1.2	- 2.0
Black	4.4	2.9	- 6.7
Asian	0.3	0.0	- 2.4
Hispanic	9.1	5.6	- 14.4
Other	5.4	3.8	- 7.6
Grade			
7th	2.1	1.3	- 3.4
8th	2.8	2.1	- 3.6
Total	2.5	2.0	- 3.2

In Summit County, 0.9% of students used smokeless tobacco, snuff or dip, such as Redman, Levi Garrett, Beechnut, Skoal, Skoal Bandits, or Copenhagen during the 30 days before the survey (i.e., current smokeless tobacco use). The prevalence of current smokeless tobacco use was higher among Hispanic (4.6%) students than White or Black (0.7%, 1.0%) students.

In Summit County, 2.5% of students smoked cigars, cigarillos, little cigars, or flavored cigars such as Black & Milds, Swisher Sweets, or Phillies during the 30 days prior to the survey (i.e., current cigar use). The prevalence of current cigar use was higher among Black and Hispanic (4.4%, 9.1%) students than White or Asian (1.5%, 0.3%) students, respectively.

Tried first electronic vapor product before age 11 years			
Category	%	CI	
Gender			
Female	2.2	1.6	- 3.2
Male	2.8	2.2	- 3.5
Race/Ethnicity			
White	2.0	1.5	- 2.6
Black	3.6	2.4	- 5.2
Asian	3.2	1.7	- 5.9
Hispanic	6.7	3.8	- 11.5
Other	3.9	2.6	- 5.8
Grade			
7th	2.4	1.8	- 3.2
8th	2.7	2.0	- 3.6
Total	2.5	2.1	- 3.1

In Summit County, 2.5% of students tried an electronic vapor product for the first time before age 11 years. The prevalence of trying an electronic vapor product for the first time before age 11 years was higher among Hispanic (6.7%) students than White (2.0%) students.

Current electronic vapor product use			
Category	%	CI	
Gender			
Female	8.4	6.8	- 10.3
Male	8.9	7.6	- 10.3
Race/Ethnicity			
White	7.9	6.9	- 9.1
Black	9.9	7.3	- 13.2
Asian	3.9	2.0	- 7.8
Hispanic	17.2	12.8	- 22.7
Other	13.1	10.5	- 16.3
Grade			
7th	6.3	5.0	- 8.0
8th	10.9	9.0	- 13.1
Total	8.6	7.5	- 10.0

In Summit County, 8.6% of students used an electronic vapor product on at least one day in the past 30 days (ie., current electronic vapor product use). The prevalence of current electronic vapor product use was higher among Hispanic and Other/Multiple race (17.2%, 13.1%) students than White and Asian (7.9%, 3.9%) students. The prevalence of current electronic vapor product use was higher among 8th grade (10.9%) students than 7th grade (6.3%) students.



Students perceive parents/guardians believe it would be very wrong for them to use tobacco			
Category	%	CI	
Gender			
Female	86.8	85.3	- 88.1
Male	84.7	82.9	- 86.3
Race/Ethnicity			
White	86.1	84.8	- 87.3
Black	85.4	82.0	- 88.3
Asian	87.5	81.2	- 92.0
Hispanic	80.2	73.6	- 85.5
Other	79.7	75.3	- 83.4
Grade			
7th	87.5	86.0	- 88.8
8th	83.9	82.2	- 85.5
Total	85.6	84.4	- 86.7

In Summit County, 85.6% of students perceive that their parents/guardians believe it would be very wrong for them to use tobacco. The prevalence of perceiving that their parents/guardians believe it would be very wrong for them to use tobacco was higher among White students (86.1%) than Other/Multiple (79.7%) students.

ⁱ U.S. Department of Health and Human Services. 2004. *The Health Consequences of Smoking: A Report of the Surgeon General*. Atlanta, GA: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Office on Smoking and Health.

ⁱⁱ U.S. Department of Health and Human Services. 1994. *Preventing Tobacco Use among Young People: A Report of the Surgeon General*. Atlanta, GA: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Office on Smoking and Health.

Section 6: Alcohol Use

The 2018 Summit County Middle School YRBS asked students three questions about alcohol consumption. Alcohol use among youth has been linked to unintentional injuries, physical fights, academic problems, job problems and illegal behavior.ⁱ Alcohol use has been identified as a major contributing factor in approximately one-third of all unintentional injury deaths, homicides and suicides, which are the leading causes of death and disability among young people.ⁱⁱ

Healthy People 2020 Objectives	Summit County 2018	Status
There are no HP2020 objectives that relate directly to questions asked in the 2018 Summit County YRBS in this section.	N/A	N/A

Overall and Regional Prevalence

Akron		Suburbs		County	
% (Confidence Interval) Population N		% (Confidence Interval) Population N		% (Confidence Interval) Population N	
2013	2018	2013	2018	2013	2018
Drank alcohol before the age 11 years					
13.0% (11.4 – 14.9) 360	8.0% (6.7 – 9.6) 208	8.9% (8.0 – 9.9) 690	5.4% (4.5 – 6.4) 375	10.0% (9.1 – 10.8) 1050	6.1% (5.4 – 7.0) 582
Current alcohol use (Drank alcohol during the 30 days before the survey.)					
10.5% (8.8 – 12.4) 289	6.6% (5.4 – 8.1) 173	8.0% (7.0 – 9.1) 623	5.6% (4.7 – 6.6) 392	8.6% (7.8 – 9.6) 913	5.9% (5.1 – 6.7) 565
Usually got alcohol they drank from someone who gave it to them (During the 30 days before the survey.)					
41.3% (33.2 – 49.9) 108	42.0% (34.0 – 50.3) 170	46.5% (39.9 – 53.0) 278	38.6% (30.3 – 47.6) 175	44.8% (39.7 – 50.1) 386	39.5% (33.0 – 46.4) 246
Students' parents feel it would be very wrong for them to drink alcohol					
75.3% (72.5 – 77.9) 1767	70.0% (67.6 – 72.3) 1701	75.1% (73.4 – 76.8) 5691	68.1% (65.9 – 70.1) 4740	75.2% (73.7 – 76.6) 7458	68.6% (66.8 – 70.2) 6442

From 2013 to 2018, Summit County middle school students reported decreases in the prevalence of those who drank alcohol before the age of 11 years (10.0% vs. 6.1%) and current alcohol use (8.6% vs. 5.9%). There was no significant change from 2013 to 2018 in the prevalence of students who reported that they usually got the alcohol they drank from someone who gave it to them (44.8% vs. 39.5%). Along with these declines in alcohol use among middle school students, there was also a significant decrease in the prevalence of students who perceived that their parents believe it would be very wrong for them to drink alcohol (75.2% vs. 68.6%).

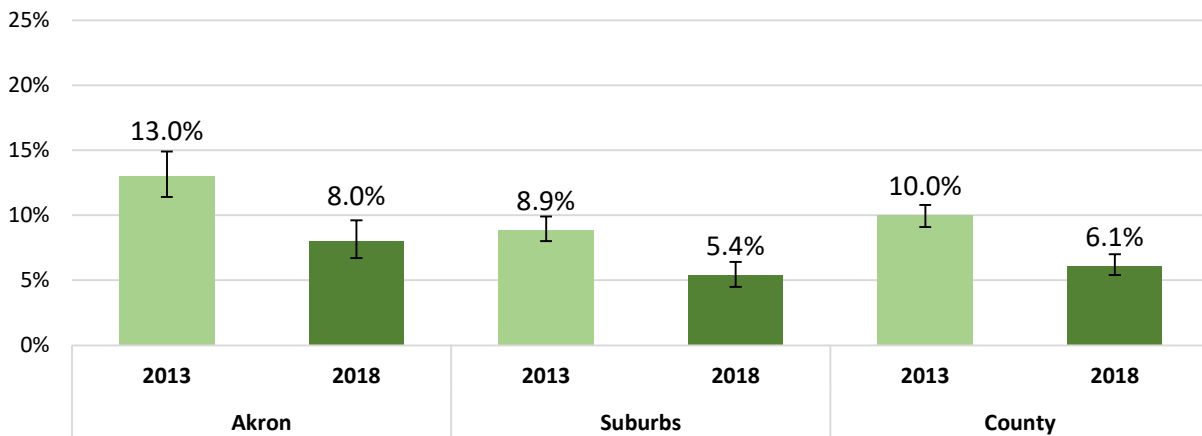
Regionally, the prevalence of students who drank alcohol before the age of 11 years was significantly higher in Akron than in the suburbs (8.0% vs. 5.4%), although the prevalence decreased significantly from 2013 to 2018 in both regions.

In 2018, there was no difference in the prevalence of current alcohol use in Akron and in the suburbs (6.6% vs. 5.6%), although the prevalence decreased significantly from 2013 to 2018 in both regions.

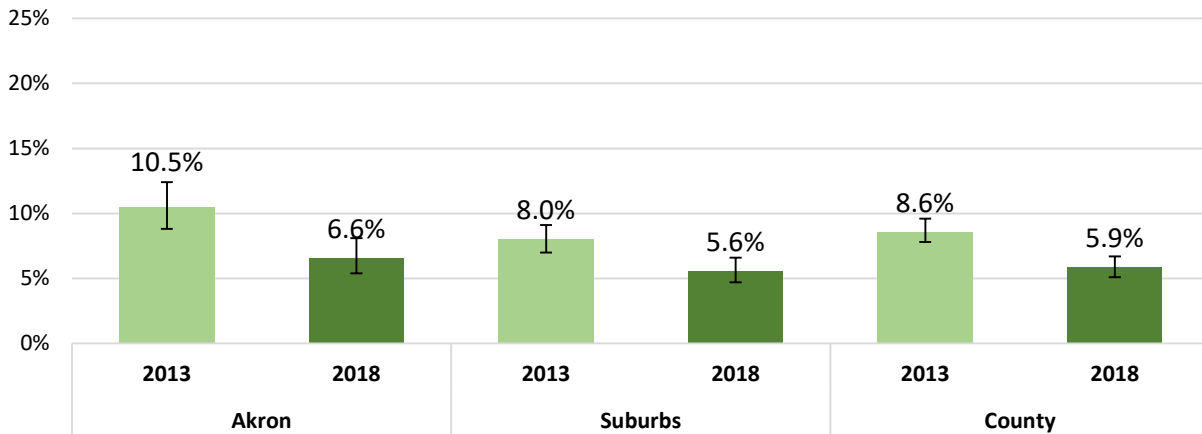
In 2018, there was no difference in the prevalence of those who usually got the alcohol they drank from someone who gave it to them in Akron and in the suburbs (42.0% vs. 38.6%), nor was there a difference in the prevalence of students' perceptions that their parents believe it would be very wrong for them to drink alcohol in Akron and in the suburbs (70.0% vs. 68.1%).

The following graphs will depict the regional differences in early use of alcohol, current alcohol use, and students' perception of parents' beliefs of alcohol use.

**Drank alcohol for the first time before age 11,
By region, 2013 vs. 2018**

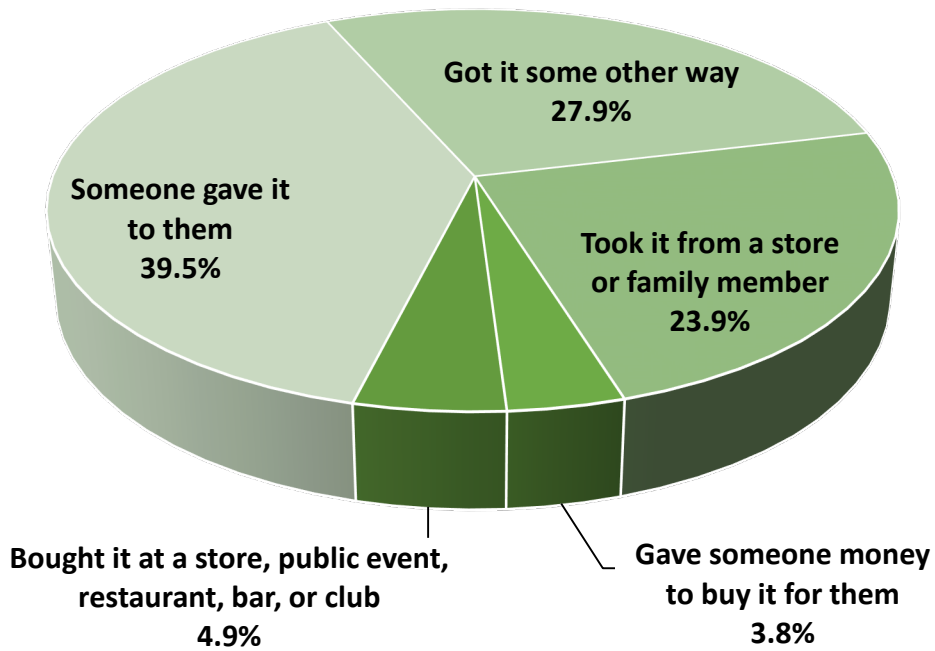


**Current alcohol use,
By region, 2013 vs. 2018**



When asked what one way they usually got the alcohol they drank, students most frequently reported that someone gave it to them (39.5%). Students less frequently reported that they took it from a store or family member (23.9%), or “got it some other way” (27.9%).

Usual way students got the alcohol they drank



Demographics

Drank alcohol before age 11 years			
Category	%	CI	
Gender			
Female	5.1	4.2	6.1
Male	6.8	5.7	8.1
Race/Ethnicity			
White	5.0	4.2	5.8
Black	8.5	6.3	11.4
Asian	2.6	1.4	4.7
Hispanic	11.0	7.5	15.9
Other	10.2	7.9	13.0
Grade			
7th	6.6	5.5	7.9
8th	5.8	4.8	7.0
Total	6.1	5.4	7.0

In Summit County, 6.1% of students had their first drink of alcohol before the age 11 years. The prevalence of having their first drink of alcohol before the age 11 years was higher for Black, Hispanic and Other/Multiple race (8.5%, 11.0%, 10.2%) students than White or Asian (5.0%, 2.6%) students.

Current alcohol use			
Category	%	CI	
Gender			
Female	6.2	5.1	7.5
Male	5.5	4.5	6.7
Race/Ethnicity			
White	5.3	4.6	6.2
Black	6.6	4.7	9.2
Asian	1.6	0.7	3.6
Hispanic	13.0	7.9	20.9
Other	10.4	8.1	13.3
Grade			
7th	4.4	3.6	5.4
8th	7.2	6.1	8.6
Total	5.9	5.1	6.7

In Summit County, 5.9% of students consumed at least one drink of alcohol during the 30 days prior to the survey (i.e., current alcohol use). The prevalence of current alcohol use was higher for Hispanic and Other/Multiple race (13.0%, 10.4%) students than White or Asian (5.3%, 1.6%) students; and higher among White students than Asian students. The prevalence of current alcohol was higher among 8th grade (7.2%) students than 7th grade (4.4%) students.

Someone gave alcohol to them			
Category	%	CI	
Gender			
Female	41.0	32.5	- 50.0
Male	38.4	29.0	- 48.7
Race/Ethnicity			
White	41.6	34.3	- 49.4
Black	37.7	22.7	- 55.5
Asian	61.4	26.3	- 87.6
Hispanic	47.8	27.3	- 69.0
Other	26.6	17.4	- 38.4
Grade			
7th	40.7	30.7	- 51.5
8th	39.3	30.9	- 48.5
Total	39.5	33.0	- 46.4

In Summit County, 39.5% of students got the alcohol they drank from someone who gave it to them during the 30 days prior to the survey. There are no significant differences in demographic groups for students who got the alcohol they drank from someone who gave it to them.

Students perceive parents/guardians believe it would be very wrong for them to drink alcohol			
Category	%	CI	
Gender			
Female	71.0	68.8	- 73.1
Male	66.2	63.9	- 68.4
Race/Ethnicity			
White	67.5	65.8	- 69.1
Black	72.1	67.8	- 76.1
Asian	76.7	70.5	- 81.9
Hispanic	65.7	57.5	- 73.1
Other	62.2	58.0	- 66.2
Grade			
7th	71.3	68.6	- 73.9
8th	65.8	63.7	- 67.9
Total	68.6	66.8	- 70.2

In Summit County, 68.6% of students perceive that their parents/guardians believe it would be very wrong for them to drink alcohol. Female students (71.0%) are significantly more likely to perceive that their parents/guardians believe it would be very wrong for them to drink alcohol than male students (66.2%). Asian (76.7%) students are more likely to perceive that their parents/guardians believe it would be very wrong for them to drink alcohol than White (67.5%) and Other/Multiple (62.2%) students. 7th grade students (71.3%) are more likely than 8th grade students (65.8%) to perceive that their parents/guardians believe it would be very wrong for them to drink alcohol.

ⁱ Substance Abuse and Mental Health Services Administration. 1999. *The relationship between mental health and substance abuse among adolescents*. Rockville, MD: Substance Abuse and Mental Health Services Administration.

ⁱⁱ Hingson, R., Kenkel, D. 2004. *Social, Health, and Economic Consequences of Underage Drinking*. Reducing Underage Drinking: A Collective Responsibility. Washington, DC: The National Academy of Sciences.

Section 7: Marijuana Use

The 2018 Summit County High School YRBS asked students about marijuana use. Marijuana is used for the intoxication or high that it gives most users. For most youth, marijuana is not difficult to obtain.ⁱ Many think marijuana is not as harmful as other illicit drugs; however, it has both short- and long-term health effects. The short-term effects include memory problems, loss of coordination, anxiety attacks, and increased heart rate.ⁱⁱ Possible long-term effects include respiratory problems, a weakened immune system, and cognitive deficits.ⁱⁱⁱ While causation is complex, teens who use marijuana, are also more likely to have lower achievement, more delinquent behavior and aggression, and weaker relationships with parents than non-users.

Healthy People 2020 Objectives	Summit County 2018	Status
SA-13.2: Reduce the proportion of adolescents reporting use of marijuana during the past 30 days to no more than 6.0%	3.7% of Summit County Middle School students reported using marijuana at least once during the past 30 days.	The objective has been met.

Overall and Regional Prevalence

Akron		Suburbs		County	
% (Confidence Interval)		% (Confidence Interval)		% (Confidence Interval)	
Population N		Population N		Population N	
2013	2018	2013	2018	2013	2018
Ever tried marijuana (One or more times during their life)					
14.7% (12.7 – 17.0) 403	12.4% (10.5 – 14.5) 323	7.9% (6.8 – 9.2) 621	5.9% (5.0 – 7.0) 421	9.7% (8.7 – 10.8) 1024	7.6% (6.7 – 8.6) 744
Tried marijuana for the first time before the age of 11					
4.9% (3.8 – 6.3) 133	3.7% (2.8 – 4.8) 96	1.5% (1.1 – 2.0) 117	1.0% (0.6 – 1.5) 68	2.4% (2.0 – 2.9) 250	1.7% (1.3 – 2.1) 164
Current marijuana use (Used marijuana during the 30 days before the survey.)					
7.8% (6.1 – 9.7) 211	6.8% (5.4 – 8.5) 177	4.4% (3.6 – 5.3) 341	2.5% (2.0 – 3.2) 179	5.2% (4.5 – 6.1) 552	3.7% (3.1 – 4.3) 356
Usually used marijuana by smoking it (Of users, used in a joint, bong, pipe, or blunt, during the 30 days before the survey.)					
N/A	74.1% (67.3 – 79.9) 158	N/A	70.3% (59.4 – 79.3) 179	N/A	72.0% (65.4 – 77.8) 337
Students’ parents believe it would be very wrong for them to use marijuana					
84.5% (82.1 – 86.6) 1956	79.6% (77.1 – 81.8) 1929	90.3% (89.0 – 91.6) 6841	87.9% (86.3 – 89.3) 6120	89.0% (87.8 – 90.0) 8797	85.7% (84.4 – 87.0) 8049

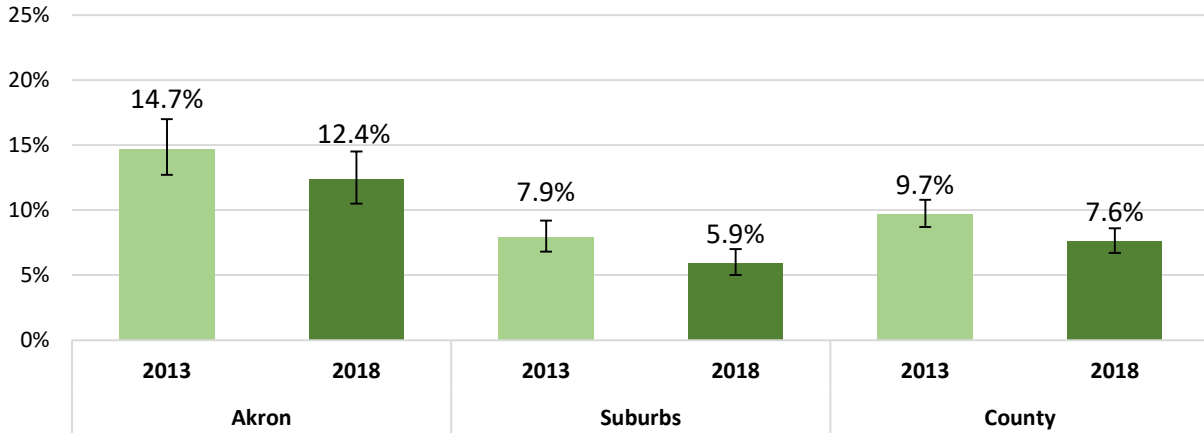
From 2013 to 2018, Summit County middle school students reported decreases in the prevalence of having ever tried marijuana (9.7% vs. 7.6%), current marijuana use (5.2% vs. 3.7%) and in the prevalence of students who perceived that their parents believe it would be very wrong for them to use marijuana (89.0% vs. 85.7%). In 2018, 72.0% of students who had smoked marijuana in the past 30 days indicated that they had used marijuana by smoking it (in a joint, bong, pipe, or blunt).

Regionally, the prevalence of students who had ever tried marijuana was significantly higher in Akron than in the suburbs (12.4% vs. 5.9%), as was the prevalence of students who tried marijuana for the first time before the age of 11 years (3.7% vs. 1.0%). The prevalence of current marijuana use was significantly higher in Akron than in the suburbs (6.8% vs. 2.5%) with a significant decrease occurring between 2013 and 2018 in the suburbs (4.4% vs. 2.5%).

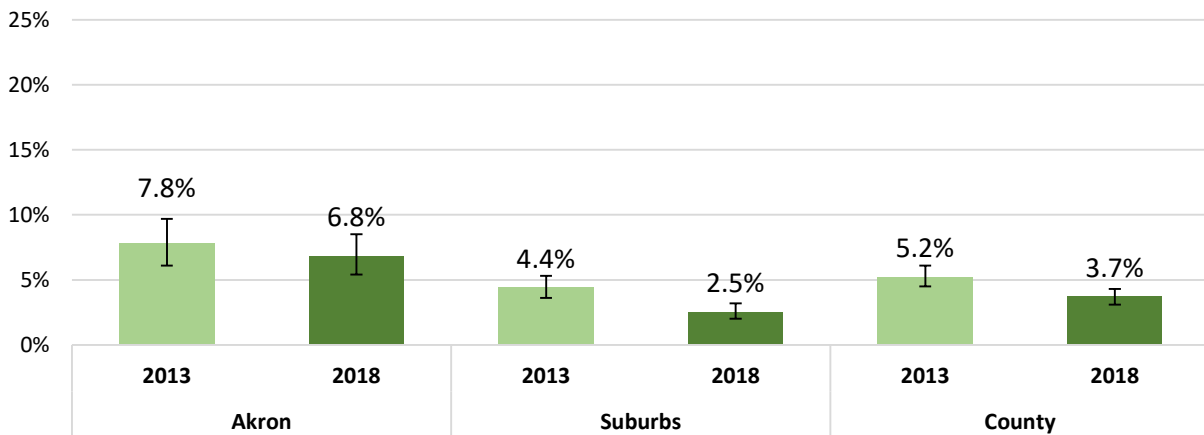
In 2018, students in Akron were significantly less likely than suburbs’ students to perceive that their parents believed that marijuana use would be very wrong for them (79.6% vs. 87.9%), with both regions experiencing a significant decrease from 2013 in this belief.

The following graphs will depict the regional differences in ever tried marijuana, current marijuana use, and students' perception of parents' beliefs of marijuana use.

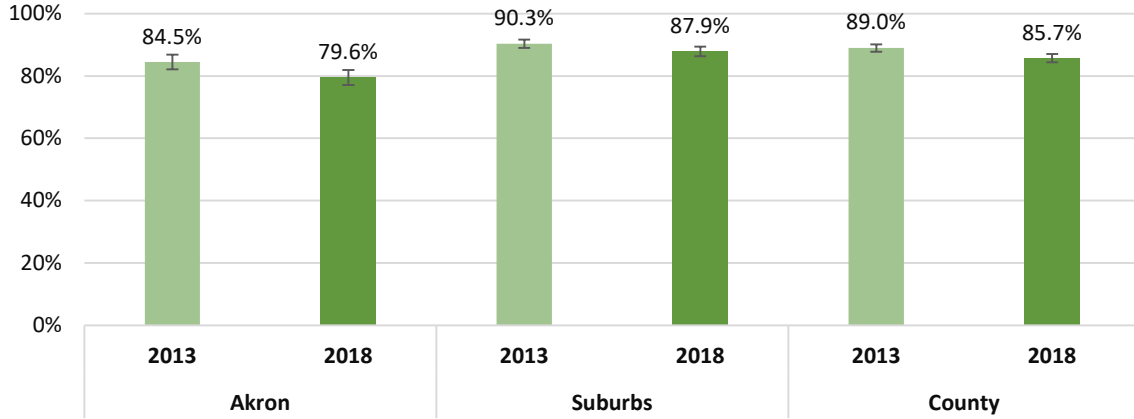
Ever tried marijuana, By region, 2013 vs. 2018



Current marijuana use, By region, 2013 vs. 2018

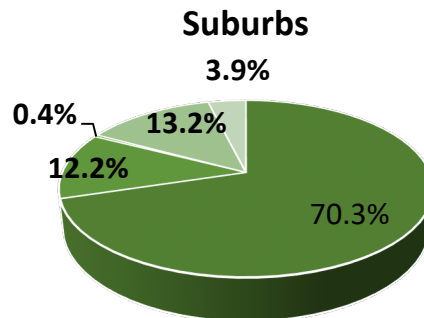
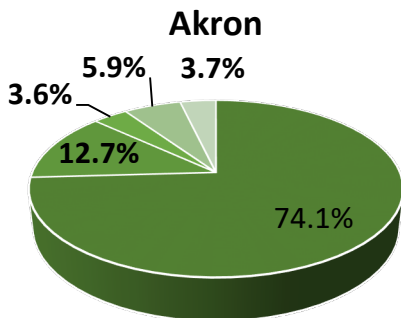


Students perceive parents think it would be very wrong for them to use marijuana By region, 2013 vs. 2018



Summit County middle school students were asked how they usually used marijuana during the 30 days before the survey. Students in Akron and in the suburbs who used marijuana in the past 30 days were most likely to indicate that they smoked it in a joint, bong, pipe, or blunt (74.1% vs. 70.3%). Marijuana users were less likely to indicate that they ate it in food such as brownies, cakes, cookies, or candy (12.7% vs, 12.2%), or that they vaporized it (5.9% vs. 13.2%).

Usual way of using marijuana among current marijuana users



- Smoked it in a joint, bong, pipe, or blunt
- Ate it in food such as brownies, cakes, cookies, or candy
- Drank it in tea, cola, alcohol, or other drinks
- Vaporized it
- Some other way

Demographics

Ever used marijuana			
Category	%	CI	
Gender			
Female	7.3	6.1	8.7
Male	7.9	6.8	9.3
Race/Ethnicity			
White	5.4	4.6	6.4
Black	12.3	9.8	15.2
Asian	2.6	1.3	5.1
Hispanic	17.9	12.8	24.4
Other	14.3	11.4	17.8
Grade			
7th	4.9	3.8	6.3
8th	10.1	8.7	11.7
Total	7.6	6.7	8.6

In Summit County, 7.6% of students had used marijuana one or more times during their life (i.e., lifetime marijuana use). The prevalence of lifetime marijuana use was higher for Hispanic (17.9%) students than White, Black, and Asian (5.4%, 12.3%, 2.6%) students. The prevalence of lifetime marijuana use was higher for Black (12.3%) and Other/Multiple (14.3%) students than White (5.4%) students. The prevalence of lifetime marijuana use was higher among 8th grade (10.1%) students than 7th grade (4.9%) students.

Tried marijuana before age 11 years			
Category	%	CI	
Gender			
Female	1.1	0.7	1.7
Male	2.2	1.7	2.9
Race/Ethnicity			
White	1.0	0.7	1.5
Black	2.9	2.0	4.1
Asian	1.0	0.3	2.8
Hispanic	8.1	4.2	15.1
Other	3.4	2.0	5.6
Grade			
7th	1.8	1.2	2.6
8th	1.6	1.1	2.2
Total	1.7	1.3	2.1

In Summit County, 1.7% of students had tried marijuana for the first time before 11 years of age. The prevalence of students that had tried marijuana before 11 years of age was higher for Black, Hispanic and Other/Multiple (2.9%, 8.1%, 3.4%) students than White (1.0%) students.

Current marijuana use			
Category	%	CI	
Gender			
Female	3.4	2.7	- 4.3
Male	3.9	3.2	- 4.8
Race/Ethnicity			
White	2.8	2.2	- 3.5
Black	5.2	3.9	- 7.1
Asian	0.3	0.0	- 2.1
Hispanic	11.7	8.0	- 16.7
Other	7.8	5.8	- 10.3
Grade			
7th	2.1	1.6	- 2.8
8th	5.1	4.2	- 6.3
Total	3.7	3.1	- 4.3

In Summit County, 3.7% of students had used marijuana one or more times during the 30 days prior to the survey (i.e., current marijuana use). The prevalence of current marijuana use was higher for Hispanic (11.7%) students than White, Black, Asian and Other/Multiple (2.8%, 5.2%, 0.3%, 7.8%) students; and higher among Black (5.2%) students than White (2.8%) and Asian (0.3%) students. The prevalence of current marijuana use was higher among 8th grade (5.1%) students than 7th grade (2.1%) students.

Usually used marijuana by smoking it			
Category	%	CI	
Gender			
Female	73.1	61.2	- 82.4
Male	71.1	61.9	- 78.9
Race/Ethnicity			
White	77.2	68.6	- 84.0
Black	66.0	52.2	- 77.6
Asian	22.2	2.9	- 73.0
Hispanic	60.2	40.0	- 77.4
Other	83.8	72.7	- 91.0
Grade			
7th	68.5	54.3	- 79.9
8th	74.0	66.4	- 80.3
Total	72.0	65.4	- 77.8

In Summit County, 72% of students who used marijuana during the past 30 days, indicated that they usually used it by smoking it (in a joint, bong, pipe, or blunt). There is no difference by demographic group in prevalence of using marijuana by smoking it among students who used in the past 30 days.

Students perceive parents/guardians feel it would be very wrong for them to use marijuana			
Category	%	CI	
Gender			
Female	86.3	84.3	- 88.0
Male	85.2	83.6	- 86.7
Race/Ethnicity			
White	87.4	86.0	- 88.7
Black	82.5	79.6	- 85.1
Asian	90.2	84.7	- 93.8
Hispanic	81.7	74.3	- 87.3
Other	77.3	73.3	- 80.9
Grade			
7th	88.7	86.9	- 90.2
8th	83.1	81.1	- 84.9
Total	85.7	84.4	- 87.0

In Summit County, 85.7% of students perceive that their parents/guardians feel it would be very wrong for them to use marijuana. The prevalence of perceiving that their parents/guardians feel it would be very wrong for them to use marijuana was higher among White (87.4%) students than Black (82.5%) and Other/Multiple (77.3%) students; and higher among Asian (90.2%) students than Other/Multiple (77.3%) students. The prevalence of perceiving that their parents/guardians feel it would be very wrong for them to use marijuana was higher among 7th grade (88.7%) students than 8th grade (83.1%) students.

ⁱ Substance Abuse and Mental Health Services Administration. 2001. *The NHSDA Report: Obtaining Marijuana Easy for Youths*. Rockville, MD: Substance Abuse and Mental Health Services Administration.

