

SUMMIT COUNTY ADOLESCENT HEALTH

# 2018 Summit County Youth Risk Behavior Survey

High School Report

September 2019



Prevention Research Center for Healthy Neighborhoods  
at Case Western Reserve University



## Acknowledgements

The 2018 Summit County High 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.

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## 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 9 through 12 throughout Summit County. The survey was tailored to fit local needs and addressed a wide range of topics. The 2018 Summit County High 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 behaviors
- Section 10: Sexual 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
- Section 16: Sexual minority youth

This report summarizes results from the 2018 Summit County High 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, race/ethnicity 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 High School YRBS sample, all public schools in Summit County that contained 9<sup>th</sup>, 10<sup>th</sup>, 11<sup>th</sup>, and 12<sup>th</sup> 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 high schools selected for participation, 20 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 20459 students were eligible to complete the survey, and 12112 usable questionnaires remained after the data set was cleaned and edited for inconsistencies. Missing data were not statistically imputed. The school response rate was 80% and the student response rate was 82%. The overall response rate was 65% (80% x 82%).

The overall response rate allowed for data to be weighted to the population of 9<sup>th</sup> through 12<sup>th</sup> 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. Population estimates provided are calculated by weighting the data to the demographics of the total population.

The questionnaire included six 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=76%)—Akron Alternative Academy, Akron Early College, John R. Buchtel Community Learning Center, East Community Learning Center, Ellet Community Learning Center, Firestone Community Learning Center, Kenmore/Garfield High School, North High School, National Inventors Hall of Fame School Center for Science, Technology, Engineering and Mathematics High School.
- **Area 2: Suburbs** (response rate=59%)—Barberton High School, Copley High School, Coventry High School, Cuyahoga Falls High School, Hudson High School, Nordonia High School, Norton High School, Springfield High School, Stow-Munroe Falls High School, Tallmadge High School, Woodridge High 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 High School YRBS. A total of 12112 usable surveys were completed.

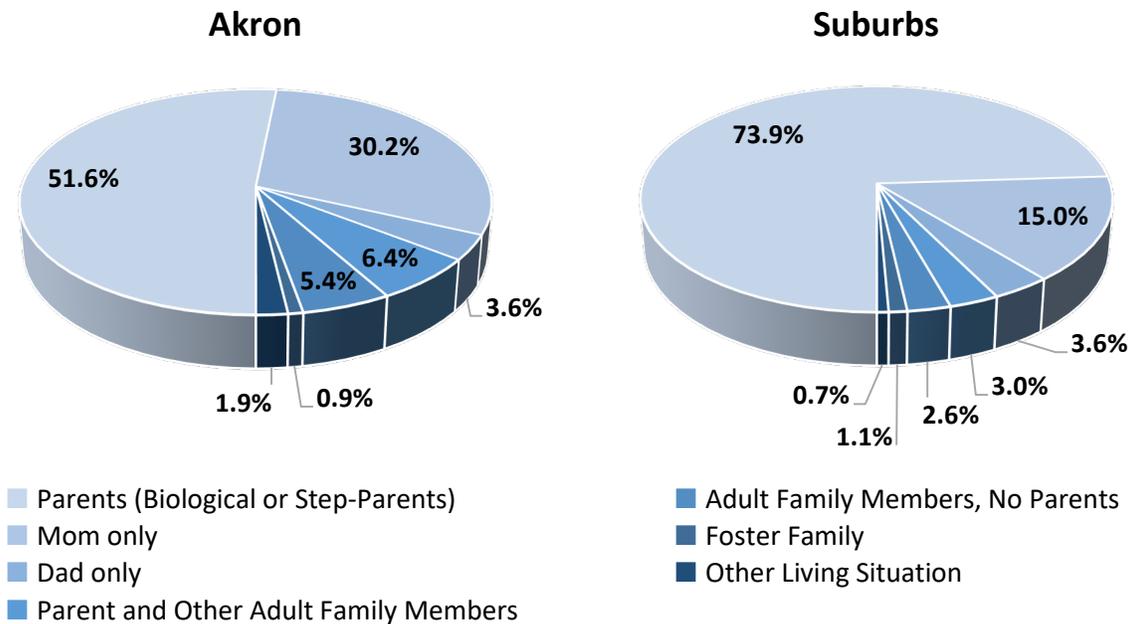
<b>2018 Summit County High School YRBS</b>			
	Sample N	Population Estimate	Weighted %
Total	12112	20459	100%
<b>Region</b>			
Akron	4239	5586	27.3%
Suburbs	7873	14873	72.7%
<b>Gender</b>			
Female	6114	10408	51.1%
Male	5944	9965	48.9%
<b>Race</b>			
White*	7331	14880	73.3%
Black*	2228	4079	20.1%
Asian*	688	377	1.9%
Hispanic	666	240	1.2%
Other/Multiple	1091	729	3.6%
<b>Grade Level</b>			
9 <sup>th</sup>	3310	4930	24.3%
10 <sup>th</sup>	3220	4992	24.6%
11 <sup>th</sup>	2775	5126	25.3%
12 <sup>th</sup>	2719	5231	25.8%
*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, their sexual orientation, whether they identified as transgender, 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
<b>Parents (Biological or Step-Parents)</b>	67.8%	13698
<b>Mom Only</b>	19.2%	3869
<b>Dad Only</b>	3.6%	729
<b>Parent and Other Adult Family Members</b>	4.0%	801
<b>Adult Family Members, No Parents</b>	3.3%	674
<b>Foster Family</b>	1.1%	217
<b>Other Living Situation</b>	1.1%	213

### Household Composition by Region



Students in the suburbs were significantly more likely to report that they lived with their parents (biological or step-parents) (73.9%) than students in Akron (51.6%). Students in Akron were significantly more likely to report that they lived with their mother only (30.2%) than students in the suburbs (15.0%). Although less frequently reported, compared to students in the suburbs, students in Akron were more likely to live with a parent and other adult family members (6.4% vs. 3.0%) or adult family members who were not their parents (5.4% vs. 2.6%).

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?”

Times changed homes since kindergarten	Akron	Suburbs	Overall	Overall Population Estimate
Never	25.6%	40.9%	36.8%	7476
1 or 2 times	26.0%	30.1%	29.0%	5898
3 or 4 times	20.2%	15.3%	16.6%	3376
5 or 6 times	11.0%	6.3%	7.6%	1546
7 + times	9.7%	5.0%	6.2%	1269
Not sure	7.6%	2.4%	3.8%	776

Students in the suburbs were significantly more likely than students in Akron to report that they had never changed homes since kindergarten (40.9% vs. 25.6%) or that they had changed homes 1 or 2 times (30.1% vs. 26.0%) and significantly less likely to report that they had moved 3 or 4 times (15.3% vs. 20.2%), 5 or 6 times (6.3% vs. 11.0%), or 7 or more times (5.0% vs. 9.7%).

Information about students’ sexual orientation was collected for Summit County school districts overall and for the two regions by responding to the item, “Which of the following best describes you?” with answer options, “Heterosexual (straight), Gay or Lesbian, Bisexual, Not Sure”.

Sexual Orientation	Akron	Suburbs	Overall	Overall Population Estimate
Heterosexual	79.5%	86.2%	84.4%	17131
Gay, Lesbian, or Bisexual	14.5%	10.9%	11.9%	2412
Not Sure	6.0%	3.0%	3.8%	765

Students in Akron were significantly more likely to respond that they were gay, lesbian, or bisexual (14.5%) compared to students in the suburbs (10.9%). Students in Akron also more frequently said that they were “not sure” (6.0%) than those in the suburbs (3.0%).

To assess the prevalence of students who identify as transgender in Summit County school districts overall and for the two regions, students were asked, “Some people describe themselves as transgender when their sex at birth does not match the way they think or feel about their gender. Are you transgender?”

	Akron	Suburbs	Overall	Overall Population Estimate
<b>Transgender</b>	1.4%	1.5%	1.5%	293

Of Summit County high school students, 1.5% identified as transgender. There was no significant difference in the prevalence of students identifying as transgender between Akron and the suburbs.

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

Language at Home	Akron	Suburbs	Overall	Overall Population Estimate
<b>English</b>	93.4%	97.5%	96.4%	19588
<b>Language other than English</b>	6.6%	2.5%	3.6%	739

Overall, 96.4% of Summit County high school students responded that they spoke English at home. Of the 3.6% of students who reported they spoke a language other than English at home, all of the other provided language options made up less than 1% prevalence of the languages spoken at home. Students in Akron were more likely to speak a language other than English at home (6.6%) compared to students in the suburbs (2.5%).

## 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) ( $\text{kg}/\text{m}^2$ ), 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.

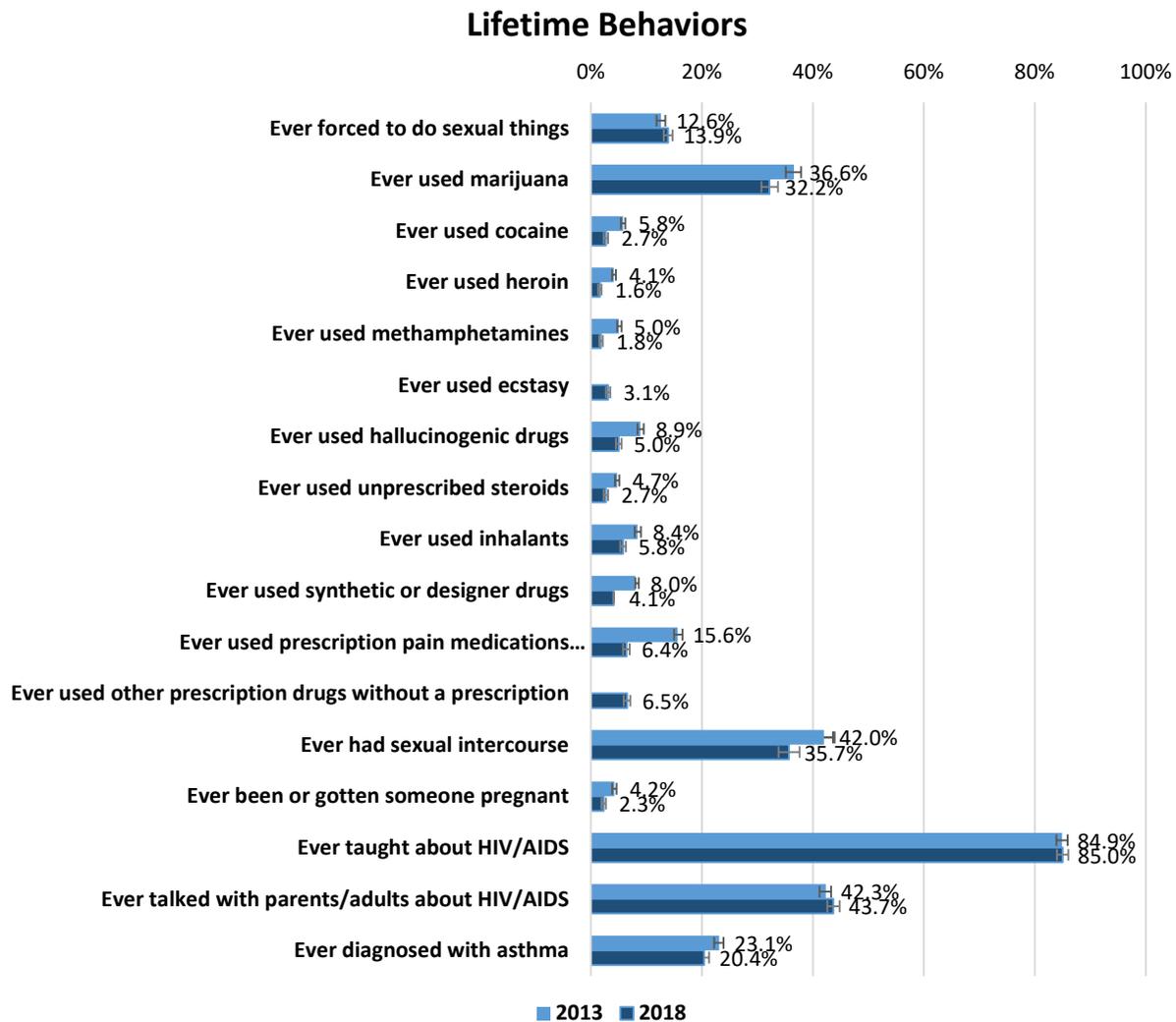
## Executive Data Summary

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 13 years

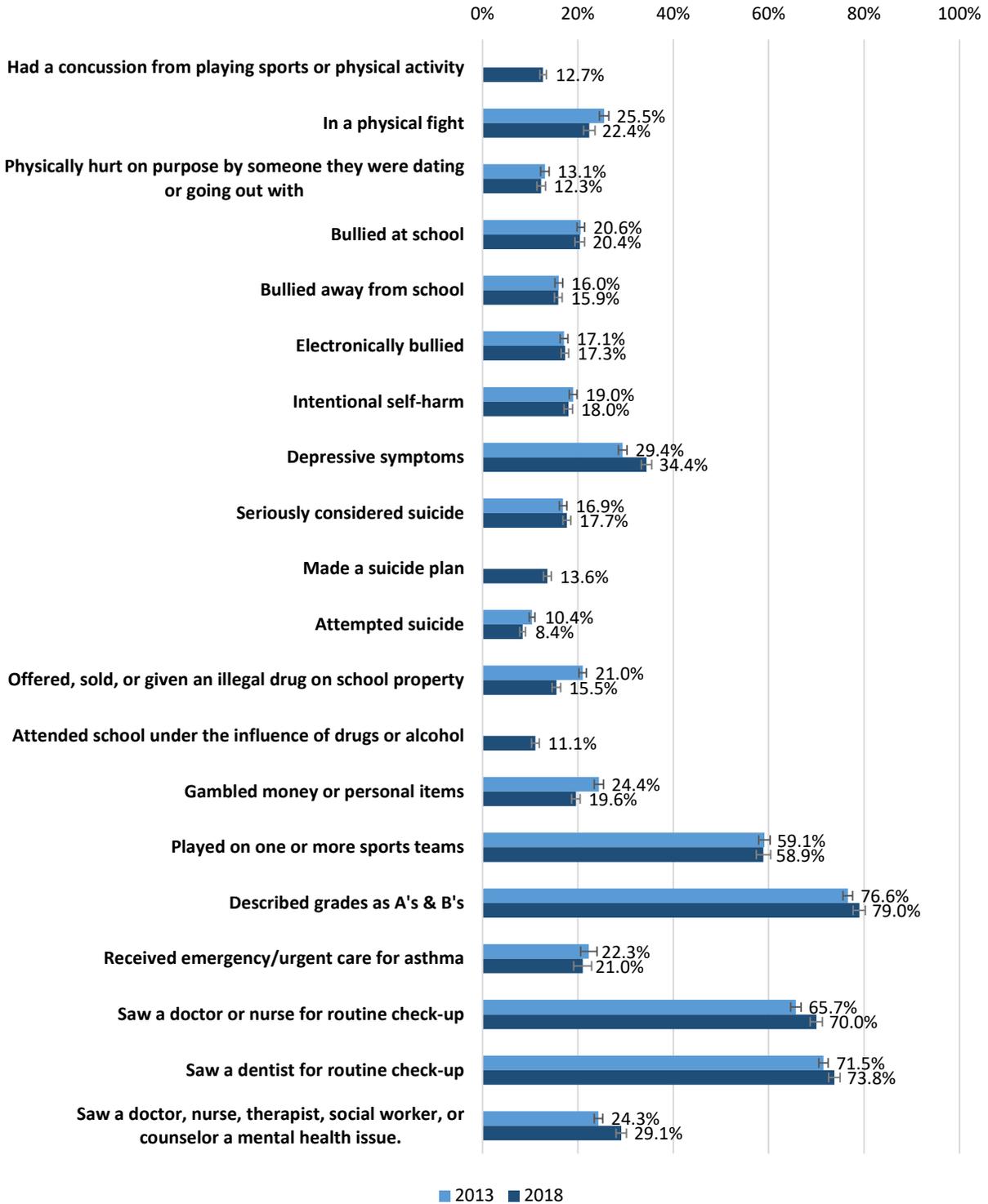
The series of graphs that follow reveal the prevalence of risk behavior engagement according to these timeframes.

The survey contains 17 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.



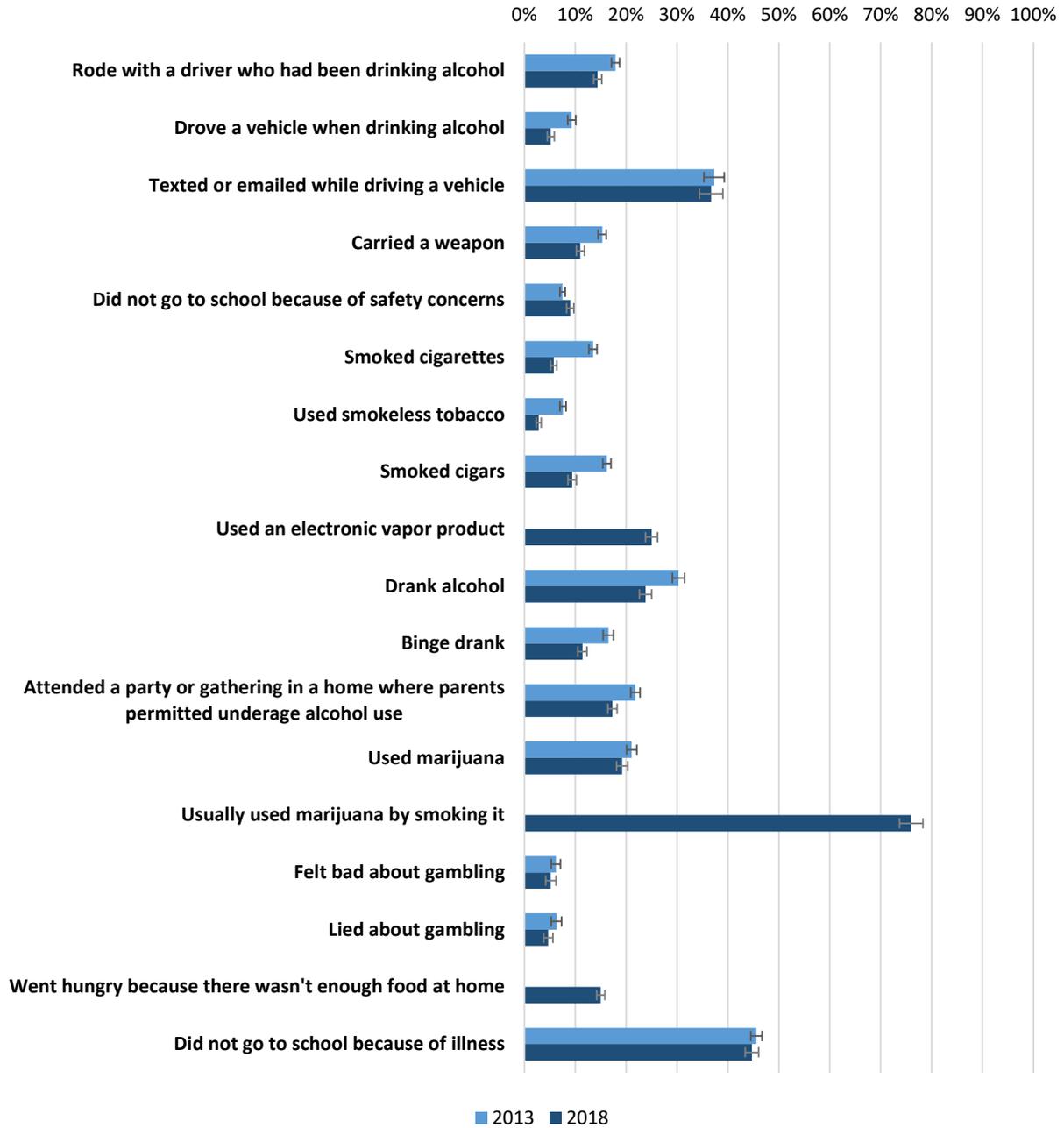
The survey contains 20 items addressing behaviors that students may have engaged in during the 12 months before the survey. The chart below depicts the prevalence for each of these items, as reported in 2013 and again in 2018.

### Behaviors in the 12 months before the survey

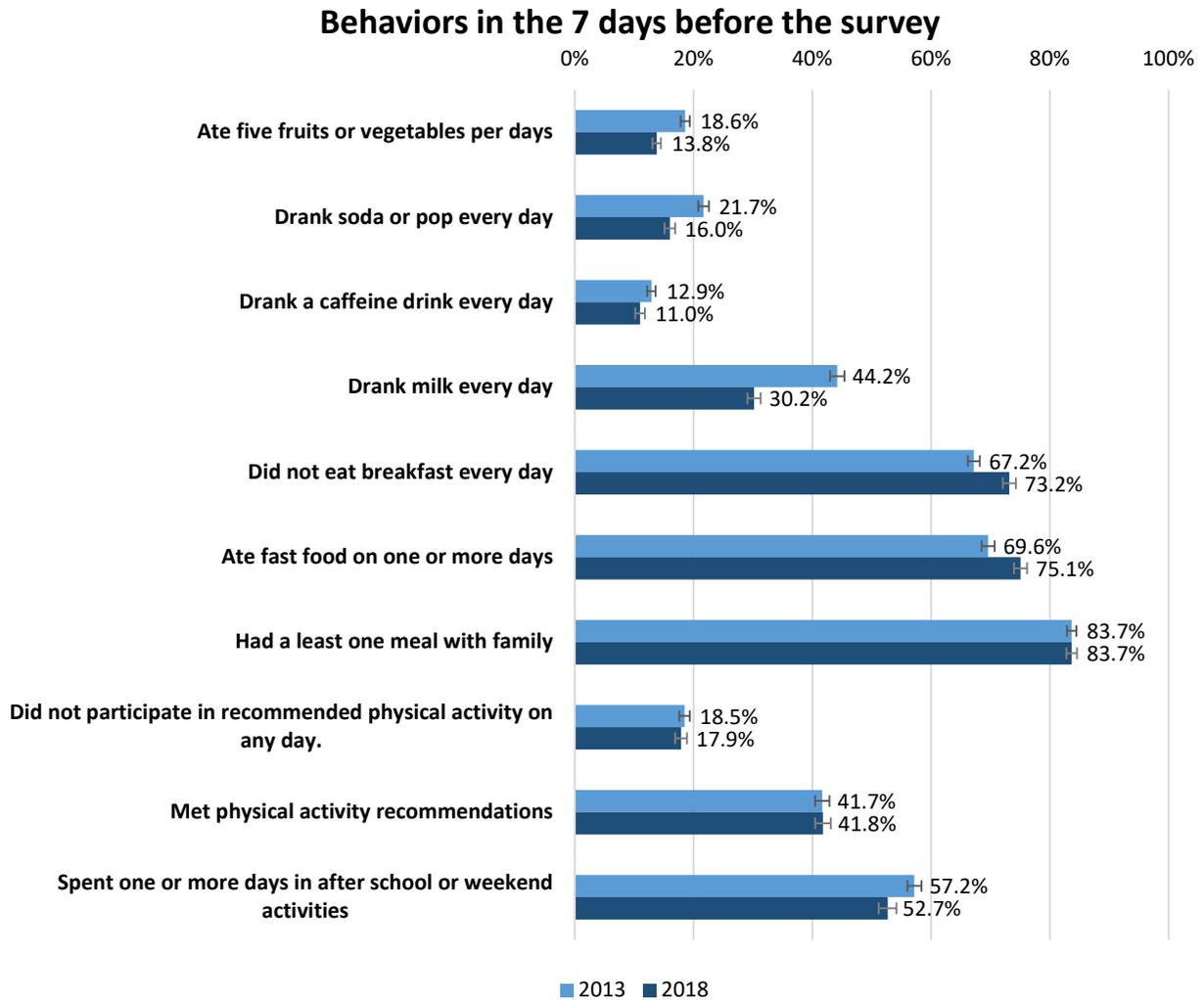


The survey contains 18 items addressing behaviors that students may have engaged in during the past 30 days, considered to be “current use”. The chart below depicts the prevalence for each of these items, as reported in 2013 and again in 2018.

### Behaviors in the 30 days before the survey

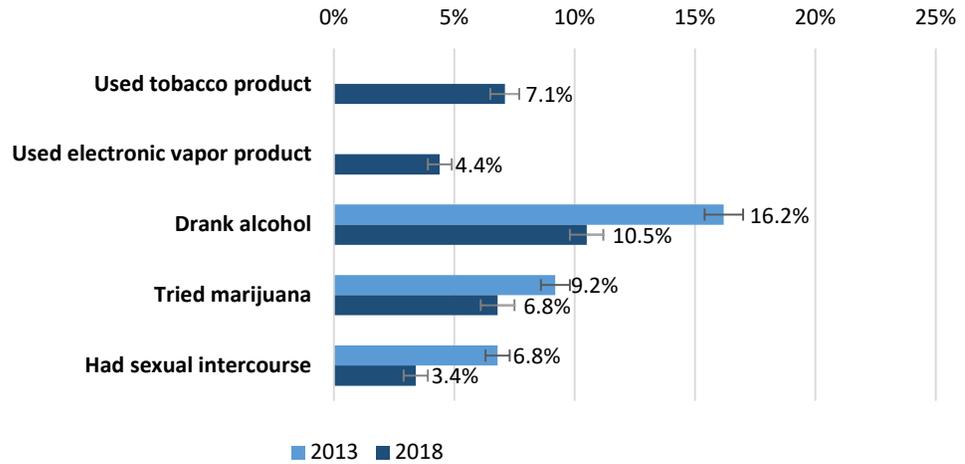


The survey contains 10 items addressing behaviors that students may have engaged in during the 7 days before the survey. The chart below depicts the prevalence for each of these items, as reported in 2013 and again in 2018.



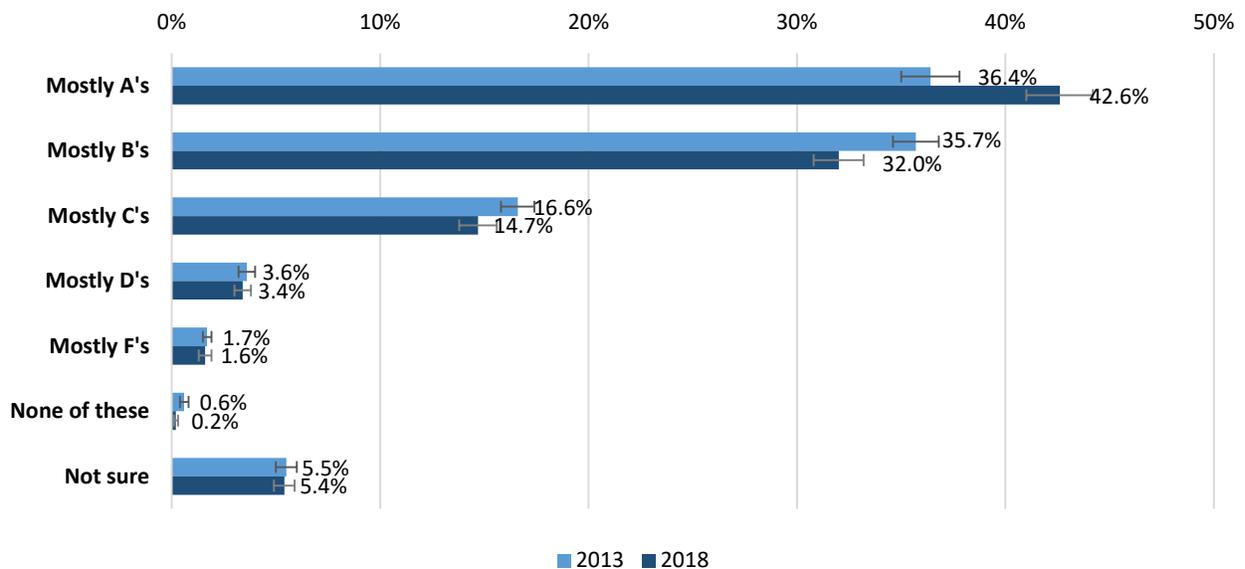
The survey contains 5 items addressing behaviors that students may have engaged in for the first time before the age of 13 years. Students who participate in risk behaviors before the age of 13 years are considered to be at higher risk for these behaviors to become habitual and to be more likely to engage in multiple risk behaviors. The chart below depicts the prevalence for each of these items, as reported in 2013 and again in 2018.

### Behaviors before age 13 years



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

### Academic Achievement



## Section 2: Behaviors that Contribute to Unintentional Injuries

The 2018 Summit County High School YRBS included five items about unintentional injury and safety, including items related to driving and head injury. Unintentional injuries are the leading cause of death for adolescents between the ages of 12 and 19; motor vehicle accidents are the most common unintentional injury death. <sup>i</sup> Safety belts, when used appropriately, reduce the risk of fatal injury to front-seat passenger car occupants by 45% and the risk of moderate-to-critical injury by 50%.<sup>ii</sup> Behaviors that co-occur with driving, such as drinking and driving or texting and driving, are also important to consider. For example, in 2017, of 15- to 20-year-old drivers who were killed in motor vehicle crashes, 24% had been drinking alcohol and 47% were unrestrained, or not using a safety belt.<sup>iii</sup>

Healthy People 2020 Objectives	Summit County 2018	Status
<b>IVP-15:</b> Increase the use of safety belts to 92.4%	92.5% of Summit County high school students reported sometimes, usually or always wearing a seat belt when riding in a motor vehicle.	The objective has been met.
<b>SA-1:</b> 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%	14.4% of Summit County high school students reported that they rode with a driver who had been drinking alcohol at least once during the past 30 days.	The 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
<b>Rarely or never wore a seatbelt</b> (When riding in a car driven by someone else.)					
<b>18.1%</b> (16.4 - 19.8) 1010	<b>12.9%</b> (11.6 - 14.4) 721	<b>9.4%</b> (8.7 - 10.2) 1462	<b>5.4%</b> (4.7 - 6.1) 800	<b>11.7%</b> (11.0 - 12.4) 2471	<b>7.5%</b> (6.8 - 8.1) 1521
<b>Rode with a driver who had been drinking alcohol</b> (During the past 30 days before the survey.)					
<b>21.2%</b> (19.7 - 22.7) 1176	<b>17.4%</b> (15.9 - 19.1) 968	<b>16.7%</b> (15.7 - 17.6) 2584	<b>13.3%</b> (12.4 - 14.3) 1974	<b>17.9%</b> (17.1 - 18.7) 3759	<b>14.4%</b> (13.6 - 15.3) 2942
<b>Drove when drinking alcohol</b> (Among students who had driven a vehicle during the 30 days before the survey.)					
<b>9.9%</b> (8.5 - 11.5) 268	<b>6.5%</b> (5.3 - 8.0) 191	<b>9.1%</b> (8.2 - 10.1) 824	<b>4.7%</b> (3.9 - 5.6) 399	<b>9.3%</b> (8.5 - 10.2) 1092	<b>5.2%</b> (4.5 - 5.9) 590
<b>Texted or emailed while driving</b> (Among students who had driven a vehicle during the 30 days before the survey.)					
<b>25.4%</b> (23.0 - 27.9) 619	<b>27.0%</b> (24.2 - 30.1) 705	<b>40.7%</b> (38.3 - 43.1) 3456	<b>39.8%</b> (37.1 - 42.6) 3153	<b>37.3%</b> (35.3 - 39.3) 4076	<b>36.7%</b> (34.4 - 39.0) 3858
<b>Had a concussion from playing sports or physical activity</b> (During the past 12 months before the survey.)					
N/A	<b>13.1%</b> (11.8 - 14.5) 726	N/A	<b>12.5%</b> (11.7 - 13.5) 1854	N/A	<b>12.7%</b> (12.0 - 13.5) 2580

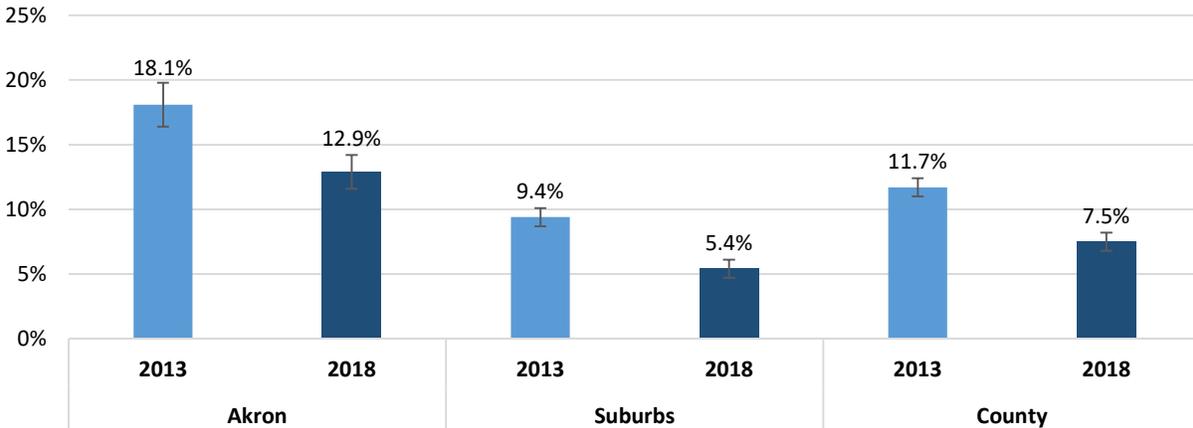
Compared to 2013, Summit County high school students in 2018 were significantly less likely to report rarely or never wearing a seatbelt when driven by someone else (11.7% vs. 7.5%), to have ridden with a driver who had been drinking alcohol in the past 30 days (17.9% vs. 14.4%), and to drive when drinking alcohol in the past 30 days (9.3% vs. 5.2%). There was no significant difference between 2013 and 2018 in rates of texting or e-mailing while driving a vehicle in the past 30 days (37.3% vs. 36.7%). In 2018, 12.7% of Summit County high school reported they had a concussion from playing sports or physical activity in the past 12 months.

There were no regional differences between Akron and its surrounding suburbs in the 2018 prevalence of students who had ever driven when drinking alcohol in the past 30 days (6.5% vs. 4.7%) or had a concussion from playing sports or physical activity (13.1% vs. 12.5%). The below graphs illustrate regional differences in the 2013 and 2018 rates of students who rarely or never wore a seatbelt, had ever ridden with a driver who had been drinking alcohol in the past 30 days, and had ever texted or emailed while driving a vehicle in the past 30 days.

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

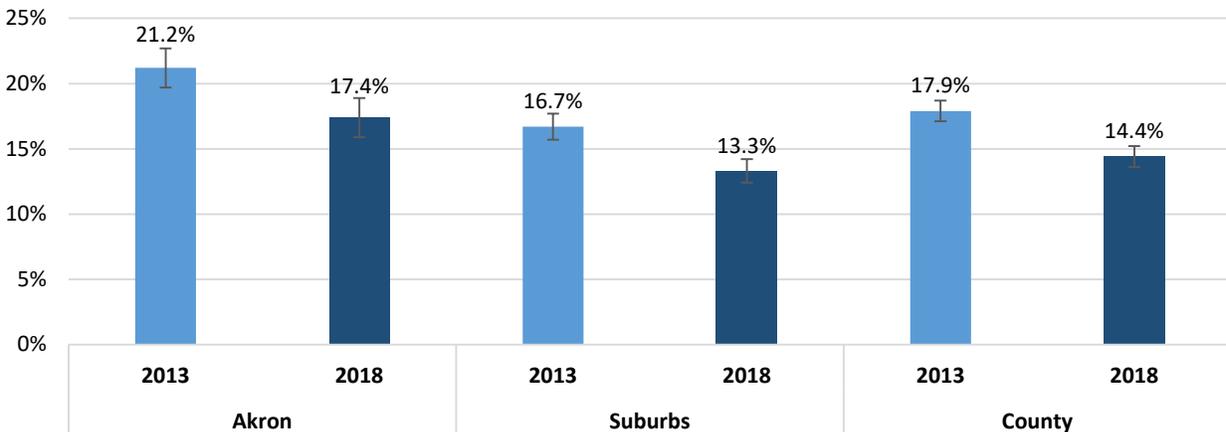
driven by someone else was significantly higher in Akron (12.9%) than in the suburbs (5.4%), however these rates have significantly decreased in both Akron and the suburbs since 2013 (18.1% and 9.4%, respectively).

### Never or rarely wore a seat belt By region, 2013 vs. 2018



Students were asked how many times in the past 30 days they rode in a vehicle driven by someone who had been drinking alcohol. In 2018, the prevalence of ever riding in a vehicle with a driver who had been drinking alcohol in the past 30 days was significantly higher in Akron (17.4%) than in the suburbs (13.3%), however these rates have significantly decreased in both Akron and the suburbs since 2013 (21.2% and 16.7%, respectively).

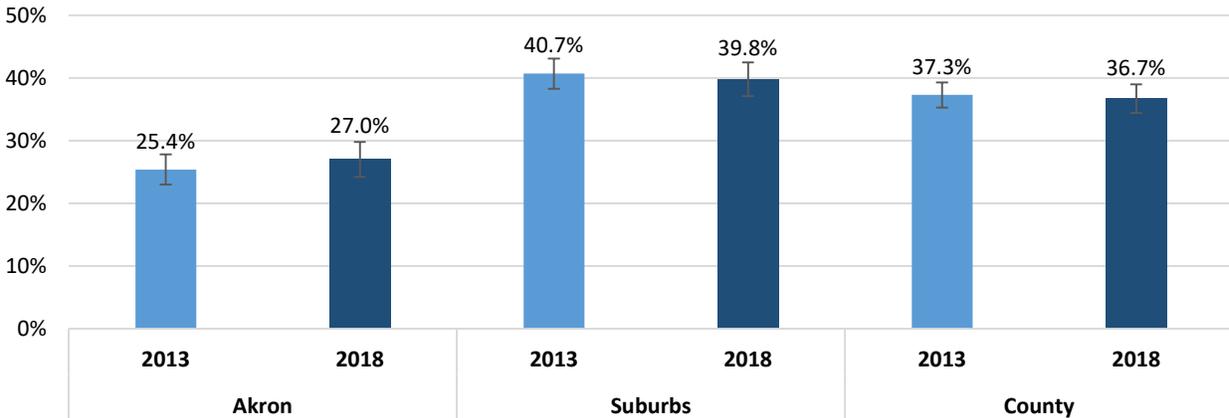
### Rode in a vehicle with a driver who had been drinking alcohol By region, 2013 vs. 2018



Summit County high school students were asked how many times they had texted or emailed while driving a vehicle in the past 30 days. Among students who had driven, there was no significant difference between 2013 and 2018 in the overall prevalence or regional prevalence of students who had ever texted or

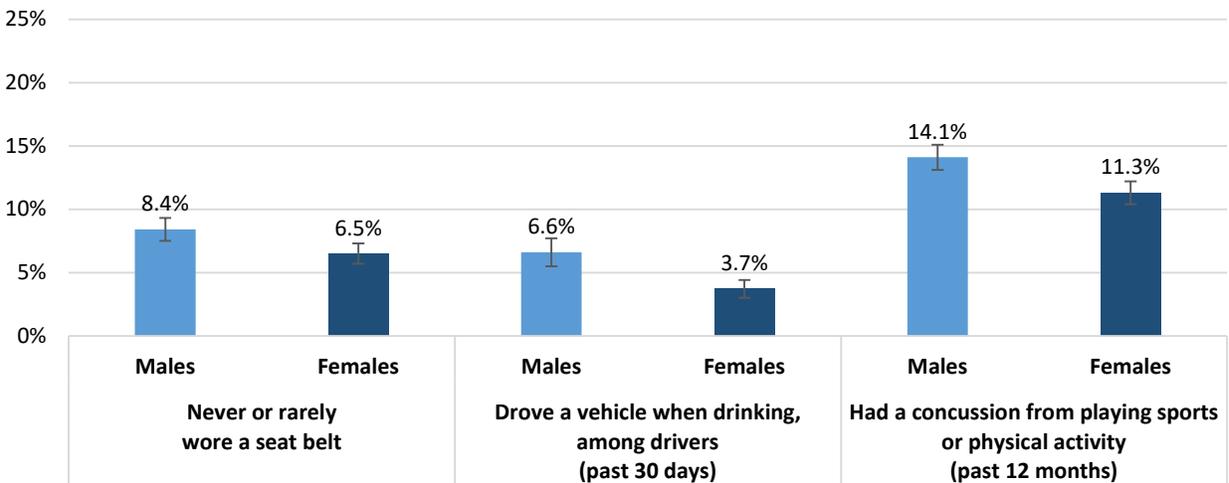
emailed while driving. However, students in the suburbs were significantly more likely to report ever having texted or emailed in the past 30 days (39.8%) than students in Akron (27.0%).

### Texted or emailed while driving, among drivers By region, 2013 vs. 2018



High school males in Summit County were significantly more likely than females to report three unintentional injury behaviors – never or rarely wearing a seatbelt (8.4% vs. 6.5%), ever driving a vehicle after drinking in the past 30 days (6.6% vs. 3.7%), and ever having a concussion from playing sports or physical activity in the past 12 months (14.1% vs. 11.3%). There were no gender differences in ever riding in a vehicle with a driver who had been drinking alcohol in the past 30 days (14.0% vs. 14.8%) or ever texting or emailing while driving in the past 30 days (36.5% vs. 36.8%).

### Unintentional Injury – 2018 Gender Differences



### Demographics

Rarely or never wore a seat belt			
Category	%	CI	
<b>Gender</b>			
Female	6.5	5.7	- 7.3
Male	8.4	7.5	- 9.5
<b>Race/Ethnicity</b>			
White	5.0	4.3	- 5.7
Black	14.9	13.2	- 16.7
Asian	8.7	6.6	- 11.5
Hispanic	21.6	16.1	- 28.4
Other	10.5	8.6	- 12.7
<b>Grade</b>			
9th	7.7	6.5	- 9.2
10th	6.9	5.8	- 8.2
11th	6.3	5.1	- 7.8
12th	8.2	6.8	- 9.8
<b>Total</b>	<b>7.5</b>	<b>6.8</b>	<b>- 8.1</b>

Rode with a driver who had been drinking alcohol			
Category	%	CI	
<b>Gender</b>			
Female	14.8	13.7	- 16.0
Male	14.0	12.9	- 15.2
<b>Race/Ethnicity</b>			
White	12.7	11.8	- 13.6
Black	19.2	17.4	- 21.2
Asian	16.2	13.0	- 19.9
Hispanic	30.9	25.1	- 37.5
Other	17.1	14.3	- 20.2
<b>Grade</b>			
9th	16.3	14.8	- 18.0
10th	14.9	13.4	- 16.6
11th	13.0	11.5	- 14.7
12th	12.8	11.3	- 14.6
<b>Total</b>	<b>14.4</b>	<b>13.6</b>	<b>- 15.3</b>

In Summit County, 7.5% of students rarely or never wore a seat belt when riding in a vehicle driven by someone else. The prevalence of rarely or never wearing a seat belt was higher among male (8.4%) than female (6.5%) students. The prevalence of rarely or never wearing a seat belt was higher among Black and Hispanic (14.9% and 21.6%) students than among White, Asian, and Other/Multiple (5.0%, 8.7%, and 10.5%) students. There was no significant difference by grade level in the prevalence of rarely or never wearing a seat belt.

In Summit County, 14.4% of students had ever ridden in a car or other vehicle driven by someone else who had been drinking alcohol in the 30 days before the survey. The prevalence of having ridden with a driver who had been drinking alcohol was significantly higher among Hispanic (30.9%) students compared to other race/ethnicity groups. Students in 9<sup>th</sup> grade (16.3%) were more likely than students in 11<sup>th</sup> (13.0%) or 12<sup>th</sup> grade (12.8%) to report that they had ever ridden in a car or other vehicle driven by someone who had been drinking alcohol in the past 30 days before the survey.

Drove when drinking alcohol, among those who had driven		
Category	%	CI
<b>Gender</b>		
Female	3.7	3.0 - 4.5
Male	6.6	5.5 - 8.0
<b>Race/Ethnicity</b>		
White	4.0	3.3 - 4.9
Black	8.0	6.3 - 10.1
Asian	6.8	4.3 - 10.6
Hispanic	26.0	17.4 - 36.8
Other	7.3	4.5 - 11.6
<b>Grade</b>		
9th	5.9	4.2 - 8.1
10th	3.0	2.3 - 4.0
11th	4.5	3.5 - 5.8
12th	6.2	4.9 - 7.8
<b>Total</b>	<b>5.2</b>	<b>4.5 - 5.9</b>

Texted or e-mailed while driving, among those who had driven		
Category	%	CI
<b>Gender</b>		
Female	36.8	34.0 - 39.7
Male	36.5	33.8 - 39.3
<b>Race/Ethnicity</b>		
White	39.2	36.6 - 41.9
Black	27.2	24.3 - 30.4
Asian	25.4	20.5 - 31.0
Hispanic	52.4	43.3 - 61.3
Other	28.3	23.6 - 33.5
<b>Grade</b>		
9th	9.0	6.9 - 11.6
10th	15.1	13.1 - 17.3
11th	40.4	37.4 - 43.5
12th	53.2	49.8 - 56.6
<b>Total</b>	<b>36.7</b>	<b>34.4 - 39.0</b>

In Summit County, of high school students who had driven a vehicle during the 30 days before the survey, 5.2% had driven a car when they had been drinking alcohol during that time period. Males were more likely to report driving when drinking alcohol than females (6.6% vs. 3.7%). The prevalence of having driven when they had been drinking was highest among Hispanic students (26.0%) compared to all other race/ethnicity groups. Black students (8.0%) were also more likely than White students (4.0%) to report driving when drinking alcohol in the 30 days before the survey. By grade level, 10<sup>th</sup> grade students (3.0%) were significantly less likely to drive when drinking alcohol than 9<sup>th</sup> (5.9%) and 12<sup>th</sup> grade students (6.2%).

In Summit County, of high school students who had driven a car or vehicle during the 30 days prior to the survey, 36.7% had ever driven while texting or emailing during that time period. Among those who drove, the prevalence of having driven while texting or emailing was higher among White and Hispanic (39.2%, 52.4%) students than Black, Asian, or Other/Multiple (27.2%, 25.4%, and 28.3%) students. The prevalence of having driven while texting or emailing was highest among 11<sup>th</sup> and 12<sup>th</sup> grade (40.4% and 53.2%) students than 9<sup>th</sup> grade (9.0%) and 10<sup>th</sup> grade (15.1%) students.

<b>Had a concussion from playing a sport or being physically active</b>			
<b>Category</b>	<b>%</b>	<b>CI</b>	
<b>Gender</b>			
Female	11.3	10.4	- 12.4
Male	14.1	13.1	- 15.3
<b>Race/Ethnicity</b>			
White	11.7	10.8	- 12.6
Black	14.4	12.6	- 16.2
Asian	19.3	16.2	- 22.8
Hispanic	27.9	22.1	- 34.6
Other	15.5	12.9	- 18.4
<b>Grade</b>			
9th	12.8	11.3	- 14.4
10th	13.5	12.2	- 15.0
11th	12.1	10.8	- 13.6
12th	12.0	10.5	- 13.7
<b>Total</b>	<b>12.7</b>	<b>12.0</b>	<b>- 13.5</b>

In Summit County, 12.7% of students had experienced a concussion from playing a sport or being physically active during the 12 months prior to the survey. The prevalence of having a concussion was higher among male (14.1%) than female (11.3%) students. The prevalence of having a concussion was highest among Hispanic (27.9%) students compared to other race/ethnicity groups. The likelihood of having a concussion from playing a sport or being physically active did not vary significantly by grade level.