ⁱⁱ National Institute on Drug Abuse. NIDA InfoFacts: Marijuana. National Institute on Drug Abuse Website. Available at <http://www.nida.nih.gov/Infofax/marijuana.html>. Accessed on July 24, 2008.

ⁱⁱⁱ Hubbard, J., Franco, S., Onaivi, E. 1999. Marijuana: Medical Implications. *The American Academy of Family Physicians*. 60:2583-93.

Section 7: Marijuana Use

The 2018 Summit County High School YRBS asked students about marijuana use. Marijuana is used for the intoxication or high that it gives most users. For most youth, marijuana is not difficult to obtain.ⁱ Many think marijuana is not as harmful as other illicit drugs; however, it has both short- and long-term health effects. The short-term effects include memory problems, loss of coordination, anxiety attacks, and increased heart rate.ⁱⁱ Possible long-term effects include respiratory problems, a weakened immune system, and cognitive deficits.ⁱⁱⁱ While causation is complex, teens who use marijuana, are also more likely to have lower achievement, more delinquent behavior and aggression, and weaker relationships with parents than non-users.

Healthy People 2020 Objectives	Summit County 2018	Status
SA-13.2: Reduce the proportion of adolescents reporting use of marijuana during the past 30 days to no more than 6.0%	3.7% of Summit County Middle School students reported using marijuana at least once during the past 30 days.	The objective has been met.

Overall and Regional Prevalence

Akron		Suburbs		County	
% (Confidence Interval)		% (Confidence Interval)		% (Confidence Interval)	
Population N		Population N		Population N	
2013	2018	2013	2018	2013	2018
Ever tried marijuana (One or more times during their life)					
14.7% (12.7 – 17.0) 403	12.4% (10.5 – 14.5) 323	7.9% (6.8 – 9.2) 621	5.9% (5.0 – 7.0) 421	9.7% (8.7 – 10.8) 1024	7.6% (6.7 – 8.6) 744
Tried marijuana for the first time before the age of 11					
4.9% (3.8 – 6.3) 133	3.7% (2.8 – 4.8) 96	1.5% (1.1 – 2.0) 117	1.0% (0.6 – 1.5) 68	2.4% (2.0 – 2.9) 250	1.7% (1.3 – 2.1) 164
Current marijuana use (Used marijuana during the 30 days before the survey.)					
7.8% (6.1 – 9.7) 211	6.8% (5.4 – 8.5) 177	4.4% (3.6 – 5.3) 341	2.5% (2.0 – 3.2) 179	5.2% (4.5 – 6.1) 552	3.7% (3.1 – 4.3) 356
Usually used marijuana by smoking it (Of users, used in a joint, bong, pipe, or blunt, during the 30 days before the survey.)					
N/A	74.1% (67.3 – 79.9) 158	N/A	70.3% (59.4 – 79.3) 179	N/A	72.0% (65.4 – 77.8) 337
Students’ parents believe it would be very wrong for them to use marijuana					
84.5% (82.1 – 86.6) 1956	79.6% (77.1 – 81.8) 1929	90.3% (89.0 – 91.6) 6841	87.9% (86.3 – 89.3) 6120	89.0% (87.8 – 90.0) 8797	85.7% (84.4 – 87.0) 8049

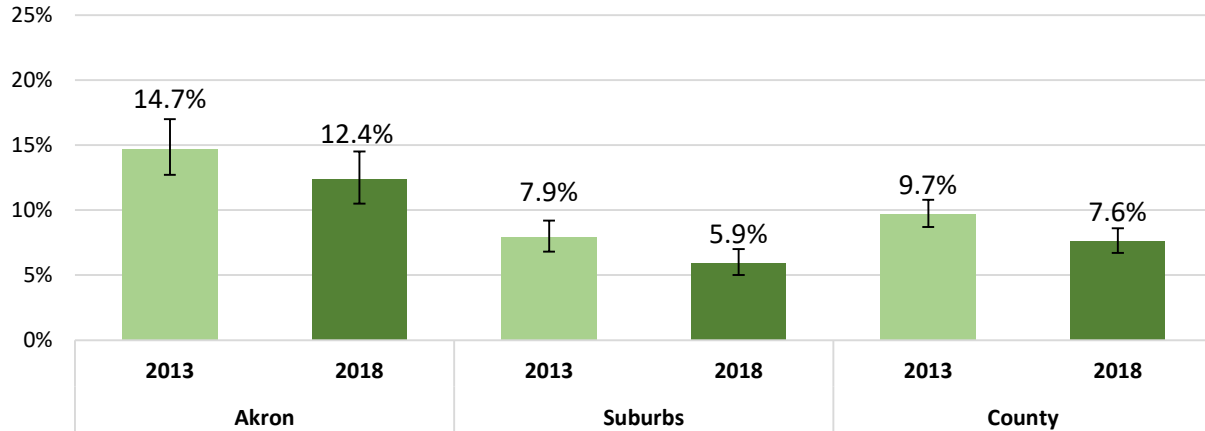
From 2013 to 2018, Summit County middle school students reported decreases in the prevalence of having ever tried marijuana (9.7% vs. 7.6%), current marijuana use (5.2% vs. 3.7%) and in the prevalence of students who perceived that their parents believe it would be very wrong for them to use marijuana (89.0% vs. 85.7%). In 2018, 72.0% of students who had smoked marijuana in the past 30 days indicated that they had used marijuana by smoking it (in a joint, bong, pipe, or blunt).

Regionally, the prevalence of students who had ever tried marijuana was significantly higher in Akron than in the suburbs (12.4% vs. 5.9%), as was the prevalence of students who tried marijuana for the first time before the age of 11 years (3.7% vs. 1.0%). The prevalence of current marijuana use was significantly higher in Akron than in the suburbs (6.8% vs. 2.5%) with a significant decrease occurring between 2013 and 2018 in the suburbs (4.4% vs. 2.5%).

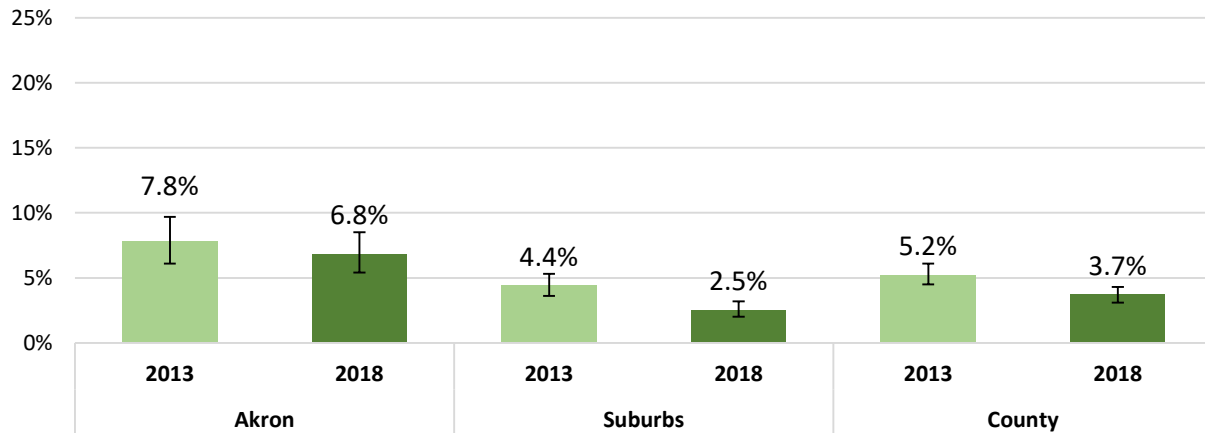
In 2018, students in Akron were significantly less likely than suburbs’ students to perceive that their parents believed that marijuana use would be very wrong for them (79.6% vs. 87.9%), with both regions experiencing a significant decrease from 2013 in this belief.

The following graphs will depict the regional differences in ever tried marijuana, current marijuana use, and students' perception of parents' beliefs of marijuana use.

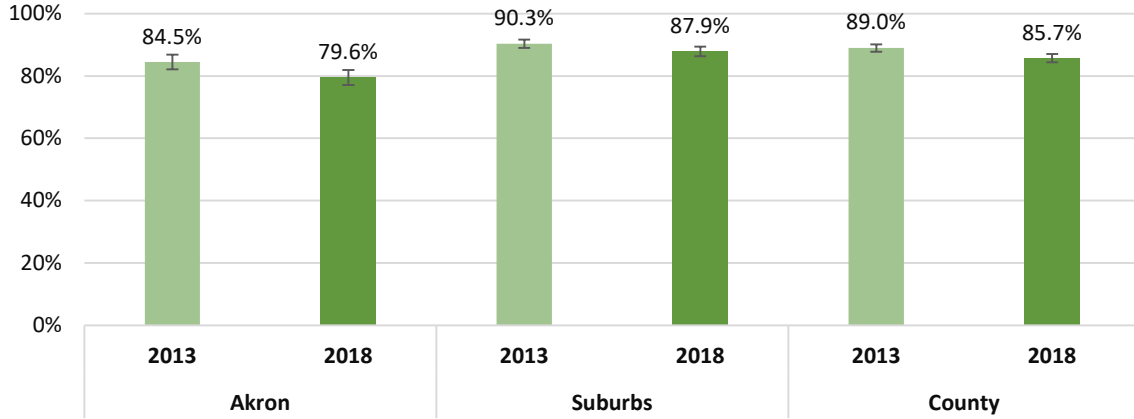
Ever tried marijuana, By region, 2013 vs. 2018



Current marijuana use, By region, 2013 vs. 2018

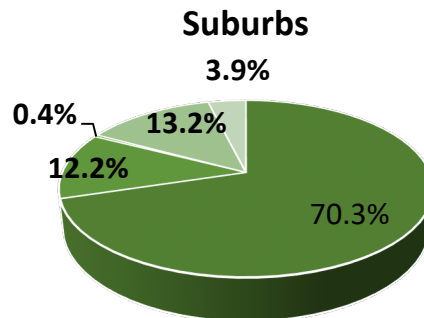
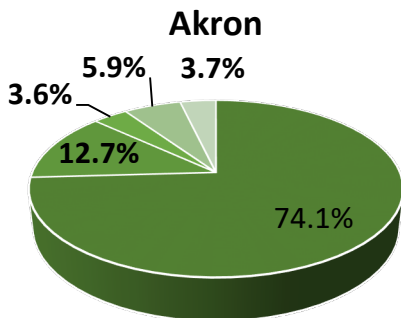


Students perceive parents think it would be very wrong for them to use marijuana By region, 2013 vs. 2018



Summit County middle school students were asked how they usually used marijuana during the 30 days before the survey. Students in Akron and in the suburbs who used marijuana in the past 30 days were most likely to indicate that they smoked it in a joint, bong, pipe, or blunt (74.1% vs. 70.3%). Marijuana users were less likely to indicate that they ate it in food such as brownies, cakes, cookies, or candy (12.7% vs, 12.2%), or that they vaporized it (5.9% vs. 13.2%).

Usual way of using marijuana among current marijuana users



- Smoked it in a joint, bong, pipe, or blunt
- Ate it in food such as brownies, cakes, cookies, or candy
- Drank it in tea, cola, alcohol, or other drinks
- Vaporized it
- Some other way

Demographics

Ever used marijuana			
Category	%	CI	
Gender			
Female	7.3	6.1	8.7
Male	7.9	6.8	9.3
Race/Ethnicity			
White	5.4	4.6	6.4
Black	12.3	9.8	15.2
Asian	2.6	1.3	5.1
Hispanic	17.9	12.8	24.4
Other	14.3	11.4	17.8
Grade			
7th	4.9	3.8	6.3
8th	10.1	8.7	11.7
Total	7.6	6.7	8.6

Tried marijuana before age 11 years			
Category	%	CI	
Gender			
Female	1.1	0.7	1.7
Male	2.2	1.7	2.9
Race/Ethnicity			
White	1.0	0.7	1.5
Black	2.9	2.0	4.1
Asian	1.0	0.3	2.8
Hispanic	8.1	4.2	15.1
Other	3.4	2.0	5.6
Grade			
7th	1.8	1.2	2.6
8th	1.6	1.1	2.2
Total	1.7	1.3	2.1

In Summit County, 7.6% of students had used marijuana one or more times during their life (i.e., lifetime marijuana use). The prevalence of lifetime marijuana use was higher for Hispanic (17.9%) students than White, Black, and Asian (5.4%, 12.3%, 2.6%) students. The prevalence of lifetime marijuana use was higher for Black (12.3%) and Other/Multiple (14.3%) students than White (5.4%) students. The prevalence of lifetime marijuana use was higher among 8th grade (10.1%) students than 7th grade (4.9%) students.

In Summit County, 1.7% of students had tried marijuana for the first time before 11 years of age. The prevalence of students that had tried marijuana before 11 years of age was higher for Black, Hispanic and Other/Multiple (2.9%, 8.1%, 3.4%) students than White (1.0%) students.

Current marijuana use			
Category	%	CI	
Gender			
Female	3.4	2.7	- 4.3
Male	3.9	3.2	- 4.8
Race/Ethnicity			
White	2.8	2.2	- 3.5
Black	5.2	3.9	- 7.1
Asian	0.3	0.0	- 2.1
Hispanic	11.7	8.0	- 16.7
Other	7.8	5.8	- 10.3
Grade			
7th	2.1	1.6	- 2.8
8th	5.1	4.2	- 6.3
Total	3.7	3.1	- 4.3

In Summit County, 3.7% of students had used marijuana one or more times during the 30 days prior to the survey (i.e., current marijuana use). The prevalence of current marijuana use was higher for Hispanic (11.7%) students than White, Black, Asian and Other/Multiple (2.8%, 5.2%, 0.3%, 7.8%) students; and higher among Black (5.2%) students than White (2.8%) and Asian (0.3%) students. The prevalence of current marijuana use was higher among 8th grade (5.1%) students than 7th grade (2.1%) students.

Usually used marijuana by smoking it			
Category	%	CI	
Gender			
Female	73.1	61.2	- 82.4
Male	71.1	61.9	- 78.9
Race/Ethnicity			
White	77.2	68.6	- 84.0
Black	66.0	52.2	- 77.6
Asian	22.2	2.9	- 73.0
Hispanic	60.2	40.0	- 77.4
Other	83.8	72.7	- 91.0
Grade			
7th	68.5	54.3	- 79.9
8th	74.0	66.4	- 80.3
Total	72.0	65.4	- 77.8

In Summit County, 72% of students who used marijuana during the past 30 days, indicated that they usually used it by smoking it (in a joint, bong, pipe, or blunt). There is no difference by demographic group in prevalence of using marijuana by smoking it among students who used in the past 30 days.

Students perceive parents/guardians feel it would be very wrong for them to use marijuana			
Category	%	CI	
Gender			
Female	86.3	84.3	- 88.0
Male	85.2	83.6	- 86.7
Race/Ethnicity			
White	87.4	86.0	- 88.7
Black	82.5	79.6	- 85.1
Asian	90.2	84.7	- 93.8
Hispanic	81.7	74.3	- 87.3
Other	77.3	73.3	- 80.9
Grade			
7th	88.7	86.9	- 90.2
8th	83.1	81.1	- 84.9
Total	85.7	84.4	- 87.0

In Summit County, 85.7% of students perceive that their parents/guardians feel it would be very wrong for them to use marijuana. The prevalence of perceiving that their parents/guardians feel it would be very wrong for them to use marijuana was higher among White (87.4%) students than Black (82.5%) and Other/Multiple (77.3%) students; and higher among Asian (90.2%) students than Other/Multiple (77.3%) students. The prevalence of perceiving that their parents/guardians feel it would be very wrong for them to use marijuana was higher among 7th grade (88.7%) students than 8th grade (83.1%) students.

ⁱ Substance Abuse and Mental Health Services Administration. 2001. *The NHSDA Report: Obtaining Marijuana Easy for Youths*. Rockville, MD: Substance Abuse and Mental Health Services Administration.

ⁱⁱ National Institute on Drug Abuse. NIDA InfoFacts: Marijuana. National Institute on Drug Abuse Website. Available at <http://www.nida.nih.gov/Infofax/marijuana.html>. Accessed on July 24, 2008.

ⁱⁱⁱ Hubbard, J., Franco, S., Onaivi, E. 1999. Marijuana: Medical Implications. *The American Academy of Family Physicians*. 60:2583-93.

Section 8: Other Drug Use

The 2018 Summit County Middle School YRBS asked students about illicit drug use, inhalant use, prescription drug abuse, and whether they had been offered, sold, or given an illegal drug on school property. Illegal drug use can lead to unhealthy behaviors and negative consequences. Drug abuse may contribute to depression and suicide, unintended pregnancy, school failure, violent behavior, delinquency, and transmission of sexually transmitted diseases, including HIV.ⁱ

Prescription drug abuse is reaching prevalence levels near use of marijuana among adolescents. 9.1% of teens aged 12-17 misused prescription drugs in 2005. In 2006, there were as many new abusers of prescription drugs as new users of marijuana.ⁱⁱ Prescription and over the counter medications are widely available, free or inexpensive, and falsely believed to be safer than illicit drugs. In 2006, 2.1 million teens abused prescription drugs and an additional 2.1 million had misused over the counter cough and cold medications at least once in their lifetime.ⁱⁱⁱ

Inhalant use, the deliberate inhalation of toxic substances to induce a psychoactive or mind-altering effect, tends to occur among younger teens and can be highly toxic and even lethal.^{iv} The 2006 Monitoring the Future study indicated that 8th graders have tried inhalants in their lifetime more so than any other illicit drug.^v

Healthy People 2020 Objectives	Summit County 2018	Status
AH-7: Reduce the proportion of adolescents who have been offered, sold, or given an illegal drug on school property to no more than 20.4%	6.3 % of Summit County Middle School students reported being offered, sold, or given an illegal drug on school property.	The objective has been met.

Overall and Regional Prevalence

Akron		Suburbs		County	
% (Confidence Interval)		% (Confidence Interval)		% (Confidence Interval)	
Population N		Population N		Population N	
2013	2018	2013	2018	2013	2018
Ever used heroin					
(Also called smack, junk, tar, dope, dog food)					
3.2% (2.2 - 4.6) 88	1.2% (0.7 - 2.0) 32	0.7% (0.5 - 1.1) 59	0.2% (0.1 - 0.4) 14	1.4% (1.0 - 1.8) 147	0.5% (0.3 - 0.7) 46
Ever used methamphetamines					
(Also called speed, crystal, crank, or ice)					
3.5% (2.3 - 5.2) 96	1.9% (1.3 - 3.0) 51	0.8% (0.6 - 1.3) 66	0.5% (0.3 - 0.9) 36	1.5% (1.2 - 2.0) 163	0.9% (0.6 - 1.3) 87
Ever used inhalants					
(Sniffed glue, breathed the contents of aerosol spray cans, or inhaled any paints or sprays to get high)					
9.0% (7.3 - 10.9) 247	7.6% (6.4 - 9.1) 201	6.2% (5.3 - 7.1) 484	5.6% (4.7 - 6.6) 399	6.9% (6.1 - 7.8) 731	6.1% (5.4 - 6.9) 599
Ever used synthetic drugs					
(One or more times during their life, also called "designer drugs")					
3.9% (2.6 - 5.6) 106	3.5% (2.6 - 4.7) 92	1.7% (1.3 - 2.3) 134	2.0% (1.6 - 2.6) 144	2.3% (1.8 - 2.9) 240	2.4% (2.0 - 2.9) 235
Ever used prescription pain medicine					
(Without a doctor's prescription or differently than how a doctor instructed)					
9.4% (7.8 - 11.3) 256	5.4% (4.4 - 6.6) 140	6.1% (5.1 - 7.1) 474	5.0% (4.3 - 5.9) 360	6.9% (6.1 - 7.8) 730	5.1% (4.5 - 5.9) 501
Ever used other prescription drugs					
(That was not a prescription pain medicine, without a doctor's prescription or differently than how a doctor instructed)					
N/A	5.4% (4.5 - 6.6) 141	N/A	4.7% (3.9 - 5.6) 335	N/A	4.9% (4.3 - 5.6) 476
Had been offered, sold, or given an illegal drug on school property					
(During the past 12 months)					
16.5% (14.6 - 18.6) 447	6.5% (5.4 - 7.8) 170	12.9% (11.7 - 14.3) 1012	6.2% (5.3 - 7.3) 445	13.8% (12.8 - 15.0) 1459	6.3% (5.5 - 7.1) 615
Attended school under the influence of alcohol or other drugs					
(Such as marijuana or prescription drugs, during the past 12 months)					
N/A	6.1% (4.8 - 7.7) 160	N/A	2.7% (2.1 - 3.4) 192	N/A	3.6% (3.1 - 4.2) 352

2018 SUMMIT COUNTY MS YRBS: Other Drug Use

From 2013 to 2018, Summit County middle school students reported decreases in the prevalence of ever heroin use (1.4% vs. 0.5%), ever prescription pain medicine use (6.9% vs. 5.1%), and having been offered, sold, or given illegal drugs on school property (13.8% vs. 6.3%). In 2018, 4.9% of Summit County middle school students reported that they had ever taken another prescription drug that was not a prescription pain medicine, without a doctor’s prescription or differently than how a doctor told them to use it (such as Adderall, Ritalin, Valium, or Xanax). In 2018, the middle school questionnaire also included an item assessing the prevalence during the past 12 months that students attended school under the influence of alcohol or other drugs (3.6%).

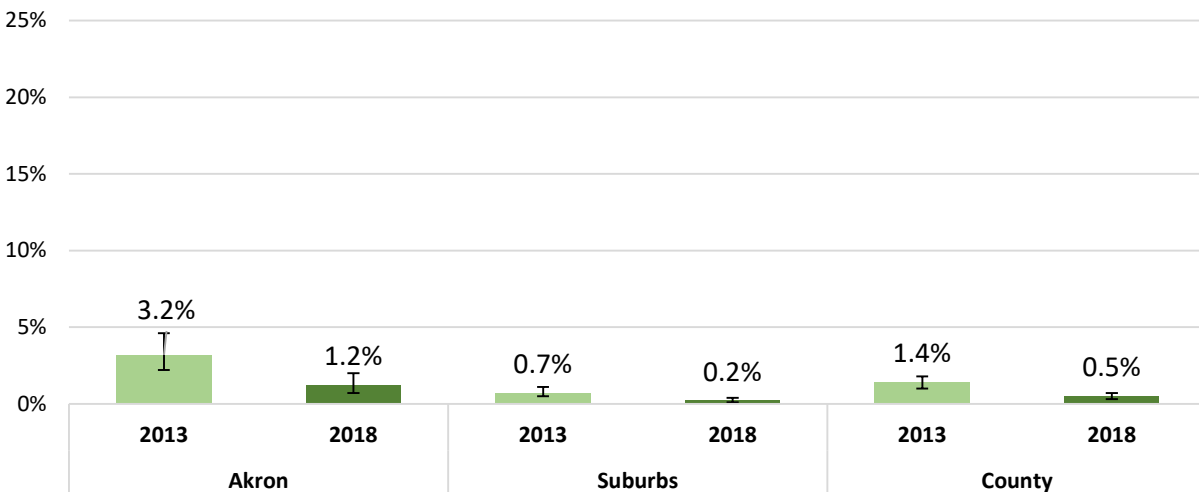
Regionally, the prevalence of ever heroin use was significantly higher in Akron than in the suburbs (1.2% vs. 0.2%), although there was a significant decrease in both regions from 2013 to 2018. The prevalence of ever methamphetamines use was significantly higher in Akron than in the suburbs (1.9% vs. 0.5%), as was the prevalence of ever use of synthetic/designer drugs (3.5% vs. 2.0%).

The prevalence of ever use of prescription pain medicine without a doctor’s prescription or differently than how a doctor instructed decreased in Akron from 2013 to 2018 (9.4% vs. 5.4%).

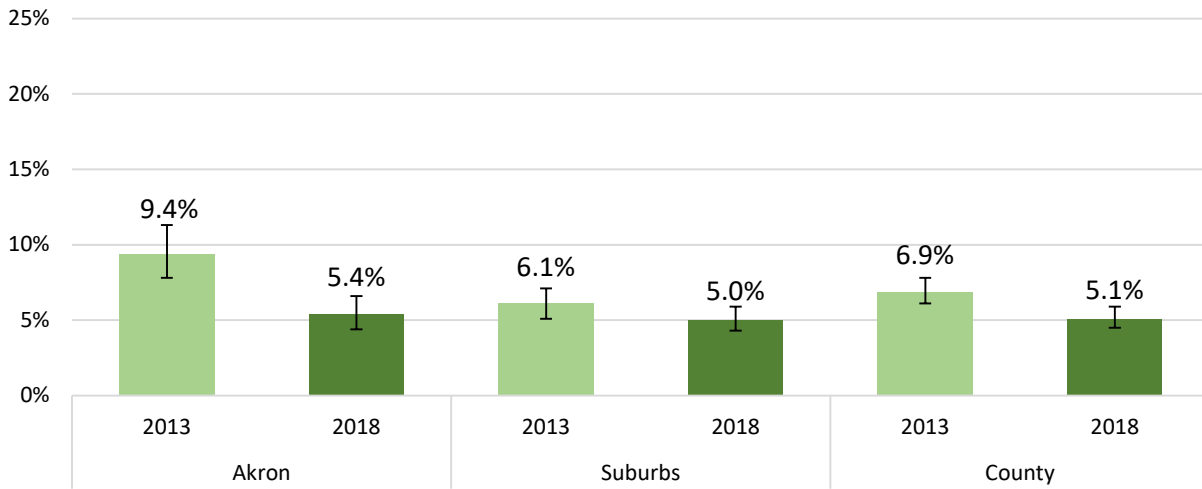
The prevalence of having been offered, sold, or given an illegal drug on school property during the past 12 months decreased significantly from 2013 to 2018 in Akron (16.5% vs. 6.5%) and in the suburbs (12.9% vs. 6.2%).

The following graphs depict the regional differences in ever used heroin, ever used prescription pain medicine without a doctor’s prescription, and were offered, sold or given illegal drugs on school property during the past 12 months.

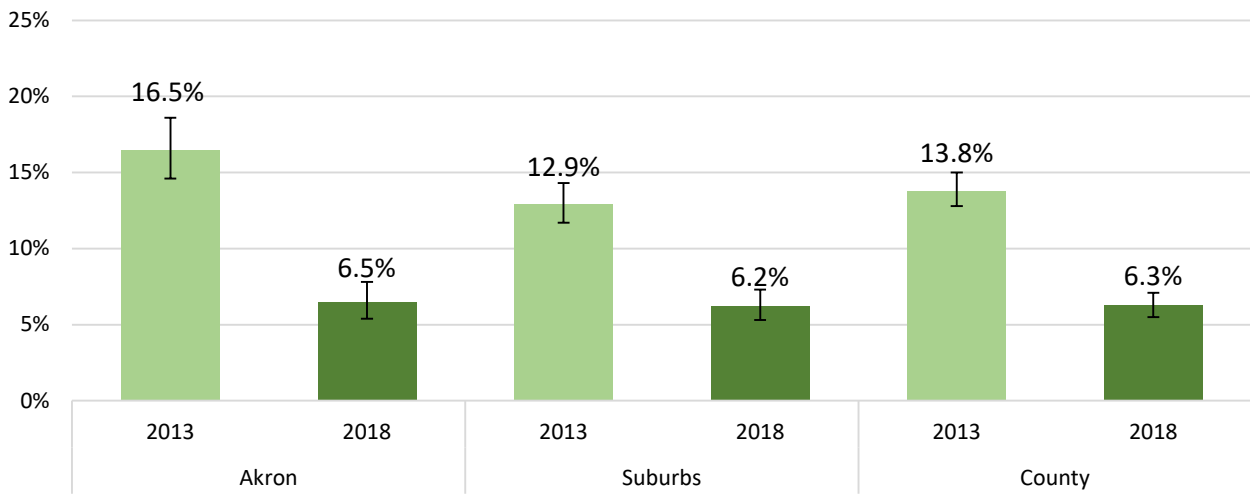
Ever used heroin, By region, 2013 vs. 2018



**Ever used prescription pain medicine without prescription,
By region, 2013 vs. 2018**



**Had been offered, sold, or given an illegal drug on school property
By region, 2013 vs. 2018**



Demographics

Ever used heroin			
Category	%	CI	
Gender			
Female	0.2	0.1	- 0.5
Male	0.7	0.4	- 1.1
Race/Ethnicity			
White	0.2	0.1	- 0.4
Black	0.9	0.5	- 1.6
Asian	0.3	0.0	- 2.1
Hispanic	3.6	1.7	- 7.7
Other	1.6	0.7	- 3.7
Grade			
7th	0.3	0.2	- 0.6
8th	0.6	0.3	- 1.0
Total	0.5	0.3	- 0.7

In Summit County, 0.5% of students had used heroin one or more times during their life (i.e., lifetime heroin use). The prevalence of lifetime heroin use was higher for Hispanic (3.6%) students than White and Black (0.2%, 0.9%) students; and higher for Black and Other/Multiple (0.9%, 1.6%) students than White (0.2%) students.

Ever used methamphetamines			
Category	%	CI	
Gender			
Female	0.7	0.3	- 1.4
Male	1.1	0.7	- 1.6
Race/Ethnicity			
White	0.5	0.3	- 0.8
Black	1.4	0.8	- 2.6
Asian	1.4	0.5	- 4.4
Hispanic	4.4	1.7	- 10.8
Other	2.4	1.4	- 4.3
Grade			
7th	0.7	0.4	- 1.3
8th	1.0	0.7	- 1.5
Total	0.9	0.6	- 1.3

In Summit County, 0.9% of students had used methamphetamines one or more times during their life (i.e., lifetime methamphetamines use). The prevalence of lifetime methamphetamines use was higher for Hispanic (4.4%) and Other/Multiple (2.4%) students than White (0.5%) students.

2018 SUMMIT COUNTY MS YRBS: Other Drug Use

Ever used inhalants			
Category	%	CI	
Gender			
Female	6.8	5.9	- 7.9
Male	5.3	4.4	- 6.4
Race/Ethnicity			
White	5.5	4.7	- 6.4
Black	6.7	5.2	- 8.7
Asian	5.0	2.9	- 8.7
Hispanic	10.9	6.8	- 16.9
Other	9.2	7.1	- 11.8
Grade			
7th	5.6	4.6	- 6.9
8th	6.6	5.6	- 7.7
Total	6.1	5.4	- 6.9

In Summit County, 6.1% of students had used inhalants one or more times during their life (i.e., lifetime inhalant use). The prevalence of lifetime inhalant use was higher for Hispanic (10.9%) students than White (5.5%) students.

Ever used synthetic or designer drugs			
Category	%	CI	
Gender			
Female	2.4	2.0	- 3.1
Male	2.3	1.7	- 3.1
Race/Ethnicity			
White	2.1	1.6	- 2.6
Black	2.8	1.9	- 4.1
Asian	1.8	0.8	- 3.7
Hispanic	4.9	2.1	- 11.0
Other	4.7	3.1	- 7.1
Grade			
7th	1.9	1.5	- 2.4
8th	2.8	2.2	- 3.6
Total	2.4	2.0	- 2.9

In Summit County, 2.4% of students had used synthetic or designer drugs one or more times during their life (i.e., lifetime synthetic or designer drug use). There was no difference in demographic groups for the prevalence of use of synthetic or designer drugs.

2018 SUMMIT COUNTY MS YRBS: Other Drug Use

Ever taken prescription pain medicine without a doctor's prescription or different than how a doctor prescribed			
Category	%	CI	
Gender			
Female	5.5	4.6	- 6.7
Male	4.8	3.9	- 5.9
Race/Ethnicity			
White	4.6	3.9	- 5.5
Black	5.7	4.3	- 7.5
Asian	3.2	1.7	- 5.9
Hispanic	11.3	7.6	- 16.4
Other	10.2	8.0	- 13.0
Grade			
7th	4.1	3.3	- 5.2
8th	6.1	5.2	- 7.2
Total	5.1	4.5	- 5.9

In Summit County, 5.1% of students had used prescription pain relievers or painkillers without a doctor’s prescription one or more times during their life (i.e., lifetime unauthorized prescription drug use). The prevalence of lifetime unauthorized prescription drug use was higher for Hispanic (11.3%) and Other/Multiple (10.2%) students than White, Black and Asian (4.6%, 5.7%, 3.2%) students.

Ever taken other prescription drug that was not pain medicine without a doctor's prescription or differently than prescribed			
Category	%	CI	
Gender			
Female	5.3	4.3	- 6.5
Male	4.4	3.6	- 5.3
Race/Ethnicity			
White	4.5	3.7	- 5.3
Black	5.2	3.8	- 7.0
Asian	3.5	1.8	- 6.7
Hispanic	13.2	8.8	- 19.5
Other	8.9	7.0	- 11.3
Grade			
7th	4.1	3.2	- 5.1
8th	5.6	4.7	- 6.7
Total	4.9	4.3	- 5.6

In Summit County, 4.9% of students had taken another prescription drug that was not pain medicine without a doctor’s prescription or differently than had been prescribed. The prevalence of having taken a prescription drug that was not pain medicine without a doctor’s prescription or differently than had been prescribed was higher among Hispanic and Other/Multiple race (13.2%, 8.9%) than among White or Asian (4.5%, 3.5%) students; and higher among Hispanic (13.2%) students than among Black (5.2%) students.

2018 SUMMIT COUNTY MS YRBS: Other Drug Use

Offered, sold, or given illegal drugs on school property			
Category	%	CI	
Gender			
Female	5.6	4.6	- 6.6
Male	6.9	5.7	- 8.2
Race/Ethnicity			
White	5.8	5.0	- 6.8
Black	6.7	5.0	- 8.9
Asian	3.3	1.8	- 6.1
Hispanic	11.7	7.6	- 17.7
Other	8.3	6.2	- 10.9
Grade			
7th	5.1	4.1	- 6.3
8th	7.3	6.1	- 8.7
Total	6.3	5.5	- 7.1

Attended school under the influence of alcohol or drugs			
Category	%	CI	
Gender			
Female	3.7	2.9	- 4.6
Male	3.5	2.8	- 4.4
Race/Ethnicity			
White	2.6	2.1	- 3.3
Black	5.3	3.9	- 7.0
Asian	1.6	0.7	- 3.8
Hispanic	11.4	7.3	- 17.5
Other	7.0	4.9	- 10.0
Grade			
7th	3.2	2.4	- 4.2
8th	4.0	3.2	- 5.0
Total	3.6	3.1	- 4.2

In Summit County, 6.3% of students had been offered, sold, or given illegal drugs on school property one or more times in the 12 months prior to the survey. The prevalence of having been offered, sold, or given illegal drugs on school property one or more times in the 12 months prior to the survey was higher among Hispanic (11.7%) students than White (5.8%) and Asian (3.3%) students.

In Summit County, 3.6% of students had attended school under the influence of alcohol or other drugs (such as marijuana or prescription drugs taken without a doctor’s prescription), during the past 12 months. The prevalence of having attended school under the influence of alcohol or other drugs was higher among Hispanic (11.4%) students than among White, Black, or Asian (2.6%, 5.3%, 1.6%) students, and higher among Black and Other/Multiple race (5.3%, 7.0%) students than among White or Asian (2.6%, 1.6%) students.

ⁱ Wu, W., Khan, A. 2005. Adolescent Illicit Drug Use: Understanding and Addressing the Problem. *Medscape Public Health & Prevention*. 3(2).

ⁱⁱ Substance Abuse and Mental Health Services Administration. 2006. *Misuse of Prescription Drugs, 2005*. Available at <http://www.oas.samhsa.gov/prescription/toc.htm>. Accessed on June 1, 2009.

ⁱⁱⁱ Substance Abuse and Mental Health Services Administration. 2007. Results from the 2006 National Survey on Drug Use and Health: National Findings. Office of Applied Studies, NSDUH Series H-32, DHHS Publication No. SMA 07-4293. Rockville, MD.

^{iv} Volkow, N. 2005. Inhalant abuse: Danger under the kitchen sink. *NIDA Notes*. 20(3).

^v Johnston, L., O'Malley, P., Bachman, J., Schulenberg, J. 2007. *Monitoring the Future national results on adolescent drug use: Overview of key findings, 2006*. Bethesda, MD: National Institute on Drug Abuse.

Section 9: Gambling

The 2018 Summit County Middle School YRBS included three items about gambling. Middle school students were asked if they had gambled money or personal items one or more times in the 12 months prior to the survey. The questionnaire also included items to further characterize gambling behavior by asking students to select all that applied from a list of how and where they gambled.

Problem gambling is widespread. It is estimated that in Ohio 264,000 adults and approximately 38,000 adolescents exhibit problem gambling behaviors.ⁱ

Little is known about the course and outcomes of adolescent gambling. A review of 26 gambling prevalence studies conducted in the US and Canada shows both a high level of adolescent involvement in gambling activities and an increase in participation in recent years.ⁱⁱ Estimates of problem gambling or pathological gambling range between two and four times higher than the adult population, with 4 to 8 percent suffering serious problems and an additional 10 to 14 percent at risk for gambling problems.^{iii,iv,v}

The graph below depicts the prevalence of past-30-day gambling behavior reported in 2013 and in 2018, overall, by gender and grade. In both years, males were more likely to gamble than females. In both 2013 and in 2018, 8th grade students were more likely than 7th grade students to report past-30-day gambling behavior. Female students in 2013 reported higher prevalence of past-30-day gambling behavior than did female students in 2018. While prevalence of gambling behavior appears to have declined, there are no other significant changes to report.

Overall and Regional Prevalence

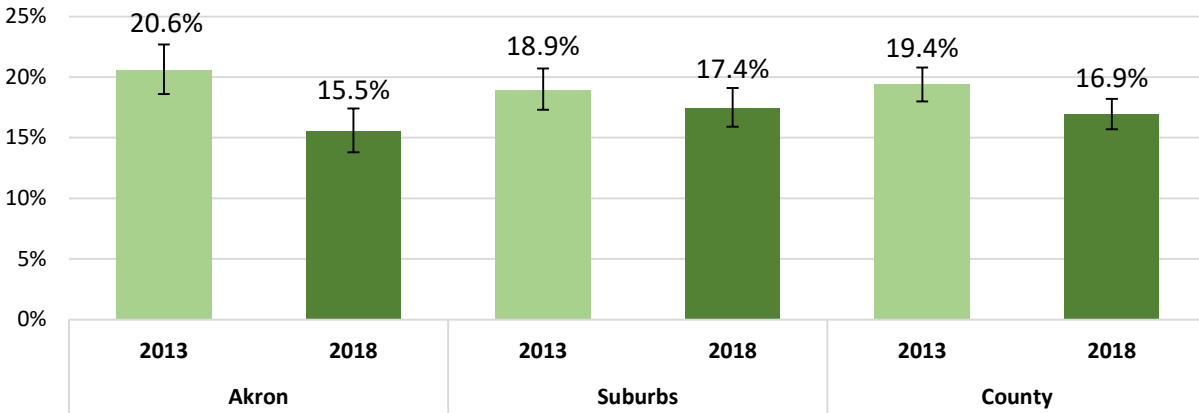
Akron		Suburbs		County	
% (Confidence Interval) Population N		% (Confidence Interval) Population N		% (Confidence Interval) Population N	
2013	2018	2013	2018	2013	2018
Gambled money or personal items (One or more times during the past 12 months)					
20.6% (18.6 – 22.7) 560	15.5% (13.8 – 17.4) 399	18.9% (17.3 – 20.7) 1473	17.4% (15.9 – 19.1) 1245	19.4% (18.0 – 20.8) 2034	16.9% (15.7 – 18.2) 1644

From 2013 to 2018, Summit County middle school students reported similar prevalence for having gambled money or personal items one or more times during the past 12 months (19.4% vs. 16.9%).

Within regions, the prevalence of having gambled money or personal items decreased from 2013 to 2018 in Akron (20.6% vs. 15.5%) while over time prevalence remained similar in the suburbs.

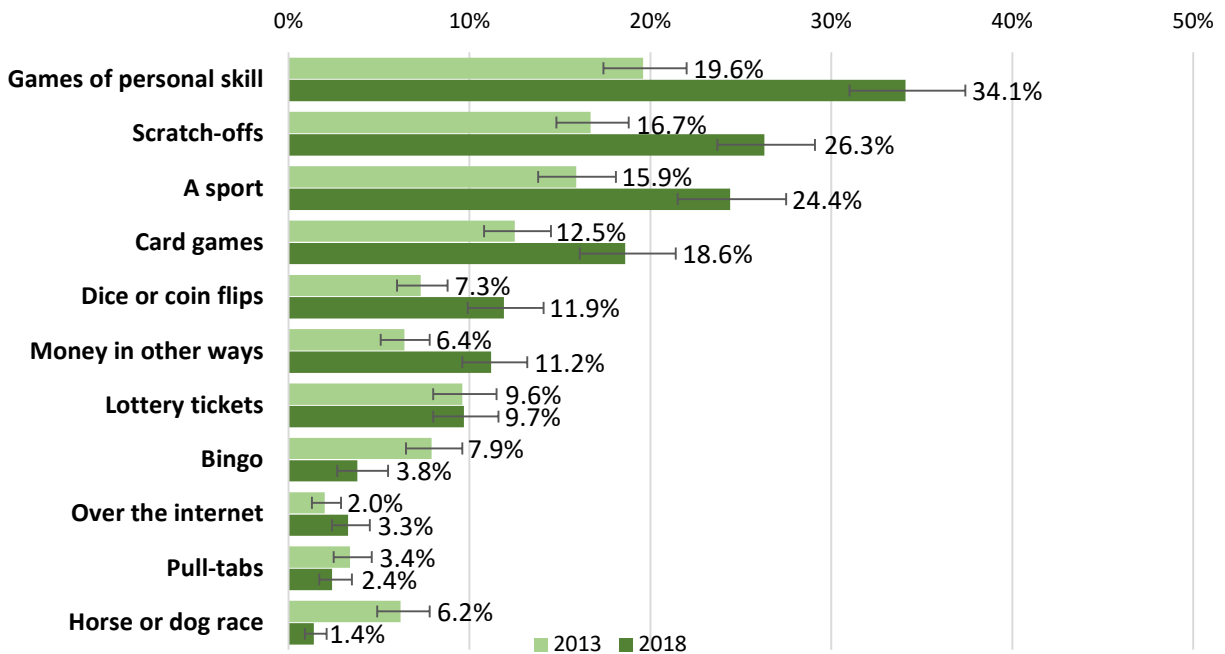
The following graph depicts the regional changes in prevalence of gambling money or personal items.

Gambled money or personal items By region, 2013 vs. 2018



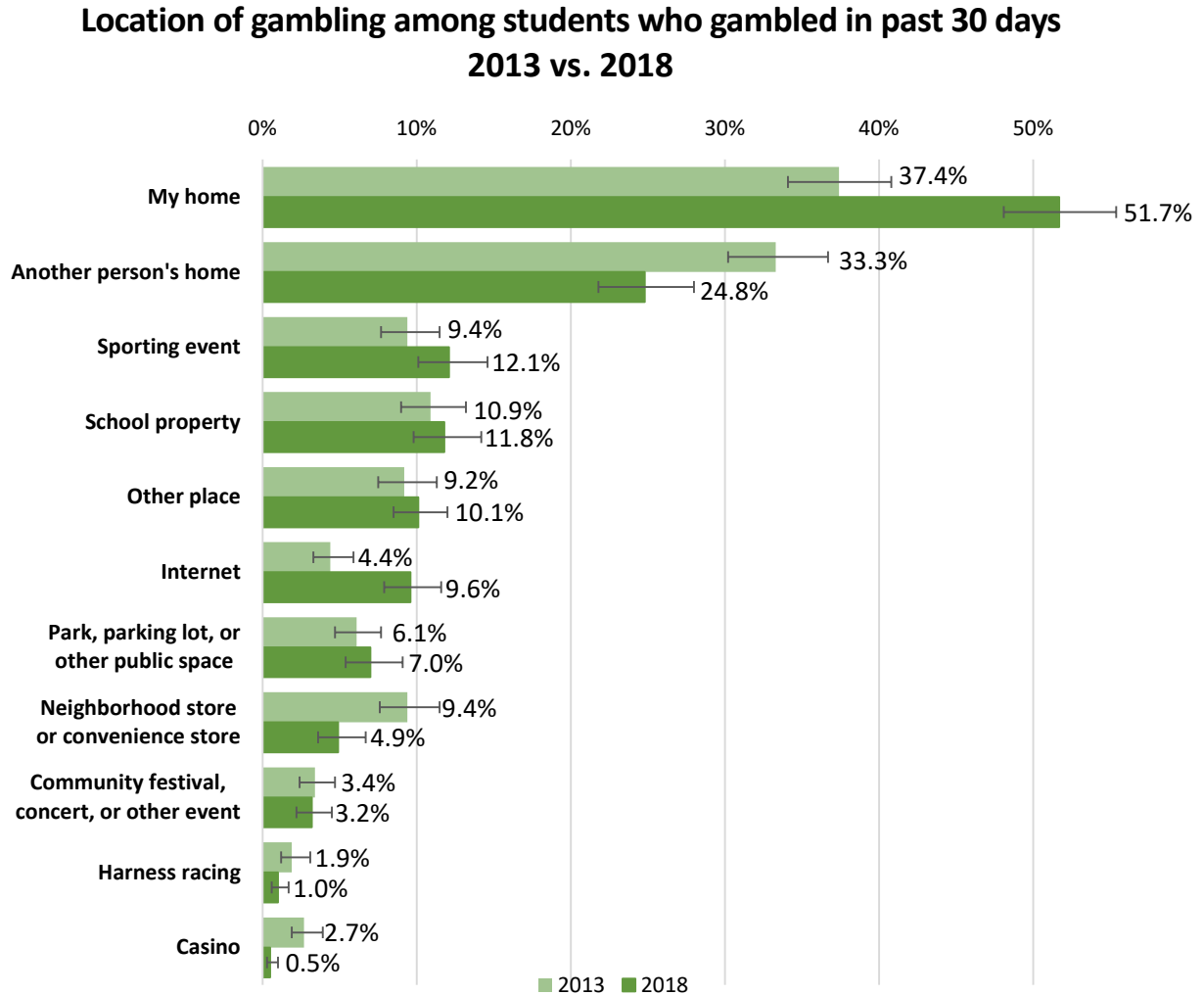
Summit County middle school students were asked to select all that applied from a list of possible gambling products/methods that they used to gamble in the 30 days before the survey. Of the students who indicated they had gambled, most students responded that they gambled on games of personal skill such as bowling, video games, or dares; or they gambled money with scratch offs. From 2013 to 2018, there were significant increases in the prevalence of gambling by games of personal skill (19.6% to 34.1%), scratch-offs (16.7% to 26.3%), sports (15.9% to 24.4%), card games (12.5% to 18.6%), dice or coin flips (7.3% to 11.9%), and money in other ways (6.4% to 11.2%). Students who currently gambled in 2018 were significantly less likely than students who had gambled in 2013 to indicate that they gambled via bingo (3.8% vs. 7.9%) or a horse or dog race (1.4% vs. 6.2%).

Type of gambling among students who gambled in past 30 days 2013 vs. 2018



2018 SUMMIT COUNTY MS YRBS: Gambling

Students in Summit County were asked to select all that applied from a list of possible gambling locations where they had gambled in the 30 days before the survey. Of the students who indicated that they had gambled in the 30 days before the survey, most reported that they gambled in their own home or another person’s home. From 2013 to 2018, there was a significant increase in the prevalence of gambling at home (37.4% to 51.7%) and on the internet (4.4% to 9.6%). Among students who gambled, there was a significant decrease in the prevalence of students who gambled at another person’s home (33.3% to 24.8%), at a neighborhood store or convenience store (9.4% to 4.9%), and at a casino (2.7% to 0.5%) from 2013 to 2018.



Demographics

Gambled money or personal items			
Category	%	CI	
Gender			
Female	9.5	8.4	- 10.9
Male	23.4	21.4	- 25.6
Race/Ethnicity			
White	16.5	15.1	- 17.9
Black	18.6	15.3	- 22.4
Asian	10.4	6.9	- 15.4
Hispanic	20.7	14.7	- 28.3
Other	17.4	14.2	- 21.1
Grade			
7th	13.9	12.2	- 15.8
8th	19.5	17.7	- 21.5
Total	16.9	15.7	- 18.2

In Summit County, 16.9% of students had gambled money or personal items one or more times in the 12 months prior to the survey. The prevalence of gambling money or personal items in the 12 months prior to the survey was higher among male (23.4%) students than female (9.5%) students. The prevalence of gambling money or personal items in the 12 months prior to the survey was higher for Hispanic (20.7%) students than Asian (10.4%) students. The prevalence of gambling money or personal items in the 12 months prior to the survey was higher among 8th grade (19.5%) students than 7th grade (13.9%) students.

ⁱ "Ohio Problem Gambling." Prevention. Ohio Department of Mental Health and Addiction Service, n.d. Web. 9 Sep 2018. <<http://mha.ohio.gov/Default.aspx?tabid=505>>.

ⁱⁱ Jacobs DF. Youth gambling in North America: Long-term trends and future prospects. In: Derevensky JL, Gupta R, editors. Gambling Problems in Youth: Theoretical and Applied Perspectives. New York, NY: Kluwer Academic/Plenum Publishers; 2004. pp.1-24.

ⁱⁱⁱ Gupta R, Derevensky JL. Adolescent gambling behavior: A prevalence study and examination of the correlates associated with problem gambling. *J Gambl Stud.* 1998;14(4):319-45.

^{iv} Shaffer HJ, Hall MN. Estimating the prevalence of adolescent gambling disorders: A quantitative synthesis and guide toward standard gambling nomenclature. *J Gambl Stud.* 1996;12(2):193-214

▼ Shaffer HJ, Hall MN. Updating and refining prevalence estimated of disordered gambling behavior in the United States and Canada. Can J Public Health. 2001;92(3):168-72

Section 10: Sexual Behaviors

The 2018 Summit County Middle School YRBS asked students whether they had ever had sexual intercourse and whether they or their partner used a condom most of the time or always during the past three months. The middle school students were also asked if they had been taught in school about AIDS or HIV infection and if they had talked about AIDS or HIV Infection with parents or other adults in their family. Early sexual activity is associated with a high number of sexual partners,^{i,ii} STI contraction, teenage pregnancy, and greater risk for unwanted sex.ⁱⁱⁱ Since 1990, teen pregnancy and birth rates in the United States have declined significantly. Researchers cite two main factors: fewer teens are having sex, and among those who are, more are using contraceptives.^{iv} While this is a positive trend, there are still risks for those teens that are entering into sexual relationships during their adolescent years.

While conducting analyses for the sexual behavior category of survey items, researchers noticed a sizeable proportion of missing responses. Missing data were more common among males and minority students. The amount of missing data decreased by grade. The stability of the data examined in this section must be considered and caution used in interpretation.

Healthy People 2020 Objectives	Summit County 2018	Status
HIV-17: Increase the proportion of sexually active population who use condoms.	For middle school students, condom use “most of the time” or “always” among currently sexually active students increased from 16.7% in 2013 to 47.6% in 2018.	The objective has been met.

Overall and Regional Prevalence

Akron		Suburbs		County	
% (Confidence Interval)		% (Confidence Interval)		% (Confidence Interval)	
Population N		Population N		Population N	
2013	2018	2013	2018	2013	2018
Ever had sexual intercourse					
(Had sexual intercourse 1 or more times during their life.)					
3.8% (2.9 – 5.0) 88	8.0% (6.7 – 9.6) 202	2.0% (1.5 – 2.7) 133	4.7% (3.7 – 5.9) 160	2.5% (2.0 – 3.1) 221	6.1% (5.2 – 7.1) 362
Condom use					
(Used a condom most of the time or always during the past 3 months among currently sexually active students.)					
21.2% (10.4 – 38.4) 14	41.9% (33.2 – 51.2) 76	11.4% (4.1 – 28.1) 7	54.4% (44.9 – 63.5) 62	16.7% (9.4 – 27.7) 21	46.7% (40.3 – 53.3) 138
Were taught in school about AIDS or HIV infection					
73.6% (70.6 – 76.5) 1746	68.6% (65.2 – 71.8) 1673	55.7% (52.5 – 58.8) 4223	59.4% (56.2 – 62.4) 4136	60.0% (57.5 – 62.4) 5969	61.7% (59.3 – 64.1) 5810
Talked about AIDS or HIV infection with parents or adult in family					
47.2% (44.4 – 49.9) 1100	43.9% (41.2 – 46.5) 1059	31.5% (29.8 – 33.3) 2364	34.6% (32.7 – 36.6) 2407	35.2% (33.7 – 36.8) 3464	37.0% (35.4 – 38.6) 3466

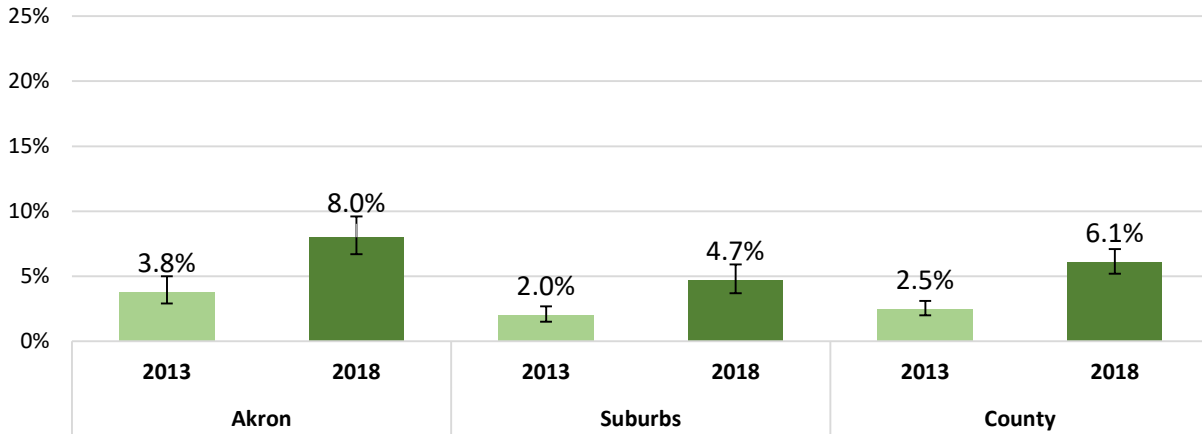
Students in Summit County were asked about their sexual activity and related behaviors. Compared to 2013, Summit County middle school students in 2018 were significantly more likely to have ever had sexual intercourse (2.5% vs. 6.1%) and to have used a condom most of the time or always when having sex (16.7% vs. 46.7%). There was no significant difference between 2013 and 2018 in prevalence rates of having been taught about AIDS or HIV infection in school, or having talked about AIDS or HIV infection with parents or other adults in the family.

Regionally, the prevalence of having ever had sexual intercourse was higher in Akron than in the suburbs (8.0% vs. 4.7%), although there was a significant increase from 2013 to 2018 in both regions. The prevalence of having been taught about AIDS/HIV in school was higher in Akron than in the suburbs (68.6% vs. 59.4%) as was the prevalence of having talked with parents or another adult in the family about AIDS/HIV (43.9% vs. 34.6%).

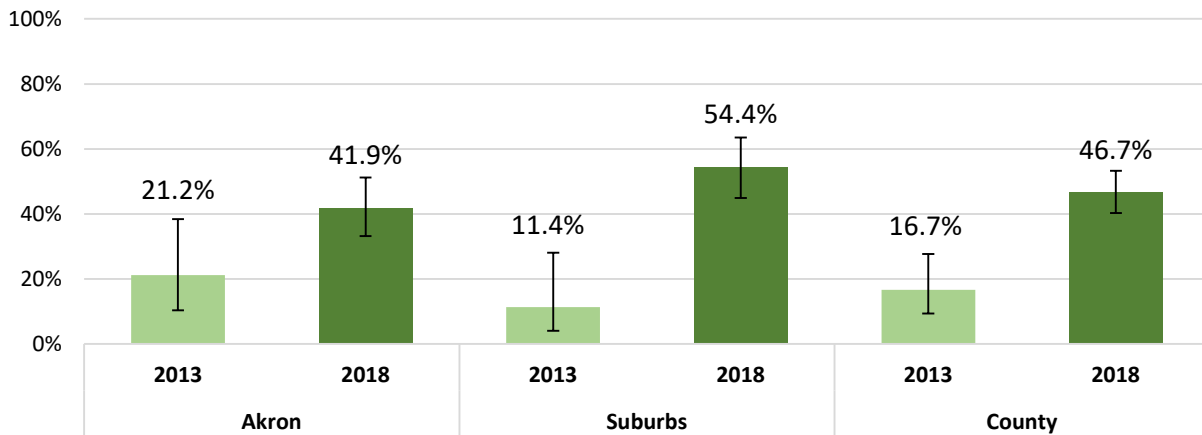
There were no regional differences between Akron and its surrounding suburbs in the 2018 prevalence of having used a condom most of the time or always, however, the prevalence increased significantly from 2013 to 2018 within both regions.

The graphs below illustrate changes in rates among students in both Akron and the surrounding suburbs who have ever had sexual intercourse, who have used a condom, who have been taught in school about AIDS/HIV, and who have talked with a parent or other adult in the family about AIDS/HIV.

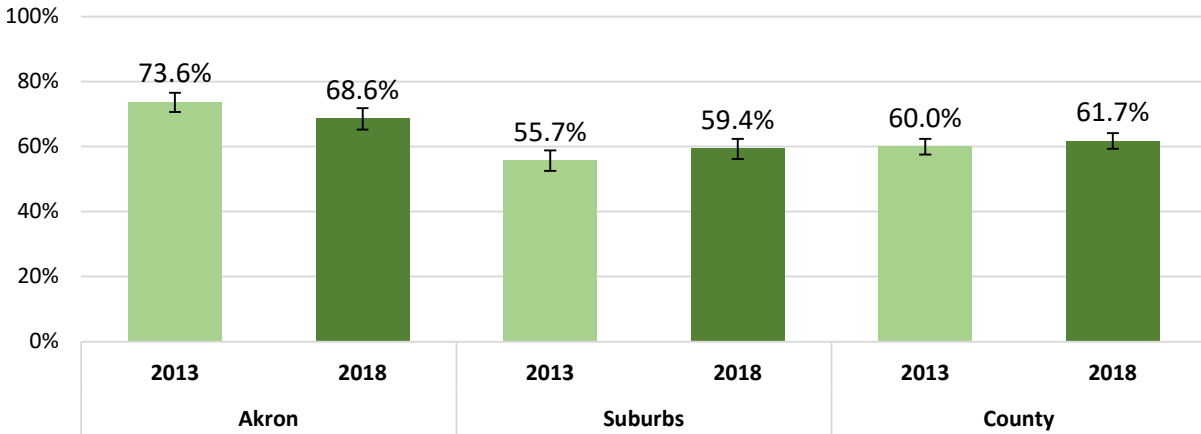
Ever had sexual intercourse By region, 2013 vs. 2018



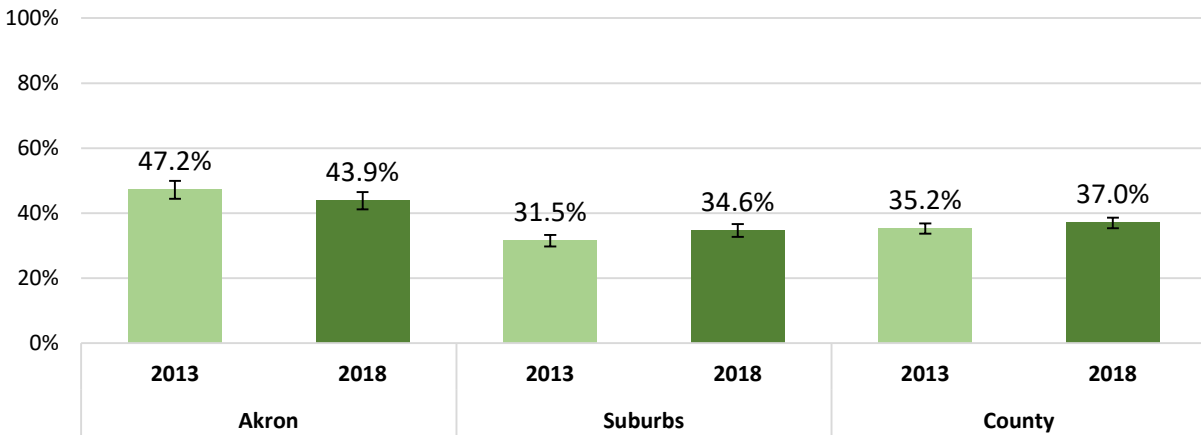
Used a condom By region, 2013 vs. 2018



Had been taught in school about AIDS or HIV infection, By region, 2013 vs. 2018



Talked with parent or other adult about AIDS or HIV infection, By region, 2013 vs. 2018



Demographics

Ever had sexual intercourse			
Category	%	CI	
Gender			
Female	4.2	3.2	5.4
Male	7.9	6.7	9.4
Race/Ethnicity			
White	4.2	3.4	5.2
Black	10.6	8.5	13.0
Asian	0.6	0.1	2.7
Hispanic	15.2	8.8	24.9
Other	7.7	5.6	10.5
Grade			
7th	4.3	3.3	5.6
8th	7.7	6.4	9.3
Total	6.1	5.2	7.1

In Summit County, 6.1% of students have had sexual intercourse one or more times during their lifetime. The prevalence of having had sexual intercourse was higher among male (7.9%) students than female (4.2%) students. The prevalence of having had sexual intercourse was higher among Black and Hispanic (10.6%, 15.2%) students than among White or Asian (4.2%, 0.6%) students; and higher among White and Other/Multiple race (4.2%, 7.7%) students than Asian (0.6%) students. The prevalence of having had sexual intercourse was higher among 8th grade (7.7%) students than 7th grade (4.3%) students.

Condom use			
Category	%	CI	
Gender			
Female	42.1	30.1	55.0
Male	48.4	40.0	56.9
Race/Ethnicity			
White	56.8	46.5	66.5
Black	43.3	32.4	54.9
Asian			-
Hispanic	40.0	22.6	60.2
Other	32.3	21.0	46.2
Grade			
7th	38.7	27.2	51.7
8th	51.4	43.0	59.6
Total	46.7	40.3	53.3

In Summit County, 46.7% of students who were currently sexually active used a condom most of the time or always during the past three months. The prevalence of students who were sexually active and used a condom most of the time or always during the past three months was higher among White (56.8%) students than Other/Multiple race (32.2%) students.

Were taught in school about AIDS or HIV infection			
Category	%	CI	
Gender			
Female	58.9	55.8	61.8
Male	64.4	61.3	67.3
Race/Ethnicity			
White	59.4	56.5	62.2
Black	69.0	64.9	72.9
Asian	49.6	40.8	58.5
Hispanic	60.0	53.1	66.5
Other	66.0	61.3	70.4
Grade			
7th	52.4	49.1	55.7
8th	70.7	68.1	73.1
Total	61.7	59.3	64.1

In Summit County, 61.7% of students were taught about HIV/AIDS in school. The prevalence of being taught about HIV/AIDS in school was higher among Black (69.0%) students than White and Asian (59.4%, 49.6%) students. The prevalence of being taught about HIV/AIDS in school was higher among 8th grade (70.7%) students than 7th grade (52.4%) students.

Talked about AIDS or HIV infection with parents or other adults in family			
Category	%	CI	
Gender			
Female	36.9	34.5	39.3
Male	37.2	35.1	39.4
Race/Ethnicity			
White	31.2	29.5	32.9
Black	53.4	49.6	57.2
Asian	16.1	11.5	22.1
Hispanic	40.5	32.5	48.9
Other	40.1	35.6	44.6
Grade			
7th	36.5	34.3	38.9
8th	37.6	35.3	40.1
Total	37.0	35.4	38.6

In Summit County, 37.0% of students talked about AIDS or HIV infection with parents or other adults in the family. The prevalence of talking about AIDS or HIV infection with parents or other adults in the family was higher among Black (53.4%) students than White, Asian, Hispanic and Other/Multiple (31.2%, 16.1%, 40.5%, 40.1%) students; and higher among Other/Multiple (40.1%) students than White (31.2%) and Asian (16.1%) students. The prevalence of talking about AIDS or HIV infection with parents or other adults in the family was higher among 8th grade (37.6%) students than 7th grade (36.5%) students.