<sup>i</sup> 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.

<sup>ii</sup> National Highway Traffic Safety Administration. *Traffic Safety Facts, 2006 Data: Occupant Protection*. Washington, DC: U.S. Department of Transportation, National Highway Traffic Safety Administration; 2007. Available at <http://www-nrd.nhtsa.dot.gov/Pubs/810807.PDF>. Accessed May 21, 2012.

<sup>iii</sup> National Highway Traffic Safety Administration. *Traffic Safety Facts, 2017 Data: Young Drivers*. Washington, DC: U.S. Department of Transportation, National Highway Traffic Safety Administration; May 2019. Available at <https://crashstats.nhtsa.dot.gov/Api/Public/ViewPublication/812753>. Accessed August 20, 2019.

## Section 3: Behaviors that Contribute to Violence

The 2018 Summit County High School YRBS asked students about violent behaviors, including behaviors against others and oneself. The items address issues of physical fighting, weapon carrying, and bullying. Adolescents can experience violence along a continuum that may begin with verbal harassment and advance into physical acts of violence. <sup>i</sup> Bullying and being bullied at school are associated with key violence-related behaviors including carrying weapons, fighting and sustaining injuries from fighting. <sup>ii</sup>

Healthy People 2020 Objectives	Summit County 2018	Status
<b>IVP-34:</b> Reduce physical fighting among adolescents to no more than 28.4%.	22.4% of Summit County high school students reported being involved in at least one physical fight during the past 12 months.	The objective has been met.
<b>IVP-35:</b> Reduce bullying among adolescents to no more than 17.9%	28.6% of Summit County high school students reported being bullied on school property, away from school property or electronically during the past 12 months.	The objective has <b>not</b> 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
<b>Carried a weapon</b> (Such as a gun, knife, or club; one or more times during the past 30 days before the survey.)					
<b>15.4%</b> (14.0 - 16.9) 860	<b>12.1%</b> (10.6 - 13.7) 672	<b>15.3%</b> (14.3 - 16.3) 2932	<b>10.6%</b> (9.7 - 11.6) 1568	<b>15.3%</b> (14.5 - 16.2) 3252	<b>11.0%</b> (10.2 - 11.8) 2240
<b>Could get and be ready to fire a loaded gun</b> (In less than 24 hours.)					
N/A	<b>38.9%</b> (36.9 - 40.9) 2104	N/A	<b>44.8%</b> (43.4 - 46.2) 6525	N/A	<b>43.2%</b> (42.0 - 44.3) 8629
<b>Did not go to school because they felt unsafe at or on the way to or from school</b> (One or more times during the 30 days before the survey.)					
<b>10.4%</b> (9.3 - 11.6) 582	<b>12.9%</b> (11.6 - 14.3) 715	<b>6.5%</b> (5.9 - 7.2) 1016	<b>7.5%</b> (6.7 - 8.4) 1111	<b>7.5%</b> (7.0 - 8.1) 1598	<b>9.0%</b> (8.3 - 9.7) 1827
<b>Rarely or never feel safe and secure at school</b>					
N/A	<b>16.0%</b> (14.5 - 17.5) 750	N/A	<b>9.6%</b> (8.8 - 10.5) 1321	N/A	<b>11.2%</b> (10.5 - 12.0) 2071
<b>In a physical fight</b> (One or more times during the 12 months before the survey.)					
<b>32.2%</b> (30.4 - 34.1) 1797	<b>31.8%</b> (29.4 - 34.3) 1763	<b>23.1%</b> (21.9 - 24.4) 3616	<b>18.8%</b> (17.6 - 20.1) 2782	<b>25.5%</b> (24.5 - 26.6) 5411	<b>22.4%</b> (21.2 - 23.6) 4545
<b>Physically hurt on purpose by someone they were dating or going out with</b> (Such as being hit, slammed into something, or injured with an object or weapon; one or more times during the 12 months before the survey, among students dating.)					
<b>15.0%</b> (13.6 - 16.7) 582	<b>15.7%</b> (14.0 - 17.6) 565	<b>12.3%</b> (11.2 - 13.4) 1195	<b>10.9%</b> (10.0 - 12.0) 1021	<b>13.1%</b> (12.2 - 14.0) 1777	<b>12.3%</b> (11.4 - 13.2) 1586
<b>Ever forced to do sexual things</b> (Such as kissing, touching, or being physically forced to have sexual intercourse.)					
<b>12.9%</b> (11.7 - 14.1) 695	<b>12.7%</b> (11.4 - 14.2) 696	<b>12.5%</b> (11.6 - 13.5) 1941	<b>14.3%</b> (13.4 - 15.2) 2098	<b>12.6%</b> (11.8 - 13.4) 2637	<b>13.9%</b> (13.1 - 14.7) 2794

Akron % (Confidence Interval) Population N		Suburbs % (Confidence Interval) Population N		County % (Confidence Interval) Population N	
2013	2018	2013	2018	2013	2018
<b>Ever bullied on school property</b> (During the past 12 months before the survey.)					
<b>18.7%</b> (17.3 - 20.3) 1046	<b>15.8%</b> (14.4 - 17.3) 873	<b>21.3%</b> (20.2 - 22.5) 3332	<b>22.1%</b> (20.9 - 23.3) 3254	<b>20.6%</b> (19.8 - 21.6) 4378	<b>20.4%</b> (19.4 - 21.3) 4127
<b>Ever bullied away from school property</b> (During the past 12 months before the survey.)					
<b>12.8%</b> (11.7 - 14.0) 714	<b>11.3%</b> (10.1 - 12.6) 620	<b>17.1%</b> (16.1 - 18.2) 2678	<b>17.6%</b> (16.6 - 18.6) 2495	<b>16.0%</b> (15.2 - 16.9) 3392	<b>15.9%</b> (15.1 - 16.7) 3215
<b>Ever electronically bullied</b> (Such as through email, chat rooms, instant messaging, websites, or text messaging; during the 12 months before the survey.)					
<b>15.1%</b> (13.9 - 16.3) 821	<b>12.9%</b> (11.7 - 14.3) 709	<b>17.8%</b> (16.8 - 18.8) 2760	<b>19.0%</b> (17.9 - 20.1) 2796	<b>17.1%</b> (16.3 - 17.9) 3581	<b>17.3%</b> (16.5 - 18.2) 3505

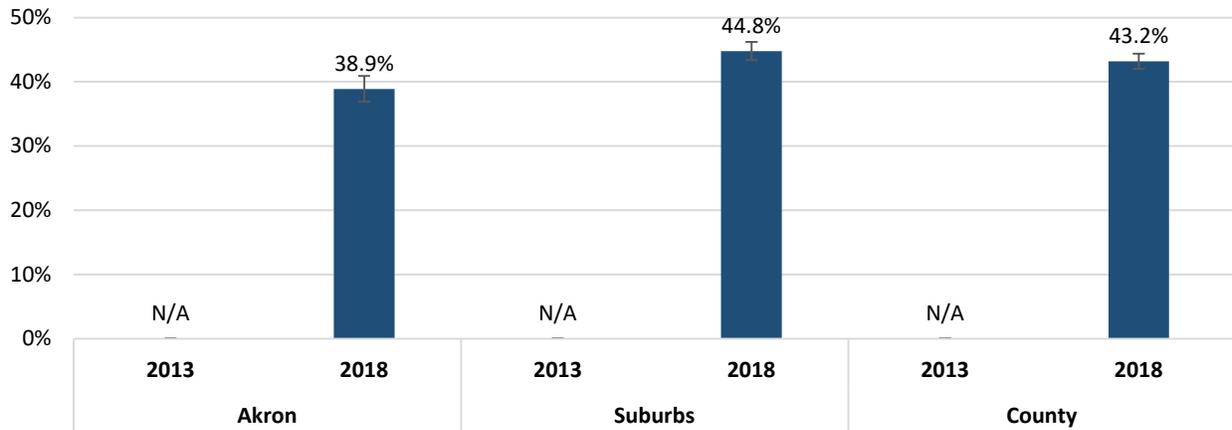
Compared to 2013, Summit County high school students in 2018 were significantly less likely to report that they had ever carried a weapon (15.3% vs. 11.0%) during the past 30 days before the survey and that they had ever been in a physical fight (25.5% vs. 22.4%) in the past 12 months. Unfortunately, compared to 2013, Summit County high 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 (7.5% vs. 9.0%). In 2018, a new question asked students how often they felt safe at school and 11.2% 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 being physically hurt on purpose by someone they were dating or going out with (13.1% and 12.3%), being forced to do sexual things (12.6% and 13.9%), being bullied on school property (20.6% and 20.4%), being bullied away from school (16.0% and 15.9%), and being bullied electronically (17.1% vs. 17.3%).

In 2018, 43.2% of Summit County high school students reported that they could get and be ready to fire a loaded gun in less than 24 hours.

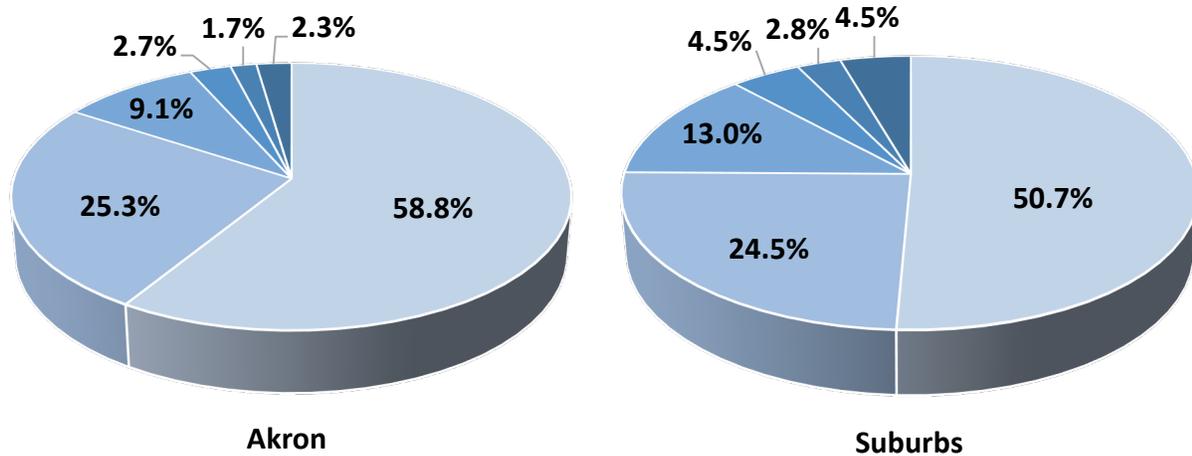
Looking regionally, there was no significant difference in the 2018 prevalence of students who reported carrying a weapon (12.1% and 10.6%) or being forced to do sexual things (12.7% and 14.3%) between Akron and its surrounding suburbs. The below graphs illustrate regional differences in the 2013 (when available) and 2018 rates of the other violence-related variables.

### Could get and be ready to fire a loaded gun in less than 24 hours By region, 2018



In Summit County, high school students in the suburbs were more likely to report that they could get and be ready to fire a loaded gun in less than 24 hours (44.8%) than students in Akron (38.9%). When comparing the amount of time students reported it would take them to get and be ready to fire a loaded gun between Akron and the suburbs, significantly more students in Akron said that they could not get a loaded gun at all (58.8% vs 50.7%). Similar numbers of students between Akron and the suburbs reported they could get and be ready to fire a gun in less than 10 minutes (25.3% vs. 24.5%).

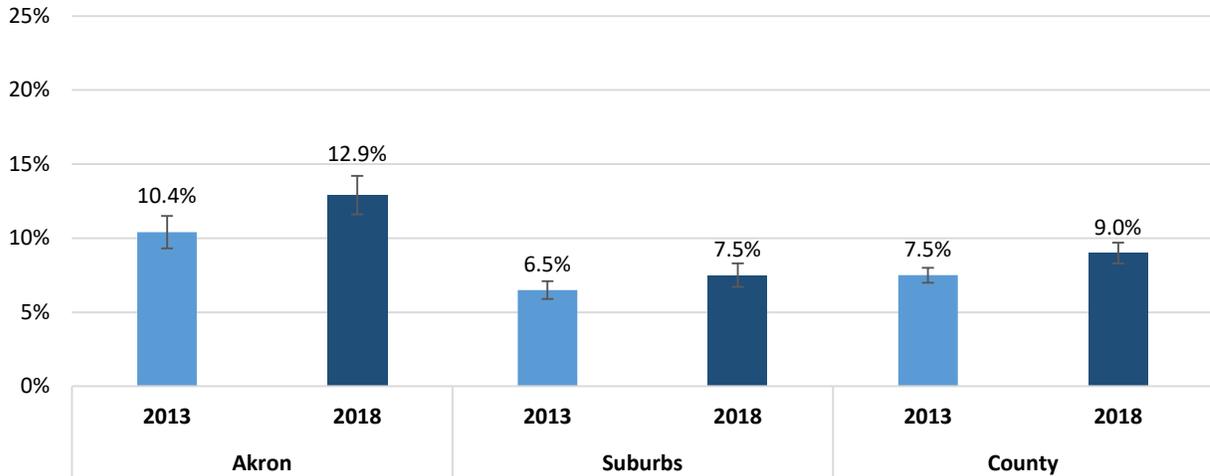
### How long would it take to get and be ready to fire a loaded gun?



- I could not get a loaded gun
- Less than 10 minutes
- 10 or more minutes, but less than an hour
- 1 or more hours, but less than 4 hours
- 4 or more hours, but less than 24 hours
- 24 hours or more

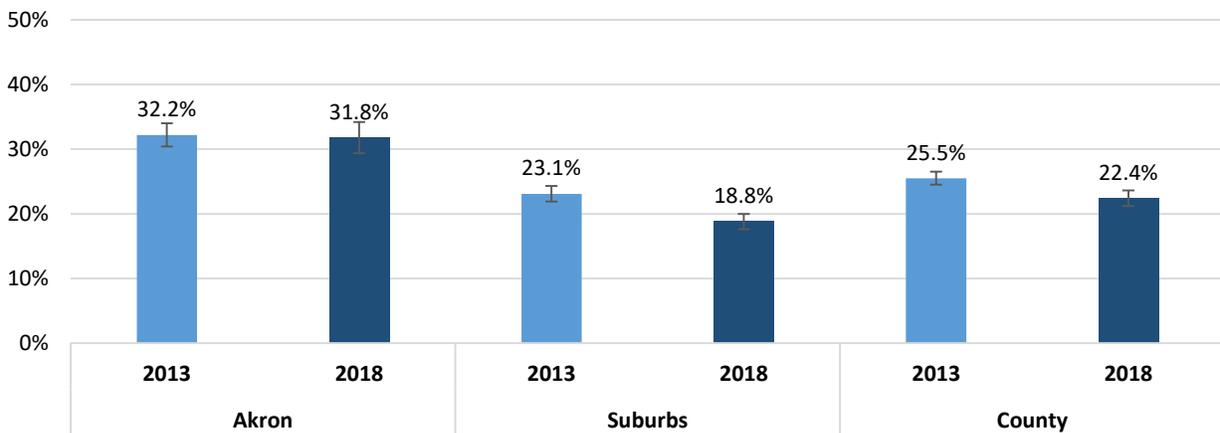
Students in Akron were more likely to report in 2018 that they did not go to school because they felt unsafe there or on their way to or from school (12.9%) than students in the suburbs (7.5%). From 2013 to 2018, there was a significant increase in Akron students missing one or more days of school because they felt unsafe (10.4% vs. 12.9%), while there was no significant change between 2013 to 2018 in the suburbs (6.5% vs. 7.5%). Similarly, Akron students were more likely to report that they rarely or never felt safe at school (16.0%) compared to students in the suburbs (9.6%).

**Ever missed school because they felt unsafe at/to/from school in past 30 days  
By region, 2013 vs. 2018**



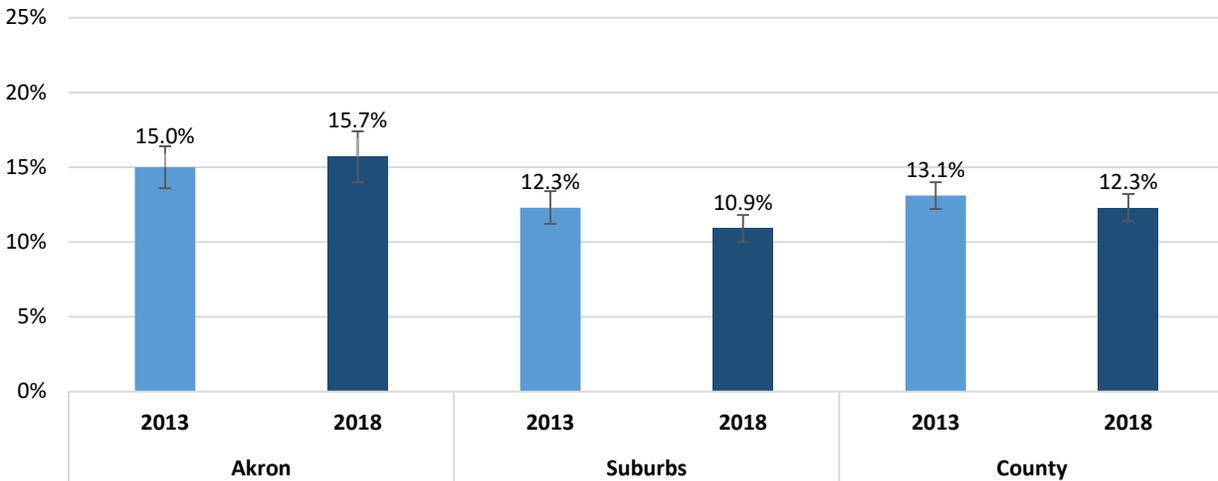
Akron students were significantly more likely to report in 2018 that they had been in a physical fight in the past 12 months before the survey (31.8%) compared to students in the suburbs (18.8%). While there has been no change in the prevalence of getting in a physical fight for Akron students between 2013 and 2018 (32.2% vs. 31.8%), this behavior has significantly decreased for students in the suburbs (23.1% vs. 18.8%).

**In a physical fight in past 12 months  
By region, 2013 vs. 2018**



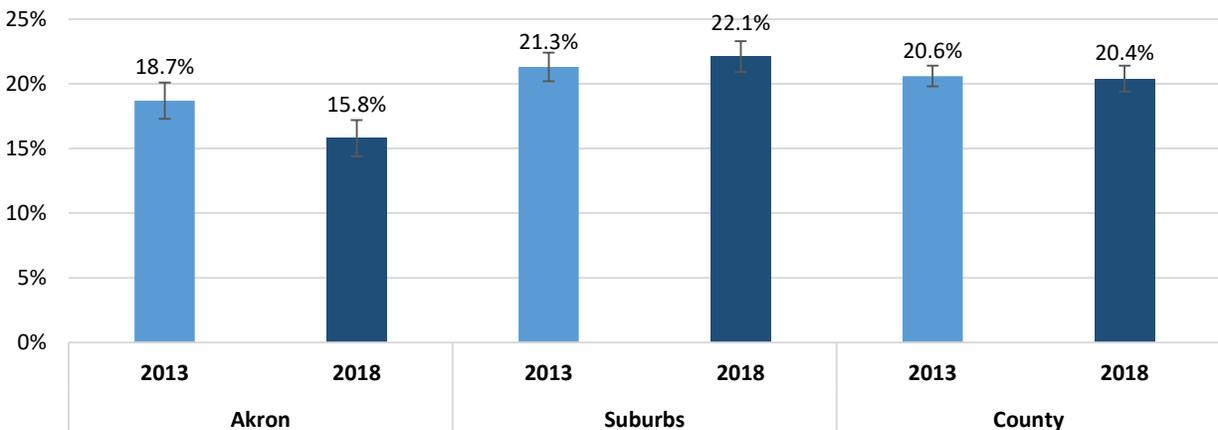
Akron students were significantly more likely to report in 2018 that they had been physically hurt, including being hit, slammed into something, or injured with an object or weapon, on purpose by someone they were dating or going out with in the past 12 months (15.7%) than students in the suburbs (10.9%). From 2013 to 2018, there was no significant change in the prevalence of students reporting that they had been physically hurt on purpose by someone they were dating in either Akron (15.0% vs. 15.7%) or the suburbs (12.3% vs. 10.9%).

**Physically hurt on purpose by someone they were dating or going out with  
By region, 2013 vs. 2018**



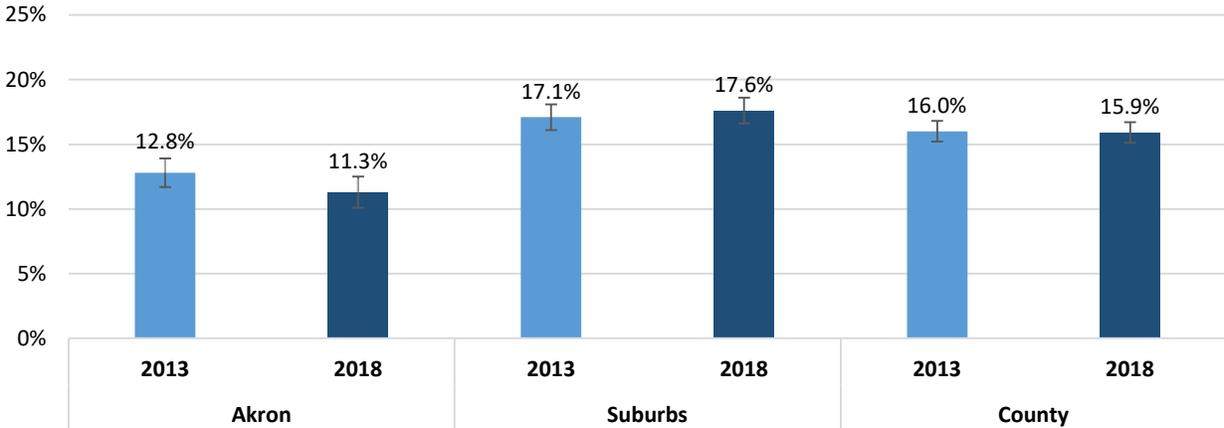
Summit county high school students in the suburbs were significantly more likely to report in 2018 that they had ever been bullied on school property in the past 12 months (22.1%) compared to students in Akron (15.8%). From 2013 to 2018, there was no significant change in the prevalence of students in the suburbs reporting being bullied at school (21.3% vs. 22.1%), however Akron students in 2018 were significantly less likely to report being ever bullied at school (15.8%) than students in 2013 (18.7%).

**Bullied on school property in the past 12 months  
By region, 2013 vs. 2018**



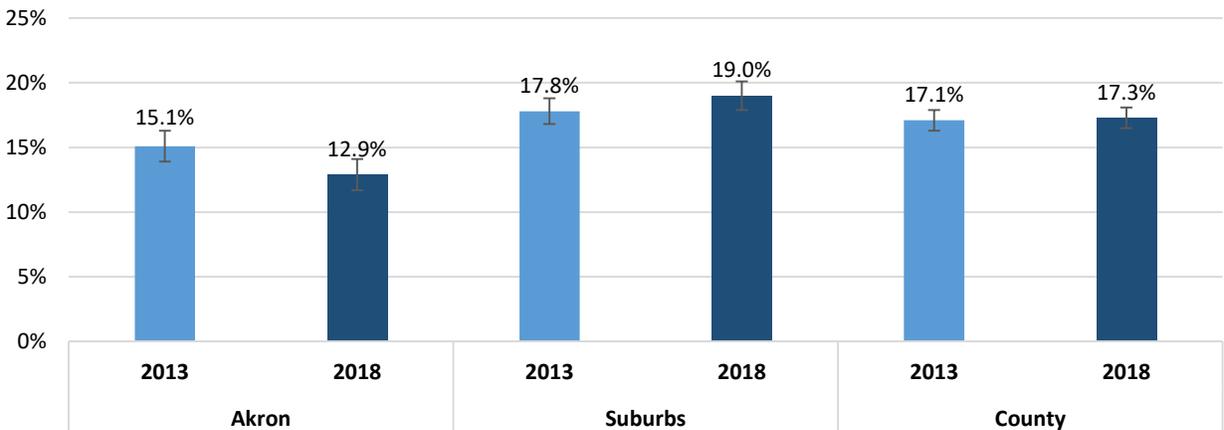
Summit county high school students in the suburbs were significantly more likely to report in 2018 ever being bullied away from school in the past 12 months (17.6%) compared to students in Akron (11.3%). From 2013 to 2018, there was no significant change in the prevalence of students reporting being bullied away from school either in the suburbs (17.1% vs. 17.6%) or in Akron (12.8% vs. 11.3%).

### Bullied away from school in the past 12 months By region, 2013 vs. 2018



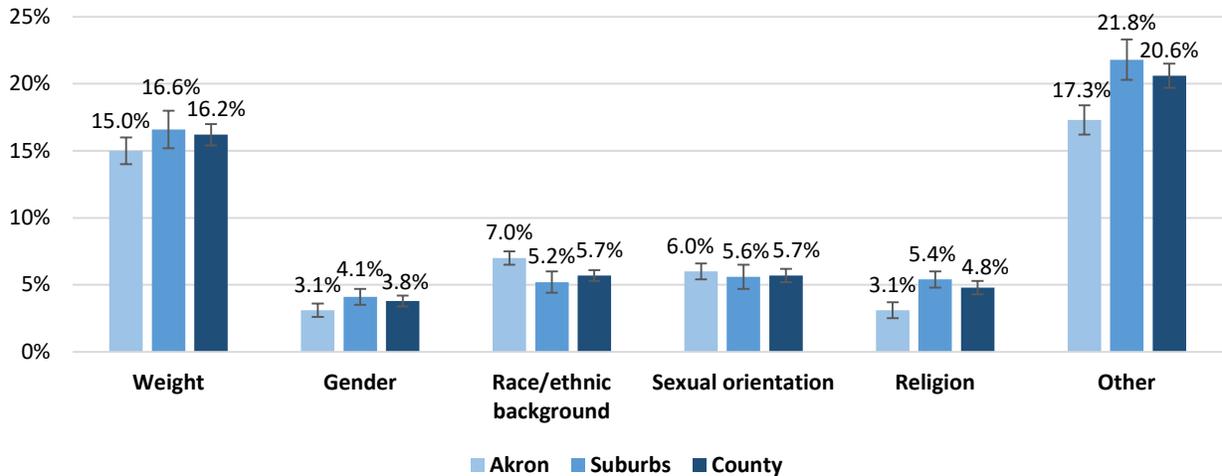
Summit county high school students in the suburbs were significantly more likely to report in 2018 ever being e-bullied, such as through email, chat rooms, instant messaging, websites, or text messaging, in the past 12 months (19.0%) compared to students in Akron (12.9%). From 2013 to 2018, there was no significant change in the prevalence of students reporting being e-bullied either in the suburbs (17.8% vs. 19.0%) or in Akron (15.1% vs. 12.9%).

### E-bullied in the past 12 months By region, 2013 vs. 2018



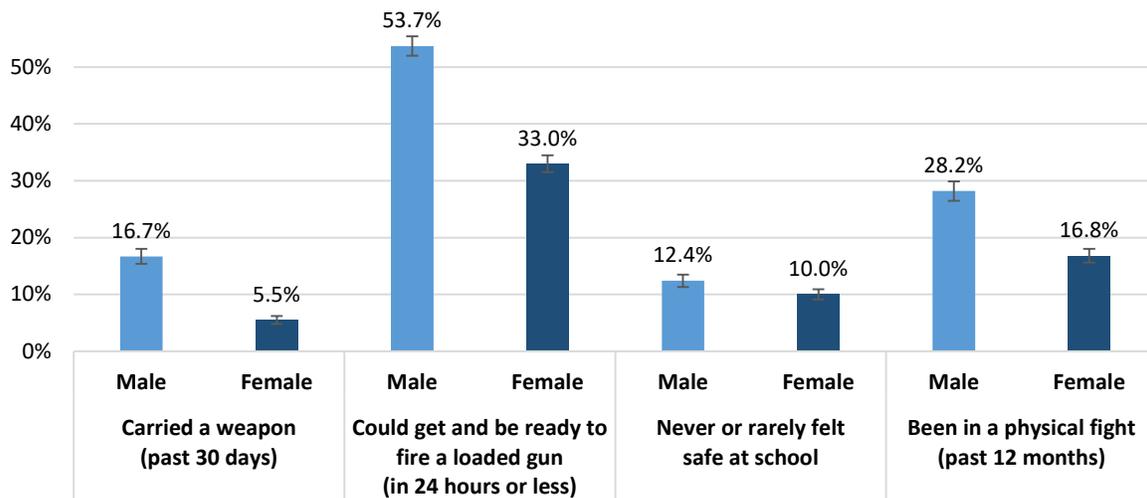
High school students in Summit County were asked to select all the reasons they had been teased or name-called in the past 12 months from the following list: their weight, gender, race/ethnic background, sexual orientation, religion, or “other”. County-wide, the most commonly selected reasons for being teased or name-called were weight (16.2%) and “other” (20.6%). Students in Akron were significantly more likely to report that they had been teased or name-called because of their race/ethnic background (7.0%) than students in the suburbs (5.2%). Students in the suburbs were significantly more likely to report that they had been teased or name-called because of their religion (5.4%) than students in Akron (3.1%).

### Reasons for being teased or name-called By region, 2018



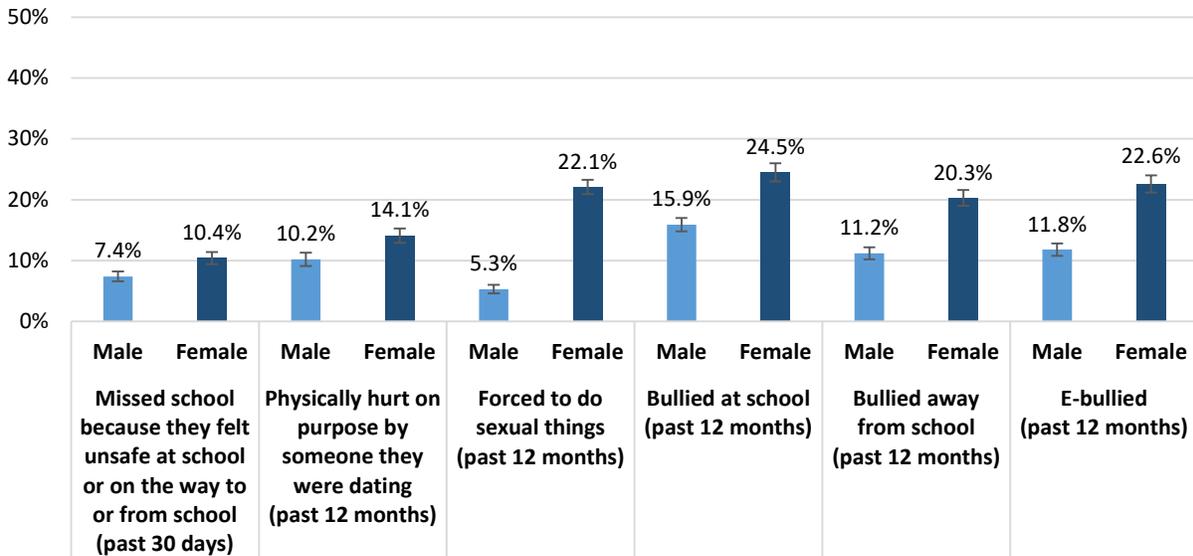
By gender, male high school students in Summit County were significantly more likely than females to report that they had carried a weapon in the past 30 days (16.7% vs. 5.5%), could get and be ready to fire a loaded gun within 24 hours (53.7% vs. 33.0%), never or rarely felt safe at school (12.4% vs. 10.0%), or had been in a physical fight in the past 12 months (28.2% vs. 16.8%).

### Violence-Related Variables -- Males Significantly Higher, 2018



Summit county high school females were more likely than male students to report that they had missed one or more days of school in the past 30 days because they felt unsafe at school or on their way to or from school (10.4% vs. 7.4%) , that they had been physically hurt on purpose by someone they were dating in the past 12 months (14.1% vs. 10.2%), that they had been forced to do sexual things in the past 12 months (22.1% vs. 5.3%), and that they had been bullied -- either at school (24.5% vs. 15.9%), away from school (20.3% vs. 11.2%), or online (22.6% vs. 11.8%).

### Violence-Related Variables -- Females Significantly Higher, 2018



### Demographics

Carried a weapon			
Category	%	CI	
<b>Gender</b>			
Female	5.5	4.8	- 6.2
Male	16.7	15.4	- 18.1
<b>Race/Ethnicity</b>			
White	10.9	10.0	- 11.9
Black	10.1	8.6	- 11.8
Asian	4.5	3.0	- 6.7
Hispanic	27.5	21.8	- 34.1
Other	15.5	13.0	- 18.3
<b>Grade</b>			
9th	9.5	8.2	- 11.1
10th	11.1	9.6	- 12.7
11th	10.6	9.2	- 12.2
12th	11.9	10.2	- 13.9
<b>Total</b>	<b>11.0</b>	<b>10.2</b>	<b>- 11.8</b>

Could get and be ready to fire a loaded gun within 24 hours			
Category	%	CI	
<b>Gender</b>			
Female	33.0	31.5	- 34.5
Male	53.7	52.0	- 55.4
<b>Race/Ethnicity</b>			
White	44.8	43.5	- 46.2
Black	38.0	35.6	- 40.4
Asian	20.0	16.5	- 24.1
Hispanic	55.2	49.4	- 60.7
Other	47.9	44.2	- 51.7
<b>Grade</b>			
9th	40.7	38.2	- 43.3
10th	41.1	38.9	- 43.4
11th	44.0	41.6	- 46.5
12th	46.3	43.8	- 48.8
<b>Total</b>	<b>43.2</b>	<b>42.0</b>	<b>- 44.3</b>

In Summit County, 11.0% of students had carried a weapon such as a gun, knife, or club in the 30 days prior to the survey. The prevalence of weapon carrying was higher among male (16.7%) than female (5.5%) students. The prevalence of weapon carrying was highest for Hispanic (27.5%) students compared to White (10.9%), Black (10.1%), Asian (4.5%) or Other/Multiple (15.5%) students. There was no variation in carrying a weapon by grade level.

In Summit County, 43.2% of students said they would be able to get and be ready to fire a loaded gun within 24 hours. Males were more likely to report they could get a gun within 24 hours than females (53.7% vs. 33.0%). Hispanic students were significantly more likely to get and be ready to fire a gun within 24 hours (55.2%) compared to the other race/ethnicity groups. Asian students were least likely to report they could get and be ready to fire a loaded gun (20.0%) than the other race/ethnicity groups. The prevalence of being able to get and be ready to fire a loaded gun within 24 hours was significantly higher for 12<sup>th</sup> grade (46.3%) students than 9<sup>th</sup> grade (40.7%) and 10<sup>th</sup> grade (41.1%) students.

Did not go to school because of safety concerns			
Category	%	CI	
<b>Gender</b>			
Female	10.4	9.4	11.4
Male	7.4	6.6	8.4
<b>Race/Ethnicity</b>			
White	7.2	6.4	8.0
Black	14.0	12.4	15.7
Asian	9.6	7.2	12.7
Hispanic	19.9	14.8	26.3
Other	12.1	9.6	15.0
<b>Grade</b>			
9th	7.7	6.5	9.0
10th	9.3	8.0	10.8
11th	9.0	7.7	10.5
12th	9.3	7.7	11.1
<b>Total</b>	<b>9.0</b>	<b>8.3</b>	<b>9.7</b>

In Summit County, 9.0% of students did not go to school at least one day in the 30 days prior to the survey, because of concern for their safety on their way to, from or during school. The prevalence of missing school because of safety concerns was higher among female than male students (10.4% vs. 7.4%). Black (14.0%), Hispanic (19.9%), and Other/Multiple (12.1%) students were significantly more likely than White students (7.2%) to report they missed at least one day of school because of safety concerns. Hispanic students (19.9%) were more likely than Asian students (9.6%) to avoid school because of safety concerns. There was no significant difference in the prevalence of missing school due to safety concerns by grade level.

In a physical fight			
Category	%	CI	
<b>Gender</b>			
Female	16.8	15.6	18.1
Male	28.2	26.5	29.9
<b>Race/Ethnicity</b>			
White	17.6	16.4	18.8
Black	37.4	34.8	40.0
Asian	15.2	12.3	18.6
Hispanic	40.3	34.4	46.5
Other	32.9	28.8	37.4
<b>Grade</b>			
9th	26.1	23.6	28.9
10th	23.3	21.1	25.7
11th	20.6	18.7	22.8
12th	18.5	16.3	21.0
<b>Total</b>	<b>22.4</b>	<b>21.2</b>	<b>23.6</b>

In Summit County, 22.4% 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 (28.2%) than female (16.8%) students. The prevalence of physical fighting was higher for Black (37.4%), Hispanic (40.3%) and Other/Multiple (32.9%) students, than for Asian (15.2%) and White (17.6%) students. The prevalence of physical fighting was higher among 9<sup>th</sup> grade (26.1%) and 10<sup>th</sup> grade (23.3%) students than 12<sup>th</sup> grade (18.5%) students.

Dating violence			
Category	%	CI	
<b>Gender</b>			
Female	14.1	12.9	15.5
Male	10.2	9.1	11.5
<b>Race/Ethnicity</b>			
White	10.8	9.8	11.8
Black	15.1	12.8	17.6
Asian	11.2	7.8	15.9
Hispanic	29.9	22.7	38.2
Other	19.9	16.1	24.4
<b>Grade</b>			
9th	10.7	9.1	12.5
10th	12.9	11.2	14.8
11th	11.7	10.0	13.5
12th	13.0	11.1	15.2
<b>Total</b>	<b>12.3</b>	<b>11.4</b>	<b>13.2</b>

In Summit County, among dating students, 12.3% of students were hit, slapped, or physically hurt by their boyfriend or girlfriend (dating violence) in the 12 months prior to the survey. The prevalence of dating violence was higher for Hispanic (29.9%) students than White, Black, or Asian (10.8%, 15.1%, 11.2%) students, respectively. The prevalence of dating violence was higher for Black and Other/Multiple (15.1%, 19.9%) students, respectively, than White (10.8%) students.

Forced into sexual acts			
Category	%	CI	
<b>Gender</b>			
Female	22.1	20.9	23.4
Male	5.3	4.6	6.0
<b>Race/Ethnicity</b>			
White	14.3	13.4	15.2
Black	11.2	9.9	12.7
Asian	9.6	7.2	12.6
Hispanic	23.7	18.3	30.1
Other	18.5	15.5	21.9
<b>Grade</b>			
9th	10.2	8.9	11.5
10th	13.1	11.7	14.7
11th	15.3	13.8	16.9
12th	16.5	14.9	18.1
<b>Total</b>	<b>13.9</b>	<b>13.1</b>	<b>14.7</b>

In Summit County, 13.9% of students have been forced to participate in a sexual act that they did not want to do. The prevalence of having been forced into a sexual act was higher among females (22.1%) than male (5.3%) students. The prevalence of having been forced into a sexual act was higher among Hispanic (23.7%) students than White (14.3%), Black (11.2%), and Asian (9.6%). The prevalence of having been forced into a sexual act was higher among 12<sup>th</sup> grade (16.5%) students than 9<sup>th</sup> grade (10.2%) and 10<sup>th</sup> grade (13.1%) students.

<b>Bullied on school property</b>			
<b>Category</b>	<b>%</b>	<b>CI</b>	
<b>Gender</b>			
Female	24.5	23.0	- 26.0
Male	15.9	14.8	- 17.1
<b>Race/Ethnicity</b>			
White	22.5	21.2	- 23.7
Black	12.3	10.8	- 13.9
Asian	10.7	8.3	- 13.6
Hispanic	30.4	25.3	- 36.1
Other	24.8	21.6	- 28.3
<b>Grade</b>			
9th	23.4	21.3	- 25.6
10th	21.9	20.1	- 23.8
11th	20.3	18.5	- 22.2
12th	16.1	14.3	- 18.0
<b>Total</b>	<b>20.4</b>	<b>19.4</b>	<b>- 21.3</b>

<b>Bullied away from school property</b>			
<b>Category</b>	<b>%</b>	<b>CI</b>	
<b>Gender</b>			
Female	20.3	19.0	- 21.6
Male	11.2	10.2	- 12.2
<b>Race/Ethnicity</b>			
White	18.1	17.0	- 19.1
Black	7.7	6.6	- 9.0
Asian	9.1	6.8	- 12.0
Hispanic	25.2	19.8	- 31.5
Other	17.8	15.1	- 20.9
<b>Grade</b>			
9th	15.8	14.2	- 17.5
10th	16.4	14.9	- 18.0
11th	16.1	14.5	- 17.8
12th	14.9	13.3	- 16.7
<b>Total</b>	<b>15.9</b>	<b>15.1</b>	<b>- 16.7</b>

In Summit County, 20.4% of students had been bullied on school property in the 12 months prior to the survey. The prevalence of having been bullied on school property was higher among female (24.5%) than male (15.9%) students. The prevalence of having been bullied on school property was higher among Hispanic (30.4%), Other/Multiple (24.8%), and White (22.5%) students, than Black (12.3%) and Asian (10.7%) students; and higher among Hispanic (30.4%) students than White (22.5%) students. The prevalence of having been bullied on school property was significantly lower for 12<sup>th</sup> grade students (16.1%) than 9<sup>th</sup> grade (23.4%), 10<sup>th</sup> grade (21.9%), or 11<sup>th</sup> grade (20.3%) students.

In Summit County, 15.9% of students had been bullied away from school property in the 12 months prior to the survey. The prevalence of having been bullied away from school was higher among female (20.3%) than male (11.2%) students. The prevalence of having been bullied away from school property was higher among Hispanic (25.2%) students than White (18.1%), Black (7.7%), and Asian (9.1%) students; and higher among White and Other/Multiple race (18.1%, 17.8%) students than Black or Asian (7.7%, 9.1%) students. The prevalence of having been bullied away from school did not vary significantly by grade level.

Electronically bullied			
Category	%	CI	
<b>Gender</b>			
Female	22.6	21.2	- 24.0
Male	11.8	10.8	- 12.9
<b>Race/Ethnicity</b>			
White	19.1	18.0	- 20.3
Black	10.4	9.0	- 11.9
Asian	8.3	6.2	- 11.1
Hispanic	26.2	21.4	- 31.6
Other	19.8	17.1	- 22.9
<b>Grade</b>			
9th	17.5	15.9	- 19.3
10th	18.2	16.7	- 19.8
11th	18.3	16.7	- 20.0
12th	15.5	13.6	- 17.5
<b>Total</b>	<b>17.3</b>	<b>16.5</b>	<b>- 18.2</b>

In Summit County, 17.3% of students were bullied electronically through e-mail, chat rooms, social media, instant messaging, websites, or texting, in the 12 months prior to the survey. The prevalence of having been bullied electronically was higher among female (22.6%) than male (11.8%) students. The prevalence of having been bullied electronically was significantly higher for Hispanic (26.2%), Other/Multiple (19.8%), and White (19.1%) students than for Black (10.4%) and Asian (8.3%) students; and higher among Hispanic students (26.2%) than White students (19.1%). The prevalence of having been electronically bullied did not vary significantly by grade.

Never or rarely feels afe at school			
Category	%	CI	
<b>Gender</b>			
Female	10.0	9.1	- 11.0
Male	12.4	11.3	- 13.6
<b>Race/Ethnicity</b>			
White	9.0	8.2	- 9.8
Black	18.8	17.0	- 20.8
Asian	10.0	7.5	- 13.1
Hispanic	23.8	18.2	- 30.5
Other	15.6	12.9	- 18.7
<b>Grade</b>			
9th	11.2	9.7	- 12.9
10th	11.4	9.9	- 13.1
11th	11.1	9.7	- 12.6
12th	10.8	9.2	- 12.7
<b>Total</b>	<b>11.2</b>	<b>10.5</b>	<b>- 12.0</b>

In Summit County, 11.2% of students reported that they rarely or never feel safe and secure at school. The prevalence of rarely/never feeling safe at school was higher among male (12.4%) than female (10.0%) students. The prevalence of rarely or never feeling safe and secure at school was higher among Black, Hispanic and Other/Multiple race (18.8%, 23.8%, 15.6%) students than among White or Asian students (9.0%, 10.0%). The prevalence of rarely/never feeling safe and secure at school did not vary significantly by grade.

## 2018 SUMMIT COUNTY HS YRBS: Violence

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<sup>i</sup> Ohio Department of Health. 2003. Ohio Youth Risk Behavior Survey. Columbus, OH: Ohio Department of Health.

<sup>ii</sup> 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

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.<sup>i</sup> Suicide was the second leading cause of death among teenagers ages 15-19 in 2017.<sup>ii</sup> Youth are much more likely to think about and attempt suicide if they are depressed.<sup>iii</sup>

Healthy People 2020 Objectives	Summit County 2018	Status
<b>MHMP-2:</b> Reduce suicide attempts by adolescents to no more than 1.7 per 100 population (1.7%).	8.4% of Summit County high school students attempted suicide one or more times during the 12 months before the survey.	The objective has <b>not</b> been met.