ⁱ Smith, C. 1997. Factors associated with early sexual activity among urban adolescents. *Social Work*. 42(4):334-346.

ⁱⁱ Santelli, J., Brener, N., Lowry, R., Bhatt, A., Zabin, L. 1998. Multiple sexual partners among U.S. adolescents and young adults. *Family Planning Perspectives*. 30(6):271-275.

ⁱⁱⁱ Moore, K., Manlove, J., Gleib, D., Morrison, D. 1998. Nonmarital school-age motherhood: family, individual, and school characteristics. *Journal of Adolescent Research*. 13(4):433-457.

^{iv} Martin, J., Hamilton, B., Sutton, P., Ventura, S., Menacker, F., Kirmeyer, S., Munson, M. 2007. Births: final data for 2005. *National Vital Statistics Reports*. 56(6).

Section 11: Obesity, Overweight, and Weight Control

Obesity has reached epidemic proportions. In the past 20 years, the prevalence of obesity has increased by more than 60% among adults and tripled in children and adolescents.ⁱ Overweight adolescents often become overweight adults with an increased risk for a wide variety of poor health outcomes including diabetes, stroke, heart disease, arthritis and certain cancers.^{ii,iii} Obesity during adolescence is associated with negative psychological and social consequences and health problems such as Type 2 diabetes, obstructive sleep apnea, hypertension, dyslipidemia, and metabolic syndrome.^{iv}

The 2018 Summit County Middle School YRBS asked students about their height and weight in order to calculate the student's Body Mass Index (BMI). Obese was defined as a BMI of $\geq 95^{\text{th}}$ percentile for age and sex. Overweight was defined as a BMI of $\geq 85^{\text{th}}$ percentile and $< 95^{\text{th}}$ percentile for age and sex. Normal weight was defined as a BMI of $\geq 5^{\text{th}}$ percentile and $< 85^{\text{th}}$ percentile for age and sex. Underweight was defined as a BMI of $< 5^{\text{th}}$ percentile for age and sex. Additionally, students were asked how they describe their own weight and what (if anything) they were currently trying to do about their weight.

Summit County Public Health has requested an analysis that explores more fully the congruence (or lack thereof) between calculated BMI status with perception of weight, what students were trying to do about their weight, dietary behaviors and levels of physical activity. This chapter contains this more detailed and specific analysis.

Healthy People 2020 Objectives	Summit County 2018	Status
<p>NWS-10.3: Reduce the proportion of adolescents aged 12 to 19 years who are considered obese to no more than 16.1%</p>	<p>15.2% of Summit County Middle School students were considered obese.</p>	<p>The objective has been met.</p>

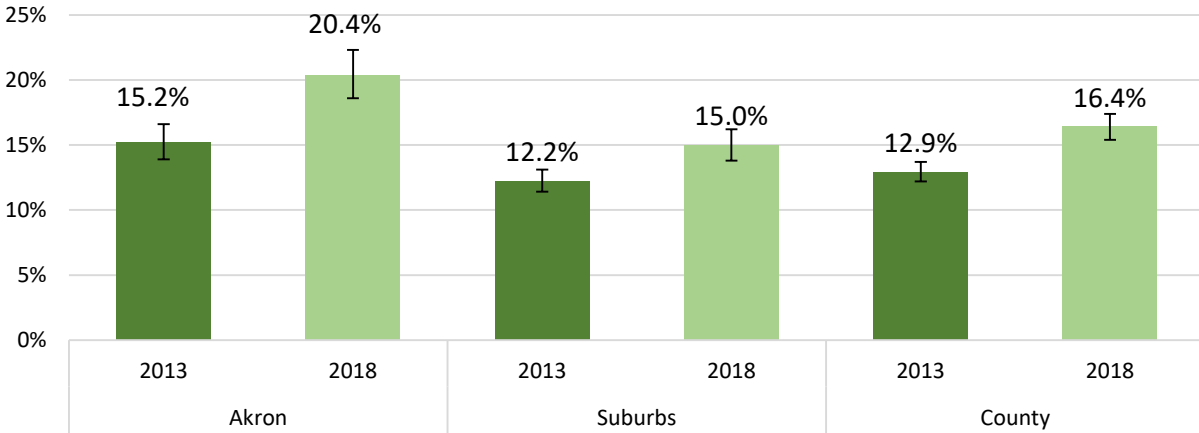
Overall and Regional Prevalence

Akron		Suburbs		County	
% (Confidence Interval)		% (Confidence Interval)		% (Confidence Interval)	
2013	2018	2013	2018	2013	2018
Overweight (Having a BMI >85th percentile and <95th percentile for age and sex. Calculated from self-reported height and weight, adjusted for sex and age.)					
19.2% (17.2 – 21.4) 422	18.5% (16.6 – 20.6) 387	14.5% (13.1 – 15.9) 935	17.7% (15.9 – 19.7) 1009	15.7% (14.5 – 16.9) 1357	17.9% (16.5 – 19.5) 1395
Obese (Having a BMI of >95th percentile for age and sex. Calculated from self-reported height and weight, adjusted for sex and age.)					
14.9% (12.8 – 17.3) 327	19.1% (17.1 – 21.4) 400	10.7% (9.6 – 11.8) 691	13.8% (12.3 – 15.4) 784	11.7% (10.8 – 12.8) 1018	15.2% (14.0 – 16.5) 1184
Described themselves as overweight (Reported as slightly or very overweight)					
27.1% (24.8 – 29.6) 706	27.2% (25.1 – 29.5) 684	29.2% (27.7 – 30.8) 2234	30.8% (28.8 – 32.8) 2161	28.7% (27.4 – 30.0) 2939	29.9% (28.3 – 31.5) 2845
Trying to lose weight					
46.5% (43.7 – 49.3) 1215	44.9% (42.4 – 47.5) 1143	43.2% (41.3 – 45.2) 3336	41.9% (40.3 – 43.6) 2969	44.1% (42.4 – 45.7) 4551	42.7% (41.3 – 44.1) 4113

Compared to 2013, the prevalence of a BMI of overweight (15.7% vs. 17.9%) and a BMI of obese (11.7% vs. 15.2%) was significantly higher among Summit County high school students in 2018. There was no significant difference between 2013 and 2018 in prevalence rates of describing oneself as slightly or very overweight (28.7% vs. 29.9%) or of trying to lose weight (44.1% vs. 42.7%).

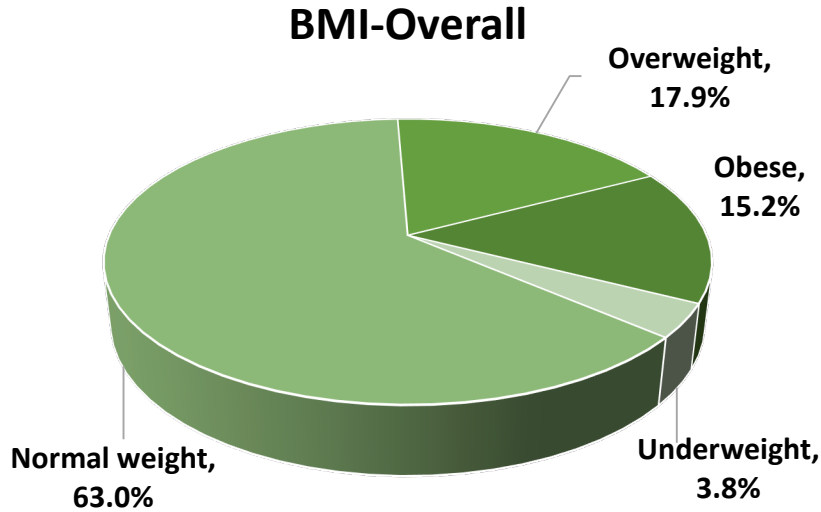
As illustrated in the graph below, the prevalence of obesity by BMI was significantly higher among middle school students in the city of Akron than in the suburbs of Summit County, while rates of obesity significantly increased since 2013 in the suburbs. There was no difference between regions or no increase in prevalence within regions from 2013 to 2018 for students with a BMI of overweight, students describing themselves as overweight, or students trying to lose weight.

Obesity, By region, 2013 vs. 2018

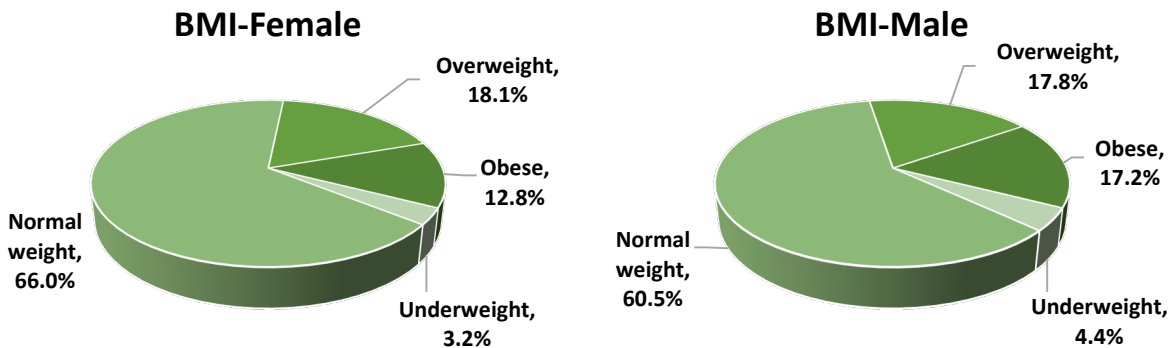


In Summit County, students were asked about their height and weight in order to calculate the student’s Body Mass Index (BMI). Obesity was defined as a BMI of $\geq 95^{\text{th}}$ percentile for age and sex. In 2018, the prevalence of obesity was significantly higher in Akron (20.4%) than in the suburbs of Summit County (15.0%) and the prevalence of obesity increased significantly in the suburbs (12.2% vs. 15.0%) since 2013.

The following three charts depict the distribution of Body Mass Index (BMI) classifications among Summit County High School students overall and by gender. In addition to the category of obese described above, the classifications of overweight, normal weight, and underweight are reported. Overweight was defined as a BMI of ≥ 85 th percentile and < 95 th percentile for age and sex. Normal weight was defined as a BMI of ≥ 5 th percentile and < 85 th percentile for age and sex. Underweight was defined as a BMI of < 5 th percentile for age and sex.

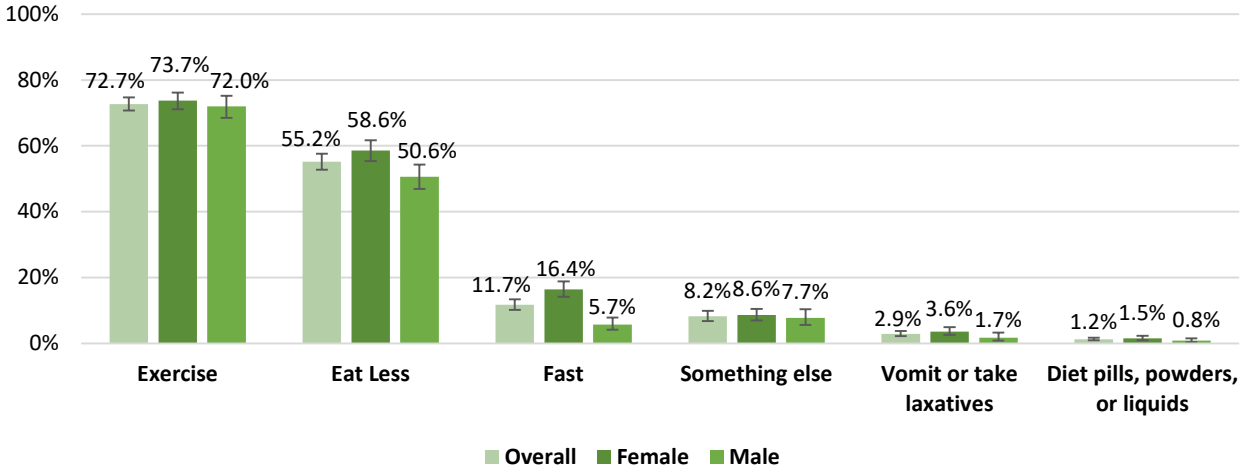


Thirty-seven percent of Summit County high school students had a BMI for their age and sex that put them into a category of risk (underweight, overweight, or obese). In addition, male students were significantly more likely than female students (39.4% vs. 34.1%) to have BMI's that put them into a risk category. It is important to note that BMI is calculated using self-reported height and weight and, therefore, may underestimate the actual prevalence of overweight and obese.



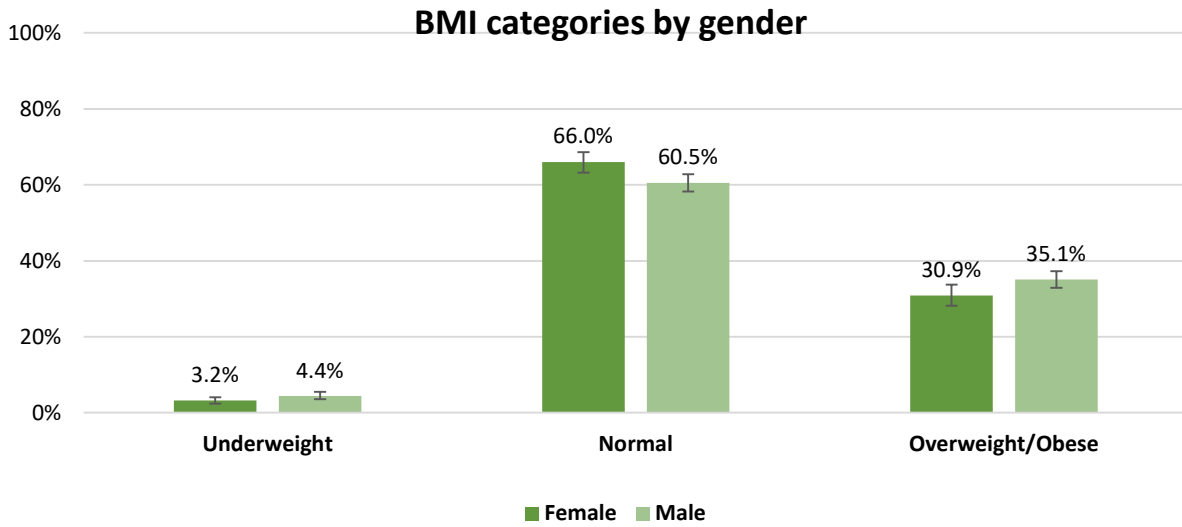
In Summit County, students were asked to choose all that applied from a list of weight loss and/or weight control options that they engaged in during the 30 days before completing the survey. Of the students who were trying to lose weight (42.7% of students), the graph below shows their responses for each option listed. The most common weight loss efforts included exercise (72.7%) and eating less/lower fat foods (58.6%). Female students were more likely to eat less (58.6% vs. 50.6%) and fast (16.4% vs. 5.7%), than male students, respectively.

Weight loss/control efforts

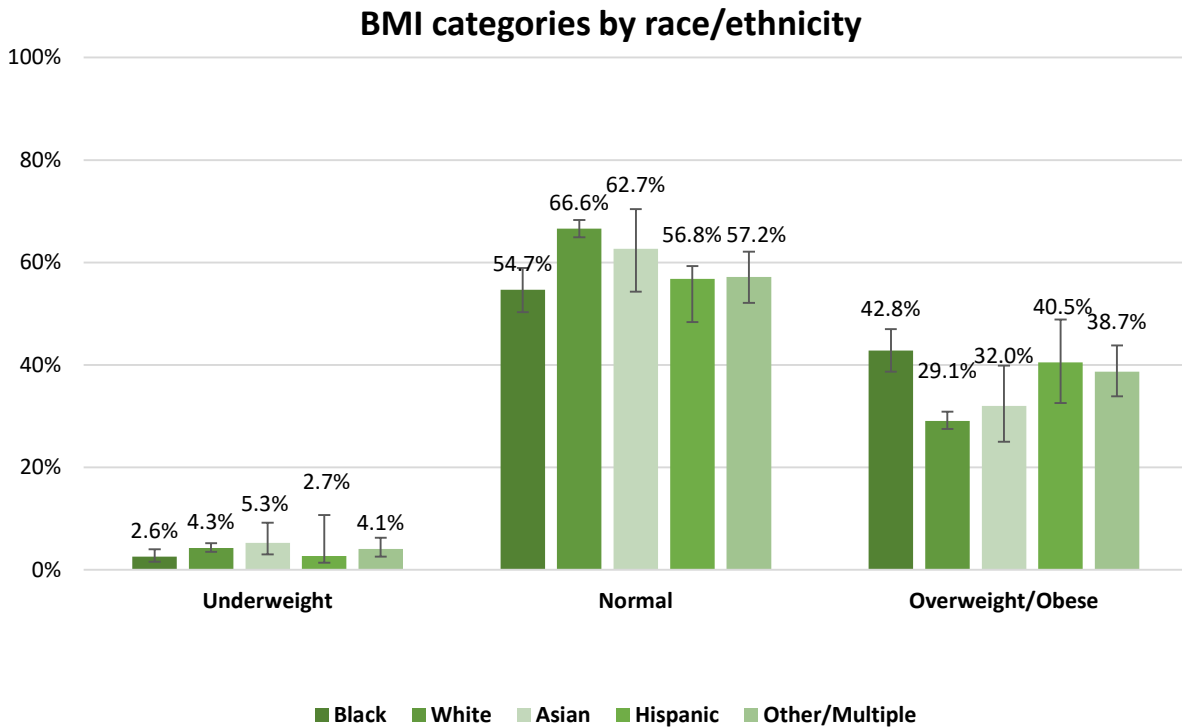


BMI categories of Underweight, Normal weight and Overweight/Obese were further examined by gender, race/ethnicity, grade level and by region of the county. The graphs below depict these analyses.

- Female (66.0%) students were more likely than male (60.5%) students to be of normal weight.

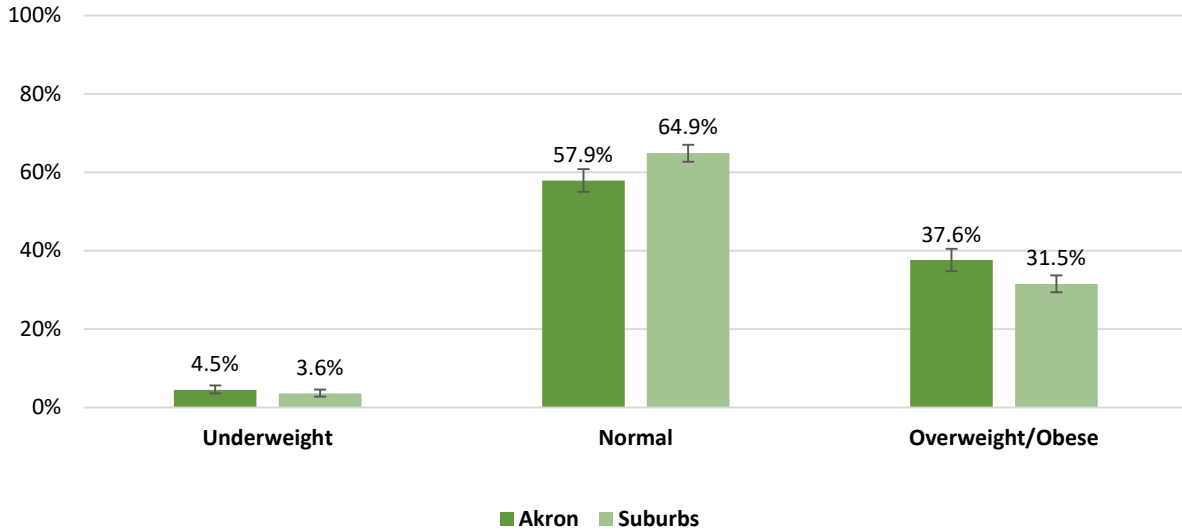


- As seen below, White (66.6%) students were more likely to be of normal weight than Black, Hispanic, and Other/Multiple students (54.7%, 56.8%, 57.2%) respectively. White (29.1%) students were also less likely to be overweight/obese than Black, Hispanic, and Other/Multiple students (42.8%, 40.5%, 38.7%) respectively.



- There were no significant differences reported by grade level in BMI categories of Underweight, Normal Weight, and Overweight/Obese.
- Students in the city of Akron (37.6%) were more likely overweight or obese than students in the suburbs (31.5%), while students in the suburbs (64.9%) were more likely to be of normal weight than students in the city of Akron (57.9%).

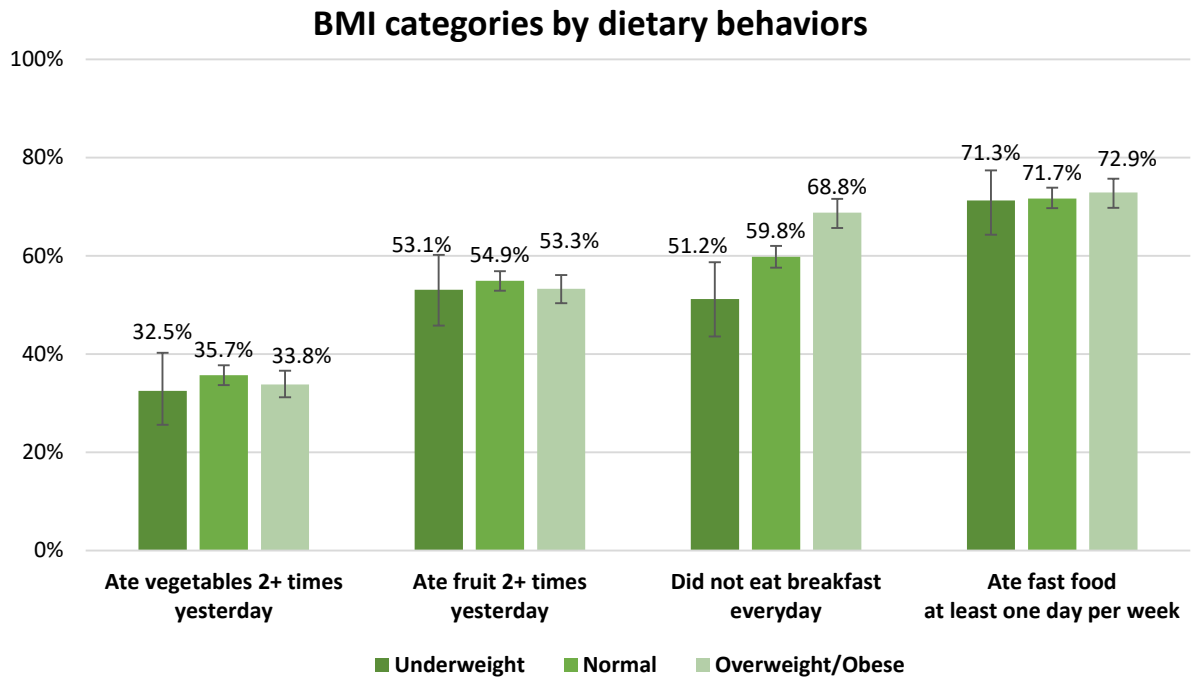
BMI categories by region



BMI categories of Underweight, Normal weight and Overweight/Obese were further examined for possible associations with dietary behaviors, physical activity and sedentary behaviors and perceptions of weight. The graphs below depict these analyses.

BMI Category by Dietary Behaviors:

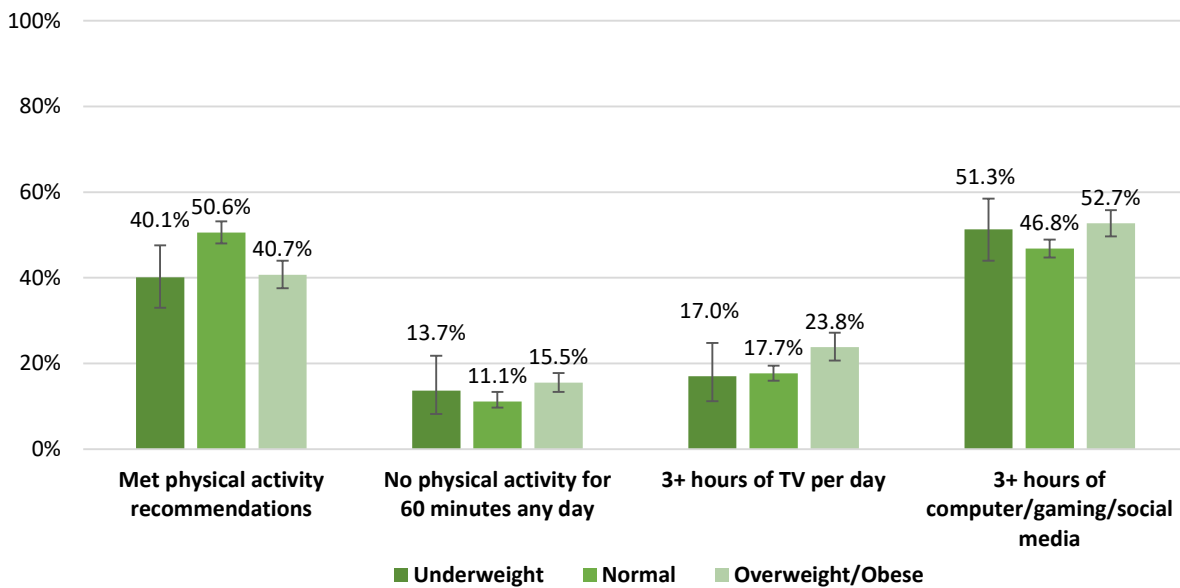
- The prevalence of not eating breakfast every day during the week before completing the survey was higher among overweight/obese (68.8%) students than among underweight (51.2%) and normal weight (59.8%) students.
- The prevalence of having eaten 2 or more vegetables and having eaten 2 or more fruit the day before the survey was similar for students within the three BMI categories.
- The prevalence for having eaten food from a fast food restaurant at least once during the week before completing the survey was similar for the three BMI categories.



BMI Category by Physical Activity and Sedentary Behaviors:

- The prevalence of having engaged in physical activity that meets recommendations (increased one’s heart rate and made one breathe hard some of the time for a total of at least 60 minutes per day on 5 or more of 7 days) was significantly higher among normal weight (50.6%) students than underweight (40.1%) or overweight/obese (40.7%) students.
- The prevalence of not having engaged in physical activity (that increased one’s heart rate and made one breathe hard some of the time for a total of at least 60 minutes on any of the past 7 days) was similar for students in the three BMI categories.
- The prevalence of watching 3+ hours of television per day on an average school day was higher for overweight/obese (23.8%) students than for students of normal weight (17.7%).
- The prevalence of playing video or computer games or using a computer for something that was not school work for 3+ hours on an average school day was also significantly higher among overweight/obese (52.7%) students than among normal weight students (46.8%).

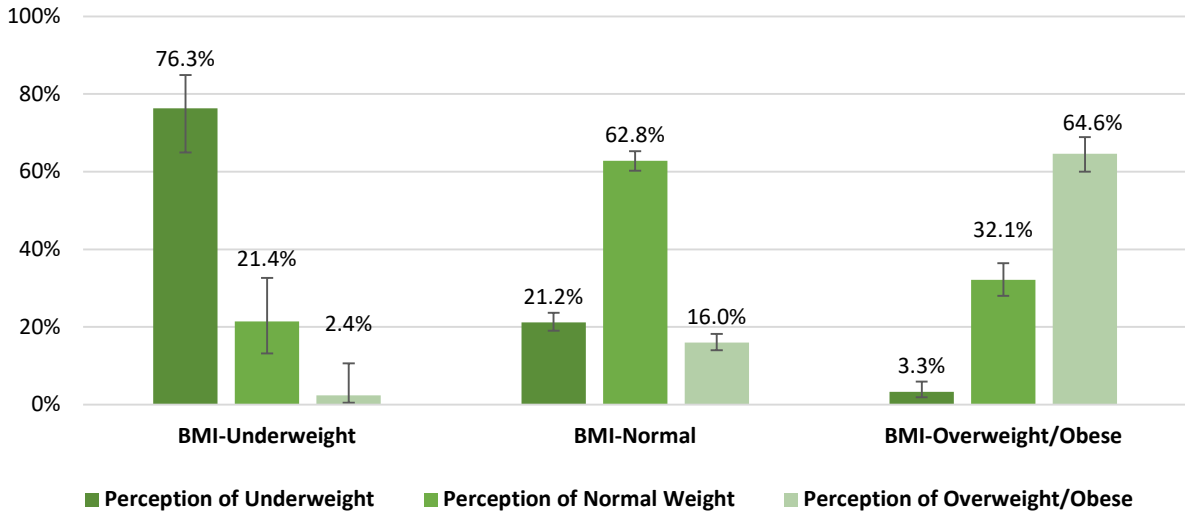
**BMI categories
by physical activity and sedentary behavior**



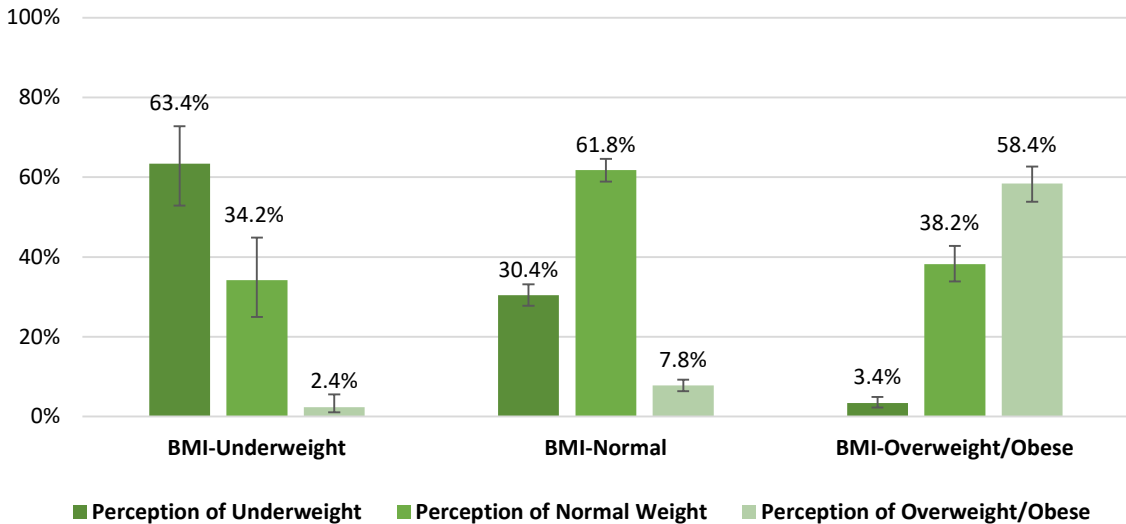
Discordance of BMI Category and Perception of Weight by Gender

Among students in Summit County, discordance existed for > 20 – 30%% of students in each BMI category (Underweight, Normal Weight, Overweight/Obese) when examining their perception of weight status.

Female-BMI categories by perception of weight



Male-BMI categories by perception of weight



As illustrated in the figures on the previous page, discordance is demonstrated in the area of weight perception:

Of students in Underweight BMI category by self-reported weight and height,

- 76.3% of female students and 63.4% of male students **considered themselves to be Underweight.**
- 21.4% of female students and 34.2% of male students considered themselves to be Normal Weight.
- 2.4% of female students and 2.4% of male students considered themselves to be Overweight/Obese.

Of students in Normal Weight BMI category by self-reported weight and height,

- 62.8% of female students and 61.8% of male students **considered themselves to be Normal Weight.**
- 21.2% of female students and 30.4% of male students considered themselves to be Underweight.
- 16.6% of female students and 7.1% of male students considered themselves to be Overweight/Obese.

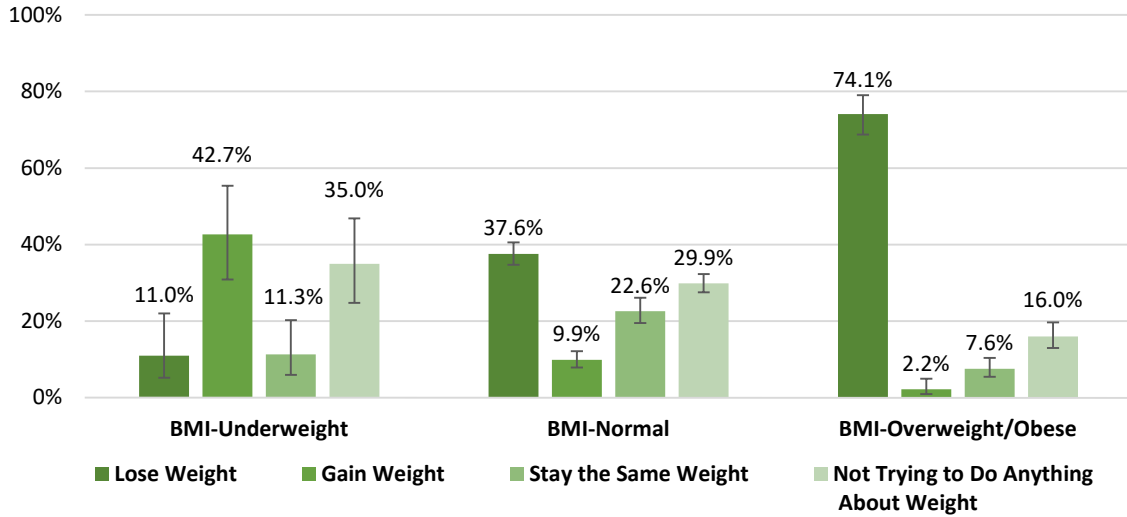
Of students in Overweight/Obese BMI category by self-reported weight and height,

- 64.6% of female students and 58.4% of male students **considered themselves to be Overweight/Obese.**
- 3.3% of female students and 3.4% of male students considered themselves to be Underweight.
- 32.1% of female students and 38.2% of male students considered themselves to be Normal Weight.

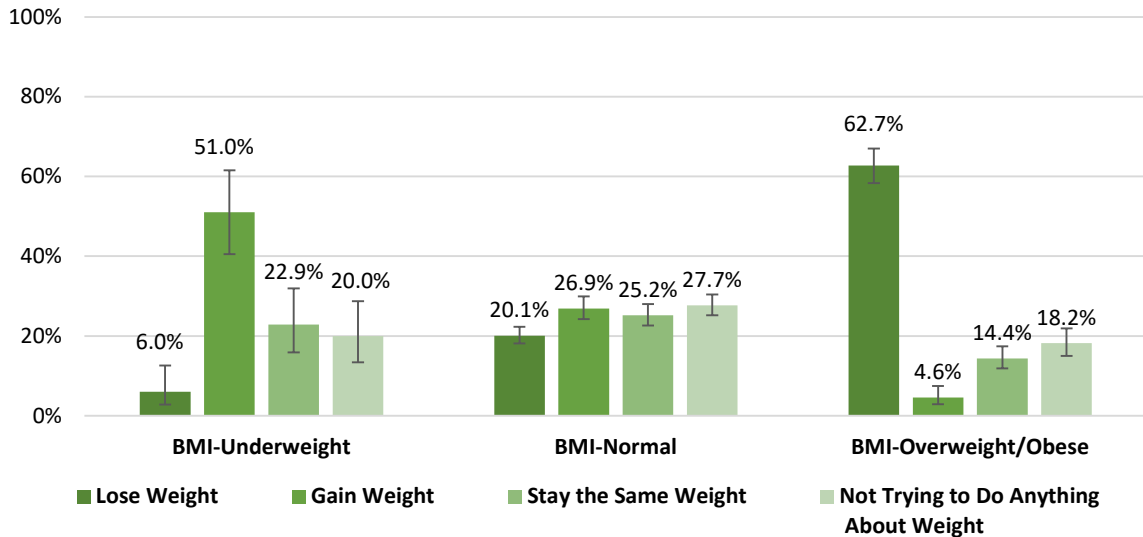
Discordance of BMI Category and Weight Loss/Control Efforts by Gender

Among students in Summit County, discordance existed for a varying proportion of students in each BMI category (Underweight, Normal Weight, Overweight/Obese) when examining their weight loss/control efforts.

Female-BMI categories by trying to do about weight



Male-BMI categories by trying to do about weight



As illustrated in the figures on the previous page, discordance is demonstrated in the area of weight loss efforts:

Of students in Underweight BMI category by self-reported weight and height,

- 11.0% of female students and 6.0% of male students were trying to **lose weight**.
- 42.7% of female students and 51.0% of male students were trying to **gain weight**.
- 11.3% of female students and 22.9% of male students were trying to **stay the same weight**.

Of students in Normal Weight BMI category by self-reported weight and height,

- 37.6% of female students and 20.1% of male students were trying to **lose weight**.
- 9.9% of female students and 26.9% of male students were trying to **gain weight**.
- 22.6% of female students and 25.2% of male students were trying to **stay the same weight**.

Of students in Overweight/Obese BMI category by self-reported weight and height,

- 74.1% of female students and 62.7% of male students were trying to **lose weight**.
- 2.2% of female students and 4.6% of male students were trying to **gain weight**.
- 7.6% of female students and 14.4% of male students were trying to **stay the same weight**.

Demographics

Described themselves as overweight			
Category	%	CI	
Gender			
Female	33.1	30.9	35.3
Male	26.7	25.0	28.5
Race/Ethnicity			
White	30.5	28.9	32.1
Black	27.0	23.7	30.5
Asian	29.9	24.0	36.6
Hispanic	36.9	30.3	44.0
Other	34.6	29.9	39.5
Grade			
7th	27.8	25.7	30.1
8th	31.9	29.6	34.2
Total	29.9	28.3	31.5

In Summit County, 29.9% of students describe themselves as slightly or very overweight. The prevalence of describing oneself as slightly or very overweight was higher among female (33.1%) students than male (26.7%) students.

Trying to lose weight			
Category	%	CI	
Gender			
Female	50.0	47.8	52.1
Male	36.1	34.1	38.1
Race/Ethnicity			
White	42.5	40.8	44.1
Black	41.1	37.9	44.4
Asian	44.7	37.4	52.1
Hispanic	49.5	42.4	56.6
Other	51.0	46.3	55.6
Grade			
7th	41.2	39.1	43.3
8th	44.5	42.7	46.2
Total	42.7	41.3	44.1

In Summit County, 42.7% of students are trying to lose weight. The prevalence of trying to lose weight was higher among female (50.0%) than male (36.1%) students. The prevalence of trying to lose weight was higher among students of Other or Multiple (51.0%) race/ethnicity than Black (41.1%) or White (42.5%) students.

Overweight			
Category	%	CI	
Gender			
Female	18.1	16.0	- 20.4
Male	17.8	16.0	- 19.8
Race/Ethnicity			
White	16.7	15.3	- 18.2
Black	21.5	17.7	- 25.9
Asian	15.7	10.5	- 22.7
Hispanic	23.2	17.4	- 30.3
Other	18.4	15.1	- 22.3
Grade			
7th	17.1	14.9	- 19.5
8th	18.9	17.0	- 20.9
Total	17.9	16.5	- 19.5

In Summit County, 17.9% of students reported heights and weights consistent with being overweight. The prevalence of being overweight did not differ between students of different gender, race/ethnicity, or grade level.

Obese			
Category	%	CI	
Gender			
Female	12.8	11.0	- 14.8
Male	17.2	15.6	- 19.0
Race/Ethnicity			
White	12.4	11.2	- 13.7
Black	21.3	17.9	- 25.0
Asian	16.4	11.3	- 23.2
Hispanic	17.3	11.7	- 24.7
Other	20.3	16.4	- 24.9
Grade			
7th	15.0	13.4	- 16.7
8th	15.4	13.4	- 17.5
Total	15.2	14.0	- 16.5

In Summit County, 15.2% of students reported heights and weights consistent with being obese. The prevalence of being obese was higher among male (17.2%) students than female (12.8%) students. The prevalence of being obese was higher for Black (21.3%) and Other/Multiple (20.3%) students than White (12.4%) students.

ⁱ National Center for Health Statistics. Prevalence of Overweight among Children and Adolescents: United States, 1999-2002. National Center for Health Statistics Web site. Available at: <http://www.cdc.gov/nchs/products/pubs/pubd/hestats/overwght99.htm>. Accessed July 24, 2008.

ⁱⁱ Ferraro, K., Thorpe, R., Wilkinson, J. 2003. The life course of severe obesity: Does childhood overweight matter? *Journal of Gerontology*. 58B(2):S110-S119.

ⁱⁱⁱ Mokdad, A., Ford, E., Bowman, B., et al. 2003. Prevalence of obesity, diabetes, and obesity-related health risk factors, 2001. *Journal of the American Medical Association*. 289(1):76-79.

^{iv} Freedman, D., Khan, L., Serdula, M., Dietz, W., Srinivasan, S., Berenson, G. 2005. The relation of childhood BMI to adult adiposity: The Bogalusa Heart Study. *Pediatrics*. 115(1):22-27.

Section 12: Dietary Behaviors

The 2018 Summit County Middle School YRBS asked students about their consumption of fruits and vegetables, milk, breakfast, and fast food. Diet and nutrition have important links to adolescent health and well-being, as well as to major causes of morbidity and mortality later in life. Fruits and vegetables are good sources of complex carbohydrates, vitamins, minerals, and other substances that are important for good health. There is probable evidence to suggest that dietary patterns with higher intakes of fruits and vegetables are associated with a decreased risk for some types of cancer,^{i,ii,iii} cardiovascular disease,^{iv} and stroke.^v Although data are limited, an increased intake of fruits and vegetables appears to be associated with a decreased risk of being overweight.

Overall and Regional Prevalence

Akron		Suburbs		County	
% (Confidence Interval) Population N		% (Confidence Interval) Population N		% (Confidence Interval) Population N	
2013	2018	2013	2018	2013	2018
Ate fruit two or more times yesterday					
47.9% (45.4 – 50.5) 1255	52.5% (50.2 – 54.8) 1336	49.7% (47.8 – 51.6) 3852	54.5% (52.6 – 56.4) 3867	49.3% (47.7 – 50.8) 5107	54.0% (52.5 – 55.5) 5203
Ate vegetables two or more times yesterday					
33.0% (30.7 – 35.4) 857	37.0% (34.5 – 39.6) 938	31.7% (30.1 – 33.4) 2460	34.8% (33.1 – 36.6) 2470	32.1% (30.7 – 33.4) 3317	35.4% (34.0 – 36.9) 3408
Drank soda or pop one or more times yesterday (Not including diet soda or diet pop)					
51.9% (49.5 – 54.4) 1332	56.1% (53.4 – 58.7) 1425	46.8% (44.7 – 48.9) 3619	46.4% (44.3 – 48.4) 3286	48.1% (46.4 – 49.8) 4951	48.9% (47.3 – 50.6) 4711
Drank beverages high in caffeine one or more times yesterday (Not including soda, pop or tea)					
24.5% (22.0 – 27.2) 616	21.4% (19.3 – 23.7) 541	20.1% (18.5 – 21.9) 1550	17.9% (16.1 – 19.8) 1267	21.2% (19.8 – 22.7) 2165	18.8% (17.4 – 20.3) 1808
Did not eat breakfast every day (During the 7 days before the survey)					
62.6% (59.9 – 65.2) 1547	66.5% (63.7 – 69.2) 1696	59.0% (57.0 – 60.9) 4509	61.7% (59.6 – 63.9) 4373	59.8% (58.2 – 61.4) 6056	63.0% (61.3 – 64.7) 6069
Ate fast food one or more times/week (During the 7 days before the survey)					
67.4% (64.7 – 70.0) 1689	70.4% (68.2 – 72.4) 1773	66.4% (64.5 – 68.2) 5099	71.0% (69.0 – 72.9) 5012	66.6% (65.1 – 68.2) 6788	70.9% (69.3 – 72.4) 6785
Went hungry because not enough food at home (Sometimes, most of the time, or always; during the 30 days before the survey)					
N/A	17.8% (16.1 – 19.5) 443	N/A	13.2% (11.6 – 14.9) 930	N/A	14.4% (13.1 – 15.7) 1373



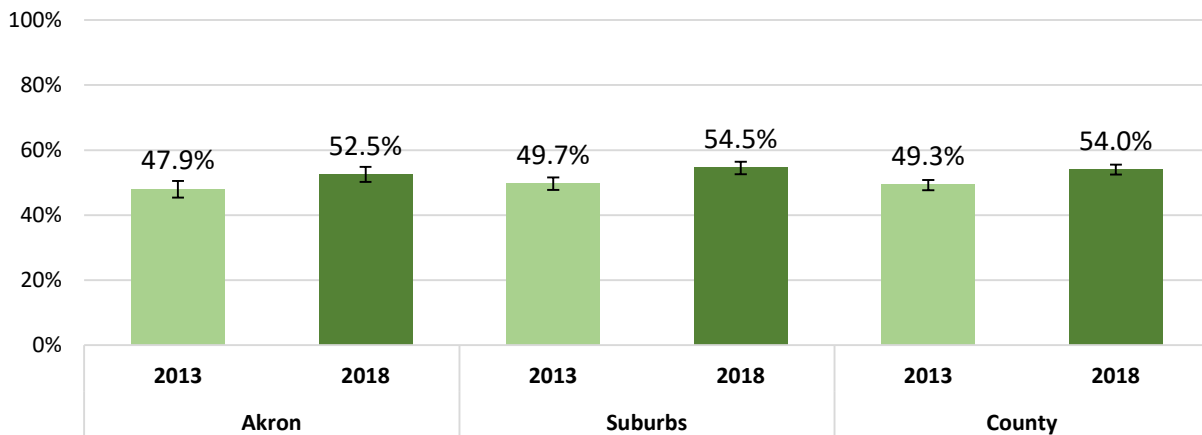
Compared to 2013, Summit County middle school students in 2018 were significantly more likely to have eaten fruit 2 or more times the day before completing the survey (49.3% vs. 54.0%), to have eaten vegetables two or more times the day before completing the survey (32.1% vs. 35.4%), and to have eaten fast food one or more times per week (66.6% vs. 70.9%). The prevalence of drinking soda or pop yesterday, drinking beverages high in caffeine one or more times yesterday, and not eating breakfast every day during the past week, remained similar from 2013 to 2018. The prevalence of going hungry sometimes, most of the time or always is not known for 2013.

There were no regional differences between Akron and its surrounding suburbs in the 2018 prevalence of students who had eaten fruits (52.5% vs. 54.5%) or vegetables (37.0% vs. 34.8%) at least twice the day before completing the survey, who drank at least one drink high in caffeine the day before completing the survey (17.5% vs. 20.1%), who did not eat breakfast every day during the past week (66.5% vs. 61.7%), and who had eaten fast food one or more times per week (70.4% vs. 71.0%).

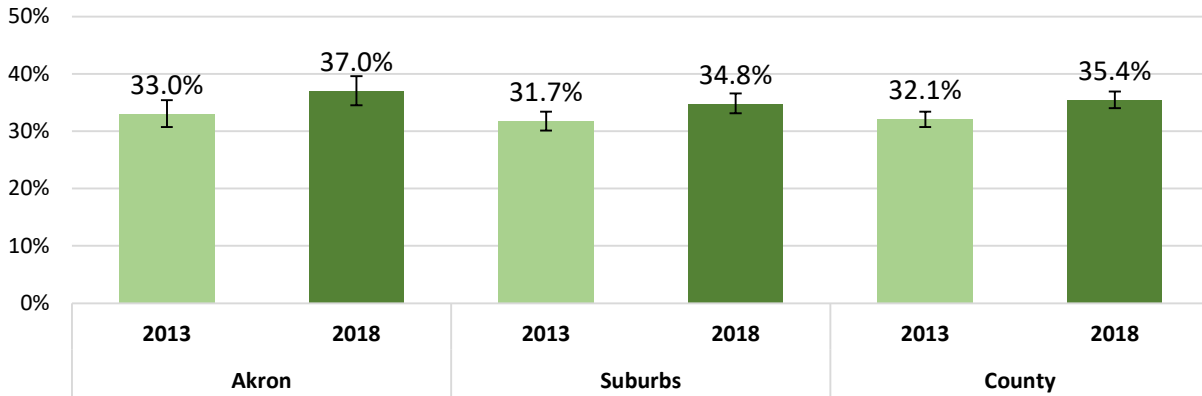
The prevalence of drinking soda or pop at least once yesterday was significantly higher in Akron than in the suburbs (56.1% vs. 46.4%), as was the prevalence of having gone hungry sometimes, most of the time or always during the past 30 days because there was not enough food at home (17.8% vs. 13.2%).

The graphs below illustrate changes over time and significant differences between the regions of Akron and the suburbs, in dietary behaviors.

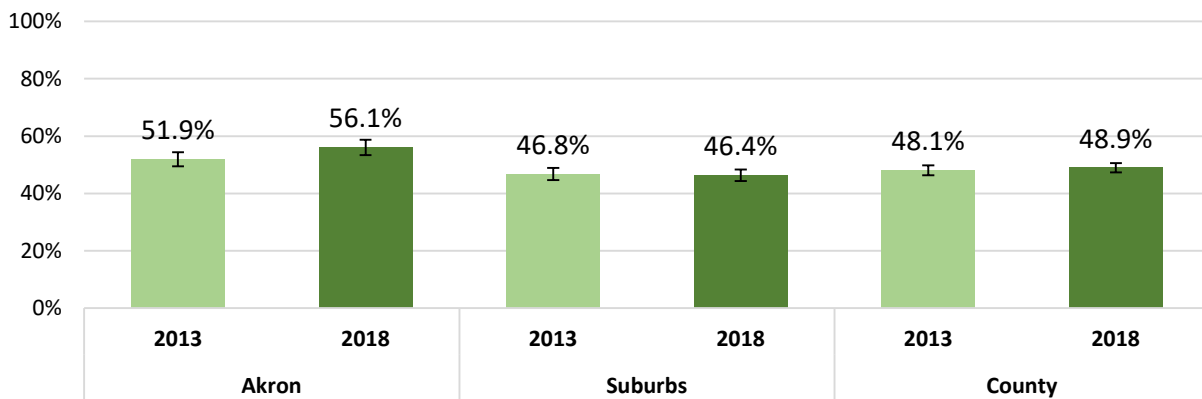
Ate fruit at least twice yesterday, By region, 2013 vs. 2018



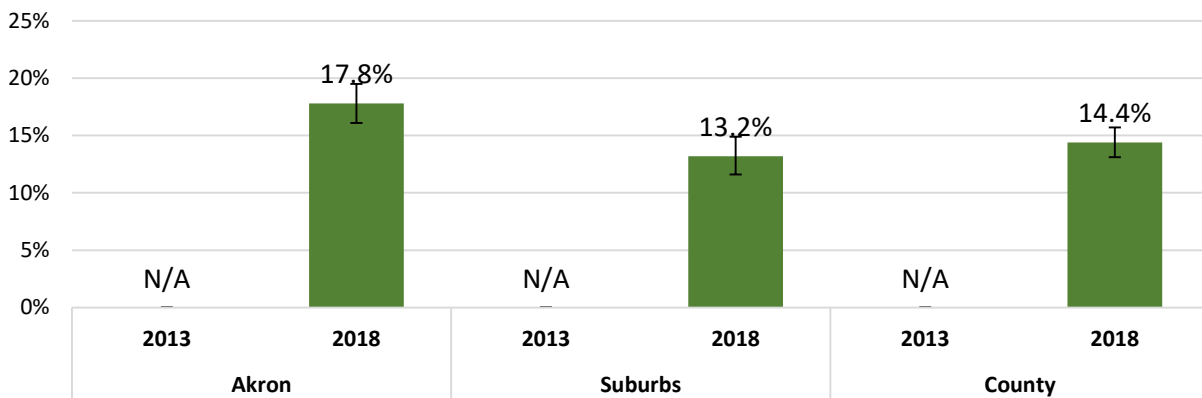
**Ate vegetables at least twice yesterday,
by region, 2013 vs. 2018**



**Drank soda or pop at least once yesterday,
by region, 2013 vs. 2018**



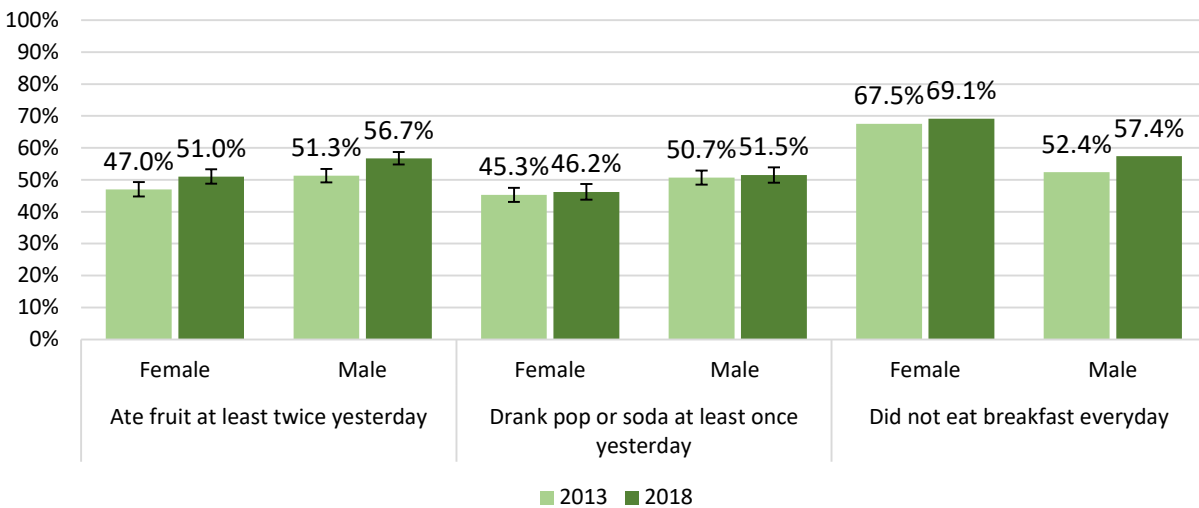
**Went hungry because there was not enough food at home,
By region, 2018**

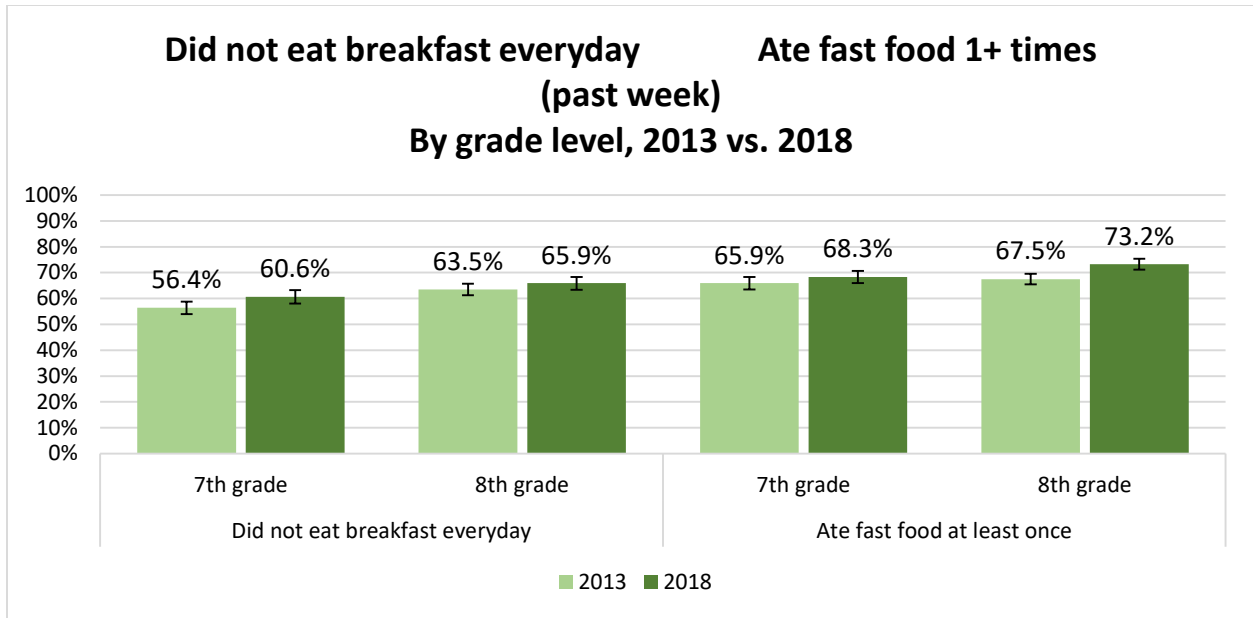


In Summit County, the prevalence of having eaten fruit at least twice yesterday was significantly higher among males than females (56.7% vs. 51.0%) as was the prevalence of drinking pop or soda at least once yesterday (51.5% vs. 46.2%). The prevalence of having not eaten breakfast every day during the past 7 days was higher among females than males (69.1% vs. 57.4%), and higher among 8th grade students than 7th grade students (65.9% vs. 60.6%). The prevalence of having eaten fast food at least once during the past 7 days was higher among 8th grade students than 7th grade students (73.2% vs. 68.3%).

The graphs below illustrate significant differences in dietary behaviors between the demographic groups of gender and grade level, over time.

Ate fruit 2+ times yesterday Drank soda 1+ time yesterday
Did not eat breakfast everyday (past week)
By gender, 2013 vs. 2018

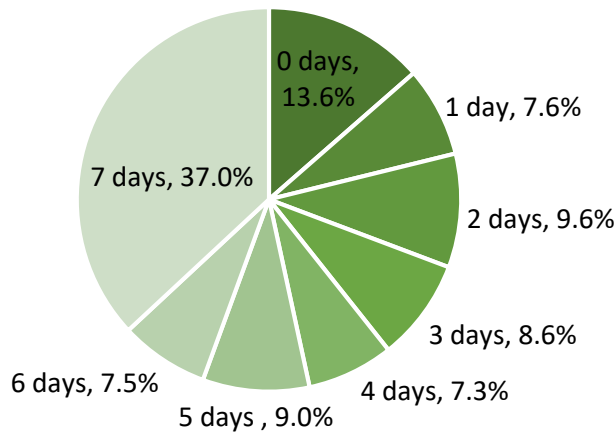




Eating breakfast every day may reduce the risk for obesity and insulin resistance syndrome, an early sign of developing diabetes, by as much as 35 to 50 percent.^{vi} Breakfast eaters tend to eat fewer calories, less saturated fat and cholesterol and have better overall nutritional status than breakfast skippers.^{vii}

The pie chart below depicts the frequency of breakfast consumption during the 7 days before the survey, among Summit County Middle School students; 13.6% of middle school students did not eat breakfast on any of the 7 days before the survey. However, 37.0% of students reported eating breakfast on all 7 days before the survey.

Breakfast consumption in the past 7 days



Demographics

Ate at least two servings of fruit yesterday			
Category	%	CI	
Gender			
Female	51.0	48.8	53.3
Male	56.7	54.8	58.7
Race/Ethnicity			
White	54.8	52.9	56.6
Black	50.7	47.5	53.9
Asian	60.4	55.1	65.5
Hispanic	59.3	51.6	66.5
Other	55.1	50.5	59.7
Grade			
7th	55.8	53.3	58.2
8th	52.3	50.1	54.4
Total	54.0	52.5	55.5

Ate at least two servings of vegetables yesterday			
Category	%	CI	
Gender			
Female	35.3	33.1	37.5
Male	35.6	33.7	37.6
Race/Ethnicity			
White	36.1	34.4	37.9
Black	31.1	27.9	34.4
Asian	50.4	44.9	55.8
Hispanic	36.7	29.6	44.4
Other	37.1	32.9	41.6
Grade			
7th	36.8	34.7	39.0
8th	33.8	31.9	35.9
Total	35.4	34.0	36.9

In Summit County, 54.0% of students had eaten fruit two or more times on the day before the survey. The prevalence of eating at least two servings of fruit yesterday was higher among male than female (56.7% and 51.0%) students. The prevalence of eating at least two servings of fruit yesterday was higher among Asian (60.4%) students than Black (50.7%) students.

In Summit County, 35.4% of students ate at least two servings of vegetables on the day before the survey. The prevalence of having eaten two or more servings of vegetables on the day before the survey was higher for Asian (50.4%) students than for White, Black, Hispanic, and Other/Multiple race (36.1%, 31.1%, 36.7%, 37.1%) students.



Drank soda or pop one or more times			
Category	%	CI	
Gender			
Female	46.2	43.8	- 48.7
Male	51.5	49.1	- 53.9
Race/Ethnicity			
White	44.6	42.7	- 46.5
Black	59.2	55.3	- 63.0
Asian	41.9	36.0	- 48.1
Hispanic	54.2	46.4	- 61.8
Other	56.9	52.7	- 61.1
Grade			
7th	50.1	47.3	- 52.8
8th	47.7	45.3	- 50.1
Total	48.9	47.3	- 50.6

Drank beverages high in caffeine one or more times			
Category	%	CI	
Gender			
Female	19.6	17.8	- 21.7
Male	18.1	16.2	- 20.1
Race/Ethnicity			
White	18.9	17.3	- 20.6
Black	17.7	14.8	- 21.0
Asian	14.9	11.1	- 19.6
Hispanic	27.1	21.2	- 33.9
Other	25.0	21.4	- 28.9
Grade			
7th	17.5	15.8	- 19.5
8th	20.1	18.1	- 22.2
Total	18.8	17.4	- 20.3

In Summit County, 48.9% of students drank pop at least once on the day before the survey. The prevalence of drinking soda or pop one or more times on the day before the survey was higher among male (51.5%) students than female (46.2%) students. The prevalence of drinking soda or pop one or more times on the day before the survey was higher among Black and Other/Multiple race (59.2%, 56.9%) students than White or Asian (44.6%, 41.9%) students.

In Summit County, 18.8% of students had a drink that was high in caffeine one or more times on the day before the survey. The prevalence of drinking a beverage high in caffeine one or more times the day before the survey was higher among Hispanic and Other/Multiple race (27.1%, 25.0%) students than White, Black or Asian (18.9%, 17.7%, 14.9%) students.

Did not eat breakfast every day during the past 7 days			
Category	%	CI	
Gender			
Female	69.1	66.7	- 71.5
Male	57.4	55.1	- 59.7
Race/Ethnicity			
White	59.6	57.7	- 61.4
Black	70.0	66.3	- 73.6
Asian	62.5	55.1	- 69.3
Hispanic	63.7	57.1	- 69.8
Other	72.7	68.4	- 76.6
Grade			
7th	60.6	58.0	- 63.2
8th	65.9	63.4	- 68.3
Total	63.0	61.3	- 64.7

In Summit County, 63.0% of students did not eat breakfast every day during the 7 days prior to the survey. The prevalence of not eating breakfast every day was higher among female (69.1%) students than male (57.4%) students. The prevalence of not eating breakfast everyday was higher among Black and Other/Multiple race (70.0%, 63.0%) students than White (59.6%) students. The prevalence of not eating breakfast everyday was higher among 8th grade (65.9%) students than 7th grade (60.6%) students.

Ate fast food on one or more days during the past 7 days			
Category	%	CI	
Gender			
Female	71.0	68.7	- 73.3
Male	70.7	68.8	- 72.5
Race/Ethnicity			
White	70.0	68.4	- 71.7
Black	75.1	71.2	- 78.6
Asian	48.1	42.2	- 54.1
Hispanic	71.0	64.9	- 76.5
Other	70.2	65.6	- 74.4
Grade			
7th	68.3	66.0	- 70.6
8th	73.2	71.1	- 75.3
Total	70.9	69.3	- 72.4

In Summit County, 70.9% of students ate fast food on one or more days during the 7 days prior to the survey. The prevalence of eating fast food was higher among White, Black, Hispanic and Other/Multiple race (70.0%, 75.1%, 71.0%, 70.2%) students than Asian (48.1%) students. The prevalence of eating fast food was higher among 8th grade (73.2%) than 7th grade (68.3%) students.