### Overall Prevalence

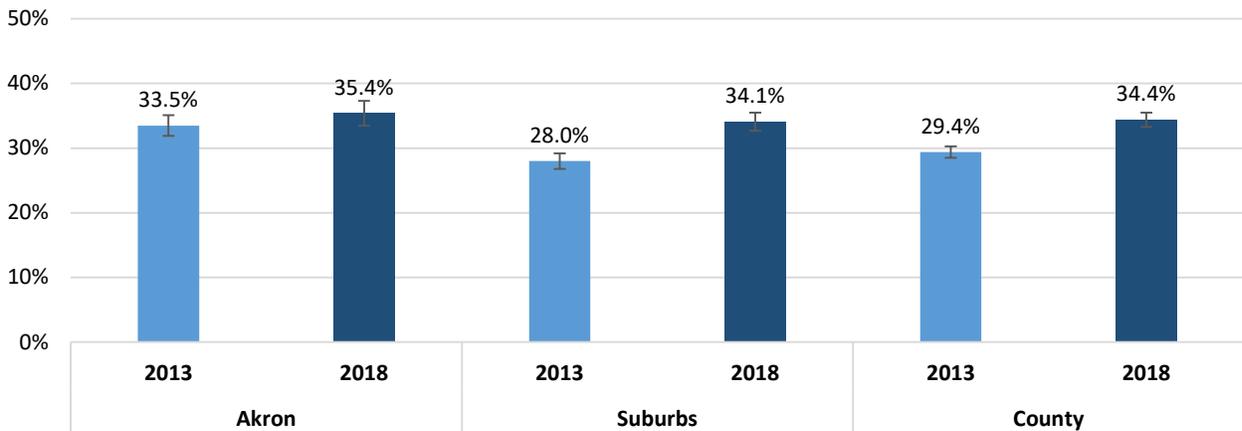
Akron % (Confidence Interval) Population N		Suburbs % (Confidence Interval) Population N		County % (Confidence Interval) Population N	
2013	2018	2013	2018	2013	2018
<b>Hurt themselves without wanting to die</b> (Such as cutting or burning themselves, during the 12 months before the survey.)					
<b>20.2%</b> (18.8 - 21.7) 1113	<b>17.9%</b> (16.4 - 19.6) 972	<b>18.6%</b> (17.6 - 19.7) 2892	<b>18.0%</b> (17.0 - 19.1) 2640	<b>19.0%</b> (18.2 - 19.9) 4004	<b>18.0%</b> (17.1 - 18.9) 3612
<b>Felt sad and hopeless</b> (Almost every day for two weeks or more that they stopped some usual activities during the 12 months before the survey.)					
<b>33.5%</b> (31.9 - 35.0) 1838	<b>35.4%</b> (33.5 - 37.4) 1919	<b>28.0%</b> (26.8 - 29.2) 4354	<b>34.1%</b> (32.7 - 35.5) 4988	<b>29.4%</b> (28.5 - 30.4) 6192	<b>34.4%</b> (33.3 - 35.6) 6907
<b>Seriously considered suicide</b> (During the 12 months before the survey.)					
<b>18.6%</b> (17.4 - 20.0) 1018	<b>18.7%</b> (17.3 - 20.2) 1010	<b>16.3%</b> (15.3 - 17.3) 2522	<b>17.3%</b> (16.3 - 18.4) 2532	<b>16.9%</b> (16.1 - 17.7) 3541	<b>17.7%</b> (16.9 - 18.6) 3543
<b>Made a plan about how they would attempt suicide</b> (During the 12 months before the survey.)					
N/A	<b>13.8%</b> (12.5 - 15.2) 740	N/A	<b>13.5%</b> (12.5 - 14.5) 1960	N/A	<b>13.6%</b> (12.8 - 14.4) 2701
<b>Attempted suicide</b> (During the 12 months before the survey.)					
<b>13.3%</b> (12.0 - 14.8) 724	<b>9.6%</b> (8.5 - 10.8) 517	<b>9.4%</b> (8.6 - 10.2) 1454	<b>7.9%</b> (7.3 - 8.7) 1157	<b>10.4%</b> (9.8 - 11.1) 2177	<b>8.4%</b> (7.8 - 9.0) 1675

Between 2013 and 2018 in Summit County, high school students were significantly more likely to report that they had 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 (29.4% vs. 34.4%). From 2013 to 2018, the prevalence of students reporting that they had hurt themselves without wanting to die (19.0% vs. 18.0%) or seriously considered suicide (16.9% vs. 17.7%) 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 (10.4% vs. 8.4%). In 2018, 13.6% of Summit County high school students reported they had made a suicide plan during the 12 months before the survey.

By region, there was no significant difference in the prevalence of students hurting themselves on purpose between Akron and its surrounding suburbs in 2018 (17.9% and 18.0%), nor was there any change in this prevalence between 2013 and 2018 in either region. Similarly, there was no significant difference in the prevalence of students seriously considering suicide between Akron and the suburbs (18.7% and 17.3%), nor was there any significant change in either region between 2013 and 2018.

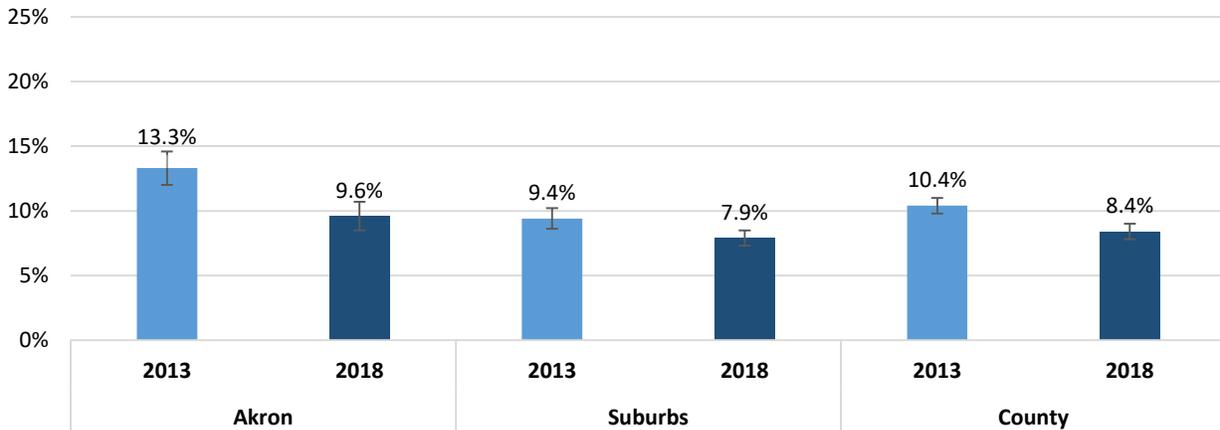
In 2018, there was no significant difference in the prevalence of students reporting that they had felt sad or hopeless for two weeks or more in the past 12 months before the survey between Akron and its suburbs (35.4% vs. 34.1%). While the overall county rate has increased from 29.4% to 34.4% between 2013 and 2018, there has been no significant change in the prevalence of students reporting feeling sad and hopeless in Akron (33.5% to 35.4%), this prevalence has significantly increased in the suburbs (28.0% to 34.1%) during this time period.

**Felt sad and hopeless for 2+ weeks during past 12 months  
By region, 2013 vs. 2018**



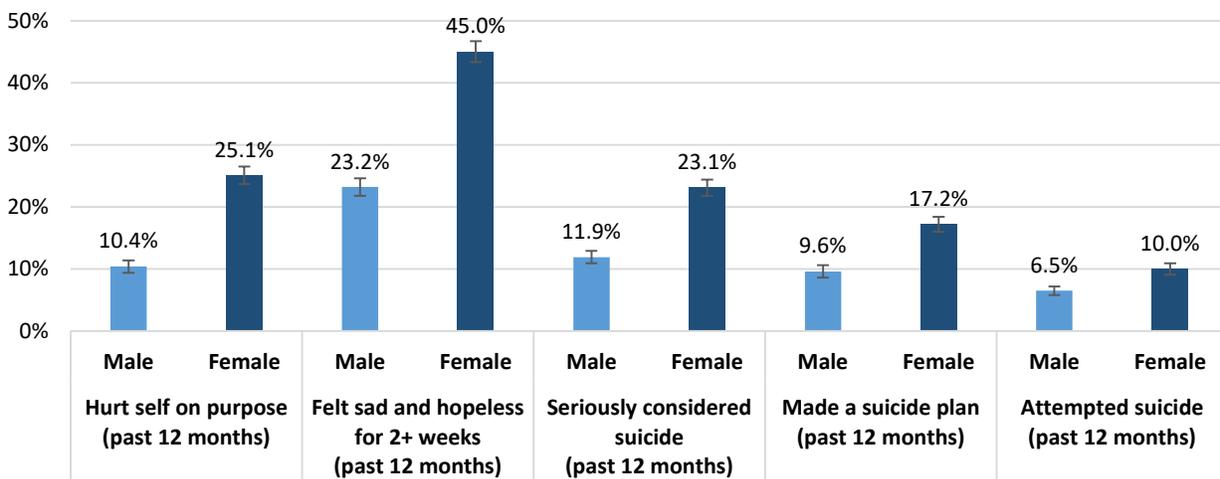
From 2013 to 2018, the prevalence of students reporting that they had attempted suicide at least once in the past 12 months fell in Summit County from 10.4% to 8.4%. During this period, this prevalence did not significantly change in the suburbs (9.4% to 7.9%), however there was a significant decrease in the percent of students in Akron reporting that they had attempted suicide at least once in the past 12 months between 2013 and 2018 (13.3% vs. 9.6%).

### Attempted suicide during the past 12 months By region, 2013 vs. 2018



For all the mental health variables considered in this section, Summit County female students in 2018 reported significantly higher rates of behaviors compared to male students. Female students were approximately two times as likely as males to report that they had hurt themselves on purpose (25.1% vs. 10.4%), that they felt sad and hopeless for 2 or more weeks (45.0% vs. 23.2%), that they had seriously considered suicide (23.1% vs. 11.9%), that they had made a suicide plan (17.2% vs. 9.6%), and that they had attempted suicide one or more times in the past 12 months (10.0% vs. 6.5%).

### Mental Health Variables — Gender Differences, 2018



### Demographics

Intentional self-harm			
Category	%	CI	
<b>Gender</b>			
Female	25.1	23.7	- 26.5
Male	10.4	9.4	- 11.5
<b>Race/Ethnicity</b>			
White	18.2	17.2	- 19.3
Black	15.2	13.5	- 17.0
Asian	13.6	10.6	- 17.3
Hispanic	29.0	23.3	- 35.3
Other	25.5	22.3	- 29.1
<b>Grade</b>			
9th	18.5	16.7	- 20.4
10th	19.1	17.5	- 20.8
11th	18.4	16.7	- 20.2
12th	15.7	14.0	- 17.6
<b>Total</b>	<b>18.0</b>	<b>17.1</b>	<b>- 18.9</b>

Felt sad or hopeless			
Category	%	CI	
<b>Gender</b>			
Female	45.0	43.3	- 46.6
Male	23.2	21.8	- 24.6
<b>Race/Ethnicity</b>			
White	34.4	33.0	- 35.8
Black	32.7	30.4	- 35.0
Asian	28.6	24.4	- 33.1
Hispanic	48.4	42.6	- 54.2
Other	41.8	38.0	- 45.6
<b>Grade</b>			
9th	29.8	27.7	- 31.9
10th	33.8	31.8	- 35.8
11th	35.9	33.7	- 38.2
12th	37.7	35.1	- 40.4
<b>Total</b>	<b>34.4</b>	<b>33.3</b>	<b>- 35.6</b>

In 2018, 18.0% of Summit County high school students reported that they had hurt themselves on purpose during the 12 months prior to taking the survey. Female students were significantly more likely to report intentional self-harm (25.1%) than male students (10.4%). Hispanic students (29.0%) and Other/Multiple students (25.5%), reported significantly higher rates of self-harm than White (18.2%), Black (15.2%), and Asian (13.6%) students. There was no significant difference in the prevalence of intentional self-harm by grade level.

County-wide, 34.4% of Summit County high school students reported that they had felt so sad and hopeless for two or more weeks in a row that they stopped doing some usual activities during the 12 months prior to taking the survey. Females were significantly more likely to report feeling sad and hopeless (45.0%) compared to males (23.2%). Hispanic students (48.4%) and Other/Multiple students (41.8%) were significantly more likely to report feeling sad and hopeless than White (34.4%), Black (32.7%), or Asian (28.6%) students. Students in 11<sup>th</sup> grade (35.9%) and 12<sup>th</sup> grade (37.7%) were significantly more likely than students in 9<sup>th</sup> grade (29.8%) to report that they had felt sad or hopeless.

Seriously considered attempting suicide			
Category	%	CI	
<b>Gender</b>			
Female	23.1	21.8	- 24.4
Male	11.9	10.9	- 13.1
<b>Race/Ethnicity</b>			
White	17.5	16.5	- 18.6
Black	16.5	14.9	- 18.3
Asian	13.3	10.6	- 16.6
Hispanic	30.2	24.5	- 36.6
Other	24.0	20.7	- 27.6
<b>Grade</b>			
9th	16.1	14.7	- 17.6
10th	17.9	16.4	- 19.5
11th	19.1	17.4	- 21.0
12th	17.4	15.6	- 19.5
<b>Total</b>	<b>17.7</b>	<b>16.9</b>	<b>- 18.6</b>

Made a suicide plan			
Category	%	CI	
<b>Gender</b>			
Female	17.2	16.0	- 18.4
Male	9.6	8.6	- 10.6
<b>Race/Ethnicity</b>			
White	13.0	12.1	- 14.0
Black	13.1	11.7	- 14.7
Asian	11.0	8.6	- 14.0
Hispanic	30.6	24.6	- 37.3
Other	20.7	17.9	- 24.0
<b>Grade</b>			
9th	13.0	11.5	- 14.6
10th	14.4	12.9	- 16.1
11th	13.9	12.4	- 15.6
12th	12.6	11.0	- 14.4
<b>Total</b>	<b>13.6</b>	<b>12.8</b>	<b>- 14.4</b>

In 2018, 17.7% of Summit County high school students reported that they had seriously considered suicide in the 12 months prior to taking the survey. Female students were significantly more likely to report considering suicide compared to male students (23.1% vs. 11.9%). Hispanic (30.2%) and Other/Multiple (24.0%) students were significantly more likely to report seriously considering suicide compared to White (17.5%), Black (16.5%), and Asian (13.3%) students. There was no significant difference in the prevalence of considering suicide by grade level.

In 2018, Summit County high school students were asked if they had ever made a suicide plan in the 12 months prior to taking the survey. Overall, 13.6% of students reported making a suicide plan. Female students were significantly more likely to have made a suicide plan than male students (17.2% vs. 9.6%). Hispanic students (30.6%) were significantly more likely than all other race/ethnicity groups to have made a suicide plan. Other/Multiple students (20.7%) were significantly more likely than White (13.0%), Black (13.1%), and Asian (11.0%) students to have made a suicide plan. There was no significant difference by grade level in the prevalence of students making a suicide plan.

<b>Attempted suicide</b>			
<b>Category</b>	<b>%</b>	<b>CI</b>	
<b>Gender</b>			
Female	10.0	9.1	- 11.0
Male	6.5	5.8	- 7.3
<b>Race/Ethnicity</b>			
White	7.3	6.6	- 8.0
Black	10.4	9.1	- 11.9
Asian	6.8	5.0	- 9.2
Hispanic	24.1	18.5	- 30.6
Other	14.2	11.6	- 17.2
<b>Grade</b>			
9th	8.0	6.9	- 9.2
10th	9.4	8.3	- 10.6
11th	8.1	6.9	- 9.4
12th	7.8	6.6	- 9.2
<b>Total</b>	<b>8.4</b>	<b>7.8</b>	<b>- 9.0</b>

In 2018, 8.4% of Summit County high school students reported that they had attempted suicide one or more times in the 12 months prior to taking the survey. Female students were significantly more likely to report attempting suicide than male students (10.0% vs. 6.5%). Hispanic students were significantly more likely than all the other race/ethnicity groups to have attempted suicide. White (7.3%) and Asian (6.8%) students were significantly less likely than Black (10.4%) students to report attempting suicide. White (7.3%) students were less likely than Black (10.4%) students to report attempting suicide. There was no significant difference by grade level in the prevalence of Summit County high school students attempting suicide.

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

<sup>ii</sup> Kochanek KD, Murphy SL, Xu JQ, Arias E. Deaths: Final data for 2017. National Vital Statistics Reports; vol 68 no 9. Hyattsville, MD: National Center for Health Statistics. 2019.

<sup>iii</sup> Child Trends Databank. (2019). *Suicidal teens*. Available at: <https://www.childtrends.org/?indicators=suicidal-teens>

## Section 5: Tobacco Use

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

Healthy People 2020 Objectives	Summit County 2018	Status
<b>TU-2.2:</b> Reduce use of cigarettes by adolescents to no more than 16.0%.	5.8% of Summit County high school students reported using cigarettes in the past 30 days.	The objective has been met.
<b>TU-2.3:</b> Reduce use of smokeless tobacco by adolescents to no more than 6.9%.	2.8% of Summit County high school students reported using smokeless tobacco products in the past 30 days.	The objective has been met.
<b>TU-2.4:</b> Reduce use of cigars by adolescents to no more than 8.0%	9.4% of Summit County high school students reported using cigars in the past 30 days.*	The objective has <b>not</b> been met.

\*The wording of the 2018 Summit County High 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) Population N		% (Confidence Interval) Population N		% (Confidence Interval) Population N	
2013	2018	2013	2018	2013	2018
<b>Used their first tobacco product before the age of 13</b>					
N/A	<b>8.9%</b> (7.7 - 10.3) 466	N/A	<b>6.5%</b> (5.7 - 7.3) 939	N/A	<b>7.1%</b> (6.5 - 7.8) 1405
<b>Current cigarette use</b> (Smoked cigarettes during the 30 days before the survey.)					
<b>12.0%</b> (10.9 - 13.3) 648	<b>5.7%</b> (4.7 - 6.9) 306	<b>14.0%</b> (13.1 - 15.0) 2162	<b>5.9%</b> (5.1 - 6.7) 857	<b>13.5%</b> (12.7 - 14.3) 2810	<b>5.8%</b> (5.2 - 6.5) 1163
<b>Current use of smokeless tobacco</b> (Used chewing tobacco, snuff or dip, during the 30 days before the survey.)					
<b>5.3%</b> (4.5 - 6.2) 290	<b>1.7%</b> (1.2 - 2.5) 93	<b>8.4%</b> (7.7 - 9.2) 1310	<b>3.2%</b> (2.6 - 3.9) 463	<b>7.6%</b> (7.0 - 8.2) 1600	<b>2.8%</b> (2.3 - 3.3) 556
<b>Current cigar use</b> (Smoked cigars, cigarillos, little cigars, or flavored cigars, during the 12 months before the survey.)					
<b>20.6%</b> (18.8 - 22.4) 1124	<b>12.3%</b> (10.6 - 14.1) 639	<b>14.7%</b> (13.7 - 15.7) 2287	<b>8.4%</b> (7.5 - 9.4) 1221	<b>16.2%</b> (15.4 - 17.1) 3411	<b>9.4%</b> (8.6 - 10.3) 1860
<b>Used their first electronic vapor product before the age of 13</b>					
N/A	<b>4.4%</b> (3.6 - 5.3) 233	N/A	<b>4.4%</b> (3.8 - 5.0) 637	N/A	<b>4.4%</b> (3.9 - 4.9) 870
<b>Current electronic vapor product use</b> (Used an electronic vapor product during the 30 days before the survey.)					
N/A	<b>15.4%</b> (14.0 - 16.8) 819	N/A	<b>28.6%</b> (27.0 - 30.2) 4167	N/A	<b>25.0%</b> (23.8 - 26.3) 4986
<b>Students' parents think it is very wrong for them to use tobacco</b>					
<b>72.6%</b> (70.8 - 74.3) 3387	<b>71.1%</b> (69.1 - 73.0) 3386	<b>71.1%</b> (69.8 - 72.4) 10601	<b>75.1%</b> (73.5 - 76.5) 10497	<b>71.5%</b> (70.4 - 72.5) 13988	<b>74.1%</b> (72.8 - 75.3) 13883
<b>Current tobacco use</b> (2013: Used of 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.)					
<b>23.3%</b> (21.5 - 25.2) 1247	<b>21.6%</b> (19.8 - 23.4) 1108	<b>21.1%</b> (20.0 - 22.5) 3257	<b>29.7%</b> (28.1 - 31.5) 4279	<b>21.8%</b> (20.7 - 22.8) 4503	<b>27.6%</b> (26.3 - 28.9) 5387

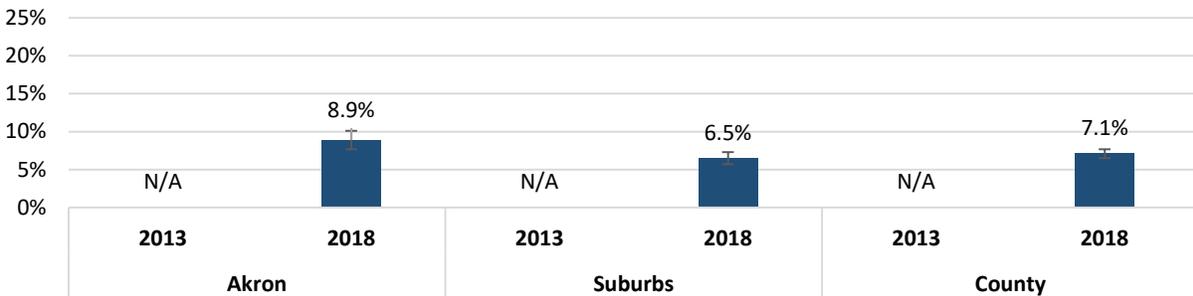


From 2013 to 2018, high school students in Summit County reported significant decreases in current use of cigarettes (13.5% to 5.8%), current use of chewing tobacco, snuff, or dip (7.6% to 2.8%), and current cigar use (16.2% to 9.4%). However, the 2018 survey included questions regarding use of electronic vapor products and 4.4% of Summit County high school students reported they had first used an electronic vapor before the age of 13 and 25.0% 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 high school students consume nicotine. While fewer students are using cigarettes, cigars, and chewing tobacco in 2018 compared to 2013, students are more likely to report that their parents think it is very wrong for them to use tobacco (71.5% to 74.1%).

Regionally, there is no significant difference in 2018 between Akron and its suburbs in current cigarette smoking (5.7% vs. 5.5%) or first use of an electronic vapor product before the age of 13 (both 4.4%). The following graphs depict regional differences in early use of tobacco products, current smokeless tobacco use, current cigar use, current electronic vapor product use, and parents' perception of tobacco use.

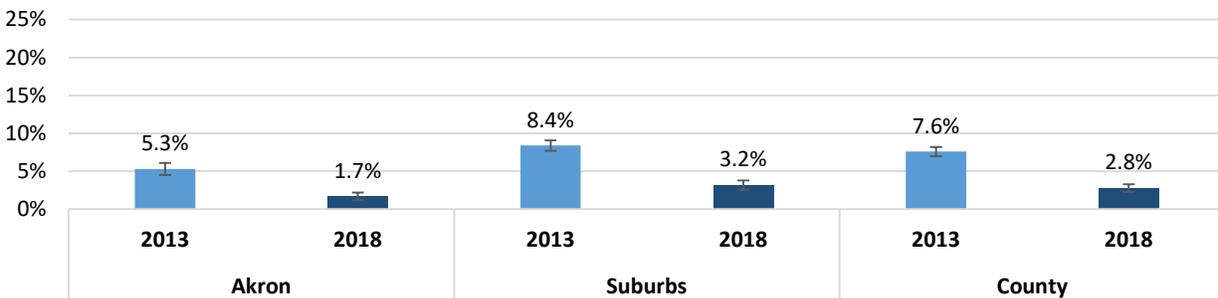
Students in Akron were significantly more likely in 2018 to report that they had used their first tobacco product before the age of 13 (8.9%) than students in the suburbs (6.5%).

### Used first tobacco product before age 13 By region, 2018



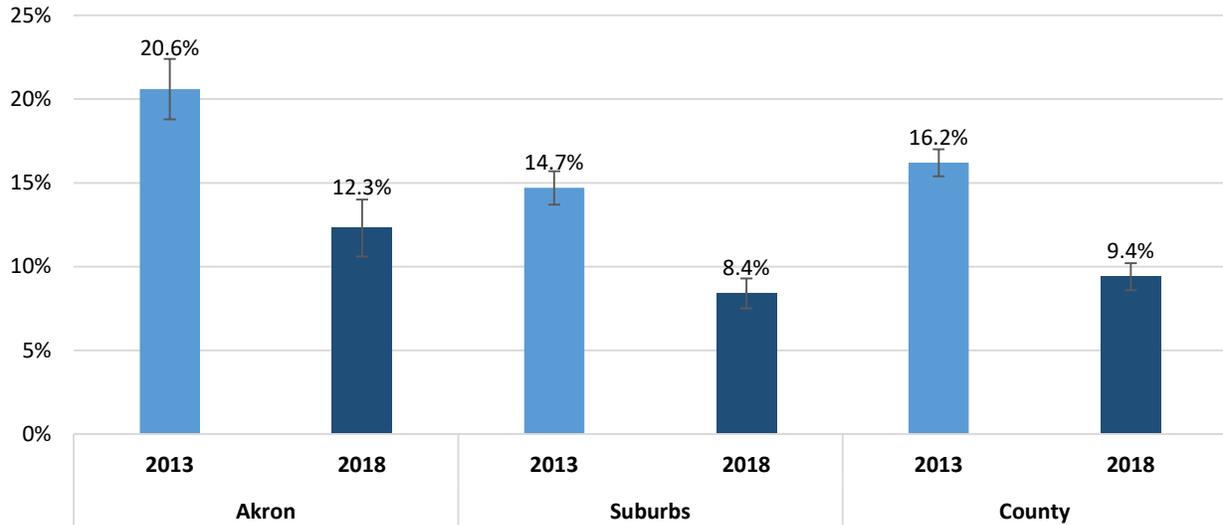
In 2018, students in the suburbs of Akron reported significantly higher rates of current use of chewing tobacco, snuff, or dip (current smokeless tobacco use) (3.2%) compared to Akron students (1.7%). From 2013 to 2018, current use of smokeless tobacco, fell significantly in both Akron (5.3% to 1.7%) and the surrounding suburbs (8.4% to 3.2%).

### Current use of smokeless tobacco use By region, 2013 vs. 2018



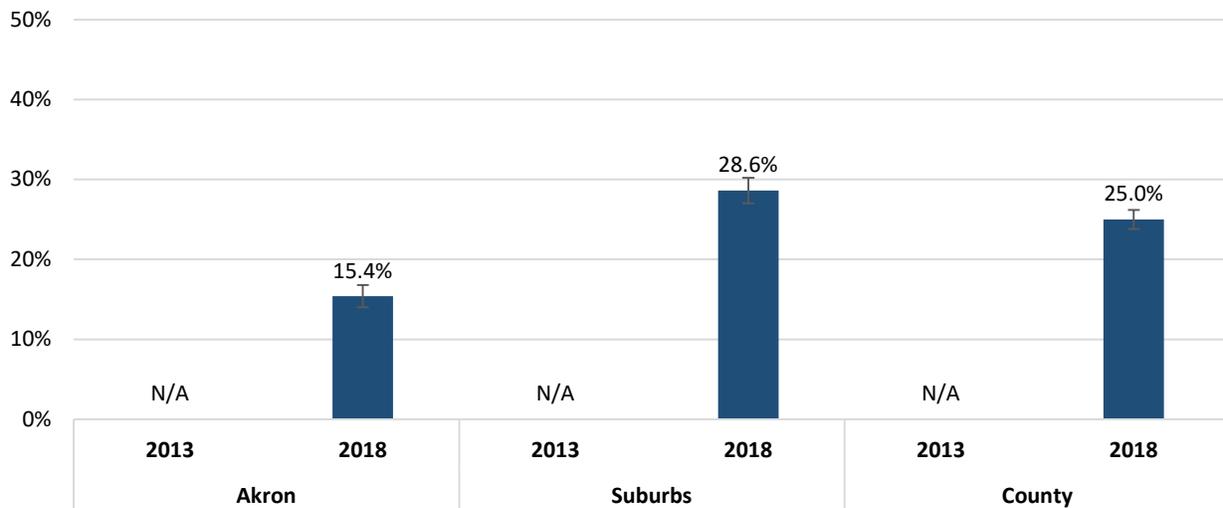
In 2018, current cigar usage was significantly higher among Akron students (12.3%) compared to students in the suburbs (8.4%). Current cigar usage as decreased significantly from 2013 to 2018 in both Akron (20.6% to 12.3%) and in the suburbs (14.7% to 8.4%).

### Current cigar usage By region, 2013 vs. 2018



Current electronic vapor product use was significantly higher for high school students in the suburbs of Summit County (28.6%) than students in Akron (15.4%).

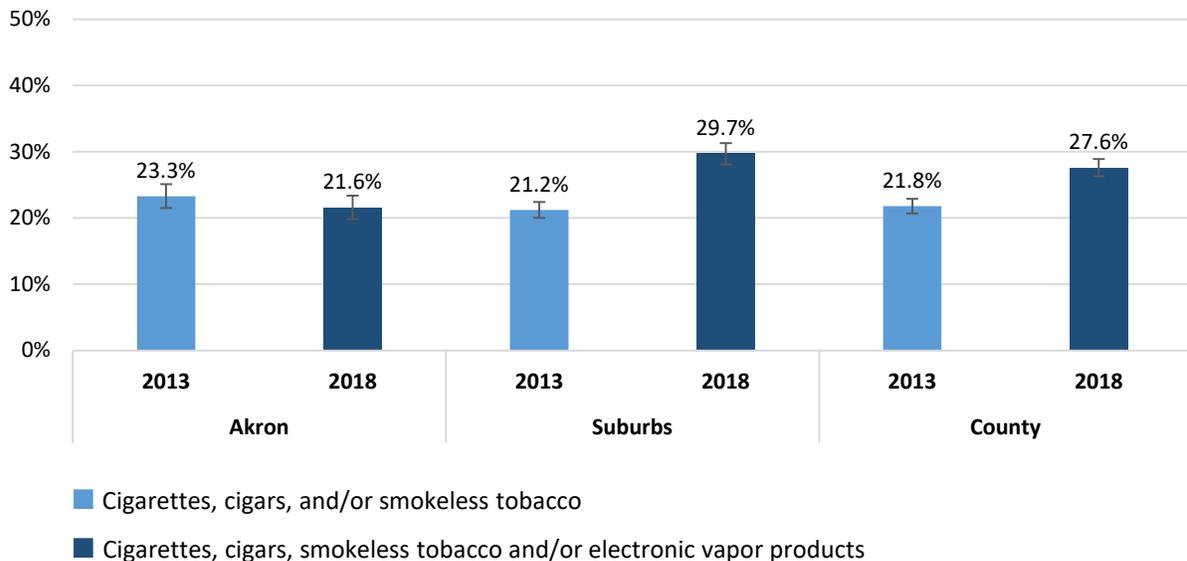
### Current electronic vapor product use By region, 2018



Although the rates of use of cigarettes, cigars, and chewing tobacco fell for Summit County high school students between 2013 and 2018, the increased prominence of electronic vapor products means students continue to use tobacco-derived products at high levels. The prevalence of current tobacco use – students who used cigarettes, cigars, smokeless tobacco, and/or electronic vapor products in the 30 days before taking the survey – in 2018 was 27.6% county-wide. Comparatively, the prevalence of current tobacco use in 2013, calculated as the percent of students who used cigarettes, cigars, and/or smokeless tobacco, was 21.8%. Data for electronic vapor product usage is not available for 2013 and cannot be included in this calculation, however, national reports have documented that high school electronic vapor product usage began to dramatically increase starting in 2014.<sup>iii</sup>

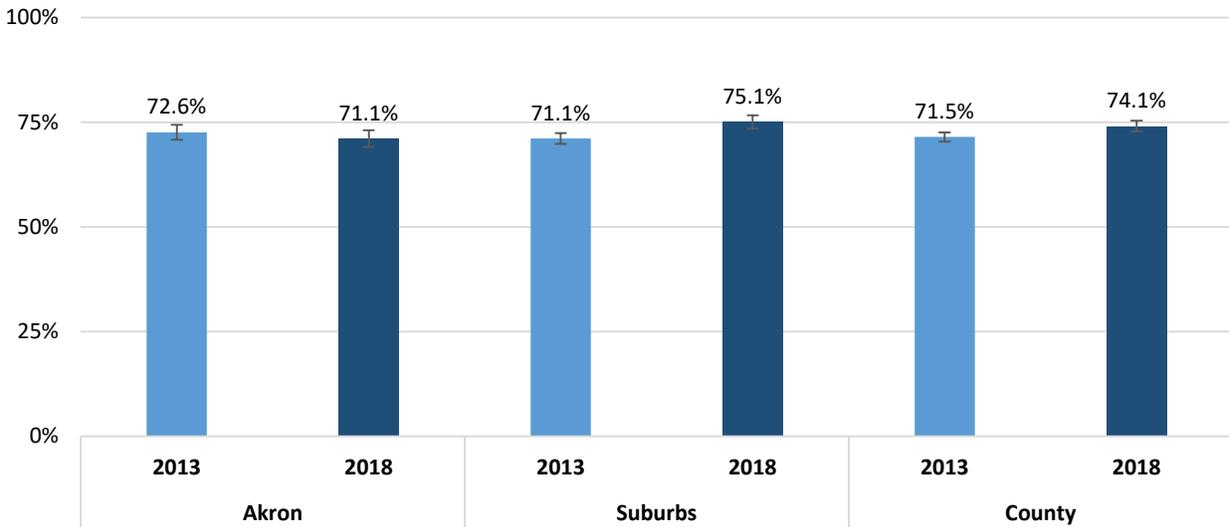
The following graph thus cautions that the *known* current tobacco-derived product use among Summit County high school students has actually increased county-wide from 21.8% in 2013 to 27.6% in 2018 – despite decreases in current cigarette, cigar, and chewing tobacco use – likely due to an increase in current electronic vapor product usage. While the known current tobacco-derived product use did not change significantly for students in Akron (23.3% to 21.6%), there was a significant increase in the suburbs from 21.2% to 29.7%. Thus, the rates of current tobacco-derived product usage are significantly higher in the suburbs (29.7%) than in Akron (21.6%).

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



In 2018, students in the suburbs of Akron were significantly more likely to report that their parents feel it is very wrong from them to use tobacco (75.1%) than students in Akron (71.1%). From 2013 to 2018, the prevalence of students in the suburbs who feel their parents think it would be very wrong for them to use tobacco significantly increased (71.1% to 75.1%), however there was no change in Akron during this time period (72.6% vs. 71.1%).

**Students' parents think it is very wrong for them to use tobacco,  
By region, 2013 vs. 2018**



## Demographics

Tried first tobacco product before age 13 years			
Category	%	CI	
<b>Gender</b>			
Female	5.7	4.9	6.5
Male	8.6	7.6	9.7
<b>Race/Ethnicity</b>			
White	6.6	5.9	7.4
Black	7.7	6.4	9.3
Asian	7.5	5.1	10.7
Hispanic	17.4	12.3	24.0
Other	10.5	8.4	13.0
<b>Grade</b>			
9th	6.6	5.4	8.2
10th	6.6	5.4	7.9
11th	7.0	5.9	8.3
12th	7.4	5.9	9.1
<b>Total</b>	<b>7.1</b>	<b>6.5</b>	<b>7.8</b>

In Summit County, 7.1% of students tried a tobacco product for the first time before the age of 13 years. Males were significantly more likely to have tried their first tobacco product before age 13 (8.6%) than female students (5.7%). Hispanic students (17.4%) were significantly more likely to have tried their first tobacco product before age 13 than White (6.6%), Black (7.7%), and Asian (7.5%) students. Other/Multiple race (10.5%) were significantly more likely than White (6.6%) students to have tried their first tobacco product before the age of 13. There was no significant difference in the prevalence of first trying a tobacco product before age 13 by grade.

Current cigarette use			
Category	%	CI	
<b>Gender</b>			
Female	5.9	5.1	6.7
Male	5.7	4.9	6.6
<b>Race/Ethnicity</b>			
White	6.3	5.5	7.1
Black	3.4	2.6	4.4
Asian	6.0	3.9	9.0
Hispanic	16.9	11.3	24.5
Other	5.4	3.7	7.7
<b>Grade</b>			
9th	3.0	2.3	4.0
10th	5.0	4.0	6.2
11th	5.5	4.4	6.8
12th	9.1	7.6	10.7
<b>Total</b>	<b>5.8</b>	<b>5.2</b>	<b>6.5</b>

In Summit County, 5.8% of students had smoked a cigarette on at least 1 day during the 30 days prior to the survey (i.e., current cigarette use). There was no significant difference in current cigarette use by gender. The prevalence of current cigarette use was significantly high for Hispanic students (16.9%) than the other four race/ethnicity groups. The prevalence of current cigarette use was significantly higher among 12<sup>th</sup> grade students (9.1%) than all other grades. Ninth grade students were least likely to report current cigarette use (3.0%).



Current smokeless tobacco use			
Category	%	CI	
<b>Gender</b>			
Female	1.1	0.8	1.5
Male	4.5	3.6	5.5
<b>Race/Ethnicity</b>			
White	2.8	2.3	3.5
Black	1.9	1.4	2.7
Asian	2.8	1.5	5.2
Hispanic	14.0	8.6	22.0
Other	3.1	1.8	5.4
<b>Grade</b>			
9th	1.6	1.1	2.3
10th	1.6	1.1	2.2
11th	2.9	2.2	3.8
12th	4.4	3.2	6.1
<b>Total</b>	<b>2.8</b>	<b>2.3</b>	<b>3.3</b>

In Summit County, 2.8% of students had used chewing tobacco, snuff, or dip on at least 1 day during the 30 days prior to the survey (i.e., current smokeless tobacco use). The prevalence of current smokeless tobacco use was higher among male (4.5%) than female (1.1%) students. The prevalence of current smokeless tobacco use was highest among Hispanic (14.0%) students compared to the other race/ethnicity groups. Twelfth grade students were significantly more likely to use smokeless tobacco (4.4%) than 9<sup>th</sup> grade (1.6%) and 10<sup>th</sup> grade (1.6%) students.

Current cigar use			
Category	%	CI	
<b>Gender</b>			
Female	8.9	7.9	10.0
Male	9.9	8.9	11.0
<b>Race/Ethnicity</b>			
White	8.6	7.7	9.5
Black	12.1	10.5	13.9
Asian	3.7	2.2	6.1
Hispanic	21.8	16.3	28.6
Other	10.7	8.7	13.2
<b>Grade</b>			
9th	5.4	4.3	6.6
10th	7.4	6.2	8.6
11th	9.0	7.6	10.6
12th	15.0	13.1	17.1
<b>Total</b>	<b>9.4</b>	<b>8.6</b>	<b>10.3</b>

In Summit County, 9.4% of students had smoked a cigar, cigarillo, little cigar, or flavored cigar on at least 1 day during the 30 days prior to the survey (i.e., current cigar use). The prevalence of current cigar use did not vary significantly by gender. The prevalence of current cigar use was highest among Hispanic students (21.8%) compared to the other four race/ethnicity groups. Black students reported significantly higher rates of current cigar use compared to White (8.6%) and Asian (3.7%) students. Students in 12<sup>th</sup> grade were significantly more likely to report current cigar use (15.0%) than the other three grades.

Tried first electronic vapor product before age 13 years			
Category	%	CI	
<b>Gender</b>			
Female	3.7	3.1	4.3
Male	5.0	4.3	5.9
<b>Race/Ethnicity</b>			
White	4.1	3.6	4.7
Black	4.3	3.4	5.4
Asian	3.6	2.1	6.2
Hispanic	13.0	8.6	19.2
Other	6.9	5.3	8.8
<b>Grade</b>			
9th	6.1	5.0	7.4
10th	4.1	3.3	5.0
11th	3.4	2.7	4.2
12th	3.7	2.7	4.9
<b>Total</b>	<b>4.4</b>	<b>3.9</b>	<b>4.9</b>

In Summit County, 4.4% of students reported that they had tried an electronic vapor product for the first time before the age of 13 years. There was no significant difference between males and females and their rates of early initiation to electronic vapor product usage. Hispanic students were significantly more likely to report that they had tried an electronic vapor product before age 13 (13.0%) than White (4.1%), Black (4.3%), and Asian (3.6%) students. Ninth grade students (6.1%) were significantly more likely than 11<sup>th</sup> grade (3.4%) and 12<sup>th</sup> grade (3.7%) students to report that they had tried an electronic vapor product before the age of 13.

Current electronic vapor product use			
Category	%	CI	
<b>Gender</b>			
Female	25.6	24.1	27.1
Male	24.4	22.7	26.1
<b>Race/Ethnicity</b>			
White	28.1	26.5	29.7
Black	14.1	12.5	15.9
Asian	10.3	7.7	13.5
Hispanic	36.2	30.2	42.8
Other	25.8	22.7	29.2
<b>Grade</b>			
9th	18.2	16.2	20.4
10th	22.8	20.7	25.1
11th	25.4	23.1	28.0
12th	32.8	29.9	35.9
<b>Total</b>	<b>25.0</b>	<b>23.8</b>	<b>26.3</b>

In Summit County, 25.0% of students had used electronic vapor products on at least 1 day during the 30 days prior to the survey. The prevalence of current use of electronic vapor products did not vary significantly by gender. The prevalence of current use of electronic vapor products was higher among Hispanic (36.2%), White (28.1%), Other/Multiple race (25.8%) students than Black (14.1%) and Asian (10.3%) students. Students in 12<sup>th</sup> grade were significantly more likely to report current electronic vapor product use (32.8%) than students in the lower grades. Students in 9<sup>th</sup> grade were least likely to report current electronic vapor product use (18.2%).



<b>Students perceive parents/guardians feel it would be very wrong for them to use tobacco</b>			
<b>Category</b>	<b>%</b>	<b>CI</b>	
<b>Gender</b>			
Female	76.1	74.6	- 77.5
Male	72.0	70.3	- 73.6
<b>Race/Ethnicity</b>			
White	73.8	72.3	- 75.2
Black	74.6	72.3	- 76.7
Asian	89.3	86.0	- 91.8
Hispanic	65.9	59.4	- 71.8
Other	72.5	68.3	- 76.3
<b>Grade</b>			
9th	79.9	78.1	- 81.6
10th	78.7	76.6	- 80.7
11th	74.1	72.0	- 76.1
12th	64.4	61.5	- 67.3
<b>Total</b>	<b>74.1</b>	<b>72.8</b>	<b>- 75.3</b>

In Summit County, 74.1% of students perceive their parents believe it is very wrong for them to use tobacco. Female students (76.1%) are more likely than male students (72.0%) to perceive that their parents believe it is very wrong to use tobacco. Asian (89.3%) students were most likely to report that their parents think it is very wrong for them to use tobacco compared to Black, White, Hispanic, and Other/Multiple students (74.6%, 73.8%, 65.9%, 72.5%, respectively). The prevalence of students perceiving that parents feel it would be very wrong for them to use tobacco was higher among White (73.8%) and Black (74.6%) students than among Hispanic (65.9%) students. Students in 12<sup>th</sup> grade were significantly less likely to report that their parents believe it is very wrong for them to use tobacco (64.4%) than students in other grades. Students in 11<sup>th</sup> (74.1%) grade were less likely to report that their parents believe it is very wrong for them to use tobacco than students in 9<sup>th</sup> or 10<sup>th</sup> grade (79.9%, 78.7%), respectively.

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- <sup>i</sup> 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.
- <sup>ii</sup> 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.
- <sup>iii</sup> Office of the Surgeon General. *E-cigarette Use among Youth and Young Adults: A Report of the Surgeon General*. Washington, DC: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention; 2016. [https://www.cdc.gov/tobacco/data\\_statistics/sgr/e-cigarettes/pdfs/2016\\_sgr\\_entire\\_report\\_508.pdf](https://www.cdc.gov/tobacco/data_statistics/sgr/e-cigarettes/pdfs/2016_sgr_entire_report_508.pdf).

## Section 6: Alcohol Use

The 2018 Summit County High School YRBS asked students six questions about alcohol consumption. Alcohol use among youth has been linked to unintentional injuries, physical fights, academic problems, job problems and illegal behavior.<sup>i</sup> Alcohol use has been identified as a major contributing factor in approximately one-third of all unintentional injury deaths, homicides and suicides.<sup>ii</sup> More young people use alcohol than tobacco or illicit drugs in the United States. Teens that begin drinking before age 15 are five times more likely to develop alcohol dependence than those who begin drinking at age 21.<sup>iii</sup>

Healthy People 2020 Objectives	Summit County 2018	Status
<b>SA-14.4:</b> Reduce the proportion of adolescents aged 12 to 17 years engaging in binge drinking during the past month to no more than 8.5%.	11.4% of Summit County high school students reported that they had five or more drinks of alcohol in a row, within a couple of hours, on at least one day in the month preceding the survey.	The objective has <b>not</b> been met.

## Overall and Regional Prevalence

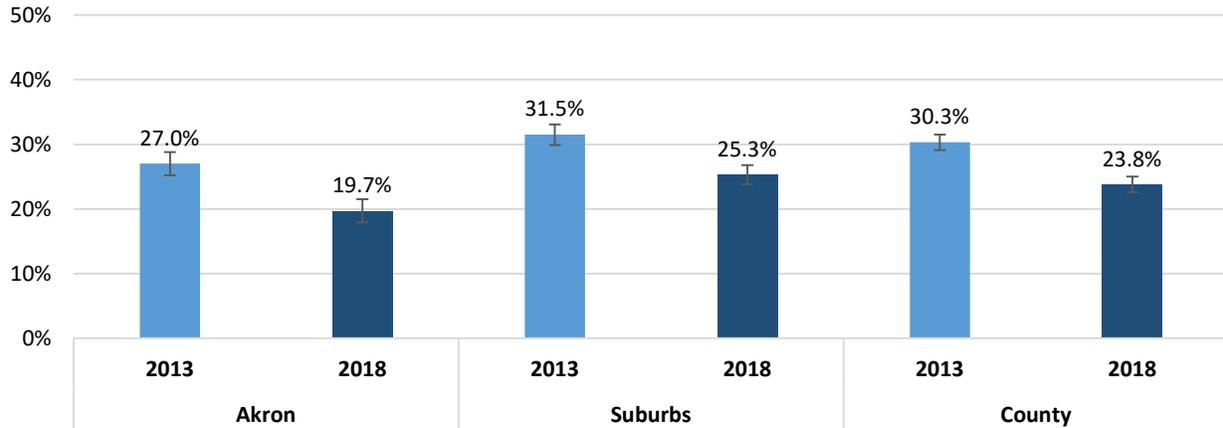
Akron		Suburbs		County	
% (Confidence Interval) Population N		% (Confidence Interval) Population N		% (Confidence Interval) Population N	
2013	2018	2013	2018	2013	2018
<b>Drank alcohol before the age 13 years</b>					
<b>20.6%</b> (19.2 - 22.0) 1098	<b>11.6%</b> (10.3 - 13.0) 611	<b>14.7%</b> (13.7 - 15.7) 2246	<b>10.1%</b> (9.3 - 11.0) 1450	<b>16.2%</b> (15.4 - 17.0) 3344	<b>10.5%</b> (9.8 - 11.2) 2061
<b>Current alcohol use</b> (Drank alcohol during the 30 days before the survey.)					
<b>27.0%</b> (25.2 - 28.9) 1413	<b>19.7%</b> (17.9 - 21.6) 1036	<b>31.5%</b> (29.9 - 33.1) 4806	<b>25.3%</b> (23.8 - 26.8) 3649	<b>30.3%</b> (29.1 - 31.6) 6219	<b>23.8%</b> (22.6 - 25.0) 4685
<b>Had 4 or more drinks in a row (if female) or 5 or more drinks in a row (if male)</b> (During the 30 days before the survey.)					
<b>13.8%</b> (12.5 - 15.2) 718	<b>9.1%</b> (7.9 - 10.4) 480	<b>17.4%</b> (16.2 - 18.6) 2681	<b>12.2%</b> (11.1 - 13.3) 1769	<b>16.5%</b> (15.5 - 17.5) 3399	<b>11.4%</b> (10.5 - 12.3) 2248
<b>Usually got alcohol they drank from someone who gave it to them</b> (During the 30 days before the survey.)					
<b>37.3%</b> (34.2 - 40.6) 481	<b>40.8%</b> (36.0 - 45.7) 386	<b>43.0%</b> (40.9 - 45.2) 1919	<b>43.5%</b> (40.5 - 46.6) 1499	<b>41.8%</b> (39.9 - 43.6) 2399	<b>42.9%</b> (40.3 - 45.6) 1884
<b>Attended a party or gathering in a home where parents permitted underage alcohol use</b> (During the 30 days before the survey.)					
<b>20.3%</b> (18.7 - 22.0) 1058	<b>14.2%</b> (12.9 - 15.7) 751	<b>22.4%</b> (21.2 - 23.6) 3455	<b>18.5%</b> (17.3 - 19.7) 2694	<b>21.8%</b> (20.9 - 22.9) 4513	<b>17.3%</b> (16.4 - 18.3) 3444
<b>Students' parents feel it would be very wrong for them to drink alcohol</b>					
<b>59.1%</b> (57.3 - 61.0) 2752	<b>55.8%</b> (53.5 - 58.0) 2646	<b>52.8%</b> (51.4 - 54.2) 7856	<b>49.8%</b> (48.2 - 51.4) 6957	<b>54.3%</b> (53.1 - 55.5) 10608	<b>51.3%</b> (50.0 - 52.7) 9604

From 2013 to 2018, Summit County high school students reported decreases in the prevalence of those who drank alcohol before the age of 13 years (16.2% to 10.5%), current alcohol use (30.3% to 23.8%), binge drinking (4+ drinks in a row for females, 5+ drink in a row for males) (16.5% to 11.4%), attended a party in a home where parents permitted underage alcohol use (21.8% to 17.3%), and those who perceived their parents feel it would be very wrong for them to drink alcohol (54.3% to 51.3%). There was no significant change from 2013 to 2018 in the prevalence of students who reported that they usually got alcohol they drank from someone who gave it to them (41.8% to 42.9%).