Went hungry because not enough food in the home			
Category	%	CI	
Gender			
Female	14.9	13.0	17.1
Male	13.7	12.1	15.4
Race/Ethnicity			
White	10.7	9.7	11.9
Black	21.8	18.4	25.7
Asian	22.6	17.3	29.0
Hispanic	23.8	17.4	31.7
Other	18.5	15.6	21.9
Grade			
7th	14.9	13.0	17.0
8th	14.0	12.2	16.1
Total	14.4	13.1	15.7

In Summit County, 14.4% of students went hungry sometimes, most of the time or always, during the past 30 days, because there was not enough food in their home. The prevalence of having gone hungry because there was not enough food in their home, was higher among Black, Asian, Hispanic and Other/Multiple race (21.8%, 22.6%, 23.8%, 18.9%) than among White (10.7%) students.

-
- ⁱ Key, T., Schatzkin, A., Willet, W., Allen, N., Spencer, E., Travis, R. 2004. Diet, nutrition, and the prevention of cancer. *Public Health Nutrition*. 7(1A):187-200.
 - ⁱⁱ Kushi, L., Byers, T., Doyle, C., Bandera, E., McCullough, M., McTiernan, A., Gansler, T., Andrews, K., Thun, M. 2006. American Cancer Society Guidelines on Nutrition and Physical Activity for Cancer Prevention: reducing the risk of cancer with healthy food choices and physical activity. *CA: A Cancer Journal for Clinicians*. 56:254-281.
 - ⁱⁱⁱ Vainio, H., Weiderpass, E. 2006. Fruit and vegetables in cancer prevention. *Nutrition and Cancer*. 54(1):111-42.
 - ^{iv} Bazzano, L., He, J., Ogden, L., Loria, C., Vupputuri, S., Myers, L., Whelton, P. 2002. Fruit and vegetable intake and risk of cardiovascular disease in US adults: the first National Health and Nutrition Examination Survey Epidemiologic Follow-up Study. *American Journal of Clinical Nutrition*. 76(1):93-99.
 - ^v He, F., Nowson, C., MacGregor, G. 2006. Fruit and vegetable consumption and stroke: meta-analysis of cohort studies. *Lancet*. 367(9507):320-326.
 - ^{vi} Pereira, M., Kartashov, A., Ebbeling, C., Van Horn, L., Slattery, M., Jacobs, D., Ludwig, D. 2005. Fast-food habits, weight gain, and insulin resistance (the CARDIA study): 15-year prospective analysis. *The Lancet*. 365(9453):36-42.
 - ^{vii} Wyatt HR, Grunwald OK, Mosca CL, Klem ML, Wing RR, Hill JO (2002). Long-term weight loss and breakfast in subjects in the National Weight Control Registry. *Obesity Research*; 10:78-82.

Section 13: Physical Activity

The 2018 Summit County Middle School YRBS asked students about their computer/video game usage and television watching habits, along with the amount of physical activity and sports team participation. Television (TV) viewing, computer usage, and video/DVD usage are all considered sedentary behaviors. Child and adolescent TV viewing, in particular, is associated with childhood and adult obesity; and youth who engage in less than two hours of TV viewing per day tend to be more active. Computer usage and video game playing are associated with physical inactivity among adolescents and young adults.

When students are watching television excessively, they are less likely to be spending time doing homework or reading, participating in after school activities, exercising frequently or being engaged in other intellectually stimulating activities.ⁱ Television watching is assessed in the same manner as having used a computer and played video games; with having watched 3 or more hours per day of television on an average school day considered a risky, sedentary behavior.

Healthy People 2020 Objectives	Summit County 2018	Status
<p>PA-8.2.2: Increase the proportion of children and adolescents aged 6 to 14 years who view television, videos, or play video games for no more than 2 hours a day to 86.8%.</p>	<p>79.5% of Summit County Middle School students watched television 2 or fewer hours per day on an average school day.</p>	<p>The objective has not been met.</p>
<p>PA-8.3.2: Increase the proportion of children and adolescents aged 6 to 14 years who use a computer or play computer games outside of school (for non-school work) for no more than 2 hours a day to 100%.</p>	<p>50.4% of Summit County Middle School students used a computer or played computer games outside of school (for non-school work) for 2 or fewer hours on an average school day.</p>	<p>The objective has not been met.</p>



Overall and Regional Prevalence

Akron		Suburbs		County	
% (Confidence Interval) Population N		% (Confidence Interval) Population N		% (Confidence Interval) Population N	
2013	2018	2013	2018	2013	2018
Did not participate in at least 60 minutes of physical activity on any day (During the 7 days before the survey.)					
18.3% (16.3 – 20.4) 445	21.8% (19.8 – 24.0) 539	11.7% (10.6 – 13.0) 895	11.9% (10.5 – 13.3) 833	13.3% (12.3 – 14.4) 1340	14.4% (13.2 – 15.8) 1372
Physically active at least 60 minutes/day on 5 or more days (During the 7 days before the survey.)					
40.4% (37.6 – 43.2) 982	39.3% (37.0 – 41.6) 970	50.7% (48.9 – 52.5) 3877	45.9% (43.5 – 48.4) 3226	48.2% (46.7 – 49.8) 4859	44.2% (42.2 – 46.2) 4196
Watched television 3 or more hours/day (On an average school day.)					
37.5% (34.9 – 40.2) 912	27.8% (25.4 – 30.4) 690	25.0% (23.5 – 26.7) 1918	17.9% (16.2 – 19.7) 1258	28.0% (26.6 – 29.5) 2830	20.5% (19.0 – 22.0) 1948
Used computers 3 or more hours/day (Played video or computer games or used a computer for something that was not school work on an average school day.)					
43.0% (40.4 – 45.6) 1040	54.9% (52.3 – 57.4) 1354	39.9% (38.0 – 41.8) 3051	47.7% (45.9 – 49.5) 3346	40.6% (39.1 – 42.2) 4091	49.6% (48.1 – 51.1) 4700
Played on at least one sports team (During the past 12 months.)					
53.4% (50.7 – 56.0) 1279	55.1% (52.5 – 57.7) 1359	69.9% (68.0 – 71.7) 5331	65.7% (63.3 – 68.1) 4625	65.9% (64.3 – 67.5) 6610	63.0% (61.0 – 64.9) 5983

Compared to 2013, Summit County middle school students in 2018 were significantly less likely to have been physically active for 60 or minutes per day on 5 of the past 7 days (48.2% vs. 44.2%), and less likely to have watched television for 3 or more hours per day (28.0% vs. 20.5%), but significantly more likely to have used a computer or played video games for something that is not school work for 3 or more hours per day (40.6% vs. 49.6%). There were no significant differences between 2013 and 2018 in the prevalence of not being physically active at least 60 minutes per day on any of the past 7 days (13.3% vs. 14.4%), or playing on at least one sports team (65.9% vs. 63.0%).

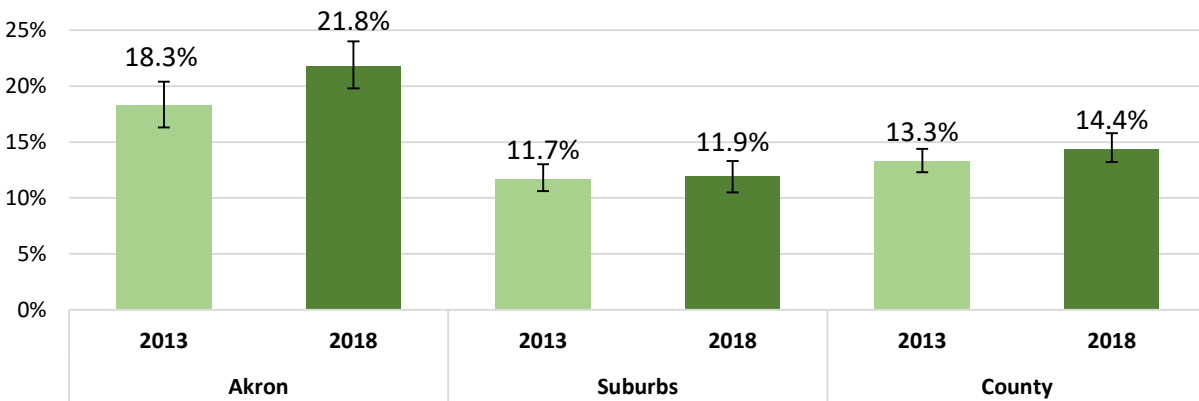
Regionally, the prevalence of not being physically active at least 60 minutes per day on any of the past 7 days was significantly higher in Akron than in the suburbs (21.8% vs. 11.9%). The prevalence of watching television for 3 or more hours per day was significantly higher in Akron than in the suburbs (27.8% vs. 17.9%), although there was a significant decrease in this behavior from 2013 to 2018 in both regions.

The prevalence of having used a computer or played video games for something that was not school work for 3 or more hours per day was significantly higher in Akron than in the suburbs (54.9% vs. 47.7%), although there was a significant increase in this behavior from 2013 to 2018 in both regions.

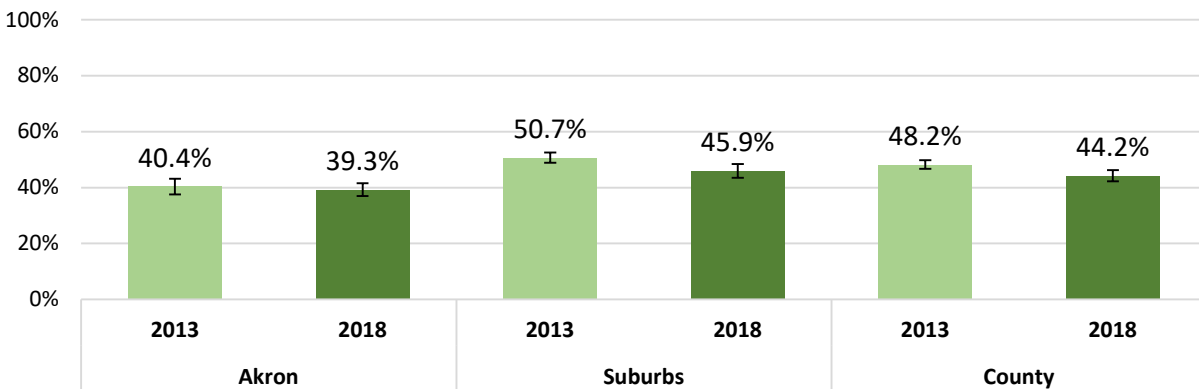
The prevalence of being physically active at least 60 minutes per day on 5 or more of the past 7 days was significantly lower in Akron than in the suburbs (39.3% vs. 45.9%), although there was a significant decrease in this behavior from 2013 to 2018 in the suburbs (50.7% vs. 45.9%). The prevalence of having played on one or more sports teams during the past 12 months was significantly lower in Akron than in the suburbs (55.1% vs. 65.7%).

The graphs below illustrate significant differences within these two regions from 2013 to 2018 for these physical activity behaviors.

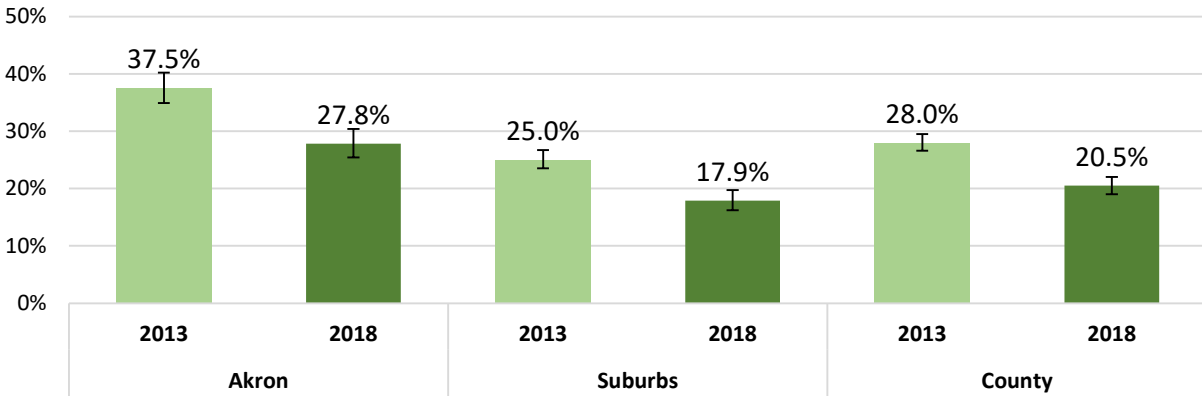
**Did not participate in at least 60 minutes of physical activity on any of the past 7 days
By region, 2013 vs. 2018**



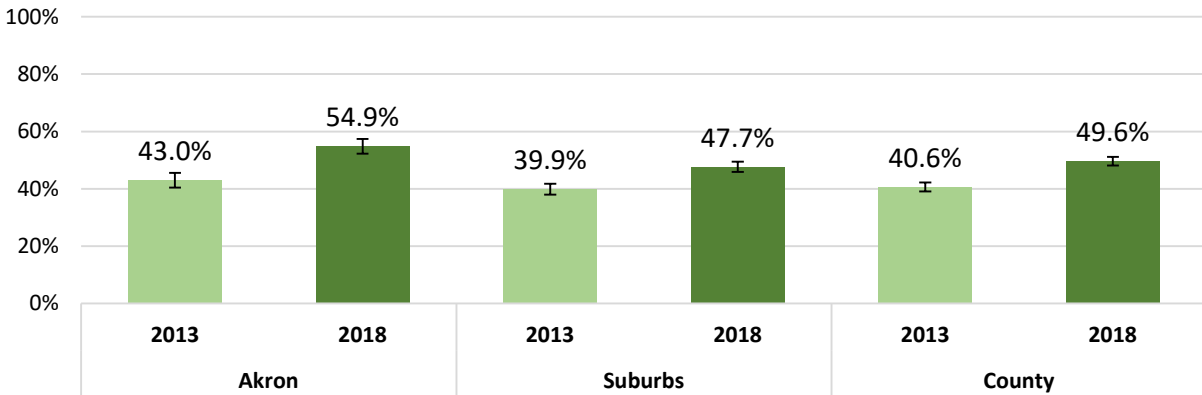
**Physically active at least 60 minutes per day on 5+ of the past 7 days
By region, 2013 vs. 2018**



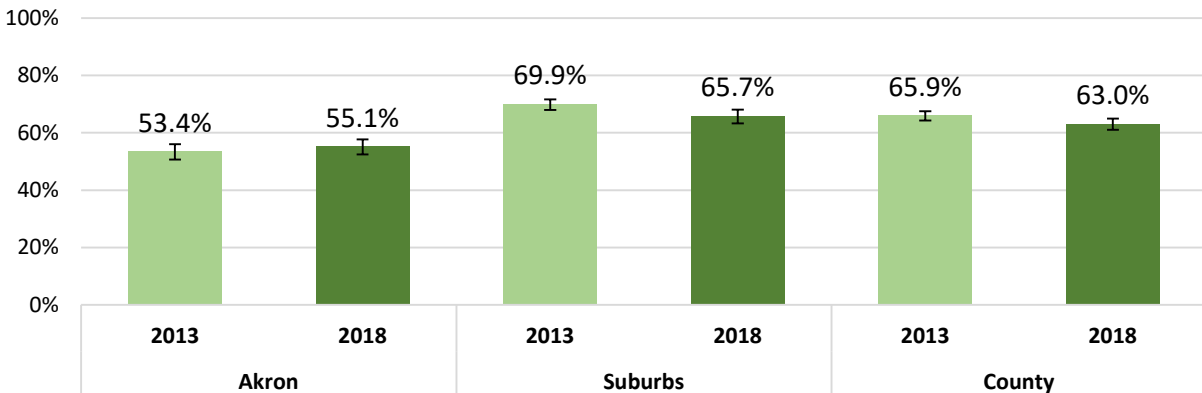
Watched television 3+ hours per day, By region, 2013 vs. 2018



Used computers 3+ hours per day, By region, 2013 vs. 2018



Played on at least one sports team, By region, 2013 vs. 2018

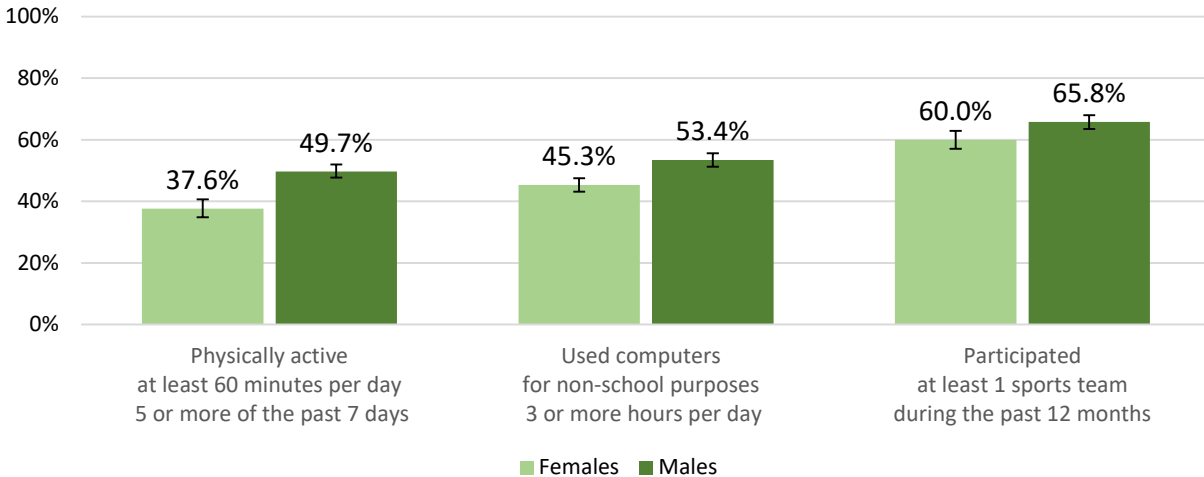


Participation in regular physical activity among young people can help build and maintain healthy bones and muscles, maintain body weight and reduce body fat, reduce feelings of depression and anxiety, and promote psychological well-being.^{ii,iii} Over time, regular physical activity decreases the risk of high blood pressure, heart disease, diabetes, some types of cancer, and premature death.

In Summit County, the 2018 prevalence of having been physically active for at least 60 minutes per day on 5 of the past 7 days was higher among male students than female students (50.3% vs. 37.6%), although the prevalence among males decreased significantly since 2013 (55.0% vs. 50.3%). The 2018 prevalence of using computers for non-school purposes for 3 or more hours per day was also higher among male students than female students (53.4% vs. 45.3%), with the prevalence increasing significantly since 2013 (39.6% vs. 53.4%). The 2018 prevalence of having participated on at least one sports team during the past 12 months, was higher among male students than female students (65.8% vs. 60.0%).

The graph below illustrates significant differences in 2018 for these physical activity behaviors when examined by gender.

**Physical activity behaviors
By gender, 2018**



Demographics

Did not participate in at least 60 minutes of physical activity on any day			
Category	%	CI	
Gender			
Female	16.1	14.3	- 18.0
Male	13.0	11.5	- 14.5
Race/Ethnicity			
White	10.9	9.7	- 12.2
Black	21.4	18.7	- 24.4
Asian	26.2	20.6	- 32.7
Hispanic	15.4	11.4	- 20.4
Other	19.7	15.7	- 24.3
Grade			
7th	14.6	12.8	- 16.6
8th	14.3	12.7	- 16.1
Total	14.4	13.2	- 15.8

Physically active at least 60 minutes/day on 5 or more days			
Category	%	CI	
Gender			
Female	37.6	34.8	- 40.6
Male	50.3	48.0	- 52.6
Race/Ethnicity			
White	48.1	45.7	- 50.4
Black	36.5	32.1	- 41.0
Asian	28.3	23.3	- 33.8
Hispanic	42.8	36.3	- 49.6
Other	39.8	35.7	- 43.9
Grade			
7th	44.1	41.0	- 47.2
8th	44.2	41.5	- 46.8
Total	44.2	42.2	- 46.2

In Summit County, 14.4% of students did not participate in at least 60 minutes of physical activity on any of the 7 days prior to the survey. The prevalence of not engaging in at least 60 minutes of physical activity was higher among Black, Asian and Other/Multiple race (21.4%, 26.2%, 19.7%) students than White (10.9%) students.

In Summit County, 44.2% of students were physically active at least 60 minutes per day on 5 or more of the 7 days before the survey. The prevalence of being physically active on five or more days of the 7 days prior to the survey was higher among male (50.3%) students than female (37.6%) students. The prevalence of being physically active on five or more days of the 7 days prior to the survey was higher among White (48.1%) students than Black, Asian or Other/Multiple race (36.5%, 28.3%, 39.8%) students.

Watched television 3 or more hours/day			
Category	%	CI	
Gender			
Female	21.9	19.7	- 24.4
Male	19.0	17.2	- 20.9
Race/Ethnicity			
White	15.7	14.4	- 17.1
Black	30.9	27.5	- 34.7
Asian	27.6	23.1	- 32.6
Hispanic	23.0	16.9	- 30.5
Other	26.9	23.0	- 31.2
Grade			
7th	22.9	20.6	- 25.2
8th	18.0	16.2	- 20.1
Total	20.5	19.0	- 22.0

In Summit County, 20.5% of students watched TV three or more hours per day on an average school day. The prevalence of students watching TV for three or more hours per day on an average school day was higher among Black, Asian, or Other/Multiple race (30.9%, 27.6%, 26.9%) students than White (15.7%) students. The prevalence of students watching 3 or more hours of television per day was higher among 7th grade (22.9%) students than 8th grade (18.0%) students.

Used computers 3 or more hours/day			
Category	%	CI	
Gender			
Female	45.3	43.1	- 47.5
Male	53.4	51.2	- 55.6
Race/Ethnicity			
White	47.5	45.7	- 49.3
Black	54.7	51.4	- 57.9
Asian	46.6	39.5	- 53.8
Hispanic	49.5	42.3	- 56.7
Other	53.0	48.3	- 57.6
Grade			
7th	47.8	45.4	- 50.3
8th	51.2	49.3	- 53.1
Total	49.6	48.1	- 51.1

In Summit County, 49.6% of students played video games or used computers for something that was not school work for three or more hours per day on an average school day. The prevalence of using computers for non-school purposes for 3 or more hours per day was higher among male (53.4%) students than female (45.3%) students. The prevalence of using computers for non-school purposes for 3 or more hours per day was higher among Black (54.7%) students than White (47.5%) students.

Played on at least one sports team			
Category	%	CI	
Gender			
Female	60.0	57.1	- 62.9
Male	65.8	63.5	- 68.0
Race/Ethnicity			
White	64.6	62.2	- 67.0
Black	61.9	57.3	- 66.3
Asian	41.1	35.9	- 46.4
Hispanic	65.1	58.0	- 71.6
Other	56.6	51.9	- 61.1
Grade			
7th	62.6	59.5	- 65.6
8th	63.4	60.5	- 66.2
Total	63.0	61.0	- 64.9

In Summit County, 63% of students had played on at least one sports team during the past 12 months. The prevalence of having played on at least one sports team was lower among female (60.0%) students than male (65.8%) students. The prevalence of having played on at least one sports team was lower among Asian (41.1%) students than White, Black, Hispanic or Other/Multiple race (64.6%, 61.9%, 65.1%, 56.6%) students; and lower among Other/Multiple race students (56.6%) than White (64.6%) students.

ⁱ Campbell, J., Hombro, C., Mazzeo, J. 2000. *NAEP 1999 Trends in Academic Progress: Three Decades of Student Performance*. Washington, DC: U.S. Department of Education, Office of Educational Research and Improvement, National Center for Education Statistics.

ⁱⁱ U.S. Department of Health and Human Services. 1996. *Physical Activity and Health: A Report of the Surgeon General*. Atlanta, GA: Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion.

ⁱⁱⁱ Strong, W., Malina, R., Blimke, C., et al. 2005. Evidence based physical activity for school-age youth. *Journal of Pediatrics*. 146:732-737.

Section 14: Positive Youth Development

Over time it has been determined that promoting positive asset building and considering young people as resources could be critical strategies. As a result, the field of youth development began examining the role of protective factors in a young person’s environment and how these factors could influence one’s choices.¹ Protective factors include, but are not limited to: family support, caring adults, positive peer groups, strong sense of self and self-esteem, and engagement in school and community activities.

Summit County Middle School students were asked on how many days during the 7 days before the survey they spent in clubs or organizations outside of school, how often their parents talk with them about school, and how many supportive adults and trusted friends that students felt they have. They were also asked how they would describe their grades during the past 12 months before the survey.

Healthy People 2020 Objectives	Summit County 2013	Status
AH-3.1: Increase the proportion of adolescents who have an adult in their lives with whom they can talk about serious problems to at least 83.3%	79.7% of Summit County Middle School students reported having an adult (other than their parents) in their lives with whom they can talk about serious problems.	The objective has not been met.
AH-2: Increase the proportion of adolescents who participate in extracurricular and/or out-of-school activities to at least 90.8%	52.4% of Summit County Middle School students reported participating in extracurricular activities at least one day during the past 7 days.	The objective has not been met.

Overall and Regional Prevalence

Akron % (Confidence Interval) Population N		Suburbs % (Confidence Interval) Population N		County % (Confidence Interval) Population N	
2013	2018	2013	2018	2013	2018
Described their grades in school as A's and B's (During the 12 months before the survey.)					
74.2% (71.1 - 77.1) 1834	74.3% (71.5 - 76.9) 1786	82.4% (80.3 - 84.3) 6042	82.3% (79.7 - 84.6) 5466	80.3% (78.5 - 82.0) 7876	80.2% (78.0 - 82.1) 7252
Had at least one meal with family (During the 7 days before the survey.)					
86.1% (84.3 - 87.8) 2103	87.2% (85.5 - 88.8) 2186	91.3% (90.2 - 92.3) 6949	91.2% (89.7 - 92.5) 6419	90.0% (89.1 - 90.9) 9052	90.1% (89.0 - 91.2) 8605
One or more supportive adults (Other than a parent, who they would feel comfortable seeking help from if there was an important issue or question affecting their life.)					
77.4% (74.8 - 79.8) 1725	78.1% (75.6 - 80.4) 1866	80.6% (79.2 - 82.0) 5995	80.2% (78.7 - 81.6) 5510	79.9% (78.6 - 81.1) 7721	79.7% (78.4 - 80.9) 7376
One or more trusted friends (Friends who would offer good advice if there was a really important secret or problem affecting their life.)					
84.9% (82.6 - 87.0) 1884	86.5% (84.7 - 88.2) 2069	90.0% (88.9 - 91.0) 6730	91.0% (89.8 - 92.1) 6252	88.9% (87.9 - 89.8) 8614	89.9% (88.9 - 90.8) 8321
One or more teachers or adults at school (who they can talk to if they have a problem)					
N/A	61.6% (59.1 - 64.1) 1471	N/A	63.3% (61.3 - 65.3) 4356	N/A	62.9% (61.2 - 64.5) 5827
Parents talk with student almost every day about school					
58.3% (55.8 - 60.8) 1311	53.4% (51.1 - 55.8) 1275	61.5% (59.8 - 63.2) 4601	58.8% (57.1 - 60.4) 4054	60.8% (59.4 - 62.2) 5912	57.4% (56.0 - 58.8) 5329
Spent at least one day in clubs or organizations outside of school (During the 7 days before the survey.)					
54.5% (51.9 - 57.2) 1222	51.4% (49.2 - 53.6) 1232	54.1% (52.1 - 56.0) 4041	52.7% (50.1 - 55.2) 3631	54.2% (52.6 - 55.8) 5263	52.4% (50.4 - 54.3) 4863

Compared to 2013, the prevalence of parents talking with their student(s) about what goes on in school nearly every day or every day, decreased significantly in 2018 among Summit County middle school students (60.8% vs. 57.4%). There were no other significant changes among Summit County middle school students comparing 2013 results to 2018 for categories of positive youth development. Prevalence rates were not significantly different between 2013 and 2018 for students who described their grades in school as A's and B's (80.3% vs. 80.2%), who had at least one meal with their family in the past week (90.0 vs.

90.1%), who had one or more supportive adult from whom they could seek help (79.9% vs. 79.7%), who had one or more trusted friends who could offer advice (88.9% vs. 89.9%), and who spent at least one day in clubs or organization outside of school in the past week (54.2% vs. 52.4%).

An examination of the 2018 variations in prevalence between Summit County regions of Akron and suburbs, reveals that the prevalence of reporting usually earning the grades of A's and B's (74.3% vs. 82.3%), having at least one meal with family during the past 7 days (87.2% vs. 91.2), and having a trusted friend (86.5% vs. 91.0%), were significantly lower in Akron than in the suburbs.

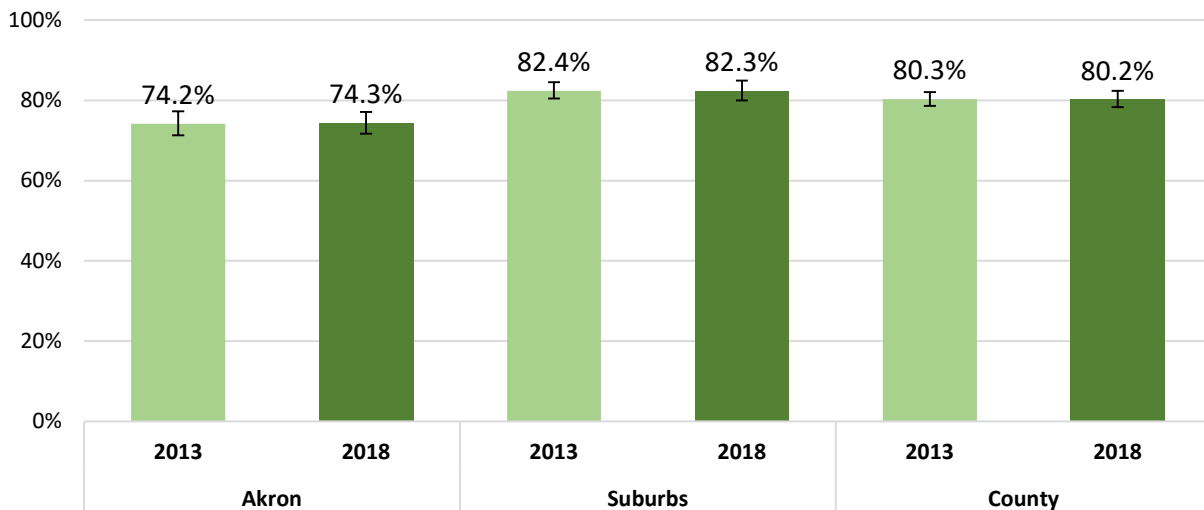
In 2018 the prevalence of having a parent/guardian who talks with them about what goes in school nearly every day or every day was lower in Akron than in the suburbs (53.4% vs. 58.8%), with a significant decrease in prevalence from 2013 to 2018 among Akron students (58.3% vs. 53.4%).

The 2018 prevalence for all other indicators of positive youth development were similar in Akron and in the suburbs, with no in-region changes over time. The prevalence of having an adult (other than a parent) that students are comfortable with for advice on an important issue or question affecting their life was similar in Akron and in the suburbs (78.1% vs. 80.2%). The prevalence of spending any days in after school/weekend activities during the past 7 days, was similar in Akron and in the suburbs (51.4% vs. 52.7%).

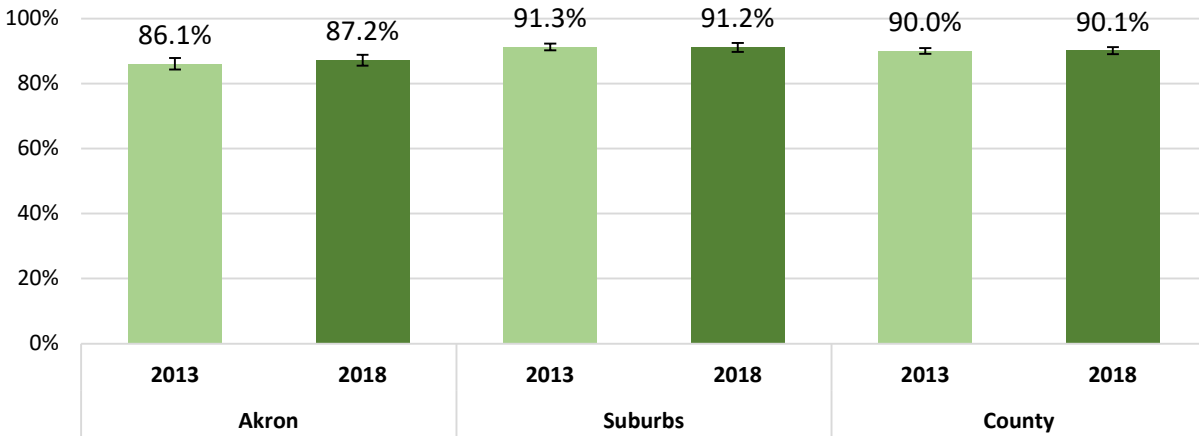
In 2018, the prevalence of students reporting that they have at least one teacher or other adult at school that they can talk to if they have a problem, was similar in Akron and in the suburbs (61.6% vs. 63.3%).

The following graphs demonstrate the variations in prevalence within region and over time for these positive youth development variables.

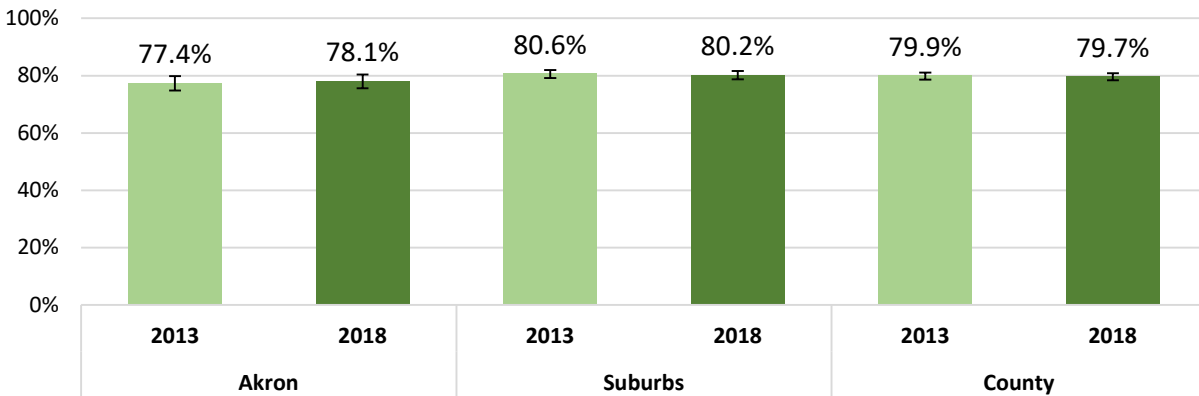
Described their grades as mostly A's and B's By region, 2013 vs. 2018



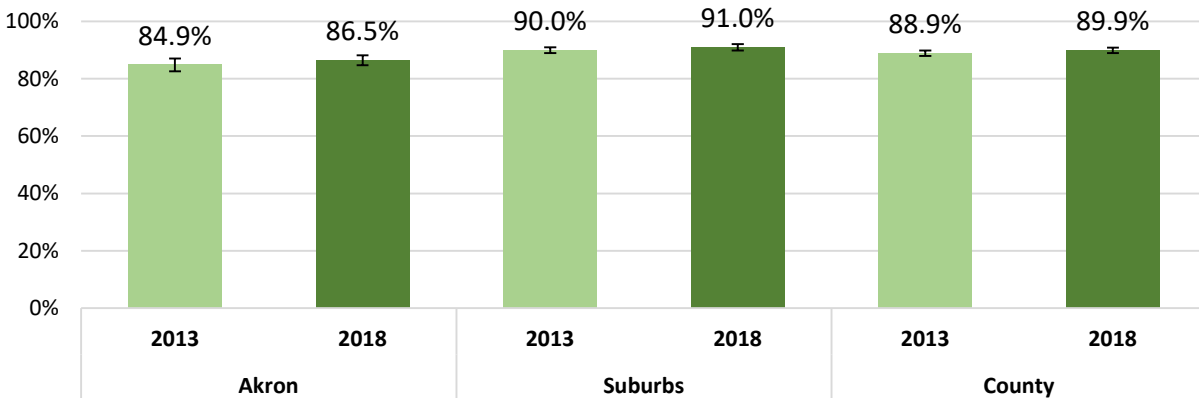
**Had at least one meal with family during the past week,
By region, 2013 vs. 2018**



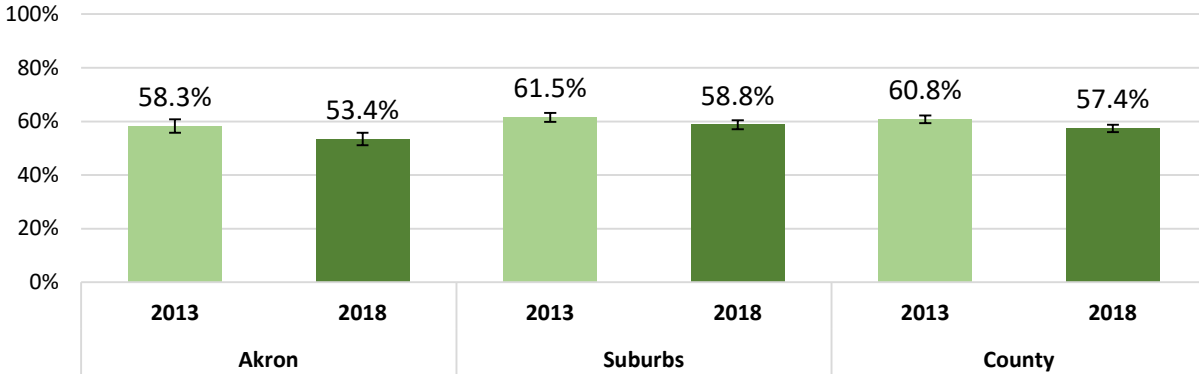
**Have one or more supportive adults, other than a parent,
By region, 2013 vs. 2018**



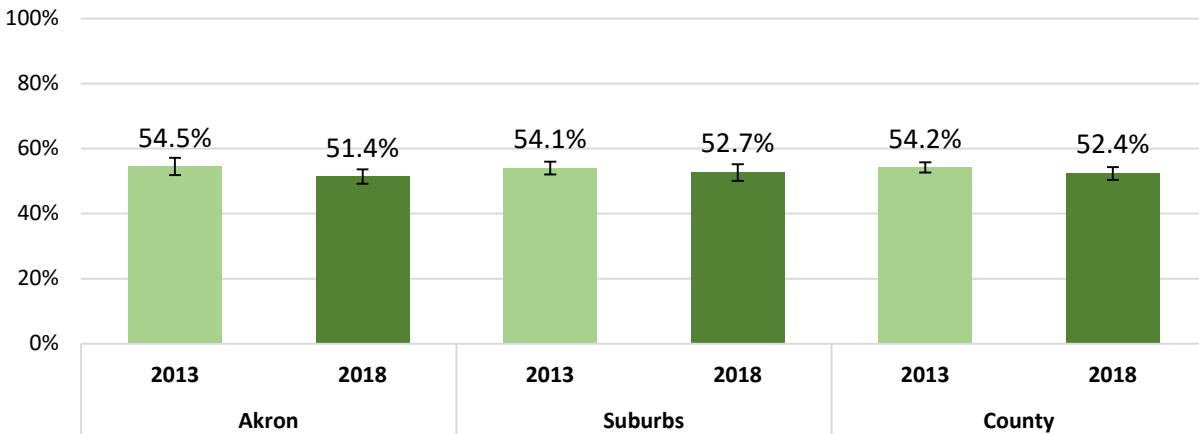
**Have one or more trusted friends
By region, 2013 vs. 2018**



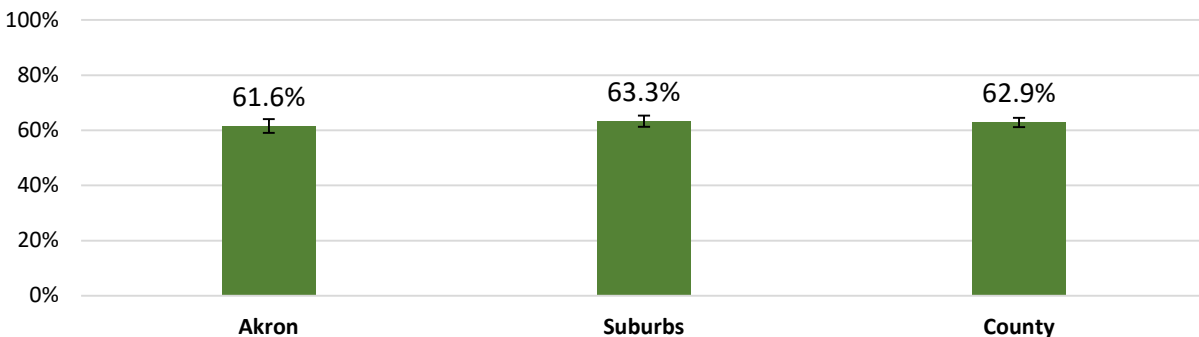
Parents talk with students nearly every day about school By region, 2013 vs. 2018



Spent 1+ day in extracurricular activities, during the past week By region, 2013 vs. 2018

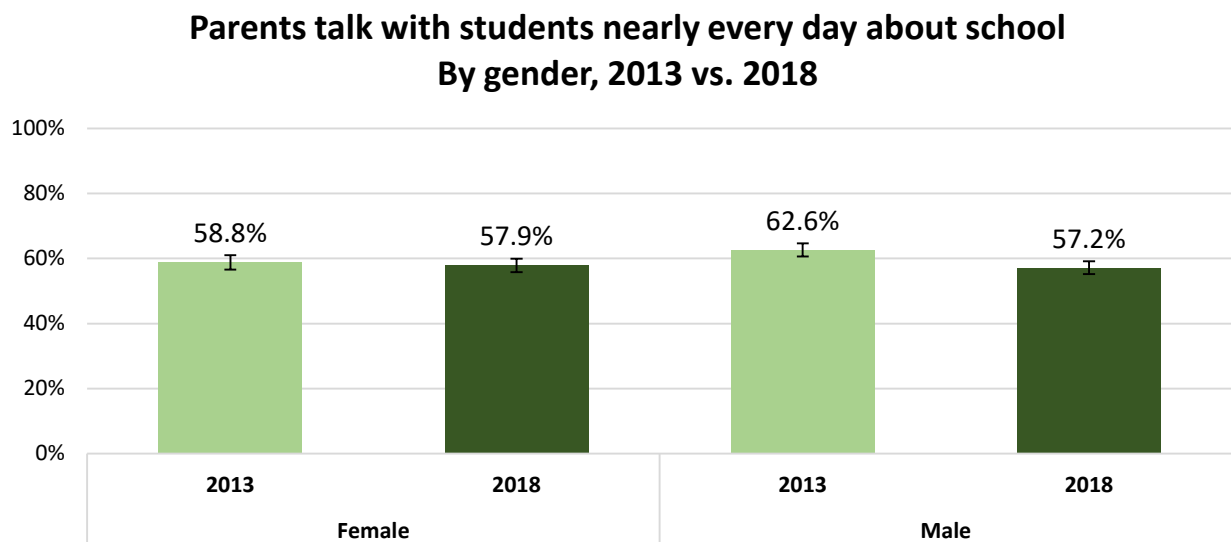
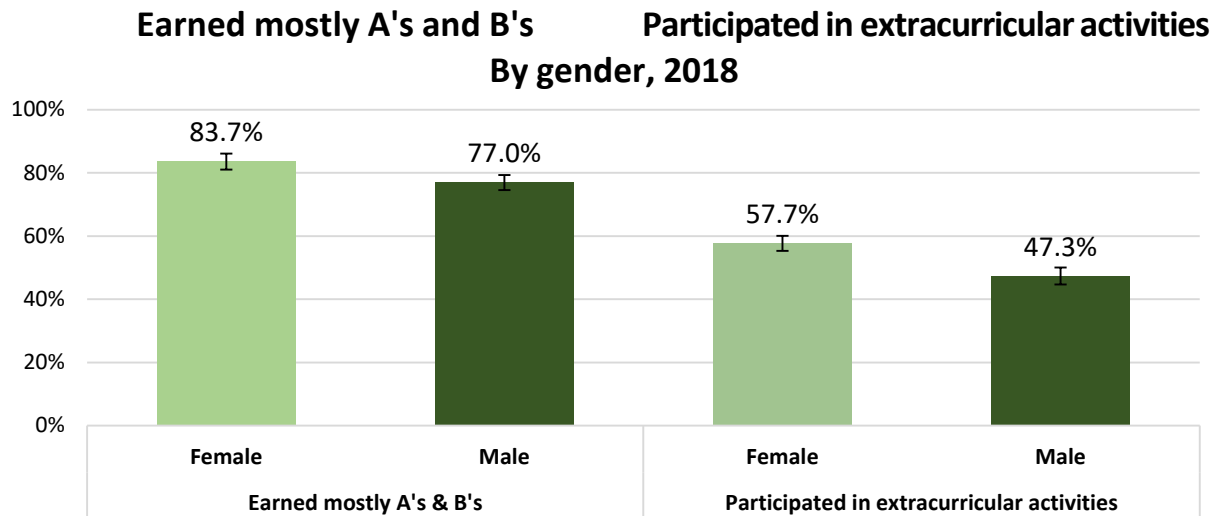


Have a trusted teacher or adult at school By region, 2018



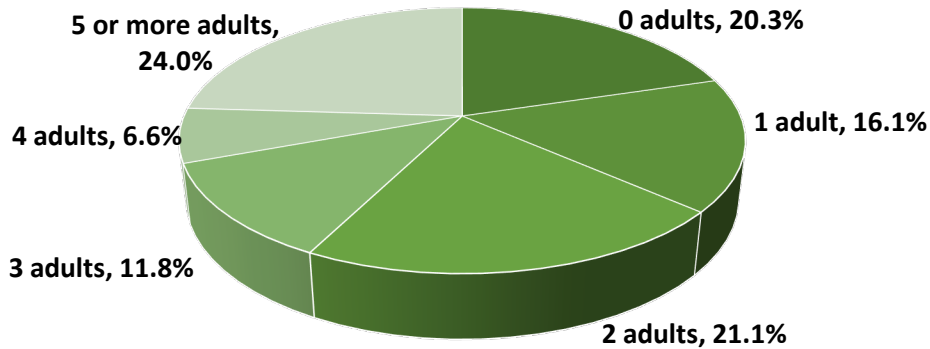
Several differences in 2018 prevalence were noted within the demographic group of gender. The prevalence of earning mostly grades of A's and B's was lower among Summit County middle school male students than female students. (77.0% vs. 83.7%). The prevalence of having participated in at least one extracurricular activity during the past 7 days, was lower among male students than female students (47.3% vs. 57.7%).

An examination within gender groups from 2013 to 2018 reveals that the prevalence of having a parent/guardian who talked with a student nearly every day or every day about what went on in school, decreased significantly among male students during that time (62.6% vs. 57.2%). The graphs below depict these differences.



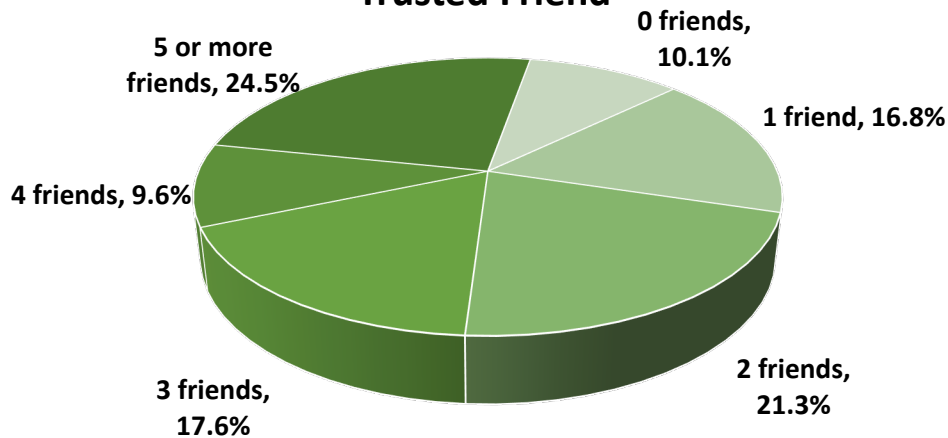
The following pie charts depict the number of supportive adults (other than a parent) that all students felt they had, as well as the number of trusted friends. More than $\frac{3}{4}$ of students (79.7%) reported that they had at least one adult, other than a parent that they would feel comfortable seeking help from if they had an important issue or question affecting their life, with 24.0% reporting having 5 or more supportive adults, and 20.3% reporting having no supportive adult.

Supportive Adults



Nearly 90% of students (89.9%) reported that they had at least one friend they would trust to offer good advice if they had a really important secret or problem affecting their life, with 24.5% reporting having 5 or more trusted friends and 10.1% reporting having no trusted friend.

Trusted Friend



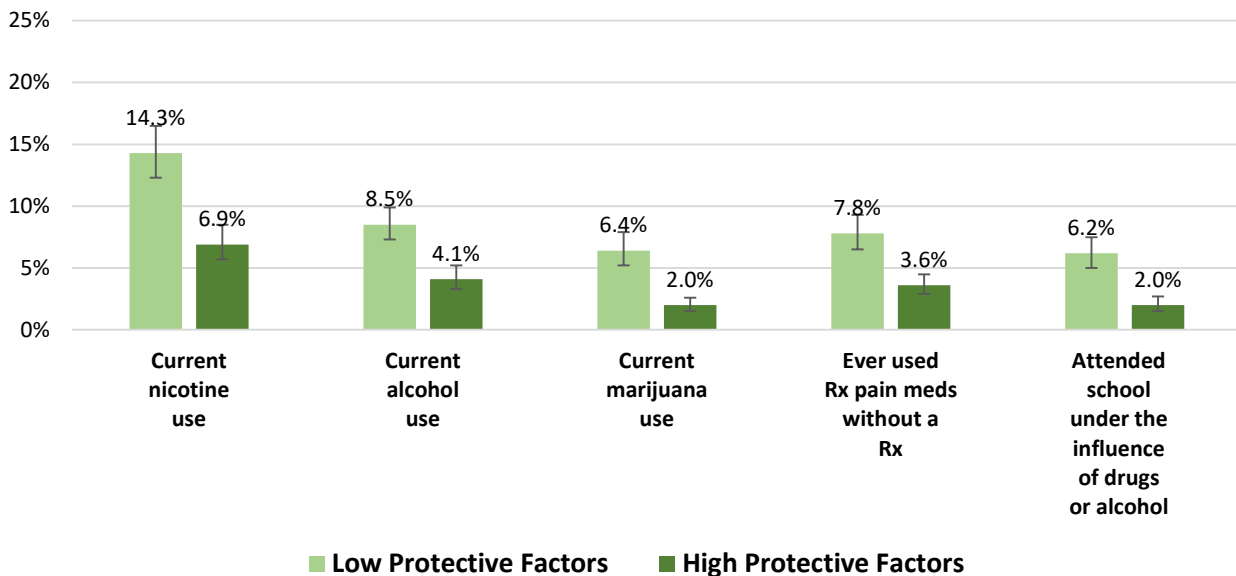
Protective factors can provide a buffering effect against risk engagement and negative health outcomes. Four of the positive youth development items: academic achievement, having a parent that talks to the student about school regularly, having one or more trusted adults at school, and having one or more trusted friends, were analyzed in combination to create a protective factors score. Students who reported having zero to two of these assets were categorized as having a “low protective factors score” and students with three or four of these assets were categorized as having a “high protective factors score”.

Akron % (Confidence Interval) Population N	Suburbs % (Confidence Interval) Population N	County % (Confidence Interval) Population N
Have a high protective factors score (Report 3-4 of the following things: earn mostly A’s and B’s in school, have a parent who regularly talks to them about school, have one or more trusted adults at school, have one or more trusted friends.)		
57.9% (55.7 - 60.0) 1380	67.6% (65.2 - 70.0) 4650	65.1% (63.2 - 67.0) 6030

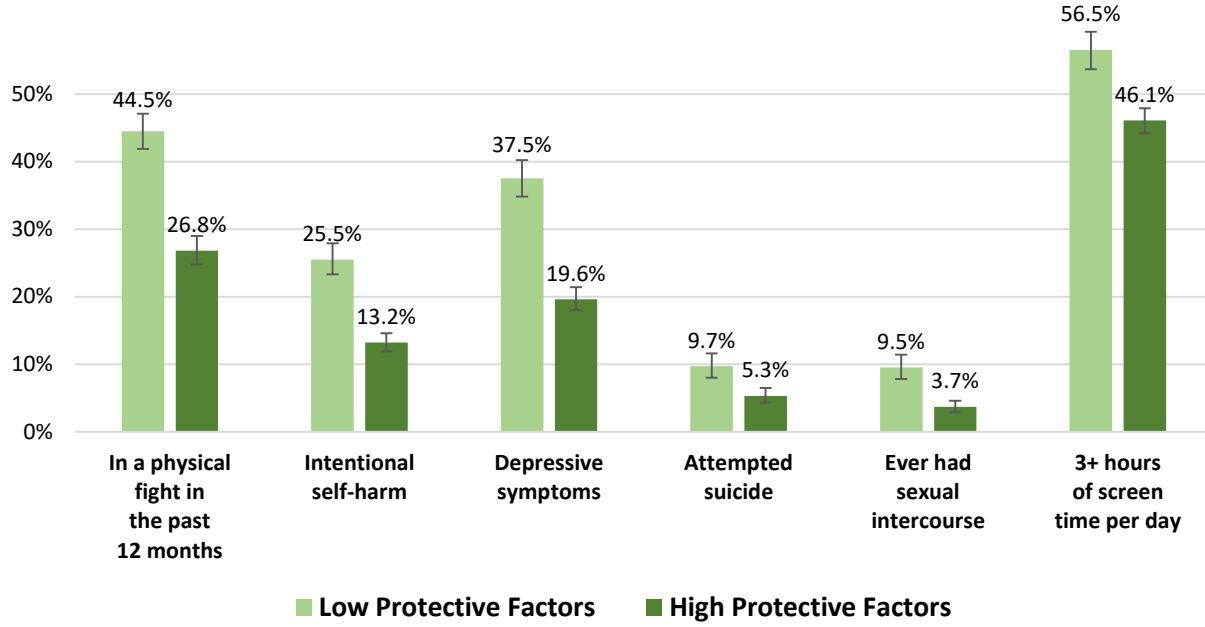
In 2018, 65.1% of Summit County middle school students reported having a high protective factors score. Students in Akron were significantly less likely to report a high protective factors score (57.9%) than students in the suburbs (67.6%).

Having a high protective factors score was significantly associated with lower risk behavior engagement and increased positive behaviors in a variety of domains: violence, mental health, substance use, sexual risk behaviors, and diet and weight status.

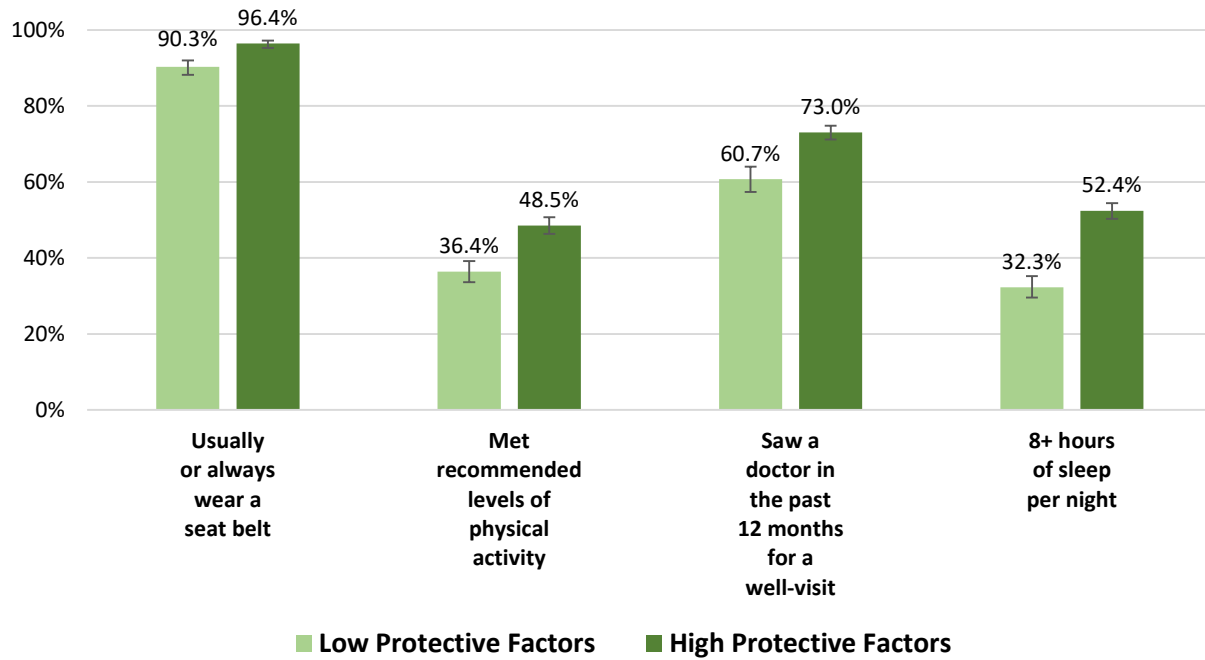
Substance Use by Protective Factors



Other Risk Behaviors by Protective Factors



Positive Behaviors by Protective Factors



Demographics

Described their grades in school as A's and B's			
Category	%	CI	
Gender			
Female	83.7	81.0	- 86.1
Male	77.0	74.5	- 79.3
Race/Ethnicity			
White	84.3	82.4	- 86.1
Black	69.2	65.0	- 73.0
Asian	87.8	83.2	- 91.3
Hispanic	77.2	69.7	- 83.2
Other	78.5	74.3	- 82.2
Grade			
7th	80.6	77.5	- 83.4
8th	79.6	76.6	- 82.3
Total	80.2	78.0	- 82.1

Had at least one meal with family			
Category	%	CI	
Gender			
Female	88.9	87.0	- 90.6
Male	91.2	89.7	- 92.5
Race/Ethnicity			
White	91.8	90.5	- 92.9
Black	86.8	83.3	- 89.6
Asian	88.4	84.3	- 91.6
Hispanic	85.5	79.6	- 90.0
Other	87.3	84.3	- 89.7
Grade			
7th	91.1	89.6	- 92.4
8th	89.3	87.4	- 91.0
Total	90.1	89.0	- 91.2

In Summit County, 80.2% of students described their grades in school as A's and B's. The prevalence of students that described their grades as mostly A's and B's was significantly higher among females (83.7%) than males (77.0%). The prevalence of students that described their grades as mostly A's and B's was lower among Black and Other/Multiple race (69.2%, 78.5%) students than among White or Asian (84.3%, 87.8%) students, and lower among Black (69.2%) students than among Other/Multiple race students (78.5%) students.

In Summit County, 90.1% of students had at least one meal during the past 7 days with their family. The prevalence of eating at least one meal with family was lower among Black, Hispanic and Other/Multiple race (86.8%, 85.5%, 87.3%) students than among White (91.8%) students.

One or more supportive adults			
Category	%	CI	
Gender			
Female	80.0	78.2	- 81.8
Male	79.5	77.7	- 81.2
Race/Ethnicity			
White	80.3	78.8	- 81.7
Black	78.8	75.5	- 81.7
Asian	74.0	68.4	- 79.0
Hispanic	77.1	70.2	- 82.8
Other	80.9	77.8	- 83.7
Grade			
7th	79.9	78.0	- 81.7
8th	79.3	77.6	- 80.9
Total	79.7	78.4	- 80.9

One or more trusted friends			
Category	%	CI	
Gender			
Female	90.9	89.6	- 92.0
Male	88.9	87.5	- 90.2
Race/Ethnicity			
White	91.5	90.5	- 92.5
Black	85.8	82.8	- 88.4
Asian	89.6	84.4	- 93.2
Hispanic	89.9	84.3	- 93.7
Other	89.4	86.3	- 91.8
Grade			
7th	89.9	88.4	- 91.2
8th	89.7	88.3	- 91.1
Total	89.9	88.9	- 90.8

In Summit County, 79.7% of students have one or more adults, other than a parent, who they would feel comfortable seeking help from if there was an important issue or question affecting their life. There are no significant differences in the prevalence of having one or more supportive adults among demographic groups.

In Summit County, 89.9% of students have one or more friends who they would trust to offer good advice if there was a really important secret or problem affecting their life. The prevalence of having one or more trusted friends was lower among Black (85.8%) students than White (91.5%) students.

One or more supportive teachers or adults at school			
Category	%	CI	
Gender			
Female	62.6	60.4	- 64.8
Male	63.3	61.1	- 65.4
Race/Ethnicity			
White	64.0	62.2	- 65.8
Black	62.0	57.8	- 66.0
Asian	59.4	53.5	- 65.0
Hispanic	63.5	56.6	- 69.8
Other	58.1	53.5	- 62.5
Grade			
7th	64.5	62.2	- 66.8
8th	61.7	59.3	- 64.0
Total	62.9	61.2	- 64.5

In Summit County, 62.9% of students had at least one teacher or other adult at school who they could talk to if there was a problem. There are no significant differences in the prevalence of having one or more supportive teachers or adults at school among demographic groups.

Parents talk with student almost every day about school			
Category	%	CI	
Gender			
Female	57.9	55.8	- 59.9
Male	57.2	55.2	- 59.1
Race/Ethnicity			
White	59.2	57.4	- 60.9
Black	54.6	51.0	- 58.2
Asian	33.3	26.5	- 40.9
Hispanic	57.1	49.3	- 64.5
Other	56.1	51.8	- 60.2
Grade			
7th	58.8	56.8	- 60.8
8th	55.9	53.7	- 58.0
Total	57.4	56.0	- 58.8

In Summit County, 57.4% of students have parents that talk to them about school almost every day. The prevalence of having parents that talk to them about school almost every day was lower among Asian (33.3%) students than among White, Black, Hispanic or Other/Multiple race (59.2%, 54.6%, 57.1%, 56.1%) students.

Spent at least one day in clubs or organizations outside of school			
Category	%	CI	
Gender			
Female	57.7	55.3	- 60.1
Male	47.3	44.7	- 50.0
Race/Ethnicity			
White	52.8	50.5	- 55.2
Black	52.3	48.9	- 55.6
Asian	48.2	42.2	- 54.2
Hispanic	57.4	51.1	- 63.4
Other	47.6	42.6	- 52.7
Grade			
7th	52.3	49.8	- 54.7
8th	52.9	49.8	- 55.9
Total	52.4	50.4	- 54.3

In Summit County, 52.4% of students spent at least one day in clubs or organizations outside of school in the 7 days prior to the survey. The prevalence of having spent at least one day in clubs or organizations outside of school in the 7 days prior to the survey was higher among female (57.7%) students than male (47.3%) students.

ⁱ Positive Youth Development. 2010. Web Site http://www.findyouthinfo.gov/topic_pyd.shtml. Accessed on September 20, 2010.

Section 15: Other Health Topics

The 2018 Summit County Middle School YRBS asked students about other health-related issues, including seeing a doctor or dentist for a check-up, obtaining eight or more hours of sleep on an average school night, asthma related health, and general assessment of health. Nationwide, adolescents have the lowest utilization rate of health care services of any age group. Barriers to care include cost of care; low family income; stigma; distrust; confidentiality and parental consent; lack of medical insurance; embarrassment about and lack of transportation to reproductive health services; lack of knowledge about where or how to access care; and lack of adolescent-friendly services.¹

Healthy People 2020 Objectives	Summit County 2018	Status
AH-1: Increase the proportion of adolescents who have had a wellness check-up in the past 12 months to at least 75.6%	68.5% of Summit County Middle School students reported seeing a doctor for a wellness check-up in the past 12 months.	The objective has not been met.
OH-7: Increase the proportion of children, adolescents, and adults who used the oral health care system in the past 12 months to at least 49.0%	71.6% of Summit County Middle School students reported seeing a dentist for a check-up, exam, or teeth cleaning (non-emergency care) in the past 12 months.	The objective has been met.