Regionally, there was no significant difference between Akron and the suburbs in the prevalence of students who drank alcohol before the age 13 years (11.6% and 10.1%), and those who usually got the alcohol they drank from someone who gave it to them (40.8% and 43.5%). Regional differences were found between Akron and the suburbs which are illustrated in the below graphs.

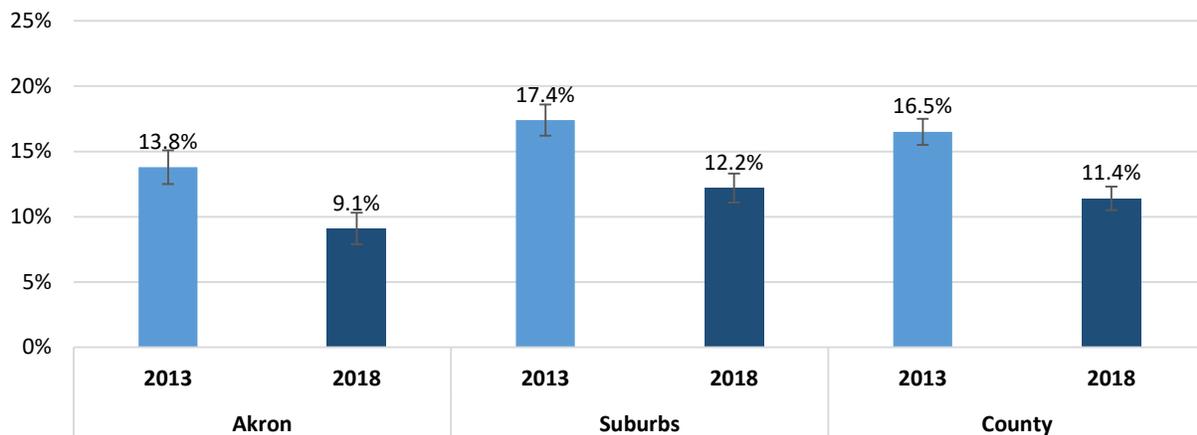
In 2018, students in Akron were significantly less likely to report current alcohol use (19.7%) compared to the suburbs (25.3%). The prevalence of current alcohol use decreased between 2013 and 2018 for both Akron (27.0% to 19.7%) and the suburbs (31.5% to 25.3%).

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



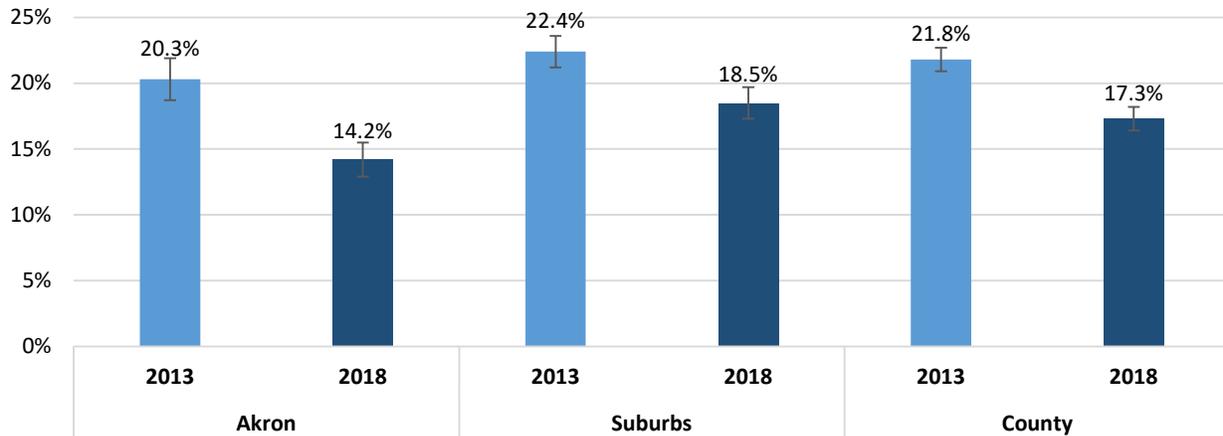
Students in Akron were significantly less likely to report binge drinking during the 30 days prior to taking the survey (4+ drinks in a row for females, 5+ drinks in a row for males) (9.1%) than students in the suburbs (12.2%). The prevalence of binge drinking decreased between 2013 and 2018 for both Akron (13.8% to 9.1%) and the suburbs (17.4% to 12.2%).

### Binge drinking By region, 2013 vs. 2018



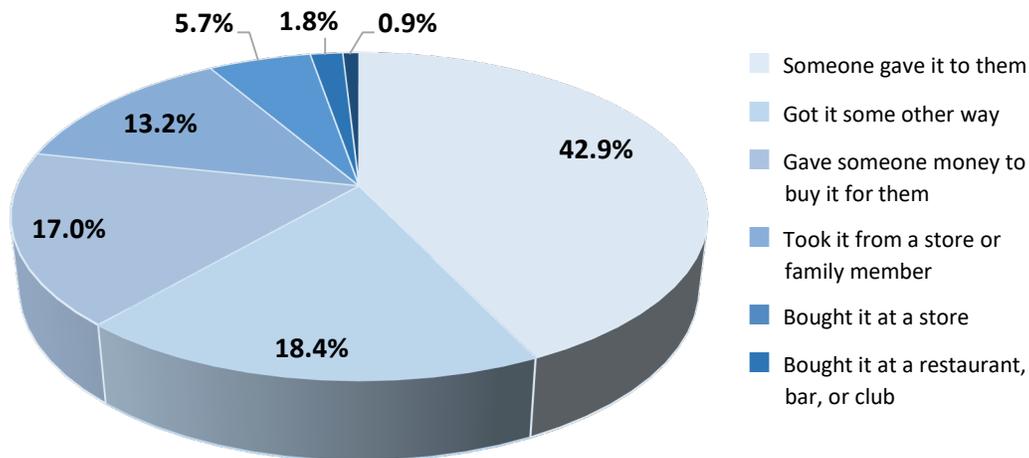
Students in the suburbs were significantly more likely to report that they had attended a party or gathering in a home where parents permitted underage alcohol use during the 30 days prior to taking the survey (18.5%) compared to students in Akron (14.2%). The prevalence of attending a party in a home where parents permitted underage alcohol use decreased between 2013 and 2018 for both Akron (20.3% to 14.2%) and the suburbs (22.4% to 18.5%).

### Attended a party where parents permitted underage alcohol use By region, 2013 vs. 2018



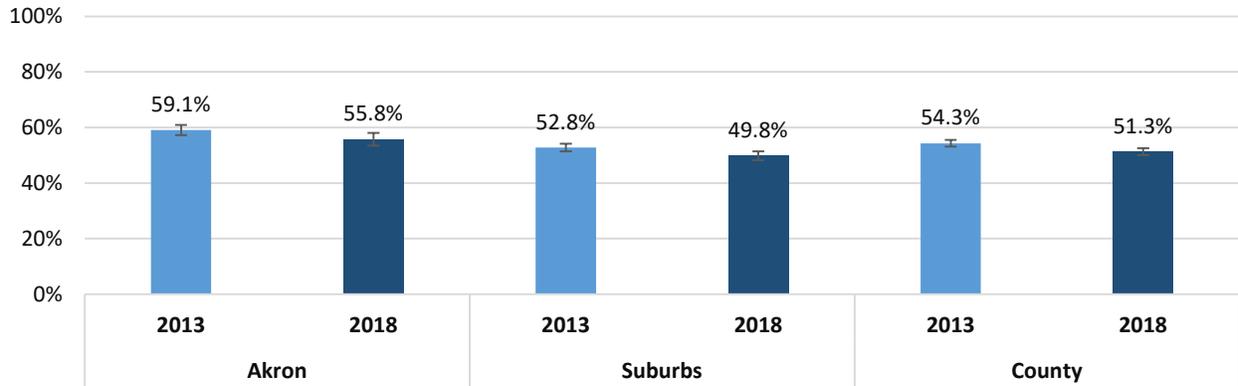
When asked what one way they usually got the alcohol they drank, students most frequently reported that someone gave it to them (42.9%). Students less frequently reported that they gave someone money to buy it for them (17.0%), that they took it from a store or family member (13.2%), or “some other way” (18.4%). Students from Akron and the suburbs did not vary significantly in their reported usual way of getting the alcohol they drank.

### Usual way students got the alcohol they drank



Students in Akron were significantly more likely to report that they perceived their parents feel it would be very wrong for them to drink alcohol (55.8%) compared to students in the suburbs (49.8%).

### Students perceive parents think it would be very wrong for them to drink alcohol By region, 2013 vs. 2018



## Demographics

Drank alcohol before age 13 years			
Category	%	CI	
<b>Gender</b>			
Female	9.4	8.6	10.4
Male	11.6	10.6	12.8
<b>Race/Ethnicity</b>			
White	10.1	9.3	11.0
Black	11.5	9.9	13.3
Asian	5.2	3.5	7.6
Hispanic	23.5	17.7	30.4
Other	12.9	10.7	15.5
<b>Grade</b>			
9th	12.3	10.8	13.9
10th	10.8	9.4	12.5
11th	9.5	8.3	10.8
12th	8.8	7.5	10.3
<b>Total</b>	<b>10.5</b>	<b>9.8</b>	<b>11.2</b>

In Summit County, 10.5% of high school students report drinking alcohol for the first time before age 13. Males were significantly more likely than females to drink alcohol for the first time before age 13 (11.6% vs. 9.4%). Hispanic students were more likely than the other race/ethnicity groups to drink alcohol for the first time before age 13 (23.5%). Asian students were significantly less likely than all the other race/ethnicity groups to drink alcohol before age 13 (5.2%). Students in 9<sup>th</sup> grade (12.3%) were significantly more likely than students in 12<sup>th</sup> grade (8.8%) to report early alcohol usage.

Current alcohol use			
Category	%	CI	
<b>Gender</b>			
Female	25.9	24.3	27.6
Male	21.5	20.1	23.0
<b>Race/Ethnicity</b>			
White	25.6	24.2	27.1
Black	17.6	15.6	19.9
Asian	11.7	8.8	15.4
Hispanic	37.8	31.9	44.2
Other	23.3	20.3	26.7
<b>Grade</b>			
9th	14.9	13.3	16.6
10th	19.2	17.4	21.2
11th	24.8	23.0	26.8
12th	34.8	32.2	37.6
<b>Total</b>	<b>23.8</b>	<b>22.6</b>	<b>25.0</b>

In Summit County, 23.8% of high school students report having at least one drink of alcohol in the 30 days prior to taking the survey -- i.e. current alcohol usage. Females were significantly more likely than males to report current alcohol use (25.9% vs. 21.5%). Hispanic students reported significantly higher rates of current alcohol use (37.8%) compared to the other race/ethnicity groups. Asian students (11.7%) and Black students (17.6%) reported significantly lower rates of current alcohol use than the other race/ethnicity groups. Current alcohol use increased significantly by grade level.

Binge drinking			
Category	%	CI	
<b>Gender</b>			
Female	12.0	10.9	13.3
Male	10.6	9.5	11.8
<b>Race/Ethnicity</b>			
White	12.3	11.3	13.5
Black	7.6	6.3	9.1
Asian	5.5	3.5	8.6
Hispanic	26.1	20.4	32.8
Other	10.6	8.3	13.5
<b>Grade</b>			
9th	6.3	5.4	7.4
10th	7.0	6.0	8.0
11th	11.4	10.1	12.9
12th	19.7	17.6	22.0
<b>Total</b>	<b>11.4</b>	<b>10.5</b>	<b>12.3</b>

Someone gave alcohol to them			
Category	%	CI	
<b>Gender</b>			
Female	48.0	44.7	51.3
Male	36.4	32.9	40.1
<b>Race/Ethnicity</b>			
White	43.5	40.4	46.6
Black	39.1	33.0	45.5
Asian	33.8	22.9	46.8
Hispanic	33.9	23.9	45.6
Other	51.1	42.6	59.6
<b>Grade</b>			
9th	41.9	35.6	48.5
10th	44.7	39.3	50.3
11th	45.7	41.5	50.0
12th	41.4	36.6	46.3
<b>Total</b>	<b>42.9</b>	<b>40.3</b>	<b>45.6</b>

Binge drinking is defined as having 4 or more drinks for females or 5 or more drinks in a row within a few hours for males at least once in the 30 days prior to taking the survey. Among high school students in Summit County, 11.4% report binge drinking. There was no significant difference in binge drinking by gender. Hispanic students reported significantly higher rates of binge drinking (26.1%) than the other race/ethnicity groups. White students reported higher rates of binge drinking (12.3%) than Black (7.6%) and Asian (5.5%) students. Binge drinking was significantly higher among 11<sup>th</sup> (11.4%) and 12<sup>th</sup> (19.7%) grade students than 9<sup>th</sup> (6.3%) and 10<sup>th</sup> (7.0%) grade students.

Among students who drank alcohol in the 30 days prior to taking the survey, 42.9% reported that they usually got the alcohol they drank by someone giving it to them. Females were more likely to report that they were given the alcohol they drank than males (48.0% vs. 36.4%). There was no significant difference in usually being given the alcohol they drank by race/ethnicity or grade level.

<b>Attended a party/gathering where parents permitted underage alcohol use</b>			
<b>Category</b>	<b>%</b>	<b>CI</b>	
<b>Gender</b>			
Female	19.4	18.1	- 20.7
Male	15.2	13.9	- 16.5
<b>Race/Ethnicity</b>			
White	18.0	16.9	- 19.2
Black	14.8	13.1	- 16.7
Asian	9.6	6.9	- 13.2
Hispanic	31.6	25.7	- 38.0
Other	17.6	14.8	- 20.8
<b>Grade</b>			
9th	11.6	10.4	- 13.0
10th	14.0	12.6	- 15.5
11th	18.4	16.7	- 20.2
12th	24.4	22.1	- 26.8
<b>Total</b>	<b>17.3</b>	<b>16.4</b>	<b>- 18.3</b>

<b>Students perceive parents/guardians feel it would be very wrong for them to drink alcohol</b>			
<b>Category</b>	<b>%</b>	<b>CI</b>	
<b>Gender</b>			
Female	52.1	50.4	- 53.9
Male	50.5	48.7	- 52.3
<b>Race/Ethnicity</b>			
White	48.1	46.6	- 49.6
Black	62.9	60.2	- 65.5
Asian	75.5	70.7	- 79.8
Hispanic	42.4	36.5	- 48.5
Other	50.3	46.1	- 54.5
<b>Grade</b>			
9th	60.9	58.4	- 63.2
10th	55.2	52.8	- 57.6
11th	49.9	47.5	- 52.3
12th	40.3	37.9	- 42.8
<b>Total</b>	<b>51.3</b>	<b>50.0</b>	<b>- 52.7</b>

Among Summit County high school students, 17.3% attended a party or gathering in a home where parents permitted underage alcohol use in the 30 days prior to taking the survey. Females (19.4%) were more likely than males (15.2%) to report attending a party where alcohol use was permitted. Hispanic students (31.6%) were significantly more likely than the other race/ethnicity groups to attend a party where alcohol use was permitted, while Asian (9.6%) and Black (14.8%) students were least likely to attend a party where parents permitted underage alcohol use. The likelihood of attending a party where underage alcohol use was permitted largely increased by age with 11<sup>th</sup> grade students (18.4%) more likely than 9<sup>th</sup> (11.6%) and 10<sup>th</sup> (14.0%) grade students, and 12<sup>th</sup> grade students (24.4%) more likely than 11<sup>th</sup> grade students.

In Summit County, 51.3% of high school students perceive that their parents/guardians feel it would be very wrong for them to drink alcohol. There was no significant difference by gender in this perception. Black students (62.9%) were significantly more likely than White, Hispanic, and Other/Multiple students (48.1%, 42.4%, 50.3%, respectively) to perceive that their parents/guardians feel it would be very wrong for them to drink alcohol. Asian students were most likely to perceive that their parents/guardians feel it would be very wrong for them to drink alcohol (75.5%). The likelihood to perceive that their parents/guardians feel it would be very wrong for them to drink alcohol decreased significantly with every grade level from 9<sup>th</sup> to 12<sup>th</sup>.

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- <sup>i</sup> 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.
- <sup>ii</sup> 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.
- <sup>iii</sup> U.S. Department of Health and Human Services. 2007. *The Surgeon General's Call to Action to Prevent and Reduce Underage Drinking*. U.S. Department of Health and Human Services, Office of the Surgeon General.

## 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.<sup>i</sup> 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.<sup>ii</sup> Possible long-term effects include respiratory problems, a weakened immune system, and cognitive deficits.<sup>iii</sup> 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
<b>SA-13.2:</b> Reduce the proportion of adolescents reporting use of marijuana during the past 30 days to no more than 6.0%	19.2% of Summit County high school students reported using marijuana at least once during the past 30 days.	The objective has <b>not</b> been met.

### Overall and Regional Prevalence

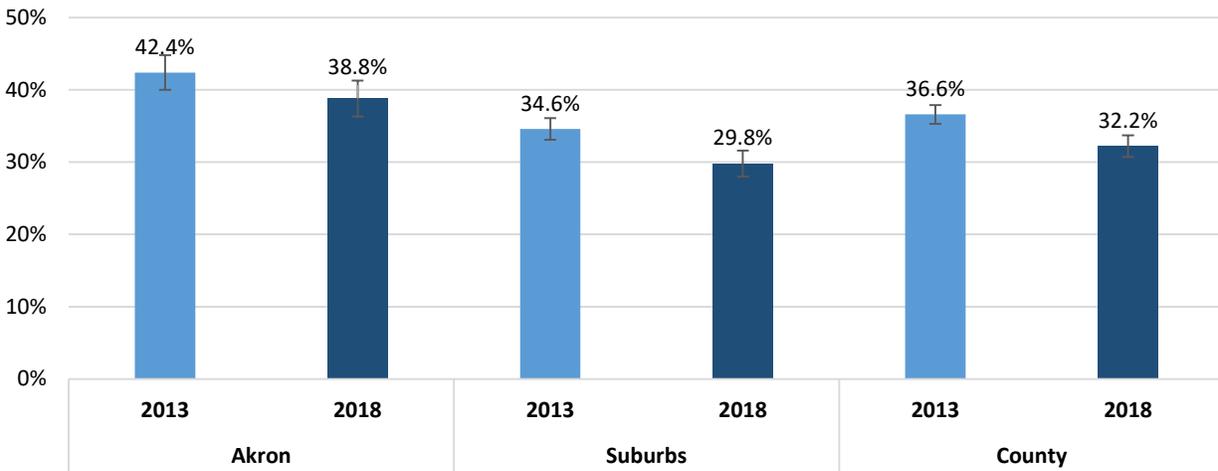
Akron % (Confidence Interval) Population N		Suburbs % (Confidence Interval) Population N		County % (Confidence Interval) Population N	
2013	2018	2013	2018	2013	2018
<b>Ever tried marijuana</b>					
<b>42.4%</b> (40.0 - 44.9) 2241	<b>38.8%</b> (36.3 - 41.4) 2036	<b>34.6%</b> (33.1 - 36.2) 5331	<b>29.8%</b> (28.0 - 31.8) 4321	<b>36.6%</b> (35.3 - 38.0) 7571	<b>32.2%</b> (30.7 - 33.8) 6357
<b>Used marijuana before age 13 years</b>					
<b>13.6%</b> (12.3 - 15.0) 723	<b>9.9%</b> (8.6 - 11.2) 518	<b>7.7%</b> (7.1 - 8.5) 1188	<b>5.7%</b> (4.9 - 6.5) 819	<b>9.2%</b> (8.6 - 9.9) 1911	<b>6.8%</b> (6.1 - 7.5) 1337
<b>Current marijuana use (Used one or more times during the 30 days before the survey.)</b>					
<b>25.7%</b> (23.8 - 27.7) 1343	<b>23.9%</b> (21.8 - 26.2) 1233	<b>19.5%</b> (18.4 - 20.7) 2992	<b>17.6%</b> (16.3 - 18.9) 2534	<b>21.1%</b> (20.1 - 22.1) 4334	<b>19.2%</b> (18.1 - 20.4) 3767
<b>Usually used marijuana by smoking it (Usually smoked marijuana in a joint, bong, pipe, or blunt, among users in the 30 days before the survey.)</b>					
N/A	<b>85.3%</b> (82.5 - 87.8) 1155	N/A	<b>71.4%</b> (68.4 - 74.3) 1957	N/A	<b>76.0%</b> (73.7 - 78.2) 3113
<b>Students' parents feel it would be very wrong for them to use marijuana</b>					
<b>69.9%</b> (68.1 - 71.7) 3233	<b>58.4%</b> (56.2 - 60.6) 2782	<b>75.6%</b> (74.4 - 76.8) 11222	<b>69.3%</b> (67.8 - 70.8) 9671	<b>74.3%</b> (73.2 - 75.3) 14455	<b>66.5%</b> (65.2 - 67.8) 12453

From 2013 to 2018, Summit County high school students reported a decrease in the prevalence of those who had ever used marijuana (36.6% to 32.2%) and those who had used marijuana for the first time before age 13 years (9.2% to 6.8%). Students in 2018 were also less likely to report that their parents/guardians would feel it would be very wrong to use marijuana compared to 2013 (74.3% vs. 66.5%). From 2013 to 2018, there was no change in the prevalence of current marijuana use (use at least one time in the 30 days prior to taking the survey) (21.1% to 19.2%). In 2018, 76.0% of students who were current marijuana users reported that they usually used marijuana by smoking it in a joint, bong, pipe, or blunt.

Regionally in 2018, students in Akron were significantly more likely to report that they had ever tried marijuana (38.8% vs. 29.8%), used marijuana for the first time before age 13 (9.9% vs. 5.7%), were current marijuana users (23.9% vs. 17.6%), that they usually used marijuana by smoking it (85.3% vs. 71.4%) than students in the suburbs. Students in Akron were significantly less likely than those in the suburbs to report that their parents or guardians feel it would be very wrong for them to use marijuana (58.4% vs. 69.3%).

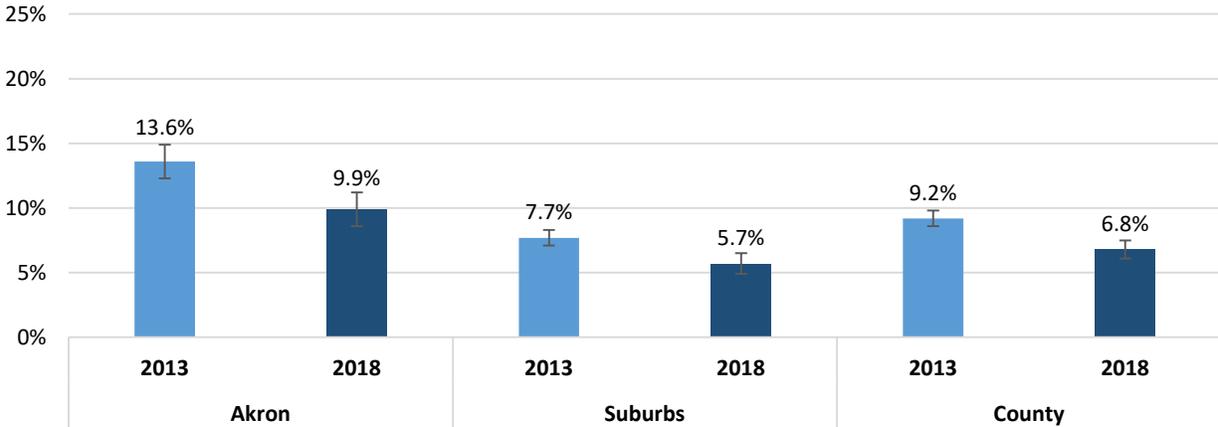
Students in Akron were significantly more likely to report that they had ever tried marijuana (38.8% vs. 29.8%) compared to students in the suburbs. From 2013 to 2018, the prevalence of ever trying marijuana decreased significantly in the suburbs (34.6% to 29.8%), but not in Akron (42.4% to 38.8%).

### Ever tried marijuana By region, 2013 vs. 2018



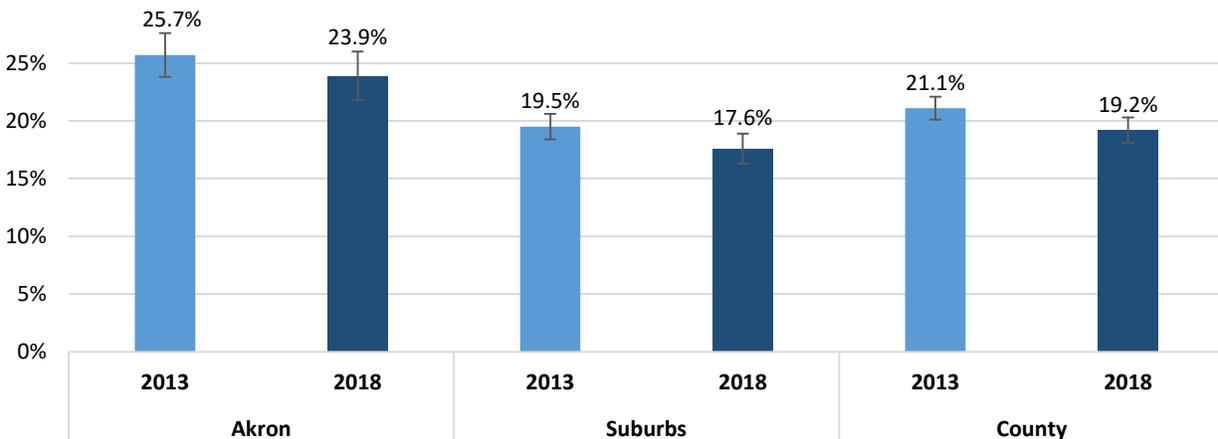
Students in Akron reported that they had tried marijuana for the first time before age 13 (9.9%) significantly more than students in the suburbs (5.7%). The likelihood of having tried marijuana before age 13 decreased from 2013 to 2018 in both Akron (13.6% to 9.9%) and the suburbs (7.7% to 5.7%).

### Tried marijuana for the first time before age 13 years By region, 2013 vs. 2018



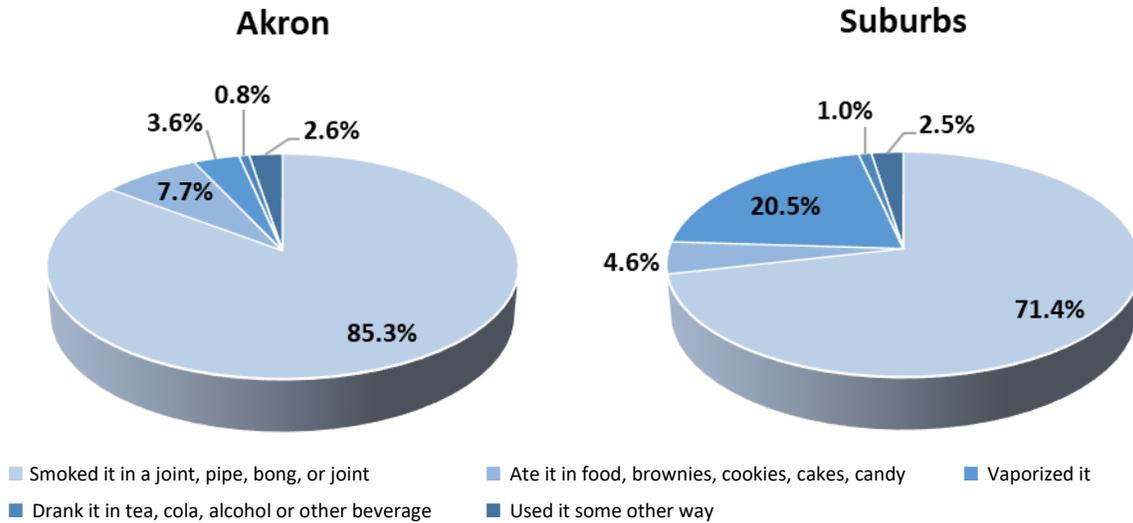
Current marijuana use in 2018 is significantly higher among students in Akron (23.9%) than students in the suburbs (17.6%). Since 2013, current marijuana use has not significantly changed in either Akron (25.7% to 23.9%) or the suburbs (19.5% to 17.6%).

### Current marijuana use By region, 2013 vs. 2018



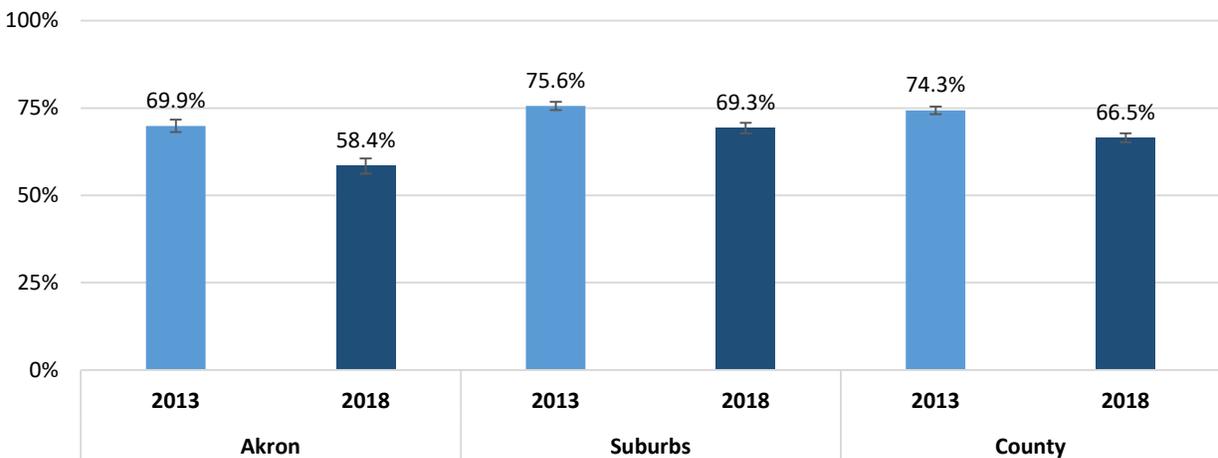
When asked how they usually used marijuana during the 30 days before the survey, current users in Akron were significantly more likely to report that they had smoked marijuana in a joint, pipe, bong, or blunt (85.3%) than current marijuana users in the suburbs (71.4%). Marijuana users in the suburbs were more likely than those in Akron to report that they usually used marijuana by vaporizing it (20.5% vs. 3.6%).

**Method usually used marijuana, among current marijuana users  
By region, 2018**



In 2018, students in Akron were significantly less likely to report that their parents or guardians feel it would be very wrong for them to use marijuana than students in the suburbs (58.4% vs. 69.3%). The perception that parents feel it would be very wrong for students to use marijuana decreased from 2013 to 2018 in both Akron (69.9% to 58.4%) and the suburbs (75.6% to 69.3%).

**Parents feel it would be very wrong for them to use marijuana  
By region, 2013 vs. 2018**



### Demographics

Ever used marijuana			
Category	%	CI	
<b>Gender</b>			
Female	33.4	31.5	- 35.3
Male	30.9	29.0	- 32.9
<b>Race/Ethnicity</b>			
White	29.8	28.0	- 31.6
Black	41.3	38.7	- 43.9
Asian	9.5	7.0	- 12.7
Hispanic	46.6	40.8	- 52.4
Other	43.4	39.4	- 47.5
<b>Grade</b>			
9th	19.0	16.7	- 21.5
10th	26.7	24.3	- 29.1
11th	34.6	32.0	- 37.2
12th	47.2	44.0	- 50.3
<b>Total</b>	<b>32.2</b>	<b>30.7</b>	<b>- 33.8</b>

Tried marijuana before age 13 years			
Category	%	CI	
<b>Gender</b>			
Female	5.5	4.8	- 6.4
Male	8.0	7.0	- 9.1
<b>Race/Ethnicity</b>			
White	5.6	5.0	- 6.4
Black	9.7	8.2	- 11.5
Asian	1.8	0.9	- 3.6
Hispanic	19.0	13.8	- 25.6
Other	13.1	10.6	- 16.2
<b>Grade</b>			
9th	7.4	6.1	- 9.0
10th	6.0	4.9	- 7.3
11th	6.3	5.2	- 7.7
12th	6.5	5.1	- 8.2
<b>Total</b>	<b>6.8</b>	<b>6.1</b>	<b>- 7.5</b>

Of high school students in Summit County, 32.2% had ever used marijuana. There was no difference by gender in the prevalence of lifetime marijuana usage. Hispanic (46.6%), Other/Multiple (43.4%), and Black (41.3%) students were significantly more likely to have ever used marijuana compared to White (29.8%) and Asian (9.5%) students. White (29.8%) students were significantly more likely than Asian (9.5%) students to have ever used marijuana. The likelihood of having ever used marijuana increased significantly with each increase in grade level.

In 2018, 6.8% of Summit County high school students had tried marijuana before age 13. Males were significantly more likely to have tried marijuana before the age of 13 than females (8.0% vs. 5.5%). Hispanic students (19.0%) were significantly more likely than Black (9.7%), White (5.6%), and Asian (1.8%) students to have tried marijuana for the first time before the age of 13. Other/Multiple race (13.1%) students were more significantly more likely than White or Asian (5.6%, 1.8%) students to have tried marijuana before age 13. There was no significant difference by grade level in the likelihood of having tried marijuana before the age of 13.

Current marijuana use			
Category	%	CI	
<b>Gender</b>			
Female	19.3	17.9	- 20.8
Male	19.1	17.6	- 20.7
<b>Race/Ethnicity</b>			
White	17.5	16.3	- 18.8
Black	25.8	23.5	- 28.3
Asian	4.9	3.1	- 7.6
Hispanic	30.2	24.3	- 36.9
Other	25.5	22.0	- 29.2
<b>Grade</b>			
9th	11.5	9.9	- 13.4
10th	16.0	14.3	- 17.9
11th	19.9	17.8	- 22.2
12th	28.4	25.9	- 31.0
<b>Total</b>	<b>19.2</b>	<b>18.1</b>	<b>- 20.4</b>

Usually uses marijuana by smoking it			
Category	%	CI	
<b>Gender</b>			
Female	78.8	75.5	- 81.8
Male	73.3	70.0	- 76.3
<b>Race/Ethnicity</b>			
White	74.2	71.2	- 77.0
Black	80.8	76.8	- 84.2
Asian	59.9	40.5	- 76.6
Hispanic	73.0	63.0	- 81.1
Other	79.2	72.8	- 84.4
<b>Grade</b>			
9th	80.3	75.1	- 84.6
10th	75.2	69.7	- 80.1
11th	73.5	68.5	- 78.0
12th	76.2	72.0	- 80.0
<b>Total</b>	<b>76.0</b>	<b>73.7</b>	<b>- 78.2</b>

In Summit County, 19.2% of high school students had used marijuana one or more times in the 30 days prior to taking the survey (i.e. current marijuana use). There was no difference in current marijuana use by gender. Hispanic (30.2%), Black (25.8%), and Other/Multiple (25.5%) students were significantly more likely to report current marijuana use than White (17.5%) and Asian (4.9%) students; and White (17.5%) students were more likely than Asian (4.9%) students to report current marijuana use. Current marijuana use increased significantly with each increase in grade level.

Among current marijuana users, 76.0% reported that in the 30 days before the survey, they usually used marijuana by smoking it in a joint, pipe, bong, or blunt. The prevalence of usually using marijuana by smoking it was higher among Black (80.8%) students than Asian (59.9%) students. There was no difference by gender or grade level in how users typically used marijuana.

<b>Students perceive parents/guardians feel it would be very wrong for them to use marijuana</b>			
<b>Category</b>	<b>%</b>	<b>CI</b>	
<b>Gender</b>			
Female	66.7	65.0	- 68.3
Male	66.5	64.7	- 68.2
<b>Race/Ethnicity</b>			
White	68.6	67.1	- 70.0
Black	58.3	55.6	- 60.9
Asian	86.6	82.6	- 89.7
Hispanic	60.8	54.4	- 67.0
Other	57.3	52.9	- 61.6
<b>Grade</b>			
9th	75.5	73.1	- 77.8
10th	70.7	68.4	- 72.8
11th	64.6	62.2	- 66.8
12th	56.6	54.0	- 59.3
<b>Total</b>	<b>66.5</b>	<b>65.2</b>	<b>- 67.8</b>

In 2018, 66.5% of high school students in Summit County reported that their parents or guardians would feel it would be very wrong for them to use marijuana. There was no difference in this variable by gender. Asian (86.6%) students were significantly more likely to report that their parents would feel it would be very wrong for them to use marijuana than White, Black, Hispanic, and Other/Multiple race students (68.6%, 58.3%, 60.8%, 57.3%) respectively. White students (68.6%) were significantly more likely than Black, Hispanic and Other/Multiple race (58.3%, 60.8%, 57.3%) to report that their parents would feel it would be very wrong for them to use marijuana. Students are less likely to perceive that their parents/guardians feel it would be very wrong for them to drink alcohol at each higher grade level from 9<sup>th</sup> to 12<sup>th</sup> grade.

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- <sup>i</sup> 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.
- <sup>ii</sup> 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.
- <sup>iii</sup> 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 High School YRBS asked students about illicit drug use, prescription drug abuse, and whether they had been offered, sold, or given drugs 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. <sup>i</sup>

Prescription drug abuse is reaching prevalence levels near the use of marijuana among adolescents. Nine percent (9.1%) of teens aged 12-17 misused prescription drugs in 2005. In 2006, there were as many new abusers of prescription drugs as there were new users of marijuana. <sup>ii</sup> 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. <sup>iii</sup>

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. <sup>iv</sup>

Healthy People 2020 Objectives	Summit County 2018	Status
<b>AH-7:</b> Reduce the proportion of adolescents who have been offered, sold, or given an illegal drug on school property to no more than 20.4%	15.5% of Summit County high school students reported being offered, sold, or given an illegal drug on school property.	The objective has been met.

Overall and Regional Prevalence

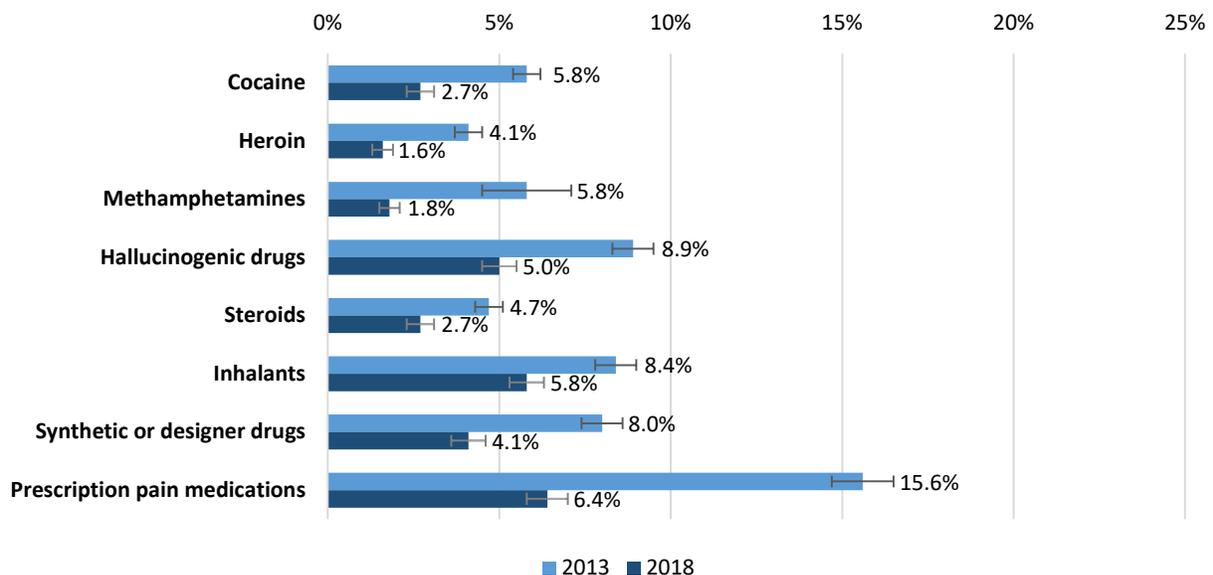
Akron % (Confidence Interval) Population N		Suburbs % (Confidence Interval) Population N		County % (Confidence Interval) Population N	
2013	2018	2013	2018	2013	2018
<b>Ever used cocaine</b> (Including powder, crack, or freebase.)					
<b>5.8%</b> (5.1 - 6.7) 309	<b>2.7%</b> (2.1 - 3.5) 142	<b>5.8%</b> (5.3 - 6.5) 909	<b>2.7%</b> (2.2 - 3.3) 395	<b>5.8%</b> (5.4 - 6.4) 1217	<b>2.7%</b> (2.3 - 3.2) 538
<b>Ever used heroin</b>					
<b>4.6%</b> (3.8 - 5.5) 246	<b>2.0%</b> (1.4 - 2.7) 103	<b>4.0%</b> (3.5 - 4.5) 616	<b>1.4%</b> (1.1 - 1.8) 209	<b>4.1%</b> (3.7 - 4.6) 862	<b>1.6%</b> (1.3 - 1.9) 312
<b>Ever used methamphetamines</b>					
<b>5.4%</b> (4.6 - 6.4) 289	<b>2.1%</b> (1.5 - 2.8) 108	<b>4.8%</b> (4.3 - 5.4) 745	<b>1.8%</b> (1.4 - 2.2) 255	<b>5.0%</b> (4.5 - 5.5) 1034	<b>1.8%</b> (1.5 - 2.2) 363
<b>Ever used ecstasy</b>					
N/A	<b>3.2%</b> (2.5 - 4.0) 165	N/A	<b>3.1%</b> (2.5 - 3.7) 446	N/A	<b>3.1%</b> (2.7 - 3.6) 611
<b>Ever used hallucinogenic drugs</b> (Such as LSD, acid, PCP, ecstasy, angel dust, mescaline, or mushrooms.)					
<b>7.9%</b> (7.0 - 9.0) 416	<b>3.6%</b> (2.9 - 4.5) 189	<b>9.3%</b> (8.5 - 10.1) 1442	<b>5.5%</b> (4.9 - 6.3) 802	<b>8.9%</b> (8.3 - 9.6) 1858	<b>5.0%</b> (4.5 - 5.6) 991
<b>Ever used steroids</b> (Pills or shots without a doctor's prescription.)					
<b>5.5%</b> (4.7 - 6.5) 290	<b>3.0%</b> (2.3 - 3.8) 154	<b>4.5%</b> (3.9 - 5.0) 691	<b>2.6%</b> (2.1 - 3.1) 372	<b>4.7%</b> (4.3 - 5.2) 981	<b>2.7%</b> (2.3 - 3.1) 526
<b>Ever used inhalants</b> (Sniffed glue, breathed the contents of aerosol spray cans, or inhaled any paints or sprays to get high.)					
<b>10.1%</b> (9.0 - 11.2) 536	<b>5.4%</b> (4.6 - 6.4) 280	<b>7.9%</b> (7.2 - 8.7) 1224	<b>5.9%</b> (5.3 - 6.6) 864	<b>8.4%</b> (7.8 - 9.1) 1760	<b>5.8%</b> (5.3 - 6.4) 1144
<b>Ever used synthetic or designer drugs</b> (Including synthetic marijuana, K2, Spice, fake weed, King Kong, Yucatan Fire, Skunk, Moon Rocks, herbal incense, or bath salts.)					
<b>7.4%</b> (6.4 - 8.6) 394	<b>4.4%</b> (3.6 - 5.3) 226	<b>8.2%</b> (7.5 - 9.0) 1276	<b>3.9%</b> (3.4 - 4.6) 572	<b>8.0%</b> (7.4 - 8.6) 1670	<b>4.1%</b> (3.6 - 4.6) 797
<b>Ever used prescription pain medication</b> (Without a prescription or differently than prescribed.)					
<b>16.1%</b> (14.8 - 17.5) 852	<b>6.7%</b> (5.6 - 8.1) 342	<b>15.4%</b> (14.4 - 16.4) 2384	<b>6.2%</b> (5.6 - 7.0) 888	<b>15.6%</b> (14.7 - 16.4) 3236	<b>6.4%</b> (5.8 - 7.0) 1230

2018 SUMMIT COUNTY HS YRBS: Other Drug Use

Akron % (Confidence Interval) Population N		Suburbs % (Confidence Interval) Population N		County % (Confidence Interval) Population N	
2013	2018	2013	2018	2013	2018
<b>Ever used other prescription drugs</b> (Without a prescription or differently than prescribed.)					
N/A	<b>6.5%</b> (5.5 - 7.8) 331	N/A	<b>6.5%</b> (5.8 - 7.4) 931	N/A	<b>6.5%</b> (5.9 - 7.2) 1262
<b>Offered, sold, or given illegal drugs on school property</b> (During the 12 months prior to taking the survey.)					
<b>25.1%</b> (23.5 - 26.7) 1320	<b>11.4%</b> (10.0 - 13.0) 588	<b>19.7%</b> (18.7 - 20.7) 3043	<b>17.0%</b> (15.9 - 18.1) 2456	<b>21.0%</b> (20.2 - 21.9) 4363	<b>15.5%</b> (14.6 - 16.5) 3043
<b>Attended school under the influence of alcohol or drugs</b> (During the 12 months prior to taking the survey.)					
N/A	<b>13.3%</b> (11.8 - 14.9) 684	N/A	<b>10.3%</b> (9.4 - 11.3) 1496	N/A	<b>11.1%</b> (10.3 - 12.0) 2180

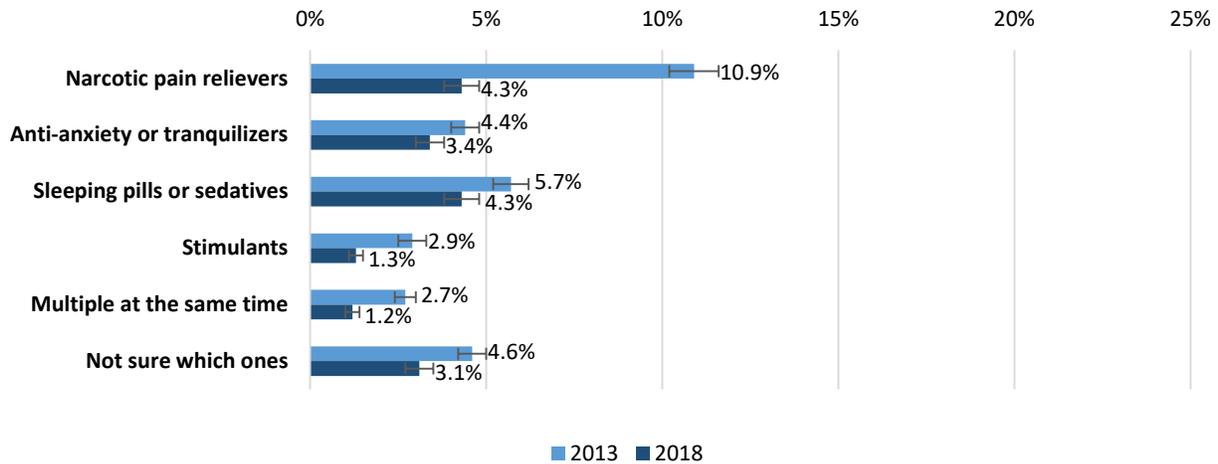
From 2013 to 2018, students in Summit County reported decreases in ever use of cocaine (5.8% to 2.7%), heroin (4.1% to 1.6%), methamphetamines (5.0% to 1.8%), hallucinogenic drugs (8.9% to 5.0%), unprescribed steroid use (4.7% to 2.7%), inhalants (8.4% to 5.8%), synthetic or designer drugs (8.0% to 4.1%), unprescribed or off-label use of pain medications (15.6% to 6.4%), as well as being offered, sold, or given illegal drugs on school property in the 12 months prior to taking the survey (21.0% to 15.5%). New to the survey in 2018, 3.1% of students reported ever using ecstasy, 6.5% reported unprescribed or off-label use of other prescription drugs, and 11.1% reported attending school under the influence of alcohol or drugs during the 12 months before taking the survey.

**Decreases in Ever Drug Use, 2013 vs. 2018**



Summit County high school students were asked to select all of the types of prescription drugs they had taken without a doctor’s prescription during their lifetime. Compared to 2013, Summit County high school students in 2018 were significantly less likely to report taking all of the categories of prescription drugs without a prescription including narcotic pain relievers, such as OxyContin, Percocet, Vicodan, or Lortabs (10.9% to 4.3%).

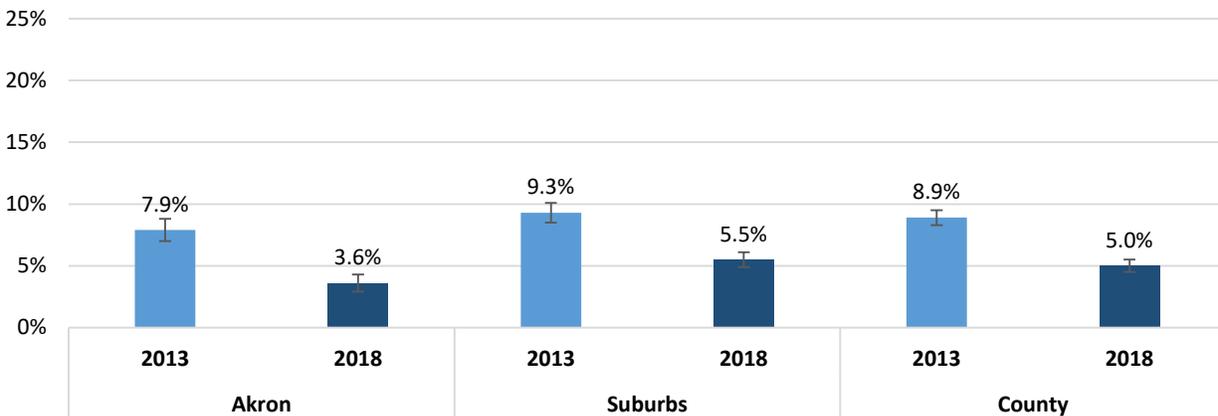
### Prescription drugs ever taken without a prescription, 2013 vs. 2018



Regionally, students in the suburbs were significantly more likely to report ever using an hallucinogenic drug (5.5%) compared to students in Akron (3.6%). Students in the suburbs were also more likely to report being offered, sold or given illegal drugs on school property (17.0%) compared to students in Akron (11.4%). For the remaining drug variables, there were no significant differences between Akron and the suburbs.

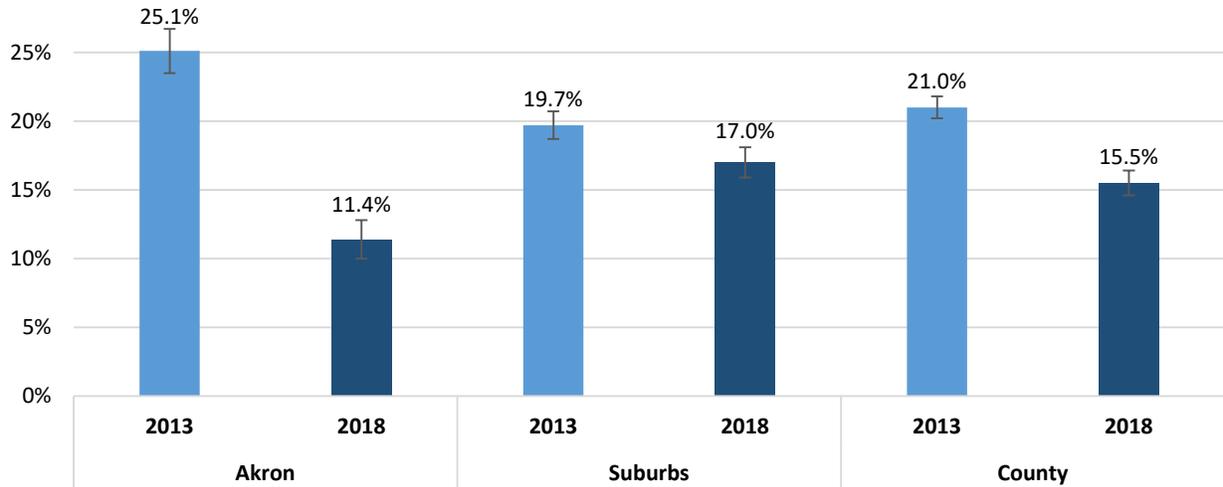
Students in the suburbs were significantly more likely to report ever using hallucinogenic drugs in 2018 (5.5%) compared to students in Akron. The prevalence of having ever used hallucinogenic drugs decreased significantly from 2013 to 2018 in both Akron (7.9% to 3.6%) and in the suburbs (9.3% to 5.5%).

### Ever used hallucinogenic drugs By region, 2013 vs. 2018



Students in the suburbs were significantly more likely to report in 2018 that they had been offered, sold, or given drugs on school property (17.0%) than students in Akron (11.4%). The prevalence of being offered, sold, or given drugs on school property decreased significantly from 2013 to 2018 in both Akron (25.1% to 11.4%) and in the suburbs (19.7% to 17.0%).

**Offered, sold, or given drugs on school property  
(12 months prior to the survey)  
By region, 2013 vs. 2018**



### Demographics

Ever used cocaine			
Category	%	CI	
<b>Gender</b>			
Female	2.3	1.8	2.9
Male	3.0	2.5	3.7
<b>Race/Ethnicity</b>			
White	2.4	2.0	3.0
Black	2.8	2.0	3.8
Asian	1.9	0.9	3.7
Hispanic	12.3	7.5	19.6
Other	5.0	3.2	7.7
<b>Grade</b>			
9th	1.9	1.2	3.0
10th	2.1	1.5	2.8
11th	2.5	1.9	3.4
12th	3.9	3.0	5.1
<b>Total</b>	<b>2.7</b>	<b>2.3</b>	<b>3.2</b>

Ever used heroin			
Category	%	CI	
<b>Gender</b>			
Female	0.9	0.6	1.3
Male	2.2	1.8	2.8
<b>Race/Ethnicity</b>			
White	1.0	0.8	1.4
Black	2.6	1.8	3.7
Asian	1.6	0.8	3.5
Hispanic	12.0	7.1	19.4
Other	3.0	1.7	5.1
<b>Grade</b>			
9th	1.1	0.6	1.7
10th	1.6	1.0	2.4
11th	1.4	0.9	2.1
12th	1.8	1.3	2.6
<b>Total</b>	<b>1.6</b>	<b>1.3</b>	<b>1.9</b>

In Summit County, 2.7% of high school students report ever using cocaine. There was no significant difference by gender in cocaine usage. Hispanic students were significantly more likely to have used cocaine (12.3%) than White (2.4%), Black (2.8%), or Asian (1.9%) students. The prevalence of ever using cocaine was higher among 12<sup>th</sup> grade (3.9%) students than 10<sup>th</sup> grade (2.1%) students.

Among Summit County high school students, 1.6% of students reported having ever used heroin. Males were significantly more likely to have used heroin (2.2%) than females (0.9%). Hispanic students (12.0%) reported a significantly higher prevalence of heroin use than the other race/ethnicity groups. The prevalence of ever heroin use was higher among Black and Other/Multiple race students (2.6%, 3.0%) than White (1.0%) students. There was no significant difference in the prevalence of heroin use by grade level.

2018 SUMMIT COUNTY HS YRBS: Other Drug Use

Ever used methamphetamines			
Category	%	CI	
<b>Gender</b>			
Female	1.4	1.1	1.9
Male	2.2	1.8	2.7
<b>Race/Ethnicity</b>			
White	1.5	1.2	1.9
Black	2.2	1.5	3.1
Asian	1.7	0.8	3.4
Hispanic	10.1	5.6	17.4
Other	3.2	1.9	5.5
<b>Grade</b>			
9th	1.3	0.8	2.0
10th	2.0	1.5	2.8
11th	1.7	1.2	2.5
12th	1.9	1.3	2.8
<b>Total</b>	<b>1.8</b>	<b>1.5</b>	<b>2.2</b>

In 2018, 1.8% of Summit County high school students reported ever having used methamphetamines. There was no significant difference by gender in the prevalence of using methamphetamines. Hispanic students (10.1%) were significantly more likely than the other race/ethnicity groups to have ever used methamphetamines. There was no significant difference by grade level in the prevalence of ever using methamphetamines.

Ever used ecstasy			
Category	%	CI	
<b>Gender</b>			
Female	2.1	1.7	2.6
Male	4.0	3.4	4.9
<b>Race/Ethnicity</b>			
White	2.8	2.3	3.4
Black	3.1	2.3	4.2
Asian	1.7	0.8	3.5
Hispanic	13.4	8.5	20.4
Other	5.7	3.9	8.5
<b>Grade</b>			
9th	2.3	1.5	3.3
10th	2.4	1.7	3.2
11th	3.4	2.5	4.5
12th	3.9	2.9	5.1
<b>Total</b>	<b>3.1</b>	<b>2.7</b>	<b>3.6</b>

In Summit County, 3.1% of high school students in 2018 reported having ever used ecstasy. Males were significantly more likely than females to have ever used ecstasy (4.0% vs. 2.1%). Hispanic students (13.4%) were significantly more likely than White (2.8%), Black (3.1%), and Asian (1.7%) students to have ever used ecstasy. There was no significant difference by grade level in the prevalence of ever using ecstasy.

Ever used hallucinogenic drugs			
Category	%	CI	
<b>Gender</b>			
Female	4.0	3.3	4.7
Male	6.0	5.2	7.0
<b>Race/Ethnicity</b>			
White	5.1	4.5	5.8
Black	3.5	2.7	4.7
Asian	2.6	1.4	4.6
Hispanic	16.9	11.6	23.9
Other	8.6	6.4	11.4
<b>Grade</b>			
9th	2.7	2.0	3.7
10th	3.5	2.8	4.4
11th	5.4	4.4	6.6
12th	7.8	6.5	9.3
<b>Total</b>	<b>5.0</b>	<b>4.5</b>	<b>5.6</b>

Ever took steroids without a doctor's prescription			
Category	%	CI	
<b>Gender</b>			
Female	2.2	1.7	2.8
Male	3.1	2.5	3.7
<b>Race/Ethnicity</b>			
White	2.1	1.7	2.6
Black	3.9	2.9	5.1
Asian	1.9	0.9	3.8
Hispanic	13.9	8.9	21.0
Other	5.2	3.5	7.6
<b>Grade</b>			
9th	2.9	2.1	4.1
10th	2.1	1.5	2.9
11th	2.5	1.8	3.4
12th	2.8	2.1	3.8
<b>Total</b>	<b>2.7</b>	<b>2.3</b>	<b>3.1</b>

Of Summit County high school students, 5.0% had ever used hallucinogenic drugs such as LSD, acid, PCP, ecstasy, angel dust, mescaline, or mushrooms. Males were significantly more likely than females to report ever using a hallucinogenic drug (6.0% vs. 4.0%). Hispanic students were significantly more likely to report having ever used a hallucinogenic drug (16.9%), compared to the other race/ethnicity groups. Other/Multiple race students (8.6%) were significantly more likely than White, Black or Asian (5.1%, 3.5%, 2.6%) students to have ever used a hallucinogenic drug. Twelfth grade students (7.8%) were significantly more likely to report having ever used hallucinogenic drugs than 9<sup>th</sup> grade (2.7%) and 10<sup>th</sup> grade (3.5%) students.

In 2018, 2.7% of Summit County high school students reported using steroids without a doctor's prescription. There was no significant difference by gender or grade level in unprescribed steroid use. Hispanic students reported the highest prevalence of steroid use without a prescription (13.9%), compared to the other race ethnicity groups. The prevalence of unprescribed steroids use was higher among Black (3.9%) and Other/Multiple race (5.2%) students than White (2.1%) or Asian (1.9%) students.

Ever used inhalants			
Category	%	CI	
<b>Gender</b>			
Female	6.0	5.3	6.8
Male	5.5	4.8	6.3
<b>Race/Ethnicity</b>			
White	5.5	4.9	6.2
Black	5.7	4.7	7.0
Asian	2.5	1.5	4.2
Hispanic	16.1	11.0	22.9
Other	9.2	6.9	12.2
<b>Grade</b>			
9th	6.4	5.3	7.6
10th	6.2	5.1	7.4
11th	5.7	4.7	6.8
12th	4.7	3.7	5.8
<b>Total</b>	<b>5.8</b>	<b>5.3</b>	<b>6.4</b>

Ever used synthetic or designer drugs			
Category	%	CI	
<b>Gender</b>			
Female	3.7	3.1	4.4
Male	4.3	3.7	5.1
<b>Race/Ethnicity</b>			
White	3.7	3.1	4.3
Black	4.3	3.4	5.5
Asian	1.7	0.9	3.3
Hispanic	14.9	9.7	22.2
Other	8.1	6.2	10.7
<b>Grade</b>			
9th	4.2	3.2	5.7
10th	3.7	3.0	4.5
11th	3.8	3.0	4.7
12th	4.0	3.1	5.3
<b>Total</b>	<b>4.1</b>	<b>3.6</b>	<b>4.6</b>

In Summit County, 5.8% of students reported ever using inhalants such as glue, the contents of aerosol spray cans, or having inhaled any paints or sprays to get high. There was no significant difference by gender or grade level in the prevalence of ever using inhalants. Hispanic students (16.1%) were significantly more likely than White (5.5%), Black (5.7%), and Asian (2.5%) students to have ever used inhalants. White, Black and Other/Multiple race (5.5%, 5.7%, 9.2%) students were significantly more likely than Asian (2.5%) students to have ever used inhalants.

In 2018, 4.1% of Summit County high school students reported that they had ever used synthetic or designer drugs. There was no significant difference by gender or grade level in the prevalence of ever using synthetic or designer drugs. Hispanic students (14.9%) were significantly more likely than White (3.7%), Black (4.3%), and Asian (1.7%) students to have ever used synthetic or designer drugs. White, Black and Other/Multiple race (3.7%, 4.3%, 8.1%) students were significantly more likely than Asian (1.7%) students to have ever used synthetic or designer drugs.



<b>Ever taken prescription pain medicine without a doctor's prescription or differently than how a doctor prescribed</b>			
<b>Category</b>	<b>%</b>	<b>CI</b>	
<b>Gender</b>			
Female	6.9	6.0	7.8
Male	5.8	5.1	6.5
<b>Race/Ethnicity</b>			
White	6.5	5.7	7.2
Black	5.0	4.0	6.3
Asian	3.6	2.2	5.7
Hispanic	15.8	11.5	21.5
Other	9.8	7.5	12.8
<b>Grade</b>			
9th	5.2	4.3	6.2
10th	4.7	3.8	5.6
11th	7.1	6.0	8.5
12th	8.3	7.0	9.9
<b>Total</b>	<b>6.4</b>	<b>5.8</b>	<b>7.0</b>

<b>Ever taken other prescription drug that was not pain medicine without a doctor's prescription or differently than prescribed</b>			
<b>Category</b>	<b>%</b>	<b>CI</b>	
<b>Gender</b>			
Female	7.1	6.3	8.1
Male	5.8	5.1	6.7
<b>Race/Ethnicity</b>			
White	6.7	5.9	7.5
Black	5.3	4.1	6.7
Asian	3.7	2.3	6.1
Hispanic	16.7	12.1	22.4
Other	8.8	6.7	11.4
<b>Grade</b>			
9th	5.0	4.0	6.1
10th	5.1	4.1	6.3
11th	7.6	6.3	9.0
12th	8.2	6.8	9.9
<b>Total</b>	<b>6.5</b>	<b>5.9</b>	<b>7.2</b>

In Summit County, 6.4% of high school students had ever taken prescription pain medicine without a doctor’s prescription or differently than how a doctor had prescribed it. There was no significant difference by gender in the prevalence of ever using prescription pain medicine without a prescription. Hispanic students (15.8%) were significantly more likely than White (6.5%), Black (5.0%), and Asian (3.6%) students to have ever taken prescription pain medicine without a prescription. Other/Multiple race (9.8%) students were significantly more likely than White, Black or Asian (6.5%, 5.0%, 3.6%) students to have taken prescription pain medicine without a prescription. Twelfth grade students (8.3%) reported a significantly higher prevalence of ever taking prescription pain medicine without a prescription than 9<sup>th</sup> grade (5.2%) and 10<sup>th</sup> grade (4.7%) students. Eleventh grade (7.1%) students reported a higher prevalence of ever taking prescription pain medicine without a prescription than 10<sup>th</sup> grade (4.7%) students.

Of Summit County high school students, 6.5% report having ever taken other prescription drugs (not pain medication) without a prescription or differently than how it had been prescribed. There was no significant difference by gender in the prevalence of taking other prescription drugs without a prescription. Hispanic students were significantly more likely to report ever taking other prescription drugs without a prescription (16.7%) than White (6.7%), Black (5.3%), and Asian (3.7%) students. Twelfth grade students (8.2%) were significantly more likely to have taken other prescription drugs without a prescription than 9<sup>th</sup> grade (5.0%) and 10<sup>th</sup> grade (5.1%) students.

Offered, sold, or given illegal drugs on school property			
Category	%	CI	
<b>Gender</b>			
Female	13.9	12.8	- 15.1
Male	17.2	15.9	- 18.6
<b>Race/Ethnicity</b>			
White	16.2	15.2	- 17.3
Black	12.8	11.2	- 14.7
Asian	5.9	4.2	- 8.4
Hispanic	26.0	20.5	- 32.3
Other	17.6	14.5	- 21.2
<b>Grade</b>			
9th	13.7	11.8	- 15.9
10th	17.9	15.9	- 20.1
11th	16.8	15.0	- 18.7
12th	13.7	11.9	- 15.6
<b>Total</b>	<b>15.5</b>	<b>14.6</b>	<b>- 16.5</b>

In 2018, 15.5% of Summit County high school students reported being offered, sold, or given illegal drugs on school property in the 12 months prior to taking the survey. Males were significantly more likely than females to have been offered, sold, or given illegal drugs at school (17.2% vs. 13.9%). Hispanic students (26.0%) were significantly more likely than White (16.2), Black (12.8%), and Asian (5.9%) students to have been offered, sold, or given illegal drugs on school property. Other/Multiple race (17.6%) students were more likely than Asian (5.9%) students to have been offered, sold or given drugs on school property. Tenth grade students (17.9%) were significantly more likely than 12th grade students (13.7%) to have been offered, sold, or given drugs on school property in the 12 months before the survey.

Attended school under the influence of alcohol or drugs			
Category	%	CI	
<b>Gender</b>			
Female	10.4	9.5	- 11.4
Male	11.7	10.7	- 12.9
<b>Race/Ethnicity</b>			
White	9.8	9.0	- 10.8
Black	15.0	13.2	- 17.1
Asian	2.3	1.3	- 4.2
Hispanic	24.5	19.0	- 31.0
Other	16.4	13.8	- 19.4
<b>Grade</b>			
9th	7.9	6.7	- 9.4
10th	9.9	8.6	- 11.4
11th	11.3	9.9	- 13.0
12th	14.6	12.7	- 16.6
<b>Total</b>	<b>11.1</b>	<b>10.3</b>	<b>- 12.0</b>

In Summit County, 11.1% of high school students attended school one or more times under the influence of alcohol or drugs in the 12 months prior to the survey. There was no significant difference by gender in the prevalence of this behavior. Hispanic students (24.5%) were significantly more likely than White (9.8%), Black (15.0%), and Asian (2.3%) students to report that they had attended school under the influence of alcohol or drugs in the 12 months prior to the survey. White, Black and Other/Multiple race (9.8%, 15.0%, 16.4%) students were more likely than Asian (2.3%) students; Other/Multiple race (16.4%) students were more likely than White (9.8%) students to have attended school under the influence of alcohol or drugs. Twelfth grade students were more likely to have attended school under the influence of alcohol or drugs (14.6%) than 9<sup>th</sup> grade (7.9%) and 10<sup>th</sup> grade (9.9%) students.

## 2018 SUMMIT COUNTY HS YRBS: Other Drug Use

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- <sup>i</sup> Wu, W., Khan, A. 2005. Adolescent Illicit Drug Use: Understanding and Addressing the Problem. *Medscape Public Health & Prevention*. 3(2).
- <sup>ii</sup> 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.
- <sup>iii</sup> 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.
- <sup>iv</sup> Volkow, N. 2005. Inhalant abuse: Danger under the kitchen sink. *NIDA Notes*. 20(3).

## Section 9: Gambling Behaviors

The 2018 Summit County High School YRBS included five items about gambling. Problem gambling is widespread. It is estimated that in Ohio 264,000 adults and approximately 38,000 adolescents exhibit problem gambling behaviors.<sup>i</sup>

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.<sup>ii</sup> 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.<sup>iii,iv,v</sup>

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

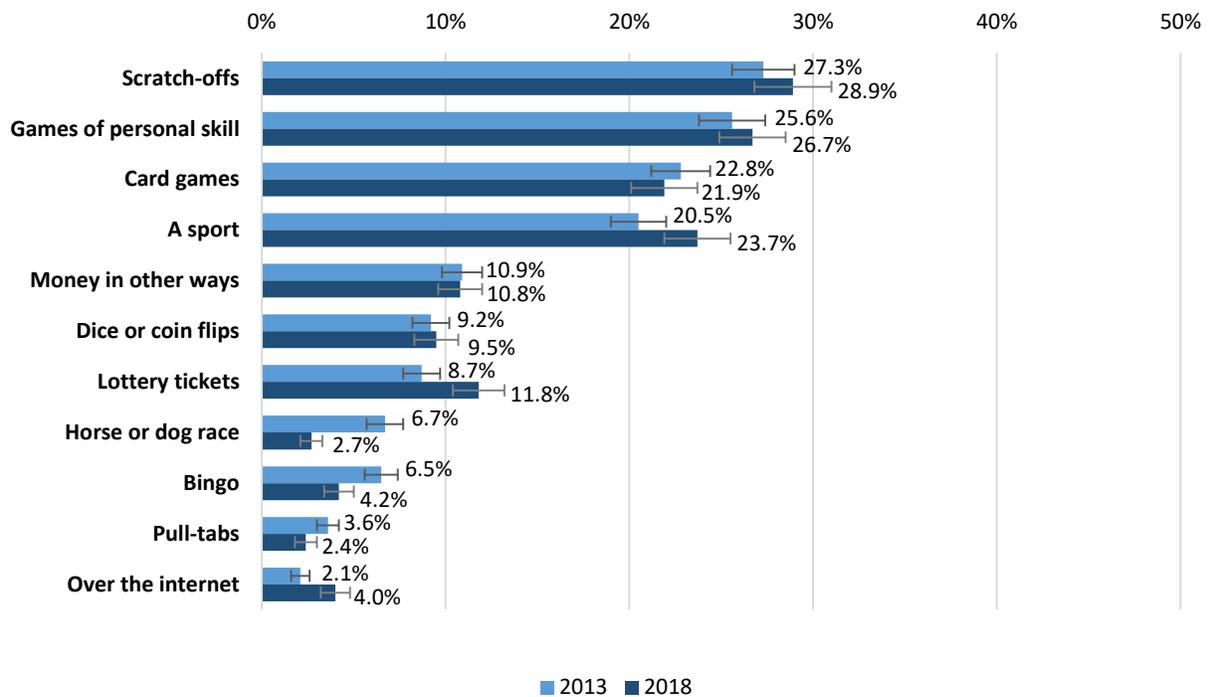
Akron		Suburbs		County	
% (Confidence Interval) Population N		% (Confidence Interval) Population N		% (Confidence Interval) Population N	
2013	2018	2013	2018	2013	2018
<b>Gambled in the 12 months prior to taking the survey</b> (Bet money or personal items while playing cards, betting on personal skills or sports teams, buying lottery tickets or scratch-offs, using the internet, etc.)					
<b>26.2%</b> (24.5 - 28.0) 1357	<b>19.9%</b> (18.3 - 21.5) 1011	<b>23.8%</b> (22.7 - 24.9) 3663	<b>19.5%</b> (18.4 - 20.6) 2812	<b>24.4%</b> (23.4 - 25.4) 5020	<b>19.6%</b> (18.7 - 20.5) 3823
<b>Felt bad about gambling</b> (Always or most of the time, among current gamblers, during the 30 days before the survey.)					
<b>6.4%</b> (5.0 - 8.1) 89	<b>5.4%</b> (3.8 - 7.6) 61	<b>6.2%</b> (5.0 - 7.5) 208	<b>5.1%</b> (3.9 - 6.6) 159	<b>6.2%</b> (5.3 - 7.3) 297	<b>5.2%</b> (4.2 - 6.4) 220
<b>Lied about gambling</b> (Always or most of the time, among current gamblers, during the 30 days before the survey.)					
<b>7.6%</b> (6.1 - 9.6) 105	<b>4.3%</b> (3.0 - 6.2) 49	<b>5.7%</b> (4.5 - 7.2) 191	<b>4.9%</b> (3.8 - 6.3) 152	<b>6.3%</b> (5.3 - 7.4) 296	<b>4.7%</b> (3.8 - 5.8) 201

From 2013 to 2018, Summit County high school students were significantly less likely to report having gambled in the 12 months prior to taking the survey (24.4% to 19.6%). There was no significant change in the prevalence of students always or most of the time felt bad about gambling or who lied about gambling in the 30 days before the survey. Regionally, students in Akron and the suburbs did not significantly differ

in the prevalence of gambling in the past 12 months (19.9% vs. 19.5%), feeling bad about gambling (5.4% vs. 5.1%), or lying about gambling (4.3% vs. 4.9%).

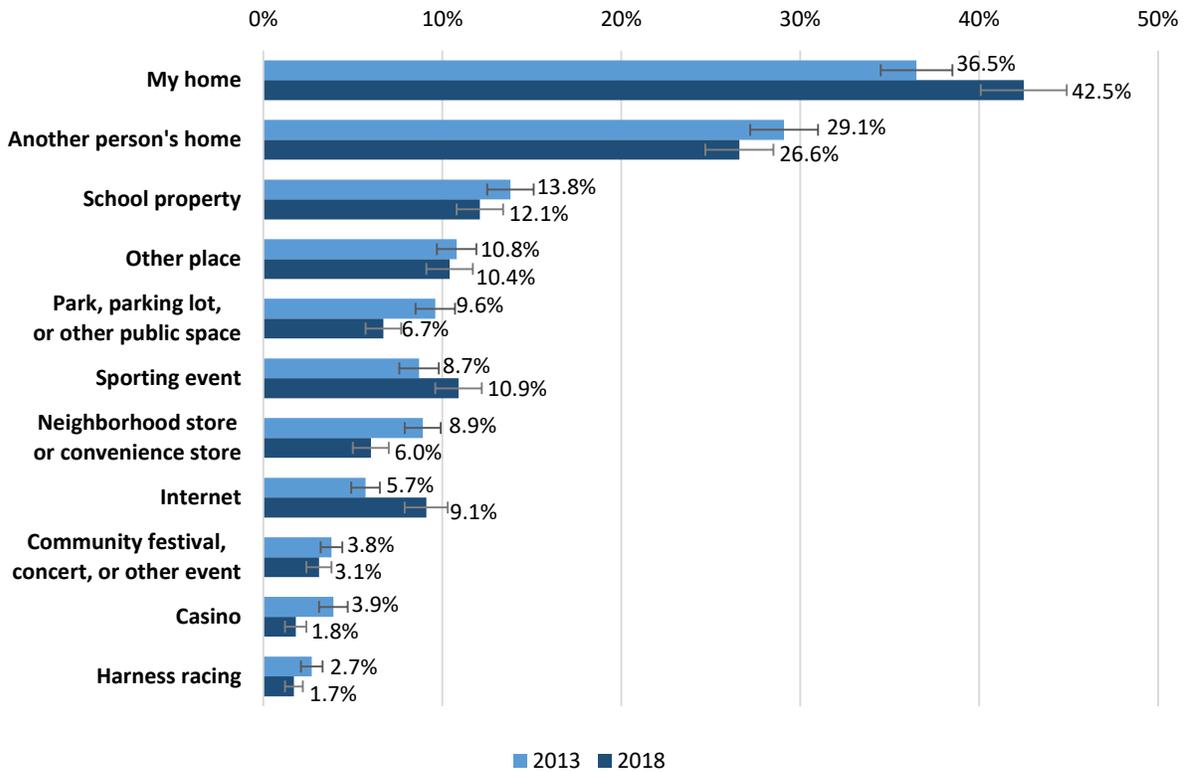
Summit County high school students were asked which type of gambling they participated in during the 30 days prior to taking the survey. In 2018, among those who had gambled in the last 30 days, students most frequently reported that they had gambled via scratch-offs (28.9%), games of personal skill (26.7%), or a sport (23.7%). From 2013 to 2018, among current gamblers, students were significantly more likely to report they had gambled using lottery tickets (11.8% vs. 8.7%) and over the internet (4.0% vs. 2.1%) and significantly less likely to report they had gambled via a horse or dog race (2.7% vs. 6.7%) or bingo (4.2% vs. 6.5%).

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



Summit County high school students were asked to select all of the locations where they had gambled in the 30 days prior to taking the survey. In 2018, students most frequently reported gambling in their home (42.5%) which had significantly increased from 2013 (36.5%). From 2013 to 2018, among students who had gambled in the past 30 days, the prevalence of gambling in a park, parking lot or other public space (9.6% to 6.7%), neighborhood store or convenience store (8.9% to 6.0%), or at a casino (3.9% to 1.8%) significantly decreased. Compared to 2013, students in 2018 were significantly more likely to report gambling at their home and over the internet (5.7% to 9.1%).

### Location of gambling among students who gambled in past 30 days



### Demographics

Gambled money or personal items			
Category	%	CI	
<b>Gender</b>			
Female	11.1	10.2	- 12.0
Male	28.6	27.2	- 30.1
<b>Race/Ethnicity</b>			
White	18.7	17.6	- 19.8
Black	23.2	21.2	- 25.3
Asian	13.1	10.2	- 16.7
Hispanic	27.7	21.9	- 34.5
Other	20.5	17.7	- 23.7
<b>Grade</b>			
9th	18.6	16.7	- 20.7
10th	18.6	17.1	- 20.3
11th	19.4	17.8	- 21.2
12th	21.1	19.3	- 23.1
<b>Total</b>	<b>19.6</b>	<b>18.7</b>	<b>- 20.5</b>

Felt bad about betting or gambling			
Category	%	CI	
<b>Gender</b>			
Female	3.5	2.3	- 5.2
Male	5.9	4.7	- 7.5
<b>Race/Ethnicity</b>			
White	4.1	3.1	- 5.4
Black	7.1	4.7	- 10.7
Asian	4.3	1.5	- 11.2
Hispanic	8.6	4.0	- 17.5
Other	6.8	4.0	- 11.4
<b>Grade</b>			
9th	4.5	2.8	- 7.2
10th	5.1	3.4	- 7.7
11th	6.1	4.2	- 8.8
12th	4.8	3.2	- 7.2
<b>Total</b>	<b>5.2</b>	<b>4.2</b>	<b>- 6.4</b>

In 2018, 19.6% of Summit County high school students reported gambling money or personal items one or more times in the 12 months prior to taking the survey. Males were significantly more likely than females to have gambled in the 12 months prior to the survey (28.6% vs. 11.1%). White (18.7%) and Asian (13.1%) students were significantly less likely to have gambled than the other race/ethnicity groups in the 12 months before the survey. There was no significant variation by grade level in the prevalence of gambling.

Among students who gambled in the 30 days prior to taking the survey, 5.2% felt bad about their gambling most of the time or always. There was no significant difference among current gamblers in the prevalence of feeling bad about gambling by gender, race/ethnicity, or grade level.

<b>Lied about betting or gambling</b>			
<b>Category</b>	<b>%</b>	<b>CI</b>	
<b>Gender</b>			
Female	3.0	2.0	- 4.4
Male	5.5	4.2	- 7.0
<b>Race/Ethnicity</b>			
White	3.4	2.5	- 4.7
Black	6.6	4.3	- 9.9
Asian	7.3	3.2	- 15.6
Hispanic	19.6	11.7	- 31.1
Other	7.7	4.7	- 12.3
<b>Grade</b>			
9th	5.4	3.5	- 8.1
10th	4.8	3.1	- 7.4
11th	4.9	3.3	- 7.3
12th	3.4	2.0	- 5.7
<b>Total</b>	<b>4.7</b>	<b>3.8</b>	<b>- 5.8</b>

Among students who had gambled in the 30 days prior to taking the survey, 4.7% lied always or most of the time about their gambling. There was no significant difference in the prevalence of lying about gambling among current gamblers by gender or grade level. Among current gamblers, Hispanic students (19.6%) were significantly more likely to report that they lied about their gambling than White (3.4%) and Black (6.6%) students.

<sup>i</sup> "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>>.

<sup>ii</sup> 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.

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

<sup>iv</sup> 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

<sup>v</sup> 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 Behavior

The 2018 Summit County high school YRBS asked students whether they had ever had sexual intercourse and whether they or their partner used a condom the last time they had sexual intercourse. Early sexual activity is associated with a high number of sexual partners,<sup>1, 2</sup> STI contraction, teenage pregnancy,<sup>17</sup> and greater risk for unwanted sex.<sup>3</sup> 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.<sup>4</sup> While this is a positive trend, there are still risks for teens who are entering into sexual relationships during their adolescent years.<sup>20</sup>

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 and 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
<b>FP-9:</b> Increase the proportion of adolescents aged 15 to 17 years who have never had sexual intercourse (80.2% females, 79.2% males).	65.8% of female and 62.5% of male Summit County high school students reported that they have never had sexual intercourse.	The objective has <b>not</b> 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
<b>Ever had sexual intercourse</b> (Had sexual intercourse 1 or more times during their life.)					
<b>46.8%</b> (44.1 - 49.5) 2272	<b>39.6%</b> (37.0 - 42.3) 2001	<b>40.2%</b> (38.2 - 42.3) 5098	<b>34.4%</b> (32.2 - 36.7) 4934	<b>42.0%</b> (40.4 - 43.7) 7370	<b>35.7%</b> (34.0 - 37.6) 6935
<b>Had sexual intercourse before age 13</b>					
<b>11.2%</b> (10.1 - 12.5) 536	<b>5.7%</b> (4.6 - 7.1) 272	<b>5.1%</b> (4.6 - 5.8) 649	<b>2.6%</b> (2.1 - 3.1) 358	<b>6.8%</b> (6.3 - 7.4) 1185	<b>3.4%</b> (2.9 - 3.9) 630
<b>Currently sexually active</b> (Had sexual intercourse with at least 1 person during the 3 months before the survey.)					
<b>32.6%</b> (30.3 - 35.0) 1579	<b>30.7%</b> (28.1 - 33.3) 1495	<b>29.9%</b> (28.1 - 31.8) 3801	<b>26.6%</b> (24.6 - 28.6) 3718	<b>30.7%</b> (29.2 - 32.1) 5380	<b>27.6%</b> (26.0 - 29.3) 5213
<b>Condom use</b> (Used a condom most of the time or always during the past 3 months among currently sexually active students.)					
<b>58.2%</b> (55.1 - 61.3) 942	<b>44.2%</b> (40.3 - 48.2) 659	<b>58.1%</b> (55.7 - 60.5) 2269	<b>56.8%</b> (53.9 - 59.7) 2148	<b>58.2%</b> (56.2 - 60.1) 3211	<b>53.3%</b> (50.9 - 55.6) 2806
<b>Drank alcohol or used drugs before having sexual intercourse</b> (Among students who were currently sexually active.)					
<b>18.7%</b> (16.8 - 20.8) 397	<b>16.8%</b> (13.9 - 20.1) 328	<b>21.3%</b> (19.6 - 23.1) 1050	<b>16.8%</b> (15.1 - 18.7) 802	<b>20.5%</b> (19.2 - 21.9) 1447	<b>16.8%</b> (15.3 - 18.4) 1131
<b>Been pregnant or gotten someone pregnant</b> (One or more times during their life.)					
<b>6.2%</b> (5.4 - 7.2) 297	<b>3.9%</b> (2.9 - 5.2) 191	<b>3.5%</b> (3.0 - 4.1) 436	<b>1.7%</b> (1.4 - 2.1) 240	<b>4.2%</b> (3.8 - 4.7) 733	<b>2.3%</b> (1.9 - 2.7) 431
<b>Used hormonal method to prevent pregnancy</b>					
N/A	<b>27.2%</b> (23.5 - 31.3) 542	N/A	<b>32.1%</b> (29.8 - 34.6) 1513	N/A	<b>30.7%</b> (28.7 - 32.8) 2055
<b>Were taught in school about AIDS or HIV infection</b>					
<b>80.0%</b> (77.5 - 82.3) 3767	<b>80.3%</b> (78.7 - 81.8) 3844	<b>86.5%</b> (85.4 - 87.5) 12911	<b>86.6%</b> (85.4 - 87.8) 12072	<b>84.9%</b> (83.9 - 85.9) 16678	<b>85.0%</b> (84.0 - 86.0) 15916
<b>Talked about AIDS or HIV infection with parents or adult in family</b>					
<b>50.3%</b> (48.5 - 52.0) 2350	<b>49.8%</b> (47.6 - 51.9) 2375	<b>39.8%</b> (38.6 - 41.0) 5941	<b>41.6%</b> (40.3 - 43.0) 5783	<b>42.3%</b> (41.3 - 43.4) 8291	<b>43.7%</b> (42.6 - 44.8) 8157

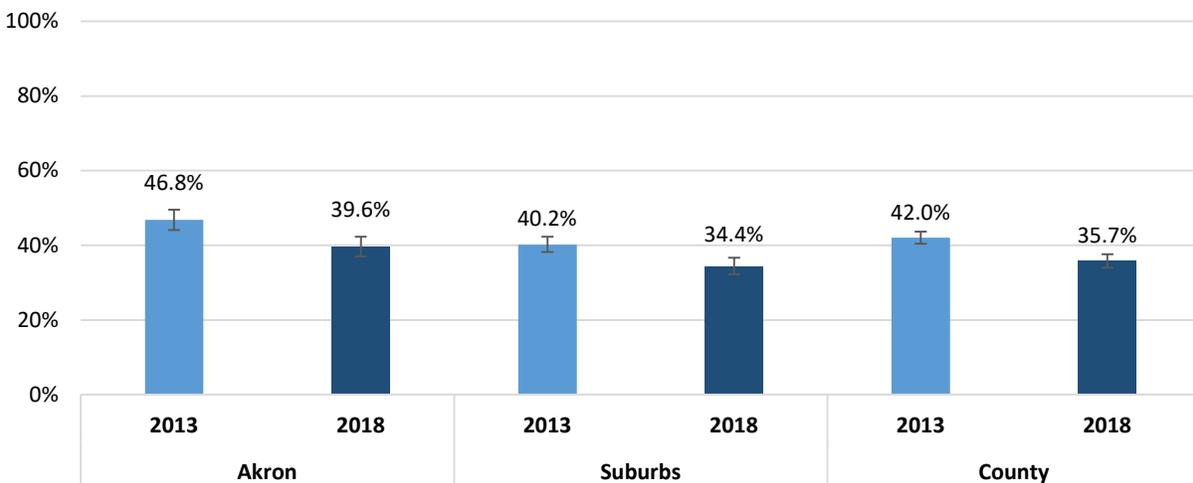
Students in Summit County were asked about their sexual activity and related behaviors. Compared to 2013, Summit County high school students in 2018 were significantly less likely to have ever had sexual intercourse (42.0% vs. 35.7%), to have had sexual intercourse before the age of 13 (6.8% vs. 3.4%), to have drunk alcohol or used drugs before sex (20.5% vs. 16.8%), to have been pregnant or gotten someone pregnant (4.2% vs. 2.3%) or to have used a condom most of the time or always when having sex (58.2% vs. 53.3%). There was no significant difference between 2013 and 2018 in prevalence rates of being currently sexually active, 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. (Students were not asked about method of pregnancy prevention during the 2013 survey administration).

There were no regional differences between Akron and its surrounding suburbs in the 2018 prevalence of students who were currently sexually active, who drank alcohol or used drugs before sex, or those students who used a hormonal method to prevent pregnancy. The graphs below illustrate significant decreases in the 2018 rates of students in both Akron and the surrounding suburbs to have ever had sexual intercourse, to have had sexual intercourse before the age of 13, or to have been pregnant or gotten someone pregnant. These three behaviors were all significantly higher in Akron than in the suburbs in 2018.

The prevalence of being taught about AIDS or HIV, to have talked about AIDS or HIV infection with parents or other adults in the family, or used a condom most of the time or always were significantly more likely in the suburbs than in Akron as seen in the graphs below.

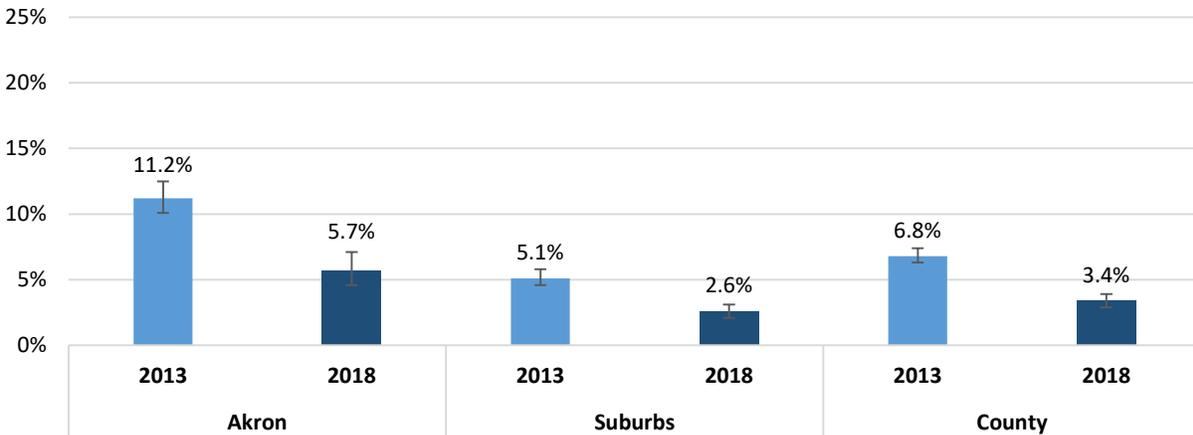
In Summit County, students were asked if they had ever had sexual intercourse. In 2018, the prevalence of having ever had sexual intercourse was significantly higher in Akron (39.6%) than in the suburbs (34.4%). However, the rates of this behavior have decreased in both Akron and the suburbs since 2013.

### Ever had sexual intercourse By region, 2013 vs. 2018



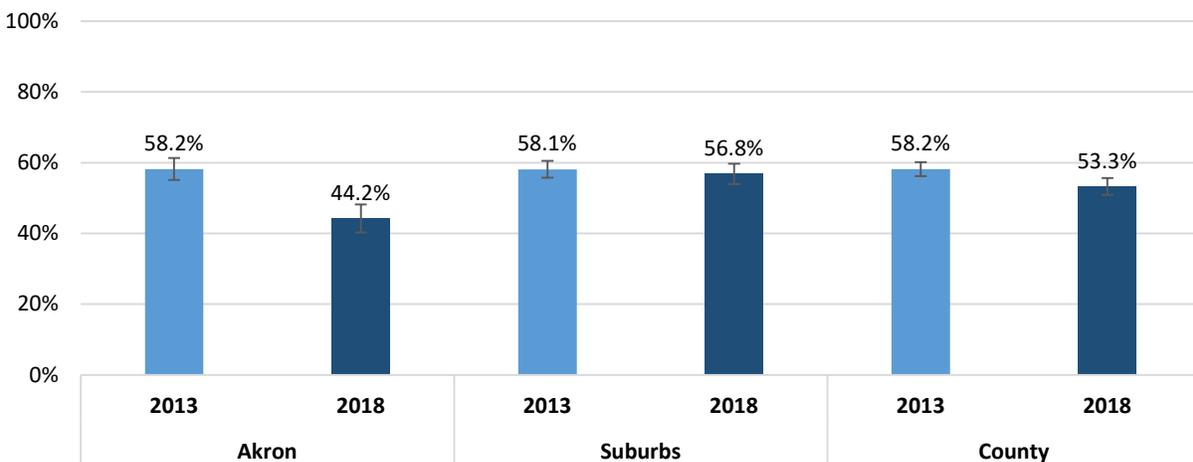
Students in Summit County were asked how old they were the first time they had sexual intercourse. The graph below depicts students that reported having had sexual intercourse before the age of 13 years. The prevalence of having had first sexual intercourse before age 13 was significantly higher among students in Akron (5.7%) than in the suburbs (2.6%) of the county. However, the rates of this behavior have decreased significantly in both regions since 2013.