Overall and Regional Prevalence

Akron		Suburbs		County	
% (Confidence Interval)		% (Confidence Interval)		% (Confidence Interval)	
Population N		Population N		Population N	
2013	2018	2013	2018	2013	2018
Obtained eight or more hours of sleep on an average school night					
51.1% (48.3 – 53.9) 1186	41.6% (38.9 – 44.3) 1021	54.5% (52.5 – 56.5) 4087	47.0% (44.6 – 49.4) 3277	53.7% (52.0 – 55.3) 5273	45.6% (43.7 – 47.5) 4298
Ever been to the emergency room or urgent care center because of asthma (One or more times in the past 12 months before the survey; among students with asthma.)					
39.0% (33.9 – 44.3) 270	34.3% (30.0 – 39.0) 250	23.0% (20.1 – 26.2) 415	29.2% (25.3 – 33.4) 502	27.5% (24.8 – 30.3) 684	30.7% (27.7 – 34.0) 752
Missed school because they were sick (During the past 30 days before the survey.)					
46.3% (43.6 – 49.0) 1071	43.0% (40.5 – 45.5) 1044	43.3% (41.5 – 45.2) 3280	43.7% (41.3 – 46.1) 3042	44.0% (42.5 – 45.6) 4351	43.5% (41.6 – 45.4) 4086
Saw a doctor or nurse for routine check-up (During the 12 months before the survey.)					
65.3% (62.5 – 68.0) 1491	58.0% (55.7 – 60.2) 1400	70.2% (68.3 – 72.2) 5285	72.2% (70.1 – 74.1) 5006	69.1% (67.4 – 70.7) 6776	68.5% (66.8 – 70.2) 6407
Saw a dentist for routine check-up (Not including emergencies, during the 12 months before the survey.)					
65.7% (62.9 – 68.5) 1489	61.3% (59.0 – 63.5) 1472	78.6% (76.9 – 80.2) 5904	75.2% (73.4 – 77.0) 5215	75.6% (74.1 – 77.0) 7393	71.6% (70.1 – 73.2) 6687
Saw a doctor, nurse, therapist, social worker, or counselor for a mental health issue (During the 12 months before the survey.)					
29.0% (26.5 – 31.6) 648	30.3% (28.1 – 32.7) 726	24.7% (23.1 – 26.5) 1851	28.7% (26.9 – 30.5) 1978	25.7% (24.3 – 27.2) 2499	29.1% (27.7 – 30.6) 2704
Received appropriate help when student felt sad, empty, hopeless, angry or anxious (Sometimes, most of the time or always.)					
N/A	48.2% (45.0 – 51.4) 751	N/A	54.0% (51.0 – 57.0) 2332	N/A	52.5% (50.1 – 54.8) 3083

Compared to 2013, Summit County middle school students in 2018 were significantly less likely to report obtaining eight or more hours of sleep on an average school night (53.7% vs. 45.6%), and to have seen a dentist for a routine check-up (75.6% vs. 71.6%). Compared to 2013, students were more likely to have seen a doctor, nurse, therapist, social worker, or counselor for a mental health issue (25.7% vs. 29.1%) during the 12 months before the survey. There was no significant difference between 2013 and 2018 in rates of having been to the emergency room or urgent care due to asthma (27.5% vs. 30.7%), missing

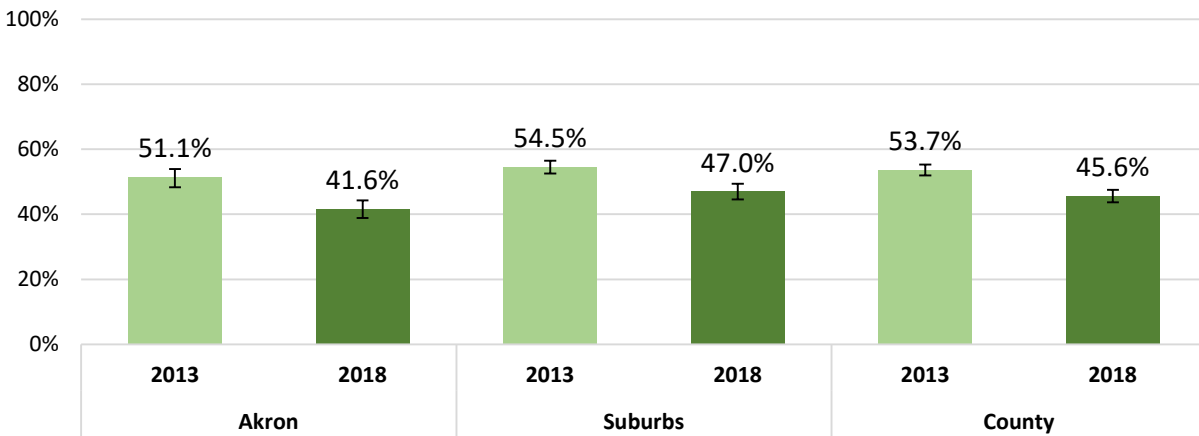
school because they were sick (44.0% vs. 43.5%), or having been seen by a doctor or nurse for a check-up or physical exam when they were not sick or injured (69.1% vs. 68.5%). Students were not asked about how often they were able to get the help they needed when feeling sad, empty, hopeless, angry, or anxious on the 2013 survey.

There were no regional differences between Akron and its neighboring suburbs in the 2018 prevalence of students who reported having been to an emergency room because of their asthma—among students diagnosed with asthma— (34.3% vs. 29.2%), missing school because of illness (43.0% vs. 43.7%), or having seen someone for a mental health issue (30.3% vs. 28.7%).

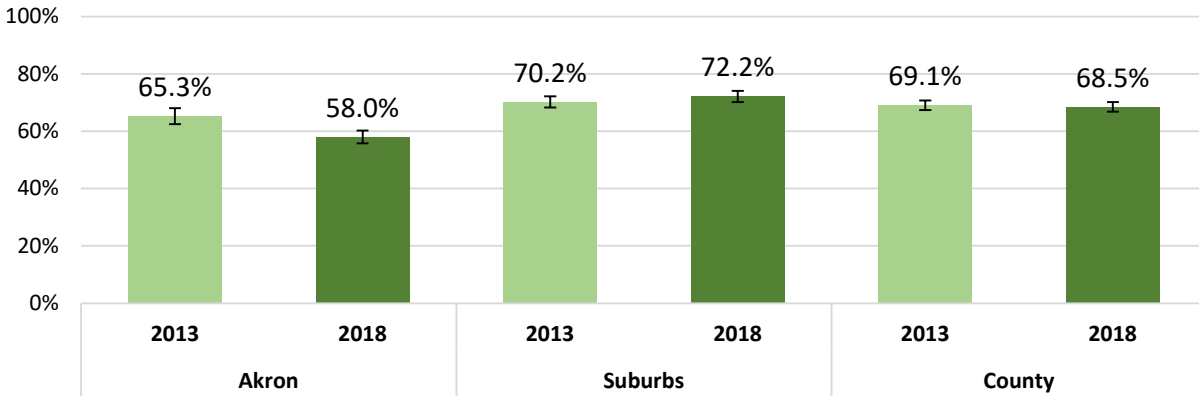
Within regions, the prevalence of obtaining eight or more hours of sleep on an average school night was lower among students in Akron than in the suburbs (41.6% vs. 47.0%), although the prevalence had decreased significantly since 2013 for both regions. The prevalence of having been seen by a doctor or nurse for a check-up or physical exam was significantly lower in Akron than in the suburbs (58.0% vs. 72.2%), with the prevalence decreasing significantly in Akron since 2013 (65.3% vs. 58.0%). The prevalence of having been seen by a dentist for a check-up, exam, teeth cleaning, or other dental work was lower in Akron than in the suburbs (61.3% vs. 75.2%).

The below graphs illustrate regional differences in the 2018 rates of Other Health Behaviors as well as the rates of change in prevalence for the county and within the regions from 2013 to 2018.

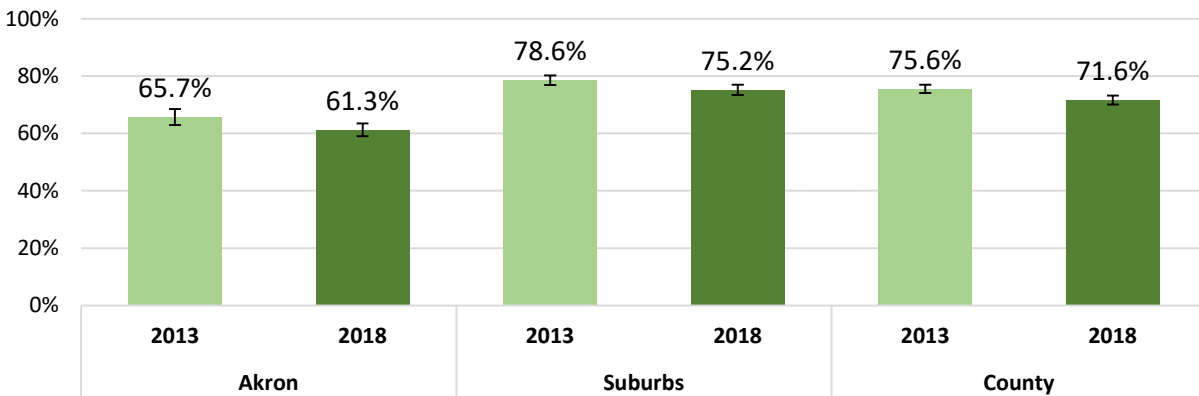
**Obtained eight+ hours sleep on an average school night,
By region, 2013 vs. 2018**



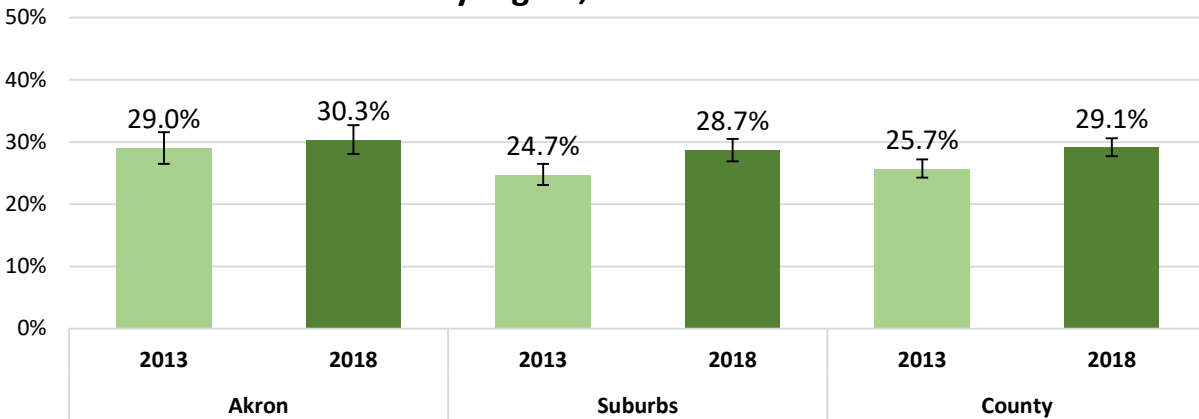
**Saw a doctor or nurse for a check-up during the past 12 months
By region, 2013 vs. 2018**



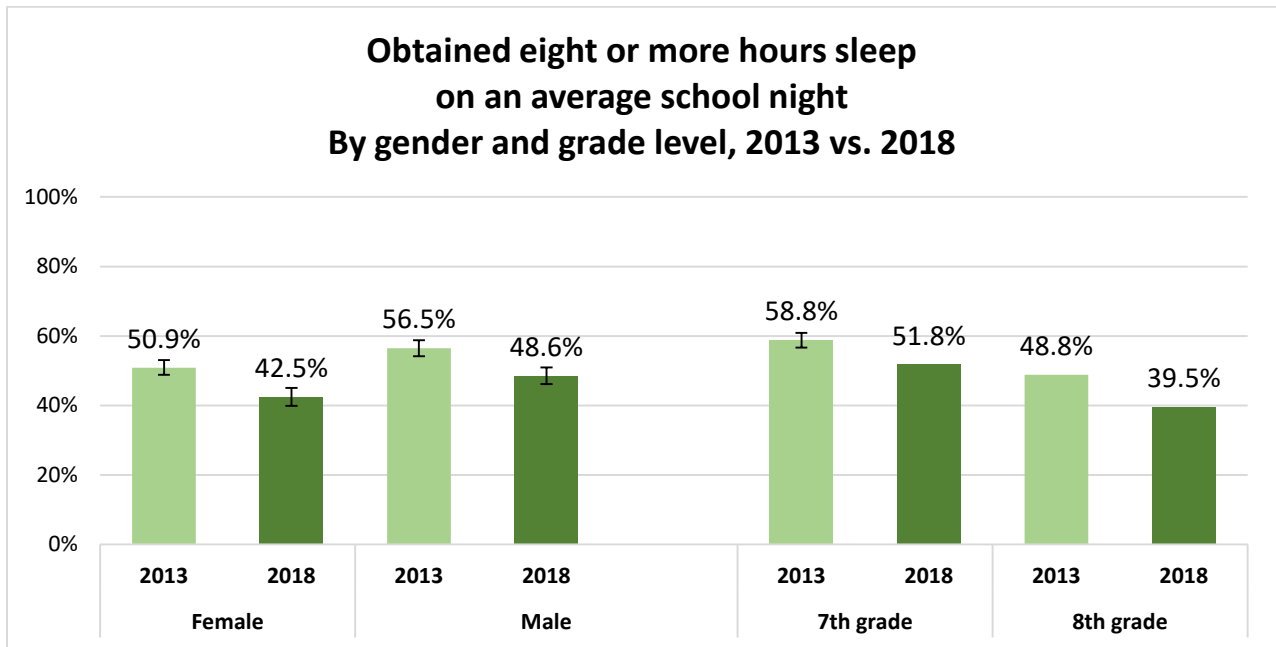
**Saw a dentist for a check-up during the past 12 months
By region, 2013 vs. 2018**



**Saw a professional for a mental health issue during the past 12 months
By region, 2013 vs. 2018**



Earlier in this chapter it was noted that the prevalence of obtaining eight or more hours of sleep on an average school night had decreased from 2013 to 2018 among Summit County middle school students (53.7% vs. 45.6%). Further, it was noted that there were regional differences in prevalence of obtaining adequate sleep, with students in Akron significantly less likely than suburban students to report obtaining 8+ hours of sleep (41.6% vs. 47.0%). The graphs below demonstrate the gender and grade level differences in obtaining adequate sleep among Summit County middle school students.



Demographics

Obtained eight or more hours of sleep on an average school night			
Category	%	CI	
Gender			
Female	42.5	39.9	- 45.1
Male	48.6	46.2	- 51.0
Race/Ethnicity			
White	47.1	45.1	- 49.1
Black	41.9	37.1	- 46.8
Asian	50.3	44.3	- 56.4
Hispanic	39.8	32.6	- 47.6
Other	39.9	35.1	- 44.9
Grade			
7th	51.8	49.5	- 54.1
8th	39.5	37.2	- 41.9
Total	45.6	43.7	- 47.5

In Summit County, 45.6% of students obtained an average of eight or more hours of sleep on an average school night. The prevalence of obtaining eight or more hours of sleep per night on an average school night was higher among male (48.6%) students than female (42.5%) students. The prevalence of obtaining eight or more hours of sleep per night on an average school night was higher among White (47.1%) than Other/Multiple race (39.9%) students. The prevalence of obtaining eight or more hours of sleep on an average school night was higher among 7th grade (51.8%) students than 8th grade (39.5%) students.

Been to the emergency room or urgent care center because of asthma (among students with asthma)			
Category	%	CI	
Gender			
Female	32.7	28.7	- 37.0
Male	29.4	25.2	- 33.9
Race/Ethnicity			
White	26.2	22.9	- 29.8
Black	37.6	31.6	- 44.0
Asian	22.4	14.2	- 33.6
Hispanic	31.1	19.9	- 45.2
Other	34.0	27.8	- 40.8
Grade			
7th	33.1	28.3	- 38.3
8th	28.1	24.4	- 32.2
Total	30.7	27.7	- 34.0

In Summit County, 30.7% of students with asthma had been to the emergency room or urgent care center because of asthma symptoms one or more times in the 12 months prior to the survey. The prevalence of going to the emergency room or urgent care center because of asthma symptoms was higher among Black (37.6%) students with asthma than White (26.2%) students with asthma.

Missed school because they were sick			
Category	%	CI	
Gender			
Female	45.9	43.2	- 48.7
Male	41.3	39.2	- 43.4
Race/Ethnicity			
White	44.2	42.0	- 46.4
Black	42.0	38.4	- 45.7
Asian	27.6	22.1	- 33.9
Hispanic	48.1	41.2	- 55.0
Other	48.6	44.2	- 52.9
Grade			
7th	42.0	39.6	- 44.5
8th	44.9	42.6	- 47.3
Total	43.5	41.6	- 45.4

In Summit County, 43.5% of students did not go to school because they were sick on at least one day in the 30 days prior to the survey. The prevalence of not going to school because of sickness was higher among White, Black, Hispanic and Other/Multiple race (44.2%, 42.0%, 48.1%, 48.6%) students than Asian (27.6%).

Saw a doctor or nurse for routine check-up			
Category	%	CI	
Gender			
Female	67.9	65.7	- 70.0
Male	69.3	66.9	- 71.5
Race/Ethnicity			
White	73.1	71.3	- 74.7
Black	59.7	55.5	- 63.7
Asian	56.6	49.2	- 63.6
Hispanic	57.4	49.9	- 64.5
Other	64.9	60.3	- 69.2
Grade			
7th	67.9	65.3	- 70.4
8th	69.0	66.5	- 71.4
Total	68.5	66.8	- 70.2

In Summit County, 68.5% of students saw a doctor or nurse for a check-up or physical exam when they were not sick or injured, in the 12 months prior to the survey. The prevalence of seeing a doctor or nurse for a check-up was significantly higher among White (73.1%) students than Black, Hispanic, Asian or Other/Multiple race (59.7%, 56.6%, 57.4%, 64.9%) students.

Saw a dentist for routine check-up			
Category	%	CI	
Gender			
Female	71.3	68.9	- 73.6
Male	72.1	69.7	- 74.3
Race/Ethnicity			
White	77.7	75.9	- 79.3
Black	59.1	55.3	- 62.7
Asian	51.9	44.5	- 59.2
Hispanic	71.7	64.8	- 77.6
Other	65.6	61.5	- 69.5
Grade			
7th	69.2	66.5	- 71.8
8th	73.8	71.3	- 76.1
Total	71.6	70.1	- 73.2

Saw a doctor, nurse, therapist, social worker, or counselor for a mental health issue			
Category	%	CI	
Gender			
Female	30.3	28.4	- 32.4
Male	27.7	25.6	- 29.9
Race/Ethnicity			
White	28.1	26.4	- 29.8
Black	31.0	27.7	- 34.4
Asian	24.1	19.7	- 29.2
Hispanic	39.0	32.5	- 45.9
Other	32.6	28.7	- 36.8
Grade			
7th	29.1	26.9	- 31.4
8th	28.8	26.8	- 30.9
Total	29.1	27.7	- 30.6

In Summit County, 71.6% of students saw a dentist for a check-up, exam, teeth cleaning, or other routine work in the 12 months prior to the survey. The prevalence of seeing a dentist for a check-up was higher among White or Hispanic (77.7%, 71.7%) students than Black or Asian (59.1%, 51.9%) students. The prevalence of seeing a dentist for a check-up was higher among White (77.7%) students than Other/Multiple race (65.6%) students, and higher among Other/Multiple race (65.6%) students than Asian (51.9%) students.

In Summit County, 29.1% of students saw a doctor, nurse, therapist, social worker, or counselor for a mental health problem in the 12 months prior to the survey. The prevalence of seeing a doctor, nurse, therapist, social worker, or counselor for a mental health problem was higher among Hispanic (39.0%) students than among White or Asian (28.1%, 24.1%) students.

Received appropriate help when student felt sad, empty, hopeless, angry or anxious			
Category	%	CI	
Gender			
Female	51.9	49.1	- 54.7
Male	53.1	49.7	- 56.5
Race/Ethnicity			
White	54.2	52.0	- 56.5
Black	48.4	42.0	- 54.8
Asian	54.5	46.8	- 61.9
Hispanic	52.1	44.2	- 59.8
Other	48.6	42.8	- 54.4
Grade			
7th	56.4	53.3	- 59.5
8th	48.6	45.8	- 51.4
Total	52.5	50.1	- 54.8

In Summit County, 52.5% of students get the kind of help they need when they feel sad, empty, hopeless, angry or anxious. The prevalence of getting the help needed when one feels sad, empty, hopeless, angry or anxious was higher among 7th grade (56.4%) students than among 8th grade (48.6%) students.

¹ Association of State and Territorial Health Officials. Adolescent and School Health Fact Sheet. Association of State and Territorial Health Officials Web site. Available at <http://www.astho.org/index.php?template=access.html>. Accessed July 24, 2008.

Appendix: Prevalence % and Population Estimates for Students Overall, by Region, and by Gender for Summit County 2018 Middle School YRBS

Variable	Overall		Akron		Suburbs		Female		Male	
	%	Pop. Est.	%	Pop. Est.	%	Pop. Est.	%	Pop. Est.	%	Pop. Est.
Rarely or never wore a seatbelt	6.4%	647	10.5%	290	4.9%	358	6.3%	294	6.6%	350
Rode with a driver who had been drinking alcohol (past 30 days.)	14.6%	1452	18.7%	515	13.0%	937	13.9%	646	15.1%	793
Had a concussion from playing sports or physical activity (past 12 months.)	14.7%	1470	18.8%	517	13.1%	952	11.6%	543	17.5%	919
Carried a weapon (past 30 days.)	9.4%	935	8.3%	229	9.8%	707	4.3%	202	13.8%	725
Did not go to school because of safety concerns (past 30 days.)	10.7%	1074	14.9%	411	9.2%	663	12.2%	4692	9.5%	498
In a physical fight (past 12 months.)	34.1%	3405	43.5%	1194	30.6%	2212	25.2%	1178	42.1%	2207
Bullied on school property (past 12 months.)	29.1%	2907	27.3%	750	29.8%	2156	33.2%	1558	25.3%	1325
Bullied away from school (past 12 months.)	17.3%	1728	14.9%	411	18.2%	1318	21.2%	994	13.6%	714
Electronically bullied (past 12 months.)	16.1%	1600	13.4%	365	17.2%	1234	20.4%	949	12.2%	635
Never or rarely feel safe at school	9.9%	924	16.2%	390	7.7%	535	9.7%	431	10.0%	484
Intentionally self-harmed (past 12 months.)	17.5%	1713	20.4%	549	16.3%	1164	22.9%	1052	12.3%	636
Felt so sad for 2+ weeks that they stopped usual activities (past 12 months.)	25.6%	2523	28.9%	779	24.4%	1743	33.5%	1550	18.3%	944
Seriously considered suicide (past 12 months.)	12.9%	1260	14.6%	395	12.2%	865	16.5%	754	9.4%	482
Made a suicide plan (past 12 months.)	9.8%	950	11.6%	310	9.1%	640	12.5%	566	7.0%	357
Attempted suicide (past 12 months.)	6.9%	670	8.8%	236	6.1%	433	8.96%	408	4.7%	242
Used a tobacco product before the age of 11	2.9%	279	4.9%	130	2.1%	150	2.5%	113	3.2%	166
Current cigarette use (past 30 days.)	1.8%	180	2.9%	79	1.4%	101	1.3%	59	2.3%	120
Current smokeless tobacco use (past 30 days.)	0.9%	92	1.6%	42	0.7%	50	0.6%	27	1.2%	64
Current cigar use (past 30 days.)	2.5%	248	4.2%	111	1.9%	77	2.4%	110	2.7%	137
Used first electronic vapor product before age 11	2.5%	247	3.8%	102	2.0%	7179	2.2%	104	2.8%	143
Current electronic vapor product (past 30 days.)	8.6%	850	6.6%	174	9.4%	975	8.4%	391	8.9%	454
Parents think it is very wrong for student to use tobacco	85.6%	8092	83.3%	2044	86.4%	6048	86.8%	3903	84.7%	4151
Current nicotine product use (past 30 days.)	7.0%	742	12.0%	334	5.2%	408	6.8%	352	7.0%	380
Drank alcohol before the age 11 years	6.1%	582	8.0%	208	5.4%	375	5.1%	230	6.8%	339
Current alcohol use (past 30 days)	5.9%	565	6.6%	173	5.6%	392	6.2%	283	5.5%	276
Someone usually gave them alcohol (among current users, past 30 days)	39.5%	246	42.0%	71	38.6%	175	41.0%	125	38.4%	119
Parents think it is very wrong for student to drink alcohol	68.6%	6442	70.0%	1701	68.1%	4740	71.0%	3172	66.2%	4870

Appendix: Prevalence % and Population Estimates for Students Overall, by Region, and by Gender for Summit County 2018 Middle School YRBS

Variable	Overall		Akron		Suburbs		Female		Male	
	%	Pop. Est.	%	Pop. Est.	%	Pop. Est.	%	Pop. Est.	%	Pop. Est.
Ever used marijuana	7.6%	744	12.4%	323	5.9%	421	7.3%	337	7.9%	405
Tried marijuana for the first time before the age of 11	1.7%	164	3.7%	96	1.0%	68	1.1%	50	2.2%	114
Current marijuana use (past 30 days.)	3.7%	356	6.8%	177	2.5%	7144	3.4%	157	3.9%	198
Usually smoked marijuana (among users, past 30 days.)	72.0%	337	74.1%	158	70.3%	179	73.1%	158	71.1%	179
Parents think it is very wrong for student to use marijuana	85.7%	8049	79.6%	1929	87.9%	6120	86.3%	3856	85.2%	4145
Ever used heroin	0.5%	46	1.2%	32	0.2%	14	0.2%	11	0.7%	35
Ever used methamphetamines	0.9%	87	1.9%	51	0.5%	36	0.7%	31	1.1%	55
Ever used inhalants	6.1%	599	7.6%	201	5.6%	399	6.8%	316	5.3%	271
Ever used synthetic or designer drugs	2.4%	235	3.5%	92	2.0%	144	2.4%	113	2.3%	118
Ever used prescription pain medicine (without a prescription or differently than prescribed)	5.1%	501	5.4%	140	5.0%	360	5.5%	256	4.8%	241
Ever used other prescription drugs (without a prescription or differently than prescribed)	4.9%	476	5.4%	141	4.7%	335	5.3%	245	4.4%	221
Offered, sold or given illegal drugs on school property (past 12 months.)	6.3%	615	6.5%	170	6.2%	445	5.6%	257	6.9%	350
Attended school under the influence of alcohol or drugs (past 12 months.)	3.6%	352	6.1%	160	2.7%	192	3.7%	170	3.5%	180
Gambled money or personal items (past 12 months.)	16.9%	1644	15.5%	400	17.4%	1245	9.5%	439	23.4%	1185
Ever had sexual intercourse	6.1%	362	8.0%	202	4.7%	160	4.2%	118	7.9%	244
Use a condom always or most of the time (among currently sexually active.)	46.7%	138	41.9%	76	54.4%	62	42.1%	33	48.4%	105
Taught about HIV/AIDS in school	61.7%	5810	68.6%	1673	59.4%	4136	58.9%	2636	64.4%	3134
Talked about HIV/AIDS with adults in family	37.0%	3466	43.9%	1059	34.6%	2407	36.9%	1648	37.2%	1804
Overweight (BMI >85th percentile and <95th percentile for age and sex.)	17.9%	1395	18.5%	387	17.7%	1009	18.1%	638	17.8%	757
Obese (Having a BMI of >95th percentile for age and sex.)	15.2%	1184	19.1%	400	13.8%	784	12.8%	451	17.2%	732
Described themselves as slightly or very overweight	29.9%	2845	27.2%	684	30.8%	2161	33.1%	1484	26.7%	1333
Trying to lose weight	42.7%	4113	44.9%	1143	41.9%	2969	50.0%	2268	36.1%	1815

Appendix: Prevalence % and Population Estimates for Students Overall, by Region, and by Gender for Summit County 2018 Middle School YRBS

Variable	Overall		Akron		Suburbs		Female		Male	
	%	Pop. Est.	%	Pop. Est.	%	Pop. Est.	%	Pop. Est.	%	Pop. Est.
Ate fruit two or more times yesterday	54.0%	5203	52.5%	1336	54.5%	3867	51.0%	2333	56.7%	2843
Ate vegetables two or more times yesterday	35.4%	3408	37.0%	938	34.8%	2470	35.3%	1611	35.6%	1781
Drank soda or pop one or more times yesterday	48.9%	4711	56.1%	1425	46.4%	3286	46.2%	2115	51.5%	2575
Drank beverages high in caffeine one or more times yesterday	18.8%	1808	21.4%	541	17.9%	1267	19.6%	897	18.1%	901
Did not eat breakfast every day (past 7 days.)	63.0%	6069	66.5%	1696	61.7%	4373	69.1%	3154	57.4%	2877
Ate fast food one or more times (past 7 days.)	70.9%	6785	70.4%	1773	71.0%	5012	71.0%	3232	70.7%	3516
Went hungry sometimes, most of the time, always (past 30 days.)	14.4%	1373	17.8%	443	13.2%	930	14.9%	680	13.7%	678
Did not participate in at least 60 minutes of physical activity on any day (past 7 days.)	14.4%	1372	21.8%	539	11.9%	833	16.1%	726	13.0%	638
Physically active at least 60 minutes/day on 5 or more days (past 7 days.)	44.2%	4196	39.3%	970	45.9%	3226	37.6%	1699	50.3%	2478
Watched TV 3+ hours/day (on average school day.)	20.5%	1948	27.8%	690	17.9%	1258	21.9%	993	19.0%	936
Used computer for 3+ hours/day not for school work (on average school day.)	49.6%	4700	54.9%	1354	47.7%	7015	45.3%	2045	53.4%	2626
Played on at least one sports team (past 12 months.)	63.0%	5983	55.1%	4625	65.7%	4625	60.0%	2711	65.8%	3243
Sleep 8 or more hours of sleep per night	45.6%	4298	41.6%	2455	47.0%	3277	42.5%	1908	48.6%	2372
Went to ER because of asthma (past 12 months, among students with asthma.)	30.7%	752	34.3%	250	29.2%	502	32.7%	366	29.4%	386
Missed school because of illness (past 30 days.)	43.5%	4086	43.0%	2429	43.7%	3042	45.9%	2055	41.3%	2008
Saw a doctor or nurse for a routine check-up (past 12 months.)	68.5%	6407	58.0%	2414	72.2%	5006	67.9%	3027	69.3%	3352
Saw a dentist for a routine check-up (past 12 months.)	71.6%	6687	61.3%	1472	75.2%	5215	71.3%	3177	72.1%	3479
Saw a professional for a mental health issue (past 12 months.)	29.1%	2704	30.3%	726	28.7%	1978	30.3%	1341	27.7%	1331
Get the help they need when they feel sad, empty, or hopeless	52.5%	3083	48.2%	751	54.0%	2332	51.9%	1628	53.1%	1431
Described their grades in school as A's and B's (past 12 months.)	80.2%	7252	74.3%	1786	82.3%	5466	83.7%	3596	77.0%	3633
Had at least one meal with family (past 7 days.)	90.1%	8605	87.2%	2186	91.2%	6419	88.9%	4038	91.2%	4514
Have one or more supportive adults	79.7%	7376	78.1%	2390	80.2%	5510	80.0%	3542	79.5%	3802
Have one or more trusted friends	89.9%	8321	86.5%	2069	91.0%	2391	90.9%	4022	88.9%	4253
Have one or more trusted teachers or adults at school	62.9%	5827	61.6%	1471	63.3%	4356	62.6%	2764	63.3%	3034
Parents talk with student almost every day about school	57.4%	5329	53.4%	1275	58.8%	4054	57.9%	2566	57.2%	2742
Spent at least one day in clubs or organizations outside of school (past 7 days.)	52.4%	4863	51.4%	1232	52.7%	1232	57.7%	2552	47.3%	2278