### Had sexual intercourse before age 13 By region, 2013 vs. 2018



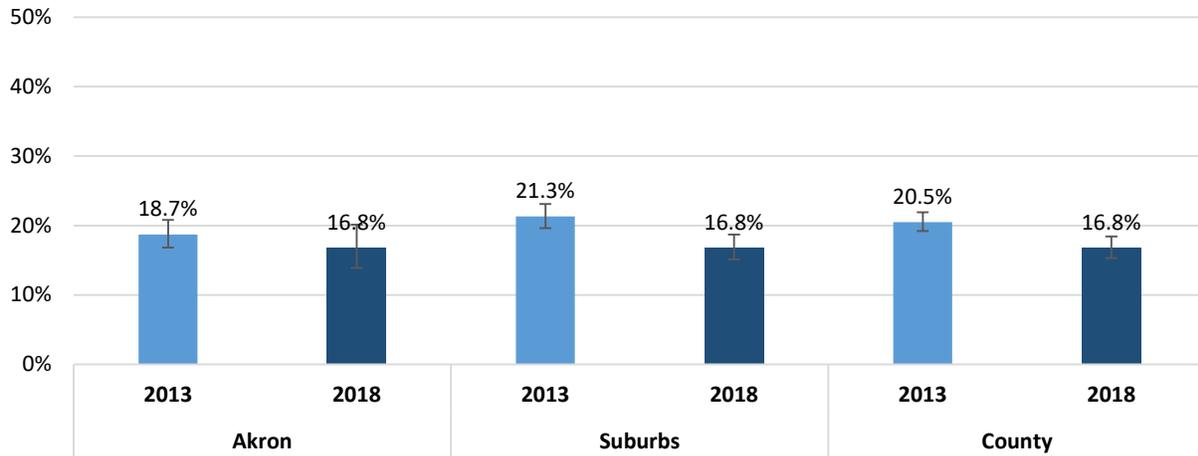
In Summit County, students are asked how often they used a condom when they had sexual intercourse. The graph below depicts students reporting use of a condom most of the time or always when they had sexual intercourse during the past 3 months. In 2018, students in the suburbs (56.8%) were significantly more likely to use a condom when they had sex than students in Akron (44.2%).

### Condom use By region, 2013 vs. 2018



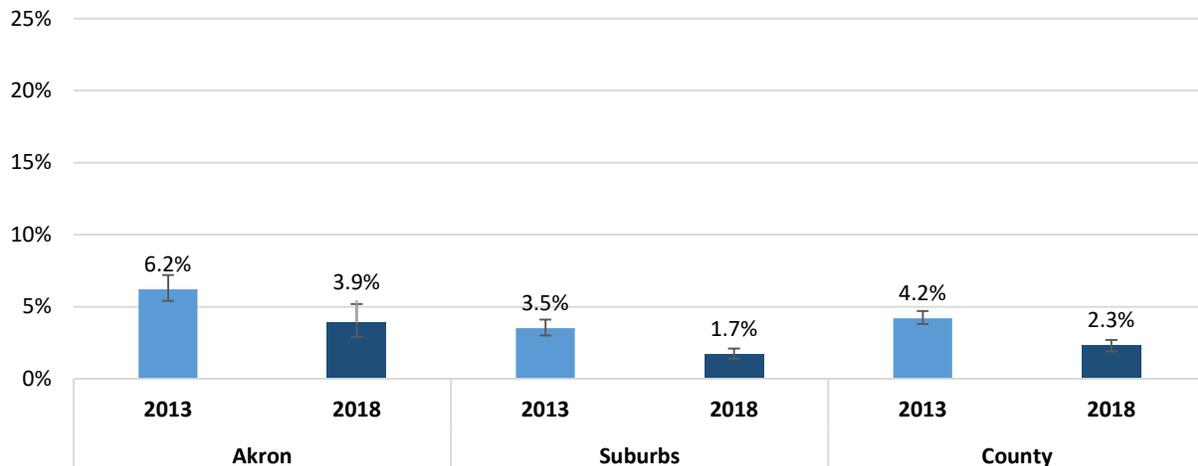
Students in Summit County were asked if, prior to their most recent sexual intercourse, they had used alcohol or drugs. The following graph depicts responses among sexually active students only. The prevalence for having drunk alcohol or used drugs during last sexual intercourse has declined significantly in the suburbs since 2013 (21.3% vs. 16.8%), but there is no difference in prevalence between the city and suburban regions.

### Drank alcohol or used drugs before sexual intercourse By region, 2013 vs. 2018



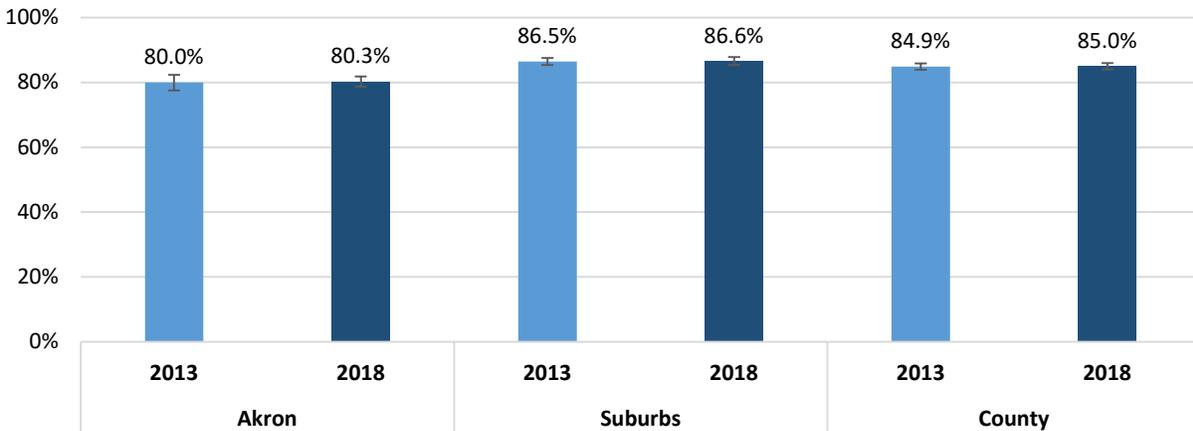
Students in Summit County were asked if they had ever been pregnant or had ever gotten someone pregnant. The prevalence for having been or gotten someone pregnant was significantly higher among students in the Akron (3.9%) than in the suburbs (1.7%) in 2018. The prevalence for having been or gotten someone pregnant has decreased significantly for both regions since 2013 (6.2% vs. 3.9%, Akron; 3.5% vs. 1.7%, Suburbs).

### Have been pregnant or gotten someone pregnant By region, 2013 vs. 2018



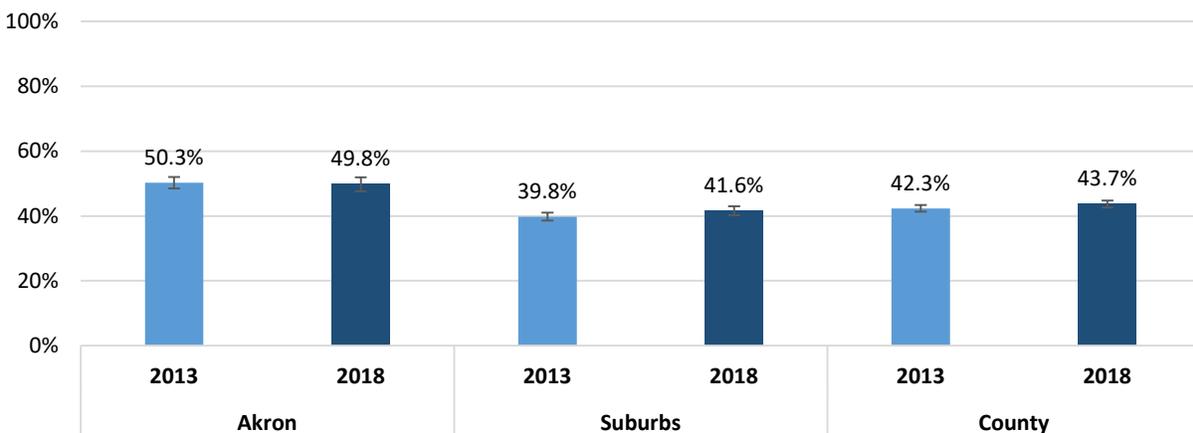
Students in Summit County were asked if they had ever been taught about AIDS or HIV in school. In 2018, the prevalence of having ever been taught about AIDS or HIV infection in school was significantly higher among students in the suburbs (86.6%) than among students in Akron (80.3%).

### Taught about AIDS or HIV infection in school By region, 2013 vs. 2018



Students in Summit County were asked if they had ever talked with their parents or other family members about AIDS or HIV infection. In 2018, the prevalence for having ever talked with parents or other family members about AIDS or HIV infection was significantly higher among students in Akron (49.8%) than for students in the suburbs (41.6%).

### Talked about AIDS or HIV infection with parents or other adults in family By region, 2013 vs. 2018



### Demographics

Ever had sexual intercourse			
Category	%	CI	
<b>Gender</b>			
Female	34.2	32.2	- 36.2
Male	37.5	35.3	- 39.8
<b>Race/Ethnicity</b>			
White	33.8	31.7	- 36.0
Black	43.8	41.0	- 46.6
Asian	16.2	12.9	- 20.2
Hispanic	47.5	41.7	- 53.3
Other	42.7	38.7	- 46.8
<b>Grade</b>			
9th	16.9	14.9	- 19.2
10th	29.3	27.0	- 31.8
11th	39.5	36.3	- 42.7
12th	55.4	52.2	- 58.5
<b>Total</b>	<b>35.7</b>	<b>34.0</b>	<b>- 37.6</b>

Had first sexual intercourse before age 13 years			
Category	%	CI	
<b>Gender</b>			
Female	2.0	1.6	- 2.4
Male	4.9	4.1	- 5.7
<b>Race/Ethnicity</b>			
White	2.1	1.7	- 2.5
Black	7.8	6.3	- 9.6
Asian	2.5	1.4	- 4.3
Hispanic	13.7	8.5	- 21.4
Other	6.4	4.5	- 8.9
<b>Grade</b>			
9th	3.1	2.4	- 4.0
10th	3.7	2.8	- 4.9
11th	3.2	2.4	- 4.2
12th	2.9	2.1	- 4.0
<b>Total</b>	<b>3.4</b>	<b>2.9</b>	<b>- 3.9</b>

In Summit County, 35.7% of students had had sexual intercourse at least once in their life. The prevalence of ever having sexual intercourse was higher among Black, Hispanic or Other/Multiple (43.8%, 47.5%, 42.7%) students, respectively, than White (33.8%) or Asian (16.2%) students. The prevalence of ever having sexual intercourse was higher with each consecutive grade level among 9<sup>th</sup> (16.9%), 10<sup>th</sup> (29.3%), 11<sup>th</sup> (39.5%), and 12<sup>th</sup> (55.4%) grade students.

In Summit County, 3.4% of students had first sexual intercourse before the age of 13. The prevalence of first sexual intercourse before the age of 13 was higher among male (4.9%) students than female (2.0%) students. The prevalence of first sexual intercourse before the age of 13 was higher among Black, Hispanic, or Other/Multiple (7.8%, 13.7%, 6.4%) students than White or Asian (2.1%, 2.5%) students, respectively.

Currently sexually active			
Category	%	CI	
<b>Gender</b>			
Female	27.0	25.2	- 28.9
Male	28.4	26.4	- 30.4
<b>Race/Ethnicity</b>			
White	26.6	24.7	- 28.5
Black	33.1	30.4	- 35.9
Asian	10.5	7.8	- 14.0
Hispanic	38.2	32.3	- 44.6
Other	29.5	26.0	- 33.2
<b>Grade</b>			
9th	11.3	9.6	- 13.2
10th	21.1	19.0	- 23.3
11th	30.6	27.8	- 33.5
12th	46.0	43.1	- 48.9
<b>Total</b>	<b>27.6</b>	<b>26.0</b>	<b>- 29.3</b>

Condom use			
Category	%	CI	
<b>Gender</b>			
Female	49.3	46.0	- 52.6
Male	57.4	54.1	- 60.5
<b>Race/Ethnicity</b>			
White	56.4	53.3	- 59.4
Black	44.7	40.4	- 49.0
Asian	56.6	41.6	- 70.5
Hispanic	47.1	36.0	- 58.6
Other	45.9	38.4	- 53.6
<b>Grade</b>			
9th	63.1	56.2	- 69.5
10th	53.8	49.1	- 58.5
11th	55.6	51.3	- 59.9
12th	49.5	45.5	- 53.5
<b>Total</b>	<b>53.3</b>	<b>50.9</b>	<b>- 55.6</b>

In Summit County, 27.6% of students had had sexual intercourse at least once during the 30 days prior to the survey (currently sexually active). The prevalence of being currently sexually active was lower among Asian (10.5%) students than White, Black, Hispanic or Other/Multiple (33.1%, 38.2%, 29.5%) students, respectively. The prevalence of being currently sexually active was higher among Black and Hispanic (33.1%, 38.2%) students, respectively, than among White (26.6%) students. The prevalence of being currently sexually active was higher with each consecutive grade level among 9<sup>th</sup> (11.3%), 10<sup>th</sup> (21.1%), 11<sup>th</sup> (30.6%), and 12<sup>th</sup> (46.0%) grade students.

In Summit County, among sexually active students, 53.3% used a condom most of the time or always when they had sexual intercourse during the past 3 months. Male students (57.4%) were more likely than female students (49.3%) to use a condom most of the time or always. The prevalence of using a condom most of the time or always when having sexual intercourse was higher among White students (56.4%) than Black students (44.7%). Students in the 9<sup>th</sup> grade who were currently sexually active were more likely to have used a condom most of the time or always than 12<sup>th</sup> grade students who were currently sexually active.



<b>Drank alcohol or used drugs before most recent sexual intercourse</b>			
<b>Category</b>	<b>%</b>	<b>CI</b>	
<b>Gender</b>			
Female	17.1	14.8	- 19.6
Male	16.5	14.5	- 18.8
<b>Race/Ethnicity</b>			
White	16.4	14.5	- 18.5
Black	16.9	14.0	- 20.4
Asian	6.5	2.9	- 14.0
Hispanic	34.4	24.4	- 45.9
Other	18.6	14.4	- 23.6
<b>Grade</b>			
9th	16.7	13.1	- 21.1
10th	17.5	14.4	- 21.1
11th	13.0	10.8	- 15.6
12th	18.3	15.8	- 21.2
<b>Total</b>	<b>16.8</b>	<b>15.3</b>	<b>- 18.4</b>

<b>Been pregnant or gotten someone pregnant</b>			
<b>Category</b>	<b>%</b>	<b>CI</b>	
<b>Gender</b>			
Female	1.9	1.5	- 2.4
Male	2.6	2.0	- 3.3
<b>Race/Ethnicity</b>			
White	1.4	1.1	- 1.9
Black	4.8	3.6	- 6.3
Asian	0.1	0.0	- 0.7
Hispanic	11.9	7.1	- 19.3
Other	4.6	2.8	- 7.5
<b>Grade</b>			
9th	0.8	0.5	- 1.2
10th	2.1	1.4	- 3.0
11th	1.8	1.2	- 2.5
12th	4.0	3.0	- 5.3
<b>Total</b>	<b>2.3</b>	<b>1.9</b>	<b>- 2.7</b>

In Summit County, 16.8% of students used alcohol or drugs before their most recent sexual intercourse. The prevalence of using alcohol or drugs during their last sexual intercourse was higher among Hispanic (34.4%) students than White, Black, Asian or Other/Multiple (16.4%, 16.9%, 6.5%, 18.6%) students, respectively. The prevalence of using alcohol or drugs during their last sexual intercourse among sexually active students was lower among Asian (6.5%) students than White, Hispanic or Other/Multiple (16.4%, 34.4%, 18.6%) students, respectively. The prevalence of using alcohol or drugs during their last sexual intercourse was higher among 12<sup>th</sup> grade (18.3%) students than 11<sup>th</sup> grade (13.0%) students.

In Summit County, 2.3% of students had been pregnant or had gotten someone pregnant at least one time in their life. The prevalence of having been or gotten someone pregnant was higher among Black, Hispanic, or Other/Multiple (4.8%, 11.9%, 4.6%) students, respectively, than among White and Asian (1.7%, 0.1%) students, respectively. The prevalence of having been or gotten someone pregnant was higher among White (1.4%) students than Asian (0.1%) students. The prevalence of having been or gotten someone pregnant was higher among Hispanic (11.9%) students than Black (4.8%) students. The prevalence of having been or gotten someone pregnant was higher among 10<sup>th</sup>, 11<sup>th</sup>, and 12<sup>th</sup> grade (2.1%, 1.8%, 4.0%) students, respectively, than among 9<sup>th</sup> grade (0.8%) students. The prevalence of having been or gotten someone pregnant was higher among 12<sup>th</sup> grade (4.0%) students than among 11<sup>th</sup> grade (1.8%) students.

Used hormonal birth control to prevent pregnancy			
Category	%	CI	
<b>Gender</b>			
Female	39.4	36.7	42.3
Male	21.9	19.5	24.6
<b>Race/Ethnicity</b>			
White	33.2	30.8	35.8
Black	24.9	21.4	28.7
Asian	11.7	6.5	20.2
Hispanic	28.6	21.7	36.7
Other	25.8	20.8	31.6
<b>Grade</b>			
9th	15.0	11.4	19.6
10th	24.0	20.8	27.6
11th	31.9	28.5	35.4
12th	37.6	34.4	40.9
<b>Total</b>	<b>30.7</b>	<b>28.7</b>	<b>32.8</b>

In Summit County, 30.7% of students used a hormonal method to prevent pregnancy. The prevalence of using a hormonal method to prevent pregnancy was lower among Black (24.9%) students than White (33.2%) students. The prevalence of using a hormonal method to prevent pregnancy was lower among Asian (11.7%) students than among White, Black, Hispanic or Other/Multiple (33.2%, 24.9%, 28.6%, 25.8%) students, respectively. The prevalence of using a hormonal method to prevent pregnancy was lower among 9<sup>th</sup> (15.0%) grade students than 10<sup>th</sup> (24.0%), and lower among 9<sup>th</sup> and 10<sup>th</sup> grade than 11<sup>th</sup> (31.9%) and 12<sup>th</sup> (37.6%) grade students.

Were taught in school about AIDS or HIV infection			
Category	%	CI	
<b>Gender</b>			
Female	84.9	83.6	86.1
Male	85.2	83.8	86.5
<b>Race/Ethnicity</b>			
White	87.1	85.9	88.2
Black	80.3	78.3	82.1
Asian	63.4	58.2	68.2
Hispanic	75.7	69.0	81.3
Other	81.1	77.5	84.3
<b>Grade</b>			
9th	78.2	75.9	80.3
10th	85.8	83.9	87.6
11th	88.2	86.6	89.7
12th	87.8	86.0	89.4
<b>Total</b>	<b>85.0</b>	<b>84.0</b>	<b>86.0</b>

In Summit County, 85.0% of students reported had ever been taught in school about AIDS or HIV infection. The prevalence of reporting having been taught in school about AIDS or HIV infection was lower among Asian students (63.4%) than White, Black, Hispanic, or Other/Multiple students, (87.1%, 80.3%, 75.7%, 81.1%) respectively. The prevalence of reporting having ever been taught in school about AIDS or HIV infection is higher among White (87.1%) students than Black, Asian, Hispanic, and Other/Multiple (80.3%, 63.4%, 75.5%, 81.1%) students, respectively. The prevalence of having been taught in school about AIDS or HIV infection was higher among 10<sup>th</sup>, 11<sup>th</sup> and 12<sup>th</sup> grade (85.8%, 88.2%, 87.8%) students than 9<sup>th</sup> grade (78.2%) students, respectively.



<b>Talked about AIDS or HIV infection with parents or other adults in family</b>			
<b>Category</b>	<b>%</b>	<b>CI</b>	
<b>Gender</b>			
Female	43.2	41.7	- 44.7
Male	44.3	42.7	- 45.9
<b>Race/Ethnicity</b>			
White	40.7	39.4	- 42.1
Black	57.1	54.7	- 59.4
Asian	22.0	18.6	- 25.9
Hispanic	46.4	40.9	- 52.0
Other	51.1	47.1	- 55.0
<b>Grade</b>			
9th	44.7	42.5	- 46.9
10th	44.5	42.2	- 46.8
11th	43.0	40.8	- 45.3
12th	42.7	40.1	- 45.3
<b>Total</b>	<b>43.7</b>	<b>42.6</b>	<b>- 44.8</b>

In Summit County, 43.7% of students had ever talked about AIDS or HIV infection with their parents or other adults in their family. The prevalence of having talked about AIDS or HIV infection with their parents or other adults was higher among Black (57.1%) students than White, Asian, or Hispanic (40.7%, 22.0%, 46.4%) students, respectively. The prevalence of having talked about AIDS or HIV infection with their parents or other adults in their family was lower among Asian (22.0%) students than the other race/ethnicity groups. The prevalence of having talked about AIDS or HIV with their parents or other adults in their family was higher among Other/Multiple (51.1%) students than White (40.7%) students.

<sup>1</sup> Smith, C. 1997. Factors associated with early sexual activity among urban adolescents. *Social Work*. 42(4):334-346.

<sup>2</sup> 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.

<sup>3</sup> 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.

<sup>4</sup> 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.<sup>i</sup> 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.<sup>ii, iii</sup> 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.<sup>iv</sup>

The 2018 Summit County high 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
<b>NWS-10.3:</b> Reduce the proportion of adolescents aged 12 to 19 years who are considered obese to no more than 16.1%	16.4% of Summit County high school students were considered obese.	The objective has <b>not</b> been met.

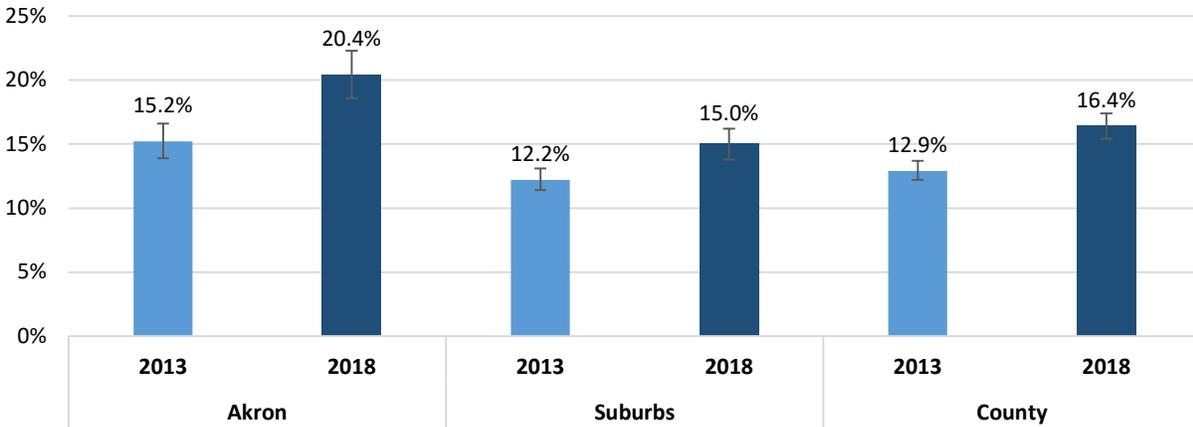
### Overall and Regional Prevalence

Akron		Suburbs		County	
% (Confidence Interval) Population N		% (Confidence Interval) Population N		% (Confidence Interval) Population N	
2013	2018	2013	2018	2013	2018
<b>Overweight</b> (Having a BMI >85 <sup>th</sup> percentile and <95 <sup>th</sup> percentile for age and sex. Calculated from self-reported height and weight, adjusted for sex and age.)					
<b>17.2%</b> (15.8 - 18.7) 798	<b>18.3%</b> (16.7 - 20.0) 886	<b>16.0%</b> (15.2 - 16.9) 2256	<b>16.5%</b> (15.5 - 17.6) 2246	<b>16.3%</b> (15.6 - 17.1) 3054	<b>17.0%</b> (16.1 - 17.9) 3112
<b>Obese</b> (Having a BMI of >95 <sup>th</sup> percentile for age and sex. Calculated from self-reported height and weight, adjusted for sex and age.)					
<b>15.2%</b> (13.9 - 16.6) 706	<b>20.4%</b> (18.6 - 22.3) 964	<b>12.2%</b> (11.4 - 13.1) 1715	<b>15.0%</b> (13.8 - 16.2) 2041	<b>12.9%</b> (12.2 - 13.7) 2422	<b>16.4%</b> (15.4 - 17.4) 3005
<b>Described themselves as overweight</b> (Reported as slightly or very overweight)					
<b>29.8%</b> (28.0 - 31.6) 1504	<b>32.8%</b> (31.0 - 34.7) 1637	<b>30.7%</b> (29.6 - 31.9) 4691	<b>32.6%</b> (31.3 - 34.0) 4668	<b>30.5%</b> (29.5 - 31.5) 6195	<b>32.7%</b> (31.6 - 33.8) 6305
<b>Trying to lose weight</b>					
<b>45.8%</b> (43.8 - 47.7) 2306	<b>44.2%</b> (42.3 - 46.0) 2209	<b>44.2%</b> (42.9 - 45.6) 6763	<b>46.2%</b> (44.7 - 47.7) 6617	<b>44.6%</b> (43.5 - 45.7) 9069	<b>45.7%</b> (44.4 - 46.9) 8826

Compared to 2013, the prevalence of obesity was significantly higher among Summit County high school students in 2018 (16.4% vs. 12.9%). The prevalence of describing oneself as slightly or very overweight also increased significantly since 2013 (32.7% vs. 30.5%). There was no significant difference between 2013 and 2018 in prevalence rates of overweight (16.3% vs. 17.0%) or trying to lose weight (44.6% vs. 45.7%).

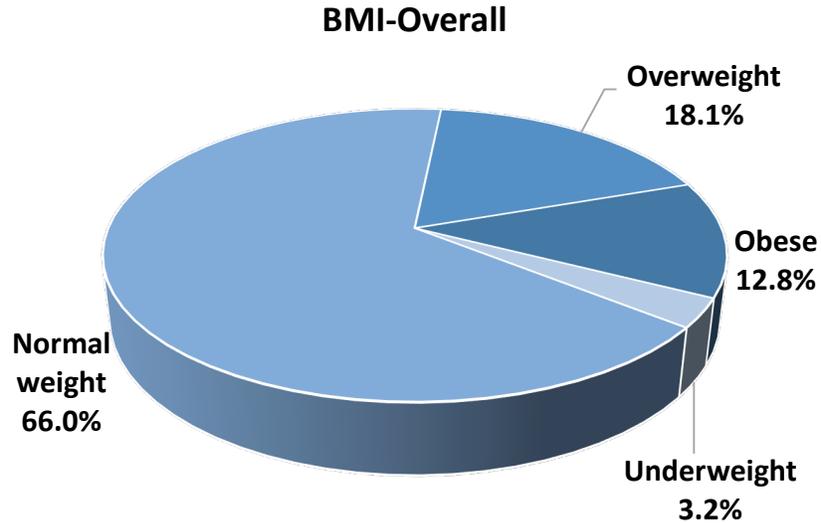
The prevalence of obesity was significantly higher among high school students in the city of Akron than in the suburbs of Summit County while rates of obesity significantly increased since 2013 for both regions as illustrated in the graph on the following page. There was no difference between regions 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

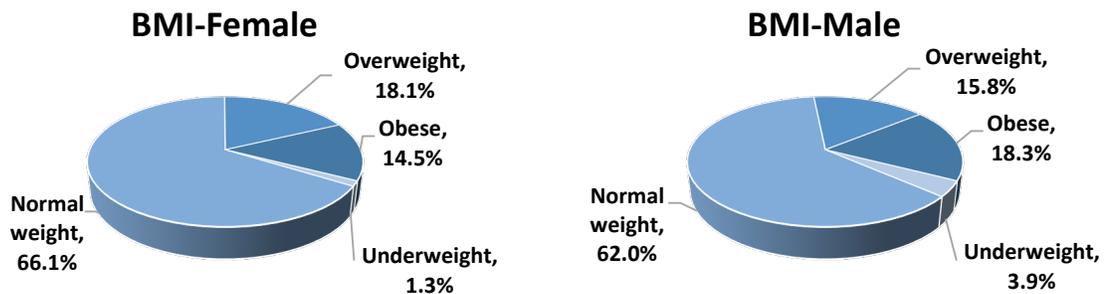


In Summit County, students were asked about their height and weight in order to calculate the student’s Body Mass Index (BMI). Obese was defined as a BMI of  $\geq 95^{\text{th}}$  percentile for age and sex. In 2018, the prevalence of obesity was significantly higher in Akron (20.4%) than in the suburbs of Summit County (15.0%) and obesity rates increased in both Akron and the suburbs since 2013 (15.2% and 12.2%, respectively).

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  $\geq 85$ th percentile and  $< 95$ th percentile for age and sex. Normal weight was defined as a BMI of  $\geq 5$ th percentile and  $< 85$ th percentile for age and sex. Underweight was defined as a BMI of  $< 5$ th percentile for age and sex.

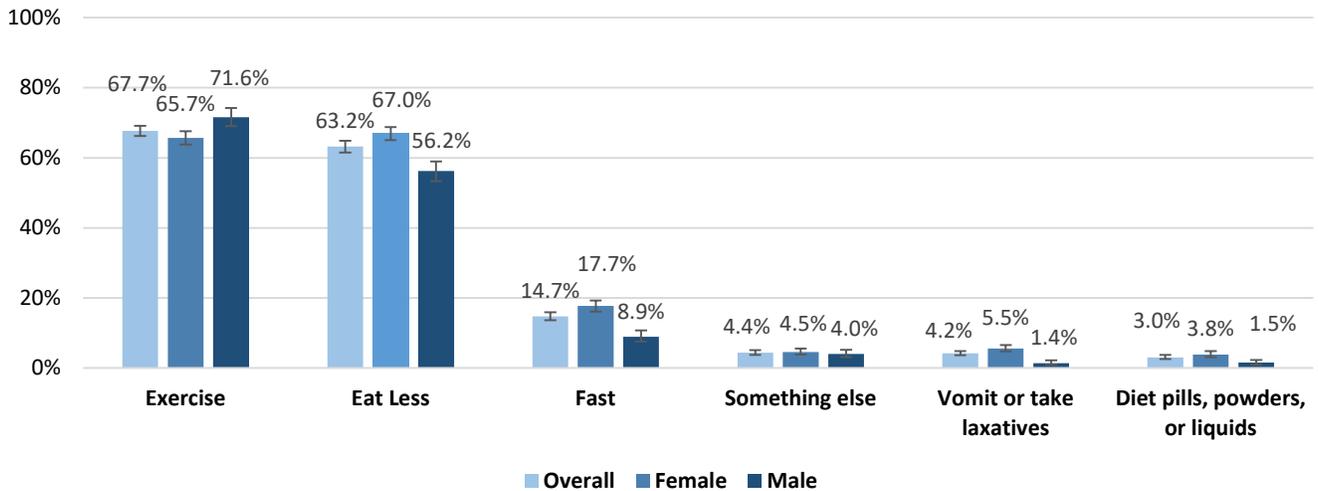


Thirty-four percent of Summit County high school students had a BMI for their age and sex that put them into a category of risk (underweight, overweight, or obese). In addition, male students were significantly more likely than female students (38.0% vs. 33.9%) to have BMI's that put them into a risk 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.



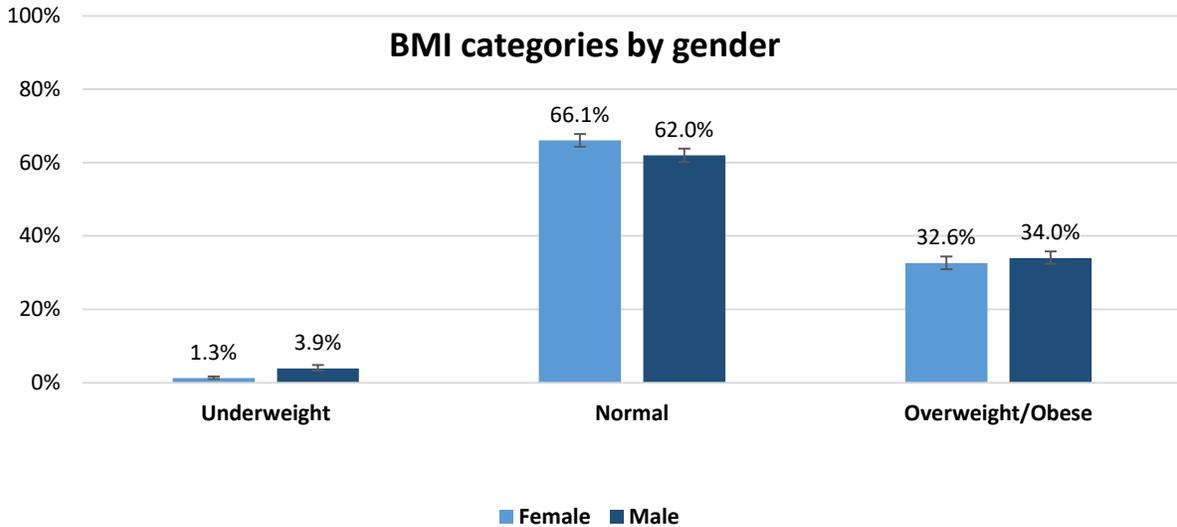
In Summit County, students were asked to choose all that applied from a list of weight loss and/or weight control options that they engaged in during the 30 days before completing the survey. Of the students who were trying to lose weight (45.7% of students), the graph below shows their responses for each option listed. The most common weight loss efforts included exercise (67.7%) and eating less/lower fat foods (63.2%). Male students were more likely to use exercise than female students, while female students were more likely to eat less than male students.

### Weight loss/control efforts among students trying to lose weight

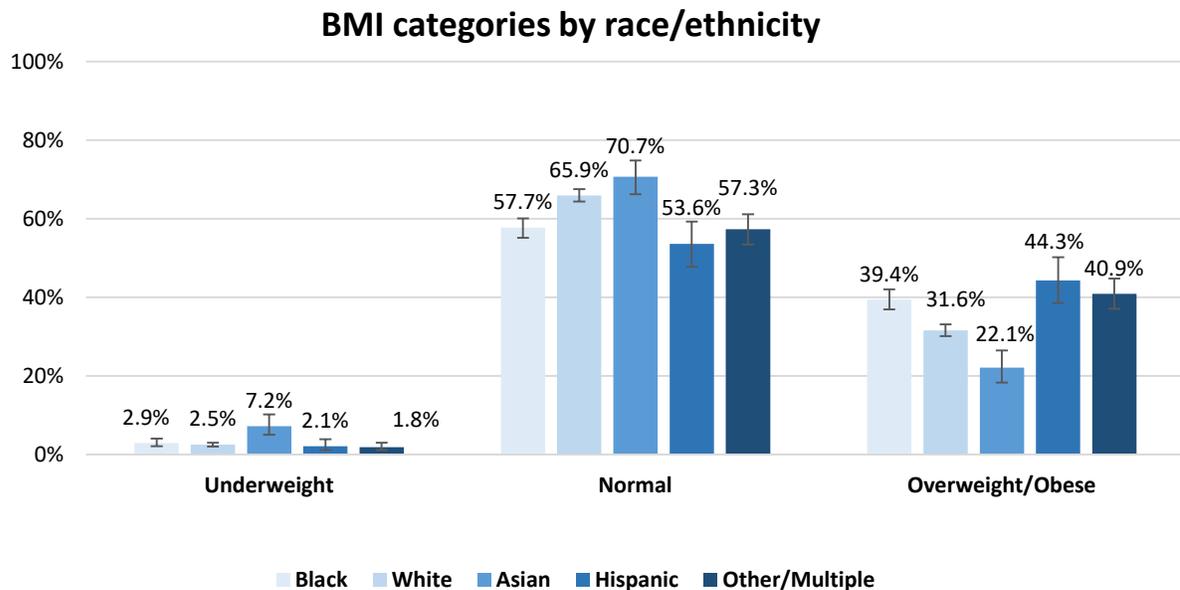


BMI categories of Underweight, Normal weight and Overweight/Obese were further examined by gender, race/ethnicity, grade level and by region in the county. The graphs below depict these analyses.

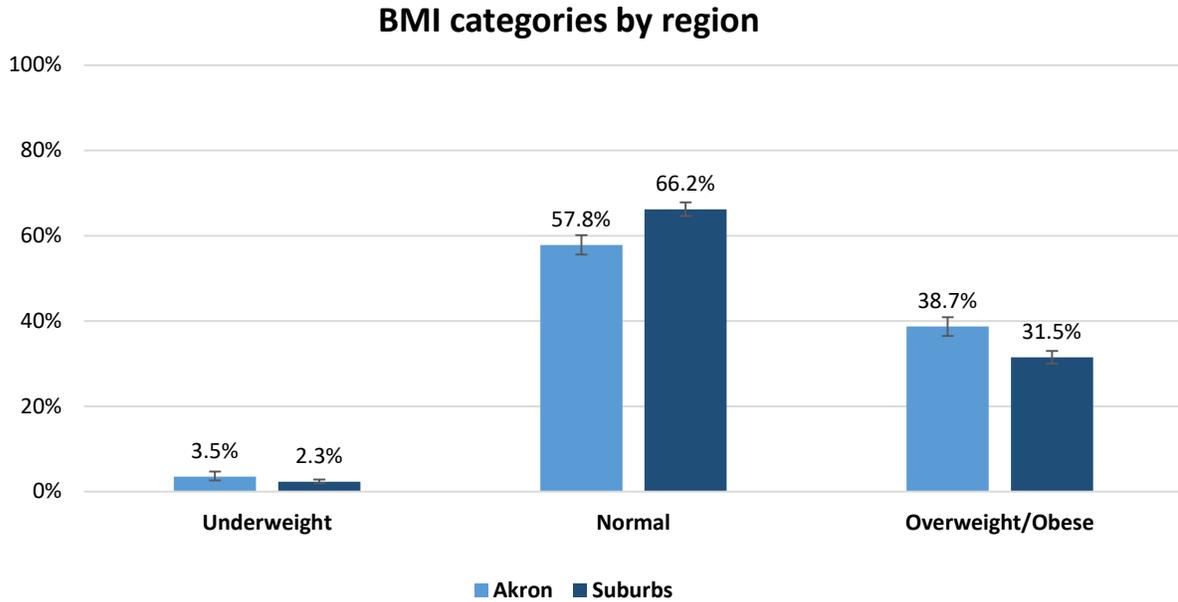
- Female students were more likely than male students to be of normal weight. Male students were more likely than female students to be underweight.



- White and Asian students were most likely to be of normal weight. Asian students were most likely to be underweight and least likely to be overweight/obese. Black, Hispanic, and students of Other/Multiple race/ethnicities were most likely to be overweight/obese.



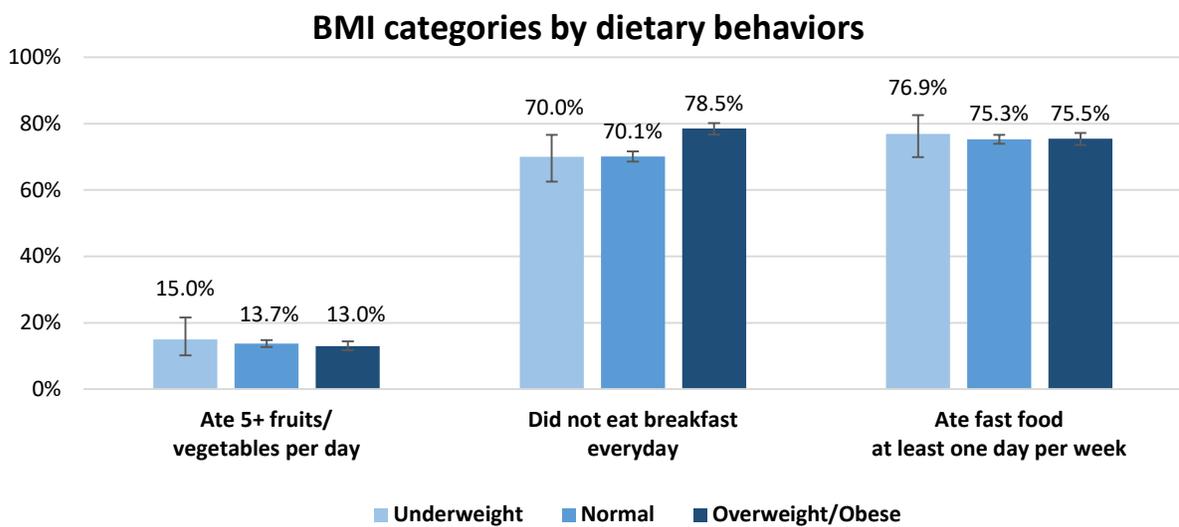
- There were no significant differences reported by grade level in BMI categories of Underweight, Normal Weight, and Overweight/Obese.
- Students in the Suburbs cluster were more likely to be of normal weight than students in the city of Akron and less likely to be overweight/obese.



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:**

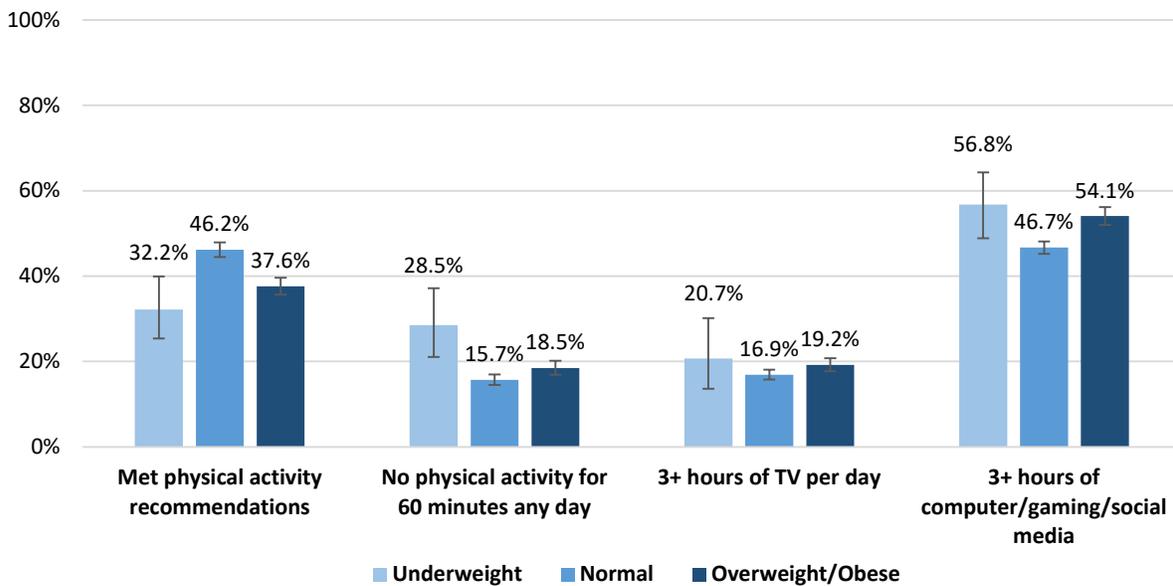
- The prevalence of having eaten five or more servings of fruits and vegetables daily during the week before the survey was similar for students within the three BMI categories.
- The prevalence of not eating breakfast every day during the week before completing the survey was higher among overweight/obese students than among underweight and normal weight students.
- 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:**

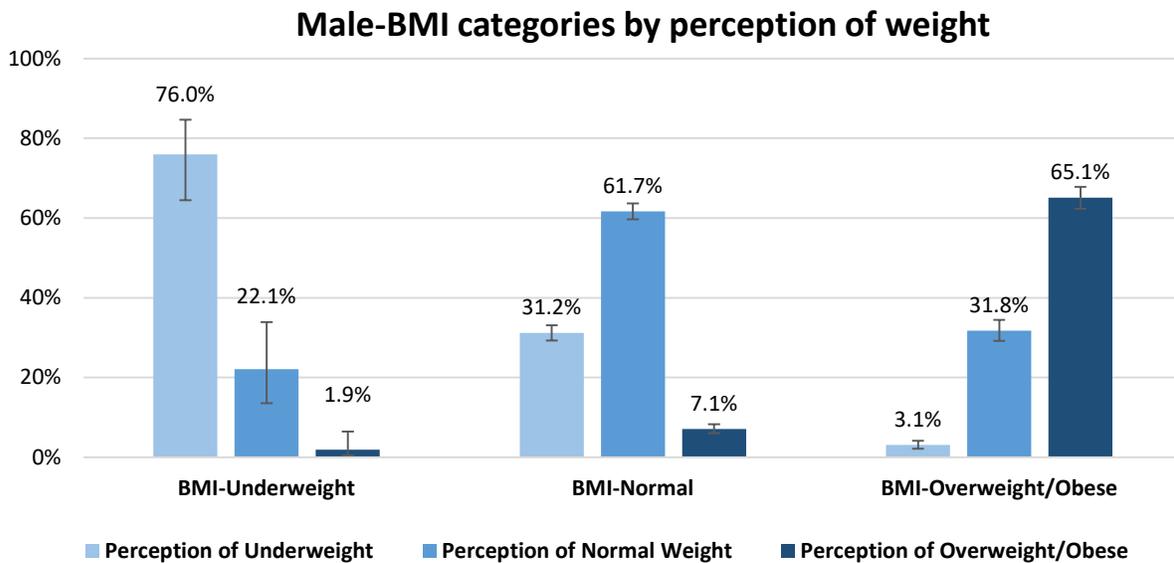
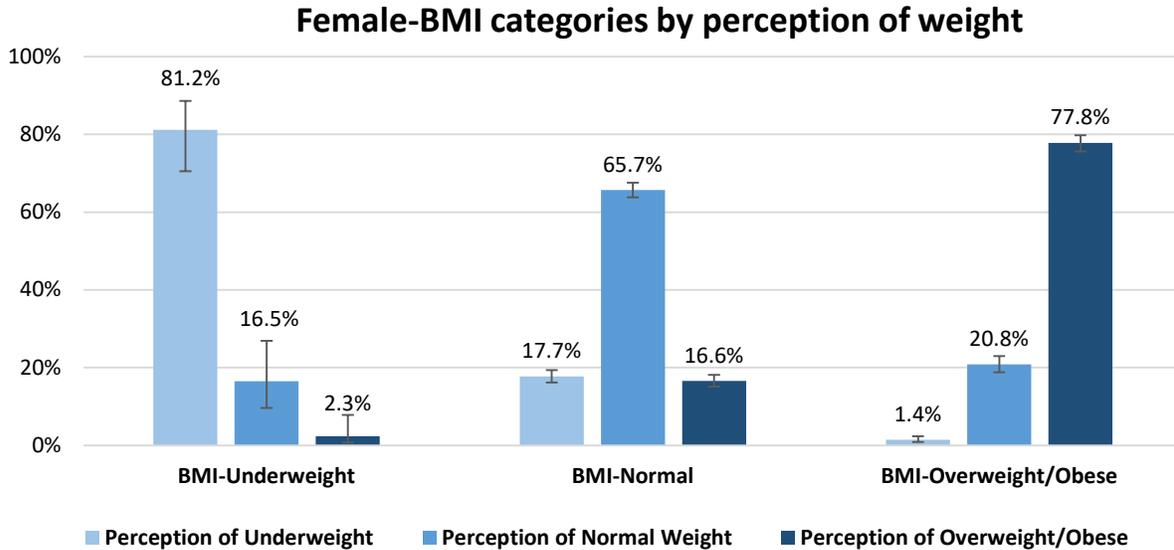
- The prevalence of having engaged in physical activity that meets recommendations (increased one’s heart rate and made one breathe hard some of the time for a total of at least 60 minutes per day on 5 or more of 7 days) was significantly higher among normal weight students than underweight or overweight/obese 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 any of the three BMI categories.
- The prevalence of watching 3+ hours of television per day on an average school day was not significantly different between BMI categories.
- 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 significantly higher among underweight and overweight/obese students than among normal weight students.

**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% of students in each BMI category (Underweight, Normal Weight, Overweight/Obese) when examining their perception of weight status.



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

- 81.2% of female students and 22.1% of male students **considered themselves to be Underweight.**
- 16.5% of female students and 22.1% of male students considered themselves to be Normal Weight.
- 2.3% of female students and 1.9% of male students considered themselves to be Overweight/Obese.

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

- 65.7% of female students and 61.7% of male students **considered themselves to be Normal Weight.**
- 17.7% of female students and 31.2% 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.

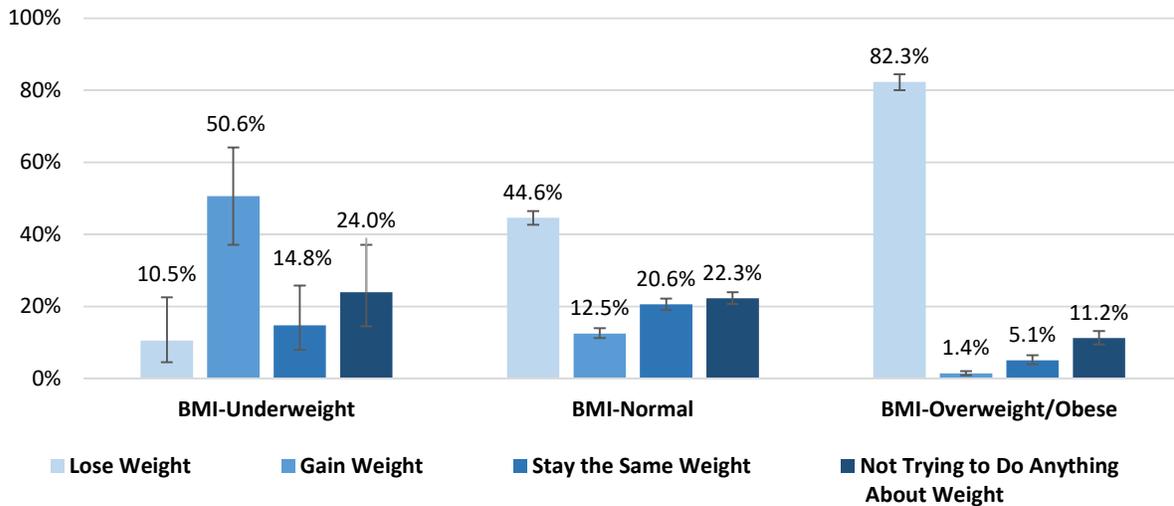
**Of students in Overweight/Obese BMI category** by self-reported weight and height,

- 77.8% of female students and 65.1% of male students **considered themselves to be Overweight/Obese.**
- 1.4% of female students and 3.1% of male students considered themselves to be Underweight.
- 20.8% of female students and 31.8% of male students considered themselves to be Normal Weight.

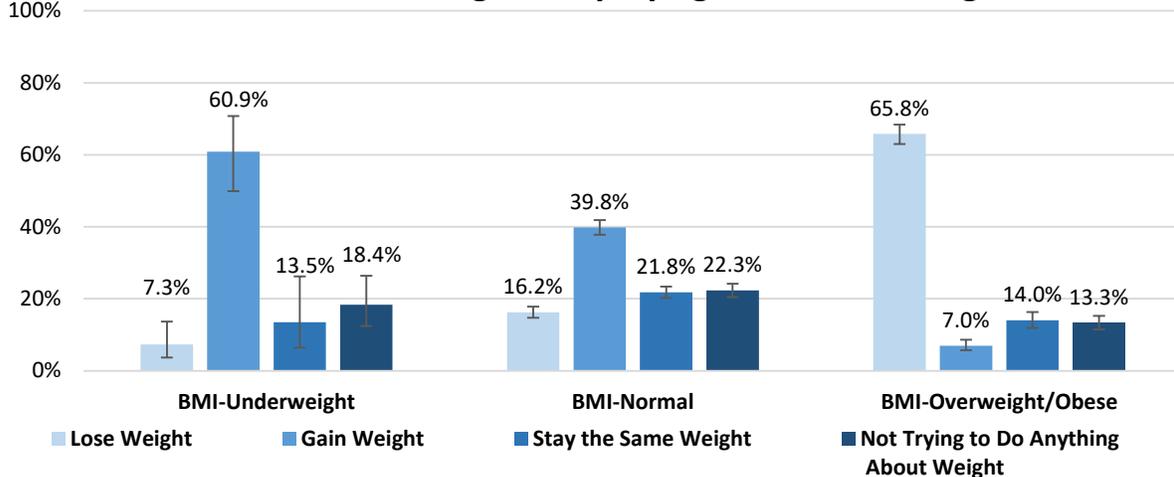
**Discordance of BMI Category and Weight Loss/Control Efforts by Gender**

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**



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

- 10.5% of female students and 7.3% of male students were trying to **lose weight**.
- 50.6% of female students and 60.9% of male students were trying to **gain weight**.
- 14.8% of female students and 13.5% of male students were trying to **stay the same weight**.

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

- 44.6% of female students and 16.2% of male students were trying to **lose weight**.
- 12.5% of female students and 39.8% of male students were trying to **gain weight**.
- 20.6% of female students and 21.8% of male students were trying to **stay the same weight**.

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

- 82.3% of female students and 65.8% of male students were trying to **lose weight**.
- 1.4% of female students and 7.0% of male students were trying to **gain weight**.
- 5.1% of female students and 14.0% of male students were trying to **stay the same weight**.

### Demographics

Overweight			
Category	%	CI	
<b>Gender</b>			
Female	18.1	16.9	- 19.5
Male	15.8	14.6	- 17.0
<b>Race/Ethnicity</b>			
White	16.2	15.2	- 17.2
Black	19.6	17.6	- 21.7
Asian	14.4	11.4	- 18.2
Hispanic	24.0	19.0	- 29.9
Other	19.8	16.8	- 23.3
<b>Grade</b>			
9th	16.4	14.9	- 18.1
10th	16.5	14.9	- 18.3
11th	16.4	14.8	- 18.3
12th	18.0	16.2	- 19.9
<b>Total</b>	<b>17.0</b>	<b>16.1</b>	<b>- 17.9</b>

In Summit County, 17.0% of students were overweight according to self-reported height and weight. The prevalence of overweight did not differ significantly by gender or grade level. The prevalence of overweight was higher among Black (19.6%) and Hispanic (24.0%) students than White (16.2%) students.

Obese			
Category	%	CI	
<b>Gender</b>			
Female	14.5	13.3	- 15.8
Male	18.3	16.9	- 19.7
<b>Race/Ethnicity</b>			
White	15.4	14.3	- 16.7
Black	19.9	17.9	- 22.0
Asian	7.7	5.7	- 10.4
Hispanic	20.3	15.6	- 25.9
Other	21.1	18.0	- 24.5
<b>Grade</b>			
9th	14.9	13.2	- 16.9
10th	15.8	14.0	- 17.7
11th	16.7	14.6	- 19.0
12th	17.9	15.8	- 20.3
<b>Total</b>	<b>16.4</b>	<b>15.4</b>	<b>- 17.4</b>

In Summit County, 16.4% of students were obese. The prevalence of obesity was higher among male (18.3%) than female (14.5%) students. The prevalence of obesity was higher among Black (19.9%) and Other/Multiple (21.1%) students than White (15.4%) students. The prevalence of obesity did not differ significantly by grade level.

Described themselves as overweight			
Category	%	CI	
<b>Gender</b>			
Female	37.9	36.4	- 39.5
Male	27.0	25.5	- 28.5
<b>Race/Ethnicity</b>			
White	33.9	32.5	- 35.3
Black	27.7	25.6	- 29.9
Asian	25.4	21.6	- 29.5
Hispanic	40.0	33.9	- 46.4
Other	35.8	32.1	- 39.8
<b>Grade</b>			
9th	30.9	28.8	- 33.0
10th	30.6	28.4	- 32.9
11th	34.3	32.2	- 36.4
12th	35.0	32.4	- 37.6
<b>Total</b>	<b>32.7</b>	<b>31.6</b>	<b>- 33.8</b>

Trying to lose weight			
Category	%	CI	
<b>Gender</b>			
Female	57.6	56.0	- 59.1
Male	32.8	31.2	- 34.4
<b>Race/Ethnicity</b>			
White	47.0	45.5	- 48.5
Black	40.3	38.0	- 42.6
Asian	40.5	36.1	- 45.1
Hispanic	48.5	42.5	- 54.5
Other	48.0	44.1	- 52.0
<b>Grade</b>			
9th	44.0	41.6	- 46.5
10th	45.8	43.6	- 48.0
11th	47.1	44.6	- 49.5
12th	46.0	43.4	- 48.6
<b>Total</b>	<b>45.7</b>	<b>44.4</b>	<b>- 46.9</b>

In Summit County, 32.7% of students described their weight as slightly or very overweight. Female students were more likely to describe themselves as overweight than male students (37.9% vs.27.0%). Black (27.7%) students were less likely to describe themselves as overweight than White (33.9%), Hispanic (40.0%), or Other/Multiple (35.8%) race/ethnicities. The prevalence of describing oneself as overweight did not differ significantly by grade level.

In Summit County 45.7% of students were trying to lose weight. Female (57.6%) students were more likely to be trying to lose weight than male (32.8%) students. White (47.0%) students and Other/Multiple (48.0%) race/ethnicities were more likely than Black (40.3%) students to be trying to lose weight. The prevalence of trying to lose weight did not differ significantly by grade level.

<sup>i</sup> 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.

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

<sup>iii</sup> 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.

<sup>iv</sup> 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 high 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,<sup>1,2,3</sup> cardiovascular disease,<sup>4</sup> and stroke.<sup>5</sup> Although data are limited, an increased intake of fruits and vegetables appears to be associated with a decreased risk of being overweight.

Milk is an important source of calcium for adolescents.<sup>6,7</sup> Calcium is essential for forming and maintaining healthy bones and low calcium intake during the first two to three decades of life is an important risk factor in developing osteoporosis.<sup>8</sup> Although the recommended intake of calcium is 1,300 mg/day, most adolescents consume far less.<sup>9</sup> National data indicate that the average calcium intake per day among persons aged 14 to 18 years was 1,266 mg/day (among males) and 876 mg/day (among females).<sup>27</sup>

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.<sup>10</sup> Breakfast eaters tend to eat fewer calories, less saturated fat and cholesterol and have better overall nutritional status than breakfast skippers.<sup>11</sup>

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 % (Confidence Interval) Population N		Suburbs % (Confidence Interval) Population N		County % (Confidence Interval) Population N	
2013	2018	2013	2018	2013	2018
<b>Ate fruits and vegetables five or more times/day</b> (During the 7 days before the survey.)					
<b>20.1%</b> (18.6 - 21.7) 988	<b>14.6%</b> (13.3 - 16.1) 736	<b>18.2%</b> (17.2 - 19.2) 2770	<b>13.6%</b> (12.7 - 14.5) 1943	<b>18.6%</b> (17.8 - 19.5) 3758	<b>13.8%</b> (13.1 - 14.6) 2678
<b>Drank soda or pop one or more times/day</b> (Not including diet soda or diet pop; during the 7 days before the survey.)					
<b>25.5%</b> (23.7 - 27.3) 1216	<b>18.2%</b> (16.5 - 20.0) 890	<b>20.5%</b> (19.5 - 21.5) 3077	<b>15.2%</b> (14.2 - 16.3) 2147	<b>21.7%</b> (20.8 - 22.6) 4293	<b>16.0%</b> (15.1 - 16.9) 3037
<b>Drank beverages high in caffeine one or more times/day</b> (During the 7 days before the survey.)					
<b>13.6%</b> (12.5 - 14.9) 649	<b>8.3%</b> (7.3 - 9.5) 404	<b>12.7%</b> (11.8 - 13.5) 1900	<b>11.9%</b> (11.0 - 12.9) 1675	<b>12.9%</b> (12.2 - 13.6) 2549	<b>11.0%</b> (10.2 - 11.8) 2079
<b>Drank milk one or more times/day</b> (During the 7 days before the survey.)					
<b>40.4%</b> (38.3 - 42.5) 1913	<b>26.3%</b> (24.5 - 28.2) 1278	<b>45.3%</b> (44.0 - 46.7) 6794	<b>31.6%</b> (30.2 - 33.0) 4440	<b>44.2%</b> (43.0 - 45.3) 8707	<b>30.2%</b> (29.1 - 31.4) 5718
<b>Did not eat breakfast every day</b> (During the 7 days before the survey.)					
<b>72.3%</b> (70.7 - 73.8) 3470	<b>78.2%</b> (76.4 - 79.8) 3826	<b>65.6%</b> (64.4 - 66.9) 9810	<b>71.5%</b> (70.1 - 72.9) 10055	<b>67.2%</b> (66.2 - 68.3) 13280	<b>73.2%</b> (72.1 - 74.3) 13881
<b>Ate fast food one or more times/week</b> (During the 7 days before the survey.)					
<b>71.6%</b> (69.8 - 73.4) 3420	<b>75.6%</b> (73.6 - 77.4) 3696	<b>68.9%</b> (67.7 - 70.1) 10238	<b>74.9%</b> (73.6 - 76.1) 10503	<b>69.6%</b> (68.5 - 70.6) 13658	<b>75.1%</b> (74.0 - 76.1) 14198
<b>Went hungry because not enough food at home</b> (Sometimes, most of the time, or always; during the 30 days before the survey.)					
N/A	<b>18.5%</b> (17.0 - 20.1) 905	N/A	<b>13.8%</b> (12.9 - 14.8) 1939	N/A	<b>15.0%</b> (14.2 - 15.9) 2844

Compared to 2013, Summit County high school students in 2018 were significantly less likely to have eaten fruits and vegetables 5 or more times per day (18.6% vs. 13.8%), to have drunk a pop or soda every day (21.7% vs. 16.0%), to have a beverage high in caffeine every day (12.9% vs. 11.0%), or to have drunk milk at least once every day (44.2% vs. 30.2%). In addition, Summit County high school students in 2018 were significantly more likely to have not eaten breakfast every day (67.2% vs. 73.2%) and to have eaten fast food one or more times per week (69.9% vs. 75.1%) than in 2013. The prevalence of going hungry sometimes, most of the time or always is not known for 2013.

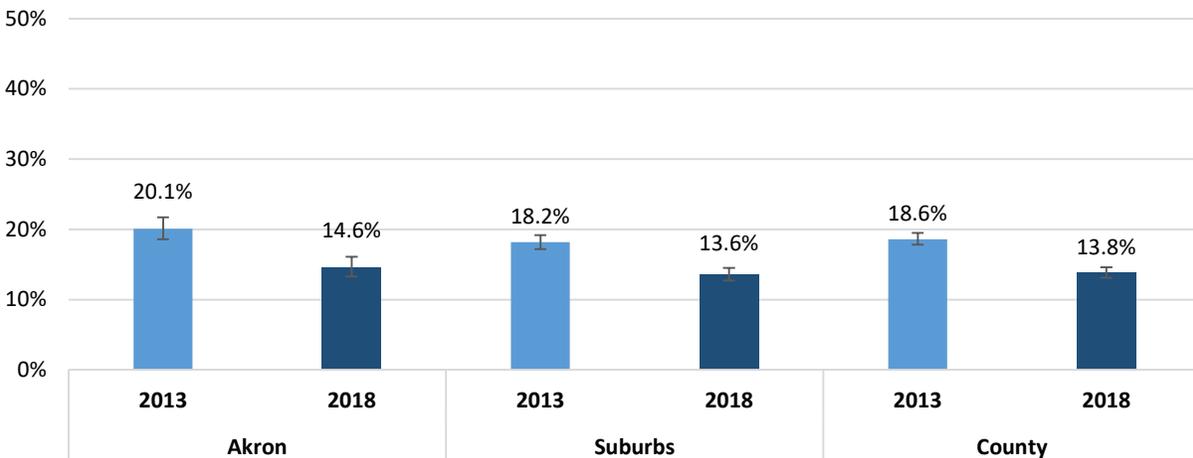
There were no regional differences between Akron and its surrounding suburbs in the 2018 prevalence of students who had eaten fruits and vegetables 5 or more times per day (14.6% vs. 13.6%) and who had eaten fast food one or more times per week (75.6% vs. 74.9%).

The graphs below illustrate significant differences between the regions of Akron and the suburbs in 2018 for students who had drank soda or pop every day, who drank beverages high in caffeine every day, who drank milk one or more times per day, who did not eat breakfast every day, and who went hungry sometimes, most of the time or always during the 30 days before the survey.

The graphs below also illustrate significant differences within these two regions from 2013 to 2018 for students who had eaten fruits and vegetables 5 or more times per day, who drank a pop or soda every day, who drank beverages high in caffeine every day, who drank milk one or more times per day, who did not eat breakfast every day, and who had eaten fast food one or more times per week.

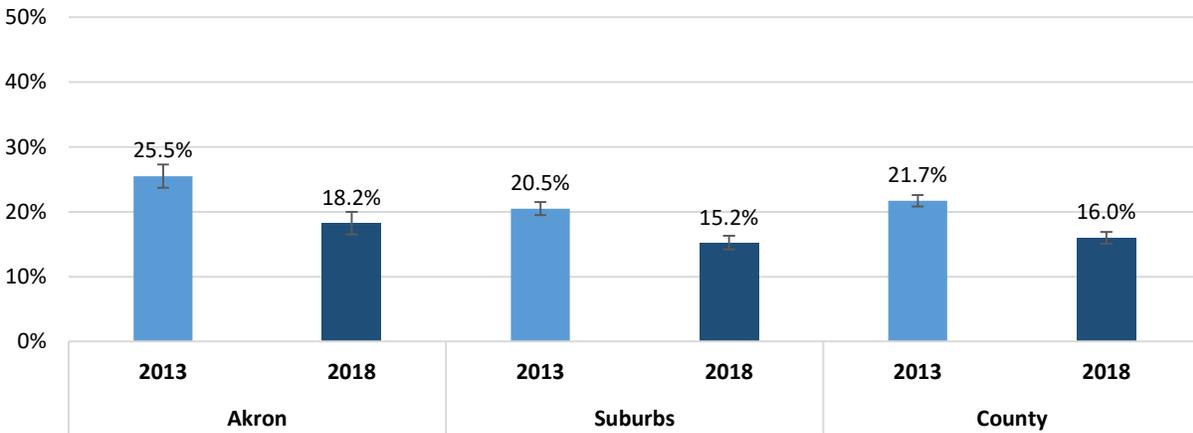
In Summit County, students were asked how many times during the past seven days had they drank 100% fruit juice, eaten fruit, green salad, potatoes, carrots, or other vegetables. The graph below shows the percentage of students who reported having eaten five or more fruits or vegetables per day over the seven days prior to the survey. In 2018, the prevalence of having eaten five or more fruits or vegetables per day was significantly higher in Akron (14.6%) than in the suburbs (13.6%). However, the prevalence of having eaten five or more fruits or vegetables per day has significantly decreased in both Akron (20.1% vs. 14.6%) and the suburbs (18.2% vs. 13.6%) from 2013 to 2018.

### Ate fruits and vegetables five or more times/day By region, 2013 vs. 2018



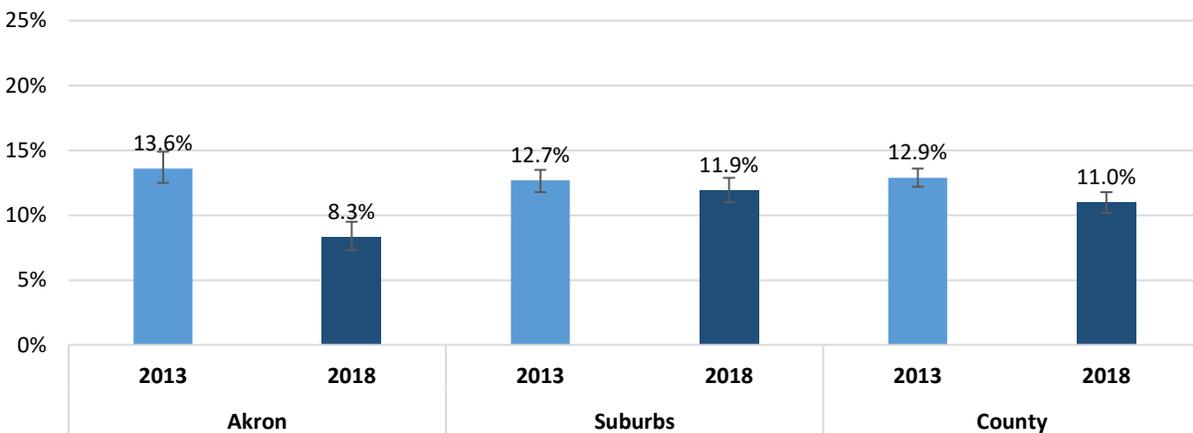
In Summit County, students were asked how many times they drank a can, bottle, or glass of soda or pop during the seven days before completing the survey. The chart below shows the students who reported having had at least one can, bottle, or glass of soda or pop every day during the 7 days before completing the survey. In 2018, the prevalence of having had at least one can, bottle, or glass of soda or pop every day was significantly higher in Akron (18.2%) than in the suburbs (15.2%). However, the prevalence of having had at least one can, bottle, or glass of soda or pop has significantly decreased in both Akron (25.5% vs. 18.2%) and the suburbs (20.5% vs. 15.2%) from 2013 to 2018.

### Drank soda or pop one or more times/day By region, 2013 vs. 2018



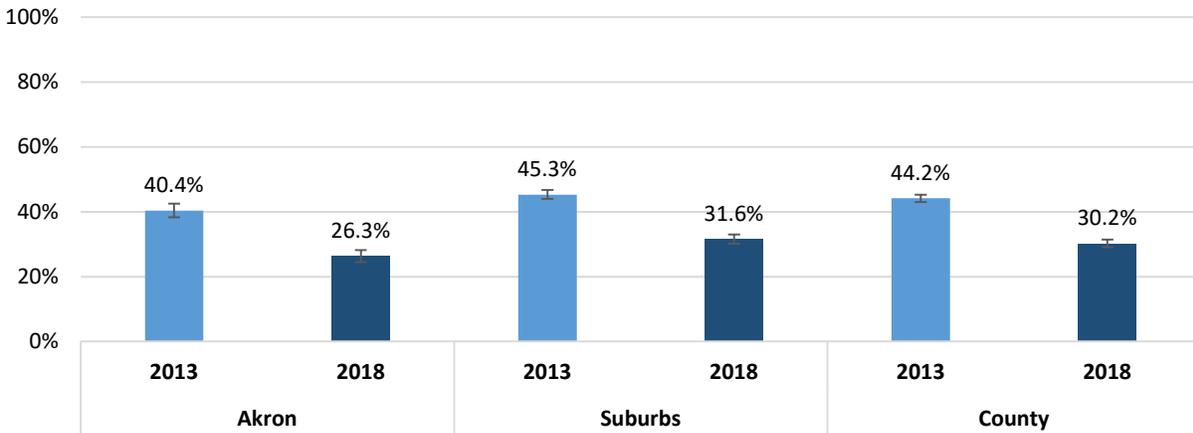
In Summit County, students were asked to report how often they consumed a beverage that was high in caffeine, including beverages such as coffee, espresso, or energy drinks, in the seven days prior to the survey. The graph below shows the students who reported having at least one drink high in caffeine every day during the seven days before completing the survey. In 2018, the prevalence of having had at least one can, bottle, or glass of soda or pop every day was significantly higher in the suburbs (11.9%) than in Akron (8.3%). The prevalence of having had at least one drink high in caffeine every day has significantly decreased in Akron (13.6% vs. 8.3%) from 2013 to 2018.

### Drank beverages high in caffeine one or more times/day By region, 2013 vs. 2018



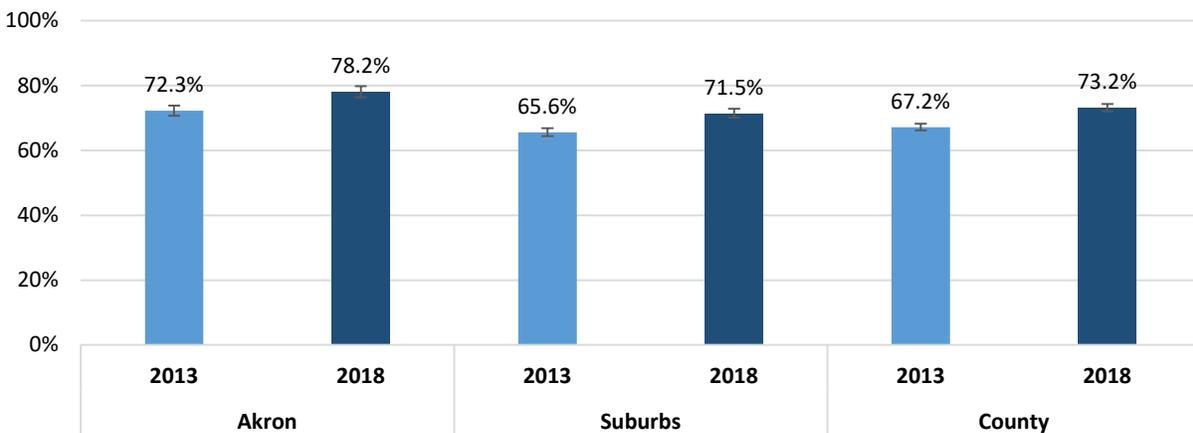
In Summit County, students were asked how many times they drank milk during the week prior to completing the survey. The graph below depicts those students who reported that they drank milk at least once daily during the seven days before the survey. In 2018, the prevalence of having drank milk at least once daily was significantly higher in the suburbs (31.6%) than in Akron (26.3%). The prevalence of having drank milk at least once daily has significantly decreased in Akron (40.4% vs. 26.3%) and the suburbs (45.3% vs. 31.6%) from 2013 to 2018.

### Drank milk one or more times per day By region, 2013 vs. 2018



In Summit County, students were asked on how many of the seven days before completing the survey, they had eaten breakfast. The graph below depicts those students who reported that they had not eaten breakfast every day during the week prior to the survey. In 2018, the prevalence of having not eaten breakfast every day was significantly higher in Akron (78.2%) than in the suburbs (71.5%). However, the prevalence of having had at least one can, bottle, or glass of soda or pop has significantly increased in both Akron (72.3% vs. 78.2%) and the suburbs (65.6% vs. 71.5%) from 2013 to 2018.

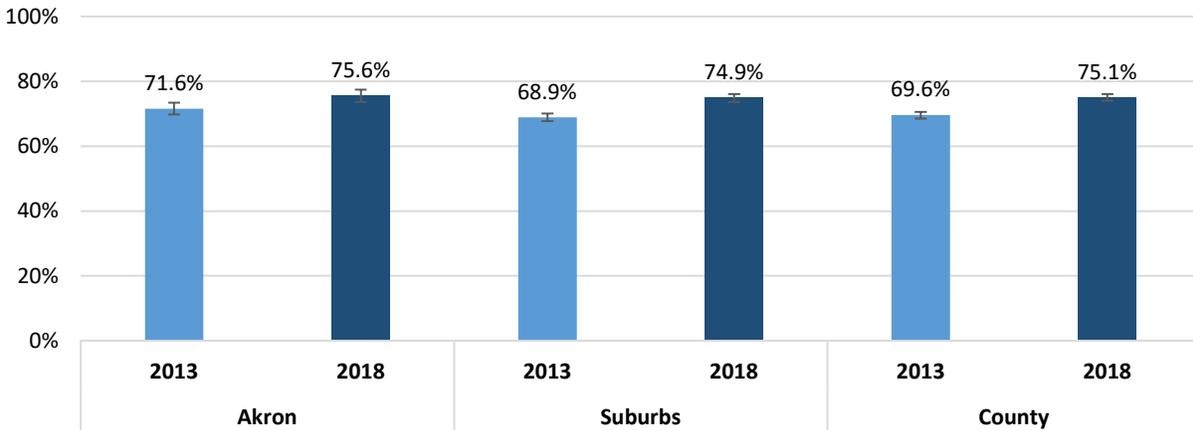
### Did not eat breakfast every day By region, 2013 vs. 2018



In Summit County, students were asked on how many days they had eaten at least one meal or snack from a fast food restaurant, such as McDonalds, Taco Bell, or KFC. The graph below depicts those students who reported having eaten at least one meal or snack from a fast food restaurant in the week before completing the survey. In 2018, the prevalence of having eaten at least one meal or snack from a fast food restaurant was not significantly different in Akron (75.6%) than in the suburbs (74.9%). The

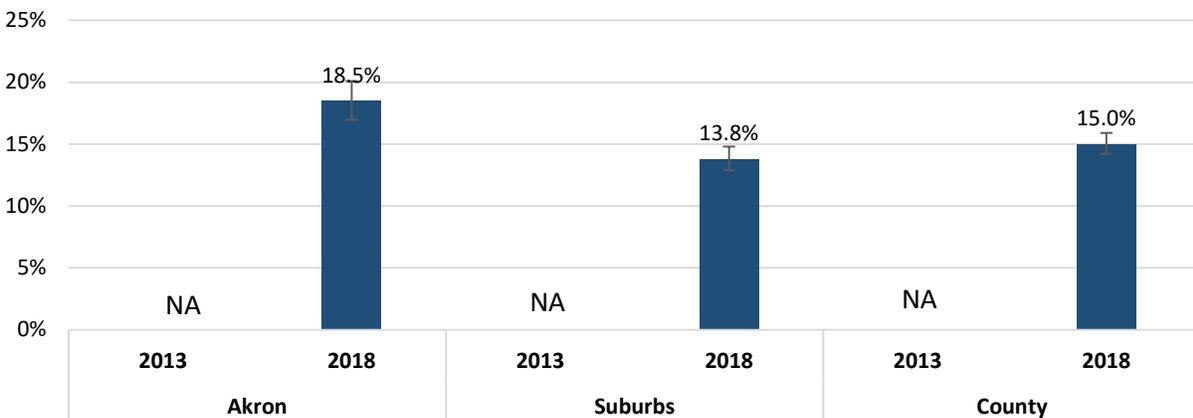
prevalence of having eaten at least one meal or snack from a fast food restaurant has significantly increased in both Akron (71.6% vs. 75.6%) and the suburbs (68.9% vs. 74.9%) from 2013 to 2018.

### Ate fast food one or more times per week By region, 2013 vs. 2018



In 2018, students in Summit County were asked how often they went hungry in the past 30 days because there was not enough food in the home. The graph below depicts students reporting they went hungry sometimes, most of the time, or always during the 30 days before the survey. In 2018, the prevalence of students reporting they went hungry was significantly higher among students in Akron (18.5%) than for students in the suburbs (13.8%).

### Went hungry because not enough food at home By region, 2013 vs. 2018



## Demographics

Ate fruits and vegetables five or more times/day			
Category	%	CI	
<b>Gender</b>			
Female	12.8	11.8	13.9
Male	14.8	13.8	15.9
<b>Race/Ethnicity</b>			
White	12.5	11.6	13.4
Black	17.7	15.8	19.7
Asian	16.2	13.0	19.9
Hispanic	20.5	16.3	25.4
Other	18.0	15.0	21.4
<b>Grade</b>			
9th	15.2	13.7	16.9
10th	14.5	13.1	16.0
11th	12.1	10.8	13.5
12th	13.3	11.7	15.1
<b>Total</b>	<b>13.8</b>	<b>13.1</b>	<b>14.6</b>

In Summit County, 13.8% of students ate fruit and vegetables five or more times per day during the 7 days prior to the survey. The prevalence of having eaten fruit and vegetables  $\geq 5$  times per day was not significantly different between male and female students. The prevalence of having eaten fruit and vegetables  $\geq 5$  times per day was higher among Black (17.7%), Hispanic (20.5%), and Other/Multiple (18.0%) students than White students. The prevalence of having eaten fruit and vegetables  $\geq 5$  times per day was higher among 9<sup>th</sup> grade students (15.2%) than 11<sup>th</sup> grade students (12.1%).

Drank soda or pop one or more times/day			
Category	%	CI	
<b>Gender</b>			
Female	12.6	11.5	13.7
Male	19.7	18.4	21.0
<b>Race/Ethnicity</b>			
White	15.6	14.5	16.7
Black	16.9	14.9	19.1
Asian	9.8	7.4	12.9
Hispanic	23.6	18.0	30.3
Other	19.5	16.4	23.0
<b>Grade</b>			
9th	14.3	12.6	16.2
10th	15.5	13.9	17.3
11th	16.0	14.2	17.9
12th	17.6	15.4	20.0
<b>Total</b>	<b>16.0</b>	<b>15.1</b>	<b>16.9</b>

In Summit County, 16.0% of students had drunk a can, bottle, or glass of soda or pop (not including diet soda or pop) one or more times/day during the 7 days prior to the survey. The prevalence of having drunk soda or pop daily was higher among male (19.7%) than female (12.6%) students. The prevalence of having drunk soda or pop daily was higher among Hispanic (23.6%) students than White (15.6%) students. The prevalence of having drunk soda or pop daily was higher among White, Black, Hispanic, or Other/Multiple (15.6%, 16.9%, 23.6%, 19.5%) students, respectively, than among Asian (9.8%) students. There was no significant difference by grade level.

Drank beverages high in caffeine one or more times/day			
Category	%	CI	
<b>Gender</b>			
Female	12.3	11.2	- 13.4
Male	9.5	8.6	- 10.6
<b>Race/Ethnicity</b>			
White	12.1	11.2	- 13.1
Black	5.9	4.7	- 7.3
Asian	6.2	4.4	- 8.6
Hispanic	17.1	12.1	- 23.7
Other	13.4	10.8	- 16.5
<b>Grade</b>			
9th	8.1	6.9	- 9.4
10th	9.3	8.0	- 10.9
11th	11.1	9.9	- 12.4
12th	14.9	13.2	- 16.7
<b>Total</b>	<b>11.0</b>	<b>10.2</b>	<b>- 11.8</b>

In Summit County, 12.9% of students had had a drink that was high in caffeine (not including soda, pop, or tea) one or more times/day during the 7 days prior to the survey. The prevalence of having had a drink that was high in caffeine daily was higher among female (12.3%) than male (9.5%) students. The prevalence of having had a drink that was high in caffeine daily was higher among White (12.1%), Hispanic (17.1%), and Other/Multiple (13.4%) students than Black (5.9%) or Asian (6.2%) students. The prevalence of having had a drink that was high in caffeine was higher among 12<sup>th</sup> grade (14.9%) students than 9<sup>th</sup>, 10<sup>th</sup>, and 11<sup>th</sup> grade (8.1%, 9.3%, 11.1%) students, respectively. The prevalence of having had a drink that was high in caffeine was also higher among 11<sup>th</sup> grade (11.1%) students than 9<sup>th</sup> grade (8.1%) students, respectively.

Drank milk one or more times/day			
Category	%	CI	
<b>Gender</b>			
Female	21.0	19.8	- 22.4
Male	40.2	38.6	- 41.8
<b>Race/Ethnicity</b>			
White	32.5	31.1	- 33.9
Black	21.7	19.7	- 23.9
Asian	26.7	23.0	- 30.6
Hispanic	28.2	23.4	- 33.5
Other	28.9	25.3	- 32.7
<b>Grade</b>			
9th	36.1	34.0	- 38.3
10th	29.9	27.9	- 32.0
11th	28.9	26.8	- 31.2
12th	26.5	24.3	- 28.9
<b>Total</b>	<b>30.2</b>	<b>29.1</b>	<b>- 31.4</b>

In Summit County, 30.2% of students had drunk milk one or more times/day during the 7 days prior to the survey. The prevalence of having drunk milk daily was higher among male (40.2%) than female (21.0%) students. The prevalence of having drunk milk daily was also higher among Other/Multiple (28.9%) students than Black (21.7%) students. The prevalence of having drunk milk daily was higher among 9<sup>th</sup> grade (36.1%) students than higher grade students (29.9% 10<sup>th</sup>, 28.9% 11<sup>th</sup>, 26.5% 12<sup>th</sup> grade).

Did not eat breakfast every day			
Category	%	CI	
<b>Gender</b>			
Female	76.7	75.3	- 78.1
Male	69.5	67.8	- 71.1
<b>Race/Ethnicity</b>			
White	71.5	70.1	- 72.8
Black	78.8	76.6	- 80.8
Asian	73.4	69.0	- 77.5
Hispanic	77.6	72.5	- 82.0
Other	80.1	76.7	- 83.1
<b>Grade</b>			
9th	67.4	64.9	- 69.9
10th	72.7	70.6	- 74.8
11th	73.6	71.6	- 75.6
12th	78.7	76.4	- 80.8
<b>Total</b>	<b>73.2</b>	<b>72.1</b>	<b>- 74.3</b>

Ate fast food one or more times/week			
Category	%	CI	
<b>Gender</b>			
Female	75.1	73.7	- 76.5
Male	75.2	73.5	- 76.7
<b>Race/Ethnicity</b>			
White	75.0	73.8	- 76.2
Black	77.2	74.9	- 79.4
Asian	59.7	54.4	- 64.7
Hispanic	72.2	66.5	- 77.2
Other	77.2	74.0	- 80.1
<b>Grade</b>			
9th	73.3	71.1	- 75.5
10th	72.8	70.7	- 74.7
11th	77.3	75.2	- 79.3
12th	76.7	74.2	- 79.0
<b>Total</b>	<b>75.1</b>	<b>74.0</b>	<b>- 76.1</b>

In Summit County, 73.2% of students did not eat breakfast every day in the 7 days prior to the survey. The prevalence of not eating breakfast everyday was higher among female (76.7%) than male (69.5%) students. The prevalence of not eating breakfast everyday was higher among Black (78.8%) and Other/Multiple (80.1%) students than White (71.5%) students. The prevalence of not eating breakfast every day was higher among 10<sup>th</sup> grade through 12<sup>th</sup> grade students (72.7%, 73.6%, 78.7% respectively) students than 9<sup>th</sup> grade (67.4%) students and higher among 12<sup>th</sup> grade (78.7%) students than 9<sup>th</sup> through 11<sup>th</sup> grade students (67.4%, 72.7%, 73.6%) respectively).

In Summit County, 75.1% of students had eaten food from a fast food restaurant (e.g., McDonalds, Taco Bell, or KFC) one or more days during the 7 days prior to the survey. The prevalence of having eaten fast food was higher among White, Black, Hispanic and Other/Multiple (75.0%, 77.2%, 72.2%, 77.2%) students, respectively, than among Asian (59.7%) students. The prevalence of having eaten fast food was higher among 11<sup>th</sup> grade (77.3%) students than 10<sup>th</sup> grade (72.8%) students.

<b>Went hungry because not enough food in the home</b>			
<b>Category</b>	<b>%</b>	<b>CI</b>	
<b>Gender</b>			
Female	16.0	14.9	- 17.3
Male	13.9	12.8	- 15.0
<b>Race/Ethnicity</b>			
White	13.2	12.3	- 14.2
Black	20.0	18.0	- 22.2
Asian	16.8	13.7	- 20.5
Hispanic	27.7	21.9	- 34.4
Other	22.2	18.8	- 26.1
<b>Grade</b>			
9th	14.7	13.1	- 16.5
10th	13.5	12.1	- 15.0
11th	14.5	13.0	- 16.2
12th	16.7	14.9	- 18.7
<b>Total</b>	<b>15.0</b>	<b>14.2</b>	<b>- 15.9</b>

In Summit County, 15.0% of students went hungry sometimes, most of the time, or always during the past 30 days because there was not enough food in the home. The prevalence of going hungry was higher among Black, Hispanic, and Other/Multiple (20.0%, 27.7%, 22.2%, respectively) than White (13.2%) students, but did not differ significantly by gender or grade level.

<sup>1</sup> 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.

<sup>2</sup> 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.

<sup>3</sup> Vainio, H., Weiderpass, E. 2006. Fruit and vegetables in cancer prevention. *Nutrition and Cancer*. 54(1):111-42.

<sup>4</sup> 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.

<sup>5</sup> He, F., Nowson, C., MacGregor, G. 2006. Fruit and vegetable consumption and stroke: meta-analysis of cohort studies. *Lancet*. 367(9507):320-326.

<sup>6</sup> U.S. Department of Health and Human Services and U.S. Department of Agriculture. 2005. *Dietary Guidelines for Americans, 2005*. Washington, DC: U.S. Government Printing Office.

- <sup>7</sup> Bailey, R., Dodd, K., Goldman, J., Gahche, J., Dwyer, J., Moshfegh, A., Sempos, C., Picciano. 2010. Estimation of total calcium and vitamin D intakes in the United States. *Journal of Nutrition*. 140(4): 817-822.
- <sup>8</sup> NIH Consensus Development on Optimal Calcium Intake. 1994. Optimal calcium intake. *Journal of the American Medical Association*. 272:1942-1948.
- <sup>9</sup> Institute of Medicine, Food and Nutrition Board. 1997. *Dietary Reference Intakes for Calcium, Phosphorus, Magnesium, Vitamin D, and Fluoride*. Washington, DC: National Academy Press.
- <sup>10</sup> 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.
- <sup>11</sup> 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 high school YRBS asked students about their computer/video game/social media usage and television watching habits, along with how many days during the 7 days before the survey they had engaged in 60 minutes or more of physical activity. Television (TV) viewing, computer and gaming usage are all considered sedentary behaviors. Child and adolescent TV viewing, in particular, is associated with childhood and adult obesity. Computer usage and video game playing are associated with physical inactivity among adolescents and young adults.

When students are watching television or other screens 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.<sup>i</sup> 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.

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.<sup>ii, iii</sup> Over time, regular physical activity decreases the risk of high blood pressure, heart disease, diabetes, some types of cancer, and premature death.

Healthy People 2020 Objectives	Summit County 2013	Status
<b>PA-8.2.3:</b> Increase the proportion of adolescents in grades 9 through 12 who view television, videos, or play video games for <b>no more than 2 hours</b> a day to at least 73.9%	81.7% of Summit County high school students reported watching television for no more than 2 hours a day.	This objective has been met.
<b>PA-8.2.3:</b> Increase the proportion of adolescents in grades 9 through 12 who use a computer to play computer games outside of school (for non-school work) for <b>no more than 2 hours</b> a day to at least 82.6%	50.3% of Summit County high school students reported using a computer for non-school work, for no more than 2 hours a day.	This objective has <b>not</b> 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
<b>Did not participate in at least 60 minutes of physical activity on any day</b> (During the 7 days before the survey.)					
<b>24.1%</b> (22.4 - 25.9) 1149	<b>25.9%</b> (23.6 - 28.3) 1263	<b>16.7%</b> (15.7 - 17.7) 2488	<b>15.2%</b> (14.1 - 16.3) 2129	<b>18.5%</b> (17.6 - 19.4) 3637	<b>17.9%</b> (16.9 - 19.0) 3392
<b>Physically active at least 60 minutes/day on 5 or more days</b> (During the 7 days before the survey.)					
<b>34.9%</b> (33.1 - 36.8) 1663	<b>34.2%</b> (31.8 - 36.7) 1670	<b>43.8%</b> (42.5 - 45.2) 6545	<b>44.5%</b> (42.9 - 46.0) 6240	<b>41.7%</b> (40.5 - 42.8) 8208	<b>41.8%</b> (40.5 - 43.1) 7910
<b>Watched television 3 or more hours/day</b> (On an average school day.)					
<b>34.8%</b> (32.7 - 37.0) 1665	<b>22.7%</b> (20.8 - 24.7) 1101	<b>22.9%</b> (21.9 - 23.9) 3423	<b>16.8%</b> (15.8 - 17.9) 2355	<b>25.8%</b> (24.9 - 26.8) 5088	<b>18.3%</b> (17.4 - 19.3) 3456
<b>Used computers 3 or more hours/day</b> (Played video or computer games or used a computer for something that was not school work on an average school day.)					
<b>43.2%</b> (41.0 - 45.4) 2029	<b>52.3%</b> (50.2 - 54.3) 2517	<b>38.7%</b> (37.3 - 40.0) 5759	<b>48.8%</b> (47.4 - 50.2) 6817	<b>39.8%</b> (38.6 - 40.9) 7788	<b>49.7%</b> (48.5 - 50.8) 9334
<b>Played on at least one sports team</b> (During the past 12 months.)					
<b>49.9%</b> (47.7 - 52.0) 2311	<b>48.3%</b> (45.8 - 50.8) 2320	<b>62.0%</b> (60.6 - 63.5) 9814	<b>62.6%</b> (60.7 - 64.4) 8712	<b>59.1%</b> (57.9 - 60.4) 11496	<b>58.9%</b> (57.4 - 60.4) 11032

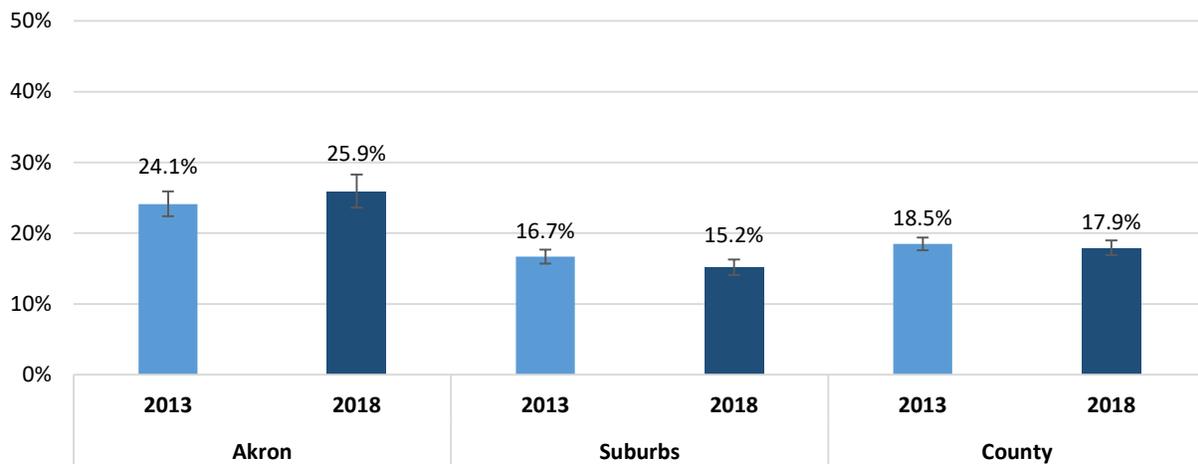
Compared to 2013, Summit County high school students in 2018 were significantly less likely to have watched television for 3 or more hours per day (25.8% vs. 18.3%), but significantly more likely to have used a computer or played video games for something that is not school work for 3 or more hours per day (39.8% vs. 49.7%). There were no significant differences between 2013 and 2018 in the prevalence of being physically active at least 60 minutes per day on 5 or more days (41.7% vs. 41.8%), not being physically active for 60 minutes on any day (18.5% vs. 17.9%), or playing on at least one sports team (59.1% vs. 58.9%).

There were no regional differences between Akron and its surrounding suburbs in the 2018 prevalence of students who had used a computer or played video games for 3 or more hours per day (52.3% vs. 48.8%). The graphs below illustrate significant differences between the regions of Akron and the suburbs in 2018 for students who did not participate in at least 60 minutes of physical activity on any day in the past 7 days, were physically active at least 60 minutes per day on 5 or more days, watched television 3 or more hours per day, or played on at least one sports team.

The graphs below also illustrate significant differences within these two regions from 2013 to 2018 for students who watched television 3 or more hours per day, or used a computer or played video games for 3 or more hours per day for something that was not school work.

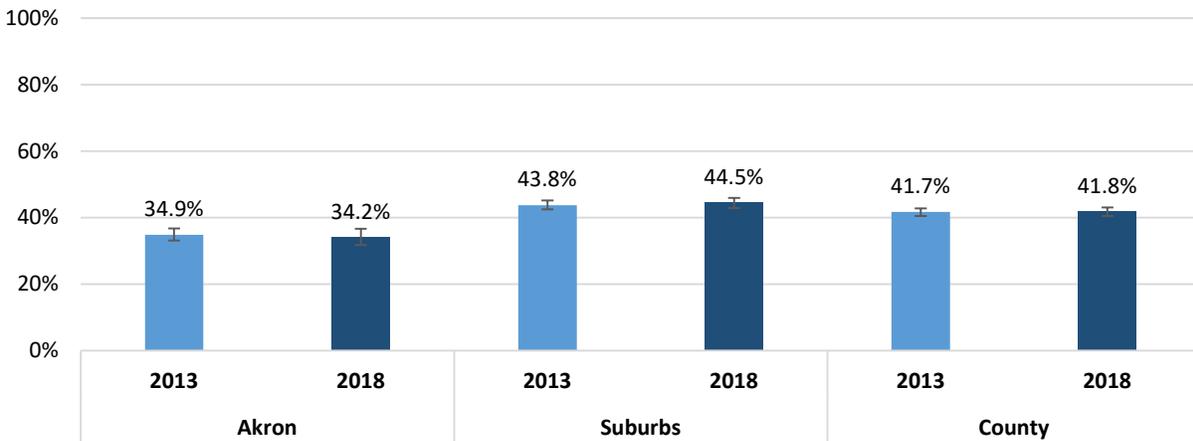
In Summit County, students were asked on how many of the 7 days before the survey they had been physically active for a total of at least 60 minutes per day. The graph below shows the prevalence for students who reported being physically active for at least 60 minutes per day none of the 7 days before the survey. Overall, the prevalence for not participating in at least 60 minutes of physical activity on any day was significantly higher in Akron (25.9%) than in the suburbs (15.2%).

### Did not participate in at least 60 minutes of physical activity on any day By region, 2013 vs. 2018



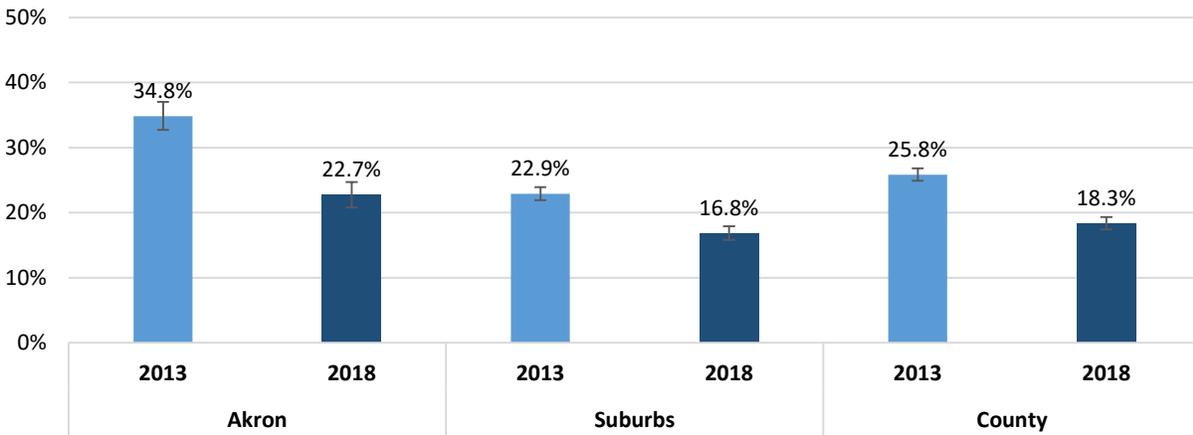
The graph below shows the prevalence for students who reported being physically active for at least 60 minutes per day on 5 or more of the 7 days before the survey. Overall, the prevalence for having been physically active for at least 60 minutes per day on 5 or more of the 7 days before completing the survey was significantly higher among students in the suburbs (44.5%) than in the city of Akron (34.2%).

### Physically active at least 60 minutes per day on 5 or more days By region, 2013 vs. 2018



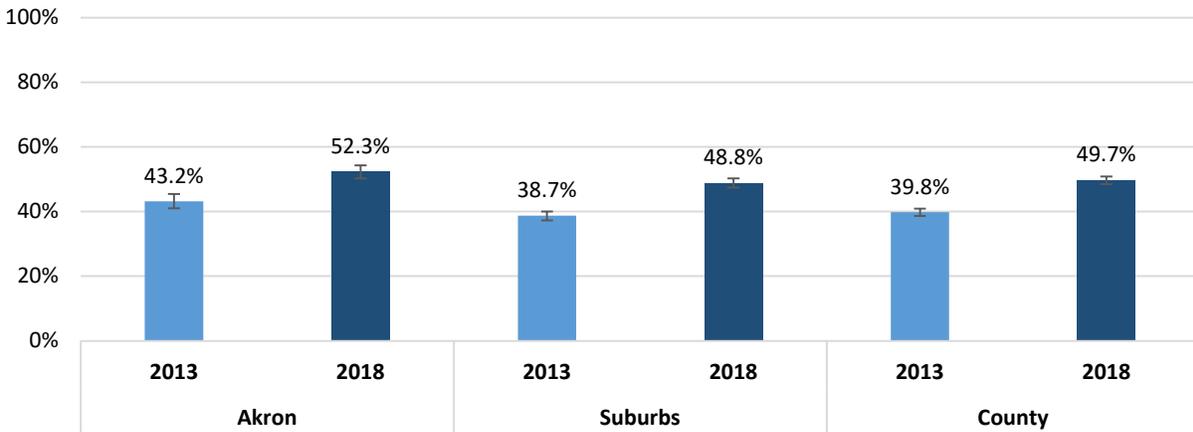
In Summit County, students were asked how many hours they watched TV on an average school day. The graph below shows the prevalence for students who reported watching television 3 or more hours on an average school day. The prevalence for watching television for three or more hours on an average school day has decreased since 2013 for students in both Akron (34.8% vs. 22.7%) and the suburbs (22.9% vs. 16.8%). In 2018, the prevalence for watching television for three or more hours per school day was higher among students in Akron (22.7%) than among students in the suburbs (16.8%).

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



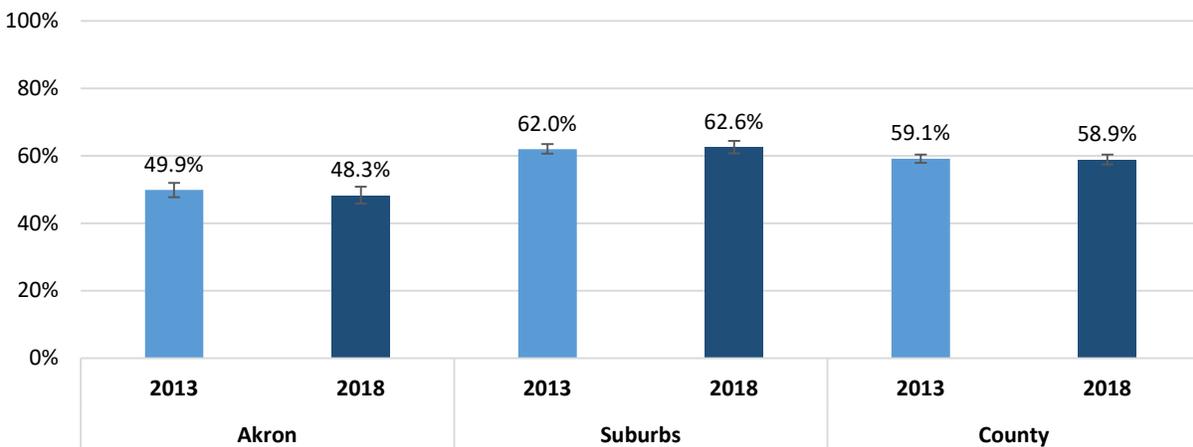
In Summit County, students were asked how many hours on an average school day they played video or computer games or used a computer for something that was not school work (including time on tablets, smartphones, social networking and the internet). The graph below shows the students who reported using 3 or more hours on an average school day. The prevalence for playing computer or video games for 3 or more hours has increased since 2013 for students in both Akron (43.2% vs. 52.3%) and the suburbs (38.7% vs. 48.8%). Prevalence in 2018 in the two regions was not significantly different.

### Used computers or played video games 3+ hours/day By region, 2013 vs. 2018



In Summit County, students were asked how many sports teams they played on during the 12 months before the survey. The graph below shows the prevalence for students who reported playing on at least one sports team in the 12 months before the survey. In 2018, the prevalence for playing on at least one sports team was significantly higher among students in the suburbs (62.6%) than in the city of Akron (48.3%). The prevalence for either region for playing on a sports team had not changed significantly from 2013.

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



## Demographics

Did not participate in 60+ minutes of physical activity on any day			
Category	%	CI	
<b>Gender</b>			
Female	20.6	19.2	- 22.1
Male	15.0	13.8	- 16.4
<b>Race/Ethnicity</b>			
White	15.1	14.0	- 16.3
Black	26.2	23.9	- 28.7
Asian	33.5	28.5	- 38.8
Hispanic	24.5	18.8	- 31.2
Other	22.7	19.4	- 26.3
<b>Grade</b>			
9th	14.7	13.0	- 16.6
10th	15.9	14.1	- 18.0
11th	20.1	18.4	- 21.9
12th	20.6	18.1	- 23.2
<b>Total</b>	<b>17.9</b>	<b>16.9</b>	<b>- 19.0</b>

Physically active at least 60 minutes/day on 5 or more days			
Category	%	CI	
<b>Gender</b>			
Female	33.9	32.2	- 35.5
Male	50.4	48.6	- 52.2
<b>Race/Ethnicity</b>			
White	43.8	42.3	- 45.3
Black	36.1	33.5	- 38.8
Asian	25.6	21.3	- 30.3
Hispanic	36.4	30.6	- 42.6
Other	39.6	35.8	- 43.4
<b>Grade</b>			
9th	46.6	43.6	- 49.6
10th	43.4	41.0	- 45.8
11th	40.0	37.8	- 42.3
12th	37.6	34.8	- 40.4
<b>Total</b>	<b>41.8</b>	<b>40.5</b>	<b>- 43.1</b>

In Summit County, 17.9% of students did not participate in 60 or more minutes of physical activity that increased their heart rate and made them breathe hard some of the time on at least 1 day during the 7 days prior to the survey. Female students (20.6%) were more likely than male students to have not met recommended levels of physical activity on any day than male (15.0%) students. The prevalence of not participating in recommended levels of physical activity on any day was higher among Black, Hispanic, Asian and Other/Multiple students (26.2%, 24.5%, 33.5%, 24.5%, respectively) than among White (15.1%) students. The prevalence of not participating in recommended levels of physical activity on any day was higher among 12<sup>th</sup> grade (20.6%) and 11<sup>th</sup> grade (20.1%) students than 9<sup>th</sup> and 10<sup>th</sup> grade (14.7%, 15.9%) students, respectively.

In Summit County, 41.8% of students reported doing physical activity that increased their heart rate and made them breathe hard some of the time for a total of at least 60 minutes per day on 5 or more days during the 7 days prior to the survey (i.e., met recommended levels of physical activity). The prevalence of having met recommended levels of physical activity was higher among male (50.4%) students than female (33.9%) students. The prevalence of having met recommended levels of physical activity was lower among Asian (25.6%) students than White, Black, Hispanic and Other/Multiple (43.8%, 36.1%, 36.4%, 39.6% respectively) students. The prevalence of having met recommended levels of physical activity was higher among White (43.8%) students than Black (36.1%) students. The prevalence of having met recommended levels of physical activity was higher among 9<sup>th</sup> grade (46.6%) students than 11<sup>th</sup> and 12<sup>th</sup> grade (40.0%, 37.6%) students, respectively and higher among 10<sup>th</sup> grade (43.4%) students than 11<sup>th</sup> grade (40.0%) students.



Watched television 3 or more hours/day			
Category	%	CI	
<b>Gender</b>			
Female	19.0	17.7	- 20.3
Male	17.7	16.3	- 19.1
<b>Race/Ethnicity</b>			
White	16.0	15.0	- 17.1
Black	26.8	24.6	- 29.2
Asian	19.4	15.7	- 23.8
Hispanic	24.6	18.9	- 31.4
Other	20.2	17.3	- 23.5
<b>Grade</b>			
9th	18.1	16.4	- 20.0
10th	18.9	17.1	- 20.7
11th	17.7	16.0	- 19.6
12th	18.3	16.2	- 20.5
<b>Total</b>	<b>18.3</b>	<b>17.4</b>	<b>- 19.3</b>

Used computers 3 or more hours/day			
Category	%	CI	
<b>Gender</b>			
Female	45.0	43.5	- 46.5
Male	54.7	53.0	- 56.4
<b>Race/Ethnicity</b>			
White	48.8	47.4	- 50.3
Black	53.1	50.5	- 55.6
Asian	45.4	40.7	- 50.3
Hispanic	54.6	48.7	- 60.3
Other	50.6	46.7	- 54.6
<b>Grade</b>			
9th	51.2	48.5	- 53.8
10th	50.2	47.7	- 52.7
11th	49.1	46.7	- 51.5
12th	48.3	45.7	- 51.0
<b>Total</b>	<b>49.7</b>	<b>48.5</b>	<b>- 50.8</b>

In Summit County, 18.3% of students watched television 3 or more hours/day on an average school day. The prevalence of watching  $\geq 3$  hours/day on an average school day was higher among Black, Hispanic, and Other/Multiple (26.8%, 24.6%, 20.2% respectively) students than White (16.0%) students. The prevalence of watching  $\geq 3$  hours/day on an average school day was also higher among Black (26.8%) students than Asian and Other/Multiple (19.4%, 20.2%) students, respectively.

In Summit County, 49.7% of students played video or computer games or used a computer for something other than school work for 3 or more hours/day on an average school day. The prevalence of using the computer for something that was not school work for  $\geq 3$  hours/day was higher among male (54.7%) students than female (45.0%) students. The prevalence of using the computer for something that was not school work for  $\geq 3$  hours/day was also more likely among Black students (53.1%) than White (48.8%) or Asian (45.4%) students.

Played on at least one sports team			
Category	%	CI	
<b>Gender</b>			
Female	56.7	54.7	- 58.6
Male	61.4	59.5	- 63.2
<b>Race/Ethnicity</b>			
White	60.5	58.7	- 62.2
Black	55.8	53.1	- 58.4
Asian	48.2	43.2	- 53.2
Hispanic	51.1	44.9	- 57.4
Other	53.1	49.0	- 57.2
<b>Grade</b>			
9th	66.9	63.8	- 69.8
10th	61.7	58.7	- 64.7
11th	57.5	54.7	- 60.3
12th	50.2	47.2	- 53.2
<b>Total</b>	<b>58.9</b>	<b>57.4</b>	<b>- 60.4</b>

In Summit County, 58.9% of students played on one or more sports teams (run by their school or community group) in the 12 months prior to the survey (sports team participation). The prevalence of sports team participation was higher among male (61.4%) than female (56.7%) students. The prevalence of sports team participation was higher among White (60.5%) students than Black, Asian, Hispanic and Other/Multiple (55.8%, 48.2%, 51.1%, 53.1%) students, respectively. The prevalence of sports team participation was higher among 9<sup>th</sup>, 10<sup>th</sup>, and 11<sup>th</sup> grade (66.9%, 61.7%, 57.5%) students than 12<sup>th</sup> grade (50.2%) students, respectively. 9<sup>th</sup> grade students (66.9%) were more likely than 11<sup>th</sup> grade (57.5%) students to have participated in at least one team sport in the past 12 months.

<sup>i</sup> 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.

<sup>ii</sup> 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.

<sup>iii</sup> 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

The 2018 Summit County YRBS included questions about family interaction and social support. Over time it has been determined that promoting positive asset building and considering young people as resources could be critical strategies in preventing risk behaviors. Developmental assets are “building blocks” that may decrease risk behavior in adolescents. Developmental assets are commonly grouped into external and internal assets. External assets include: support, empowerment, boundaries and expectations, and constructive use of time. Internal assets include: commitment to learning, positive values, social competencies, and positive identity.<sup>1</sup>

Healthy People 2020 Objectives	Summit County 2018	Status
<b>AH-3.1:</b> 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%	78.7% of Summit County high school students reported having an adult (other than their parents) in their lives with whom they can talk about serious problems.	The objective has <b>not</b> been met.
<b>AH-2:</b> Increase the proportion of adolescents who participate in extracurricular and/or out-of-school activities to at least 90.8%	52.7% of Summit County high school students reported participating in extracurricular activities at least one day during the past 7 days.	The objective has <b>not</b> been met.

## Overall and Regional Prevalence

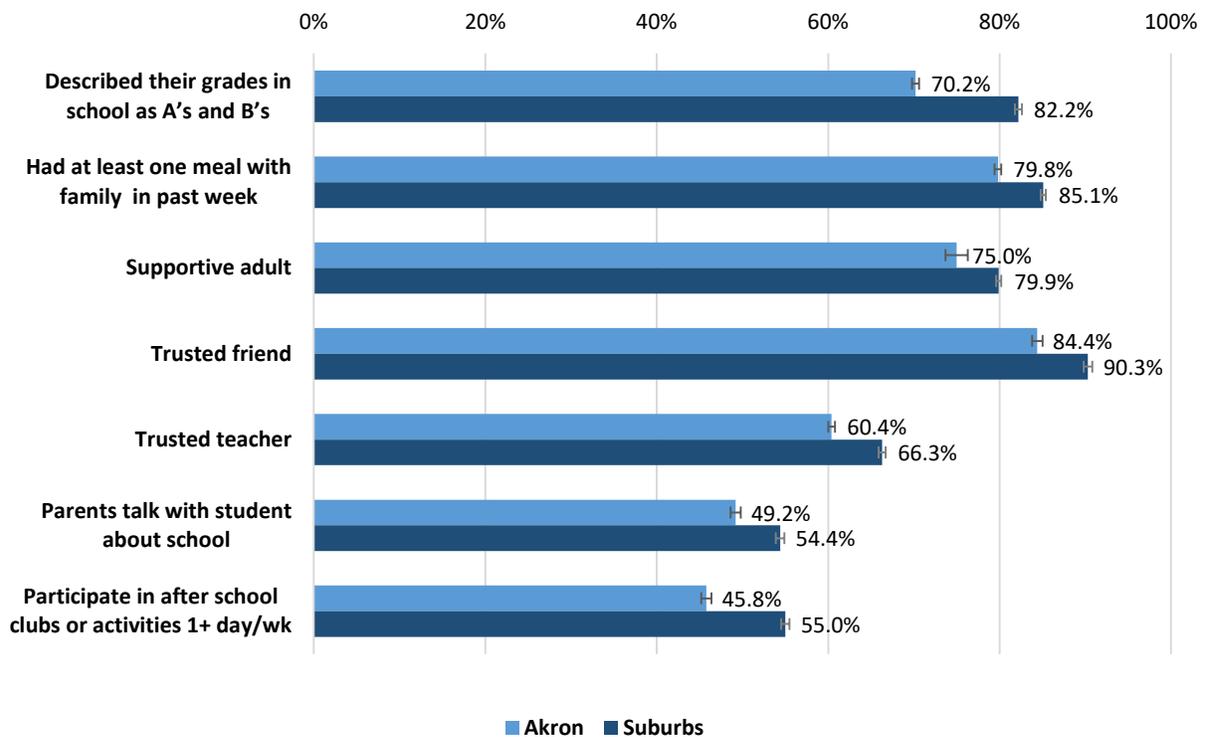
Akron		Suburbs		County	
% (Confidence Interval) Population N		% (Confidence Interval) Population N		% (Confidence Interval) Population N	
2013	2018	2013	2018	2013	2018
<b>Described their grades in school as A's and B's</b> (During the 12 months before the survey.)					
<b>68.5%</b> (66.0 - 70.8) 3461	<b>70.2%</b> (68.0 - 72.4) 3525	<b>79.6%</b> (78.3 - 80.8) 11742	<b>82.2%</b> (80.6 - 83.7) 11627	<b>76.7%</b> (75.6 - 77.8) 15203	<b>79.0%</b> (77.7 - 80.3) 15152
<b>Had at least one meal with family</b> (During the 7 days before the survey.)					
<b>79.9%</b> (78.5 - 81.3) 3829	<b>79.8%</b> (78.1 - 81.3) 3889	<b>85.0%</b> (84.0 - 85.9) 12681	<b>85.1%</b> (84.0 - 86.1) 11951	<b>83.7%</b> (82.9 - 84.5) 16510	<b>83.7%</b> (82.8 - 84.6) 15840
<b>One or more supportive adults</b> (Other than a parent, who they would feel comfortable seeking help from if there was an important issue or question affecting their life.)					
<b>75.8%</b> (74.2 - 77.4) 3466	<b>75.0%</b> (73.1 - 76.7) 3501	<b>82.1%</b> (81.1 - 83.2) 12089	<b>79.9%</b> (78.8 - 81.0) 10957	<b>80.6%</b> (79.7 - 81.5) 15555	<b>78.7%</b> (77.7 - 79.6) 14458
<b>One or more trusted friends</b> (Friends who would offer good advice if there was a really important secret or problem affecting their life.)					
<b>84.2%</b> (82.7 - 85.6) 3848	<b>84.4%</b> (82.7 - 86.1) 3948	<b>90.3%</b> (89.5 - 91.0) 13329	<b>90.3%</b> (89.4 - 91.2) 12385	<b>88.9%</b> (88.2 - 89.5) 17177	<b>88.8%</b> (88.0 - 89.6) 16333
<b>One or more teachers or adults at school</b> (who they can talk to if they have a problem)					
N/A	<b>60.4%</b> (58.4 - 62.4) 2843	N/A	<b>66.3%</b> (64.7 - 67.8) 9112	N/A	<b>64.8%</b> (63.5 - 66.1) 11955
<b>Parents talk with student almost every day about school</b>					
<b>53.0%</b> (51.2 - 54.8) 2443	<b>49.2%</b> (47.0 - 51.4) 2301	<b>57.8%</b> (56.5 - 59.0) 8505	<b>54.4%</b> (53.0 - 55.8) 7465	<b>56.6%</b> (55.6 - 57.6) 10948	<b>53.1%</b> (51.9 - 54.3) 9766
<b>Spent at least one day in clubs or organizations outside of school</b> (During the 7 days before the survey.)					
<b>52.4%</b> (50.1 - 54.7) 2413	<b>45.8%</b> (43.4 - 48.1) 2134	<b>58.7%</b> (57.4 - 60.1) 14763	<b>55.0%</b> (53.2 - 56.8) 7546	<b>57.2%</b> (56.0 - 58.4) 11082	<b>52.7%</b> (51.2 - 54.1) 9681

Compared to 2013, there were no significant changes among Summit County high school students in 2018 for categories of positive youth development. Prevalence rates were not significantly different for students who described their grades as mostly A's and B's (76.7% vs. 79.0%), who had at least one meal with their family in the past week (83.7% vs. 83.7%), who had one or more supportive adult from whom they could seek help (80.6% vs. 78.7%), who had one or more trusted friend who could offer advice (88.9% vs. 88.8%), whose parents talked with them almost every day about school (56.6% vs. 53.1%), and who

spent at least one day in clubs or organization outside of school in the past week (57.2% vs. 52.7%). Students were not asked about a trusted teacher on the 2013 survey.

The graph below illustrates significantly higher prevalence in the suburbs than in the city of Akron for all areas of positive youth development students who described their grades as mostly A's and B's, who had at least one meal with their family in the past week, who had one or more supportive adults from whom they could seek help, who had one or more trusted friends who could offer advice, who had one or more teachers or adults at school who they could talk to about a problem, whose parents talked with them almost every day about school, and who participated at least one day in clubs or organization outside of school in the past week.

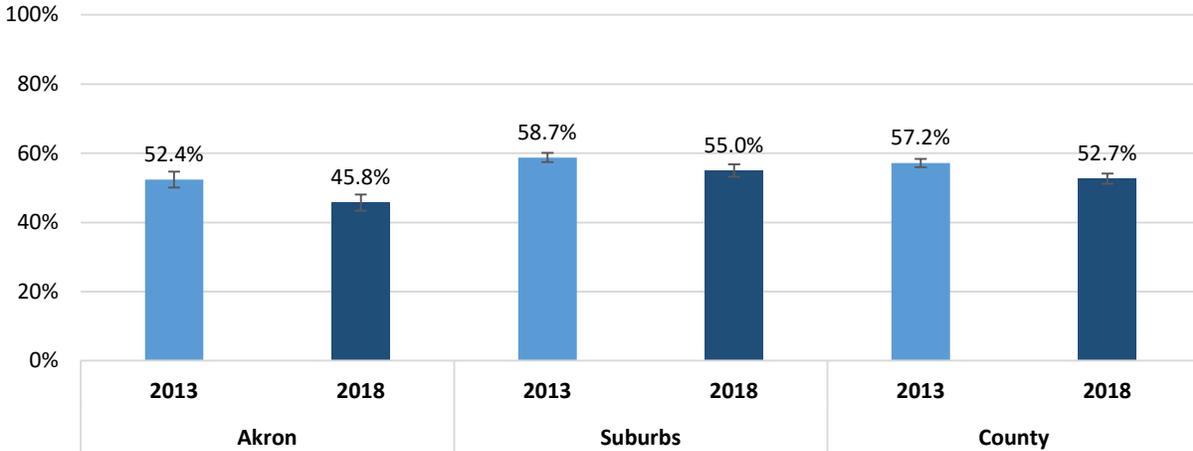
### Positive Youth Development, Akron vs. Suburbs, 2018



The graphs below illustrate significant decline within the city of Akron and the suburbs from 2013 to 2018 for students who had spent at least one day in clubs or organization in the past week, and a decline in the suburbs alone for students who had a supportive adult in their life.

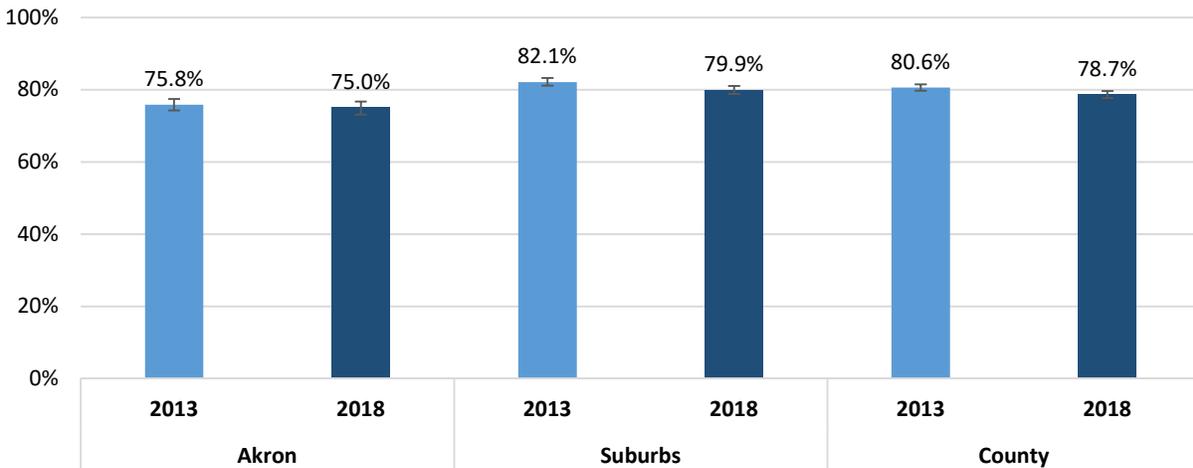
In Summit County, students were asked on how many of the 7 days before the survey they had participated in organized activities (other than sports teams) such as clubs, community center groups, music/art/dance lessons, drama, church, or other supervised activities. The graph below shows the students that reported they had participated in extracurricular activities on at least one day during the week before the survey. The prevalence for participation in extracurricular activities was significantly lower among students in Akron (45.8%) than among students in the Suburbs (55.0%). The prevalence decreased in both Akron (52.4% vs. 45.8%) and the suburbs (58.7% vs. 55.0%) between 2013 and 2018.

### Spent at least one day in clubs or organizations outside of school By region, 2013 vs. 2018



In Summit County, students were asked how many adults other than their parents, they would feel comfortable seeking help from if they had an important issue or question affecting their life. The graph below shows those students who reported that they had at least one supportive adult in their life. The prevalence for having at least one supportive adult in one's life was significantly lower among students in Akron (75.0%) than among students in the suburbs (79.9%). The prevalence decreased significantly between 2013 and 2018 for students in the suburbs (58.7% vs. 55.0%).

### Supportive adult By region, 2013 vs. 2018



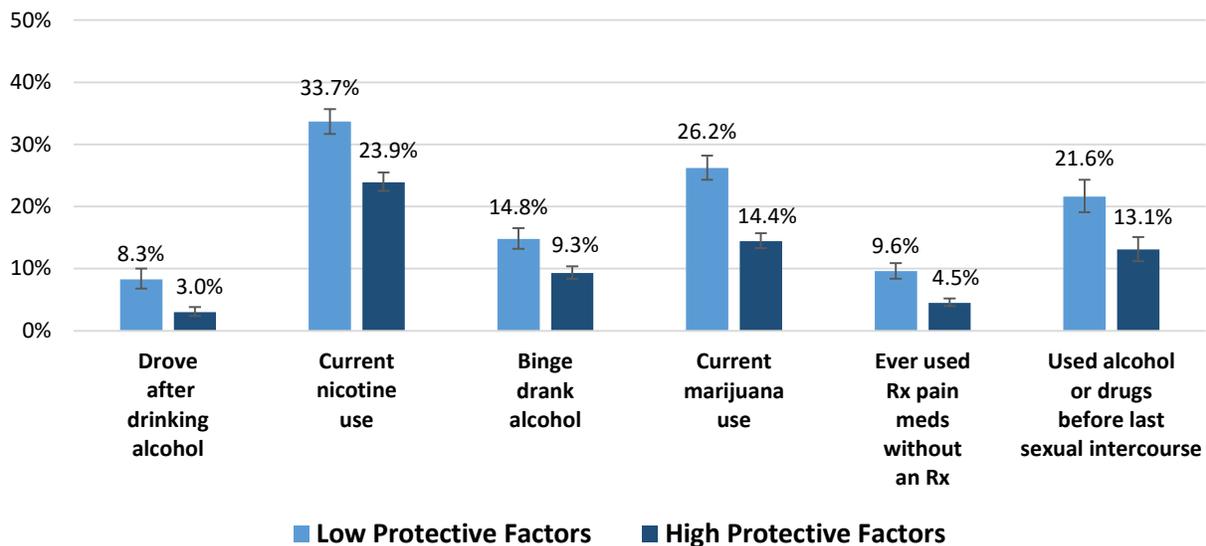
Protective factors can provide a buffering effect against risk engagement and negative health outcomes. Four of the positive youth development items: academic achievement, having a parent that talks to the student about school regularly, having one or more trusted adults at school, and having one or 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
<b>Have a high protective factors score</b> (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.)		
<b>56.1%</b> (53.7 - 58.6) 2627	<b>68.6%</b> (67.0 - 70.1) 9419	<b>65.4%</b> (64.1 - 66.8) 12046

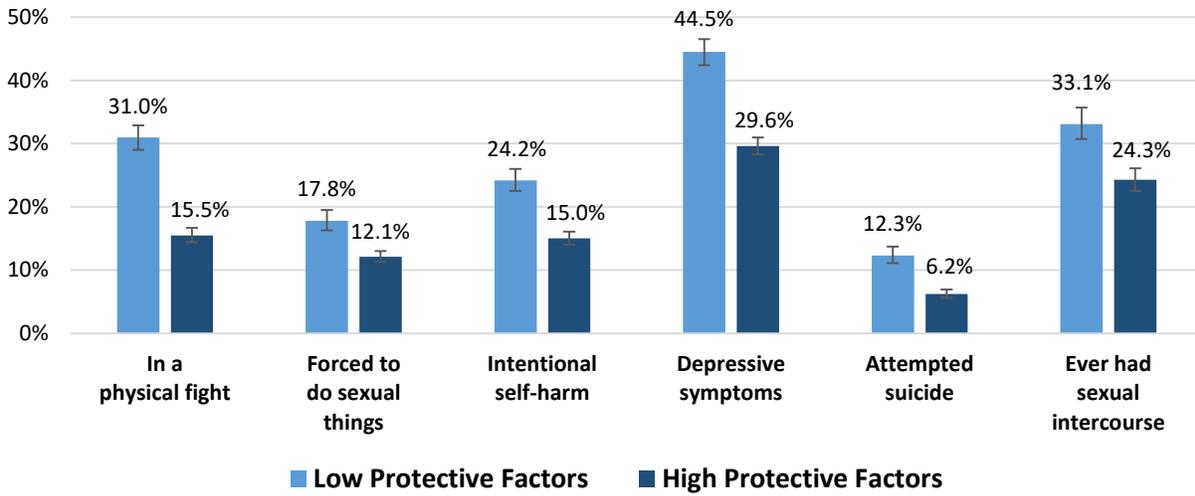
In 2018, 65.4% of Summit County high school students reported having a high protective factors score. Students in Akron were significantly less likely to report a high protective factors score (56.1%) than students in the suburbs (68.6%).

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.

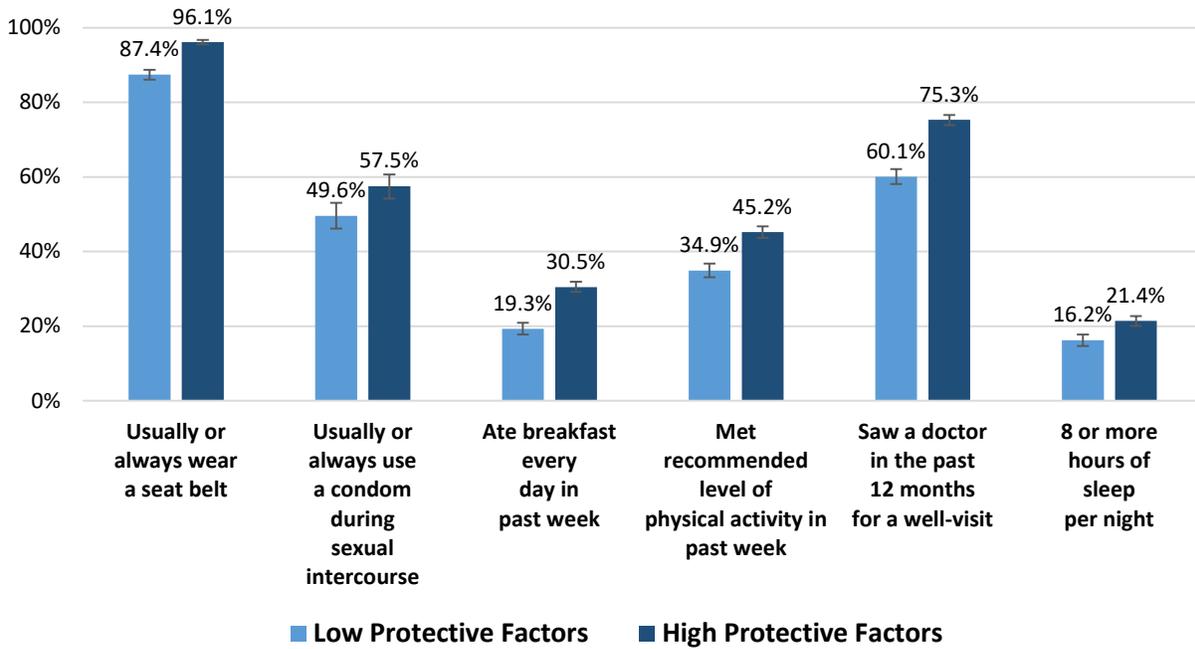
### Substance Use Behaviors by Protective Factors



### 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	
<b>Gender</b>			
Female	85.6	84.3	- 86.8
Male	72.1	70.2	- 73.9
<b>Race/Ethnicity</b>			
White	83.0	81.6	- 84.4
Black	65.1	62.5	- 67.6
Asian	84.4	80.8	- 87.5
Hispanic	66.7	60.2	- 72.6
Other	72.2	68.1	- 76.0
<b>Grade</b>			
9th	79.3	76.1	- 82.2
10th	78.2	75.2	- 80.9
11th	78.8	75.9	- 81.4
12th	80.5	77.8	- 82.9
<b>Total</b>	<b>79.0</b>	<b>77.7</b>	<b>- 80.3</b>

In Summit County, 79.0% of students described their grades in school as mostly A's and B's during the 12 months before the survey. The prevalence of describing their grades as mostly A's and B's was lower among male (72.1%) students than female (85.6%) students. The prevalence of describing their grades as mostly A's and B's was lower among Black (65.1%) students than White (83.0%), Asian (84.4%) and Other/Multiple (72.2%) students. The prevalence of describing their grades as mostly A's and B's was lower among Hispanic (66.7%) students than White (83.0%) or Asian (84.4%) students.

Had at least one meal with family			
Category	%	CI	
<b>Gender</b>			
Female	83.9	82.7	- 85.0
Male	83.6	82.3	- 84.8
<b>Race/Ethnicity</b>			
White	86.0	84.9	- 87.0
Black	76.0	73.6	- 78.2
Asian	84.0	80.2	- 87.2
Hispanic	77.6	71.0	- 83.1
Other	78.4	74.8	- 81.6
<b>Grade</b>			
9th	87.7	86.2	- 89.1
10th	83.7	82.1	- 85.2
11th	83.3	81.5	- 85.0
12th	80.7	78.5	- 82.8
<b>Total</b>	<b>83.7</b>	<b>82.8</b>	<b>- 84.6</b>

In Summit County, 83.7% of students had eaten one or more meals with their family during the 7 days prior to the survey. The prevalence of having eaten 1+ meals with their family was higher among White (86.0%) students than Black (76.0%) or Hispanic (77.6%) students. The prevalence of having eaten with their family was higher among Asian (84.0%) students than Black (76.0%) students. The prevalence of having eaten with their family was higher among 9<sup>th</sup> grade (87.7%) than 10<sup>th</sup>, 11<sup>th</sup>, or 12<sup>th</sup> grade (83.3%, 80.7%) students, respectively.

One or more supportive adults			
Category	%	CI	
<b>Gender</b>			
Female	79.6	78.3	- 80.9
Male	77.5	76.1	- 78.9
<b>Race/Ethnicity</b>			
White	80.3	79.1	- 81.4
Black	74.2	71.8	- 76.5
Asian	67.7	62.8	- 72.2
Hispanic	70.5	63.9	- 76.4
Other	76.3	72.6	- 79.6
<b>Grade</b>			
9th	78.4	76.4	- 80.2
10th	77.6	75.8	- 79.3
11th	79.1	77.2	- 81.0
12th	79.9	77.7	- 81.9
<b>Total</b>	<b>78.7</b>	<b>77.7</b>	<b>- 79.6</b>

One or more trusted friends			
Category	%	CI	
<b>Gender</b>			
Female	89.8	88.6	- 90.8
Male	87.8	86.4	- 89.0
<b>Race/Ethnicity</b>			
White	90.7	89.7	- 91.5
Black	82.9	80.8	- 84.7
Asian	85.8	82.1	- 88.8
Hispanic	83.6	76.8	- 88.7
Other	84.8	81.3	- 87.8
<b>Grade</b>			
9th	89.3	87.7	- 90.7
10th	90.2	88.5	- 91.7
11th	89.4	87.9	- 90.7
12th	87.1	85.1	- 88.8
<b>Total</b>	<b>88.8</b>	<b>88.0</b>	<b>- 89.6</b>

In Summit County, 78.7% of students had 1 or more adults, besides their parents, from whom they would feel comfortable seeking help if there was an important issue or question affecting their life (supportive adult). The prevalence of a supportive adult was higher among White (80.3%) students than Black, Asian, and Hispanic, (74.2%, 67.7%, 70.5%) students, respectively. The prevalence of a supportive adult was higher among Other/Multiple (76.3%) students than Asian (67.7%) students.

In Summit County, 88.8% of students had 1 or more friends whom they would trust to offer them good advice if there was an important secret or question affecting their life (trusted friend). The prevalence of having a trusted friend was higher among White (90.7%) students than Black, Asian, Hispanic, and Other/Multiple (82.9%, 85.8%, 83.6%, 84.8%) students, respectively.

One or more trusted teachers or adults at school			
Category	%	CI	
<b>Gender</b>			
Female	65.4	63.7	67.1
Male	64.1	62.4	65.8
<b>Race/Ethnicity</b>			
White	67.4	66.0	68.9
Black	57.7	55.0	60.3
Asian	54.1	48.8	59.3
Hispanic	57.7	51.1	64.0
Other	56.5	52.5	60.4
<b>Grade</b>			
9th	59.5	57.2	61.6
10th	62.6	60.5	64.6
11th	68.0	65.5	70.4
12th	68.9	66.1	71.6
<b>Total</b>	<b>64.8</b>	<b>63.5</b>	<b>66.1</b>

In Summit County, 64.8% of students had at least one teacher or other adult at school whom they could talk to if they had a problem (trusted teacher). The prevalence of having a trusted teacher was higher among White (67.4%) students than Black, Asian, Hispanic, and Other/Multiple (57.7%, 54.1%, 57.7%, 56.5%) students, respectively. The prevalence of having a trusted teacher was higher among 11<sup>th</sup> and 12<sup>th</sup> grade (68.0%, 68.9%) students than 9<sup>th</sup> grade and 10<sup>th</sup> grade (59.5%, 62.6%) students, respectively.

Parents talk with student almost every day about school			
Category	%	CI	
<b>Gender</b>			
Female	52.8	51.2	54.5
Male	53.4	51.7	55.1
<b>Race/Ethnicity</b>			
White	54.6	53.2	56.1
Black	50.5	47.9	53.0
Asian	37.1	32.8	41.6
Hispanic	44.5	38.5	50.7
Other	47.6	43.6	51.6
<b>Grade</b>			
9th	56.5	53.9	59.0
10th	55.5	53.1	57.9
11th	52.5	50.2	54.9
12th	48.6	45.8	51.4
<b>Total</b>	<b>53.1</b>	<b>51.9</b>	<b>54.3</b>

In Summit County, 53.1% of students' reported their parents talk to them almost every day about what they are doing in school. The prevalence of parents talking with students almost every day about school was higher among White (54.6%) students than Black, Asian, Hispanic, and Other/Multiple (50.5%, 37.1%, 44.5%, 47.6%) students, respectively. The prevalence of talking to their parents almost every day about school was higher among Other/Multiple (47.6%) students than Asian (37.1%) students.



<b>Spent at least one day in clubs or organizations outside of school</b>			
<b>Category</b>	<b>%</b>	<b>CI</b>	
<b>Gender</b>			
Female	57.5	55.7	- 59.4
Male	47.2	45.3	- 49.1
<b>Race/Ethnicity</b>			
White	54.8	53.1	- 56.6
Black	46.0	43.4	- 48.5
Asian	47.6	42.8	- 52.5
Hispanic	45.9	39.9	- 52.1
Other	47.3	43.2	- 51.5
<b>Grade</b>			
9th	53.7	51.0	- 56.3
10th	53.1	50.3	- 55.9
11th	54.5	51.5	- 57.5
12th	49.5	46.0	- 53.0
<b>Total</b>	<b>52.7</b>	<b>51.2</b>	<b>- 54.1</b>

In Summit County, 52.7% of students took part in after school, evening or weekend activities, other than sports teams, (e.g., school clubs, community center groups, music/art/dance lessons, drama, church or other supervised activities) on one or more days during the 7 days prior to the survey. The prevalence of participating in extracurricular activities was higher among female (57.5%) than male (47.2%) students. The prevalence of participating in extracurricular activities was higher among White (54.8%) students than Black, Asian, Hispanic, and Other/Multiple (46.0%, 47.6%, 45.9%, 47.3%) students, respectively.

<sup>1</sup> Leffert, N. Benson, P.L., Scales, P.C., Sharma, A., Drake, D., Blyth, D.A. Developmental assets: measurement and prediction at-risk behaviors among adolescents. *Appl Dev Sci.* 1998;2(4):209-230.

## Section 15: Other Health Topics

The 2018 Summit County high school YRBS asked students about other health-related issues, including seeing a doctor for a check-up, seeing a dentist for preventive care, or seeing a health care provider for mental health issues; as well as amount of sleep; asthma; missing school due to illness; and getting help when needed for depressive symptoms. 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 or lack of transportation to reproductive health services, lack of knowledge about where or how to access care, and lack of adolescent-friendly services. <sup>i</sup>

Sleep is an important dimension to adolescent health. Most adolescents need slightly more than 9 hours of sleep each night, although this varies among individuals. <sup>ii</sup> Adolescents who consistently get less than 8 hours of sleep lose the last two hours of sleep which are most important for storing new information. <sup>iii</sup> Sleep deprivation can affect school performance through lower grades, decreased alertness and concentration, and an increase in anger, impulsivity, and sadness. <sup>iv</sup>

Healthy People 2020 Objectives	Summit County 2018	Status
<b>AH-1:</b> Increase the proportion of adolescents who have had a wellness checkup in the past 12 months to at least 75.6%	70.0% of Summit County high school students reported seeing a doctor or nurse for a wellness checkup in the past 12 months.	The objective has <b>not</b> been met.
<b>OH-7:</b> 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%	73.8% of Summit County high school students reported seeing a dentist for a checkup, 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) Population N		% (Confidence Interval) Population N		% (Confidence Interval) Population N	
2013	2018	2013	2018	2013	2018
<b>Obtained eight or more hours of sleep on an average school night</b>					
<b>27.0%</b> (25.1 - 29.0) 1258	<b>21.6%</b> (20.0 - 23.3) 1040	<b>26.7%</b> (25.5 - 27.9) 3974	<b>19.0%</b> (17.8 - 20.2) 2636	<b>26.8%</b> (25.8 - 27.8) 5232	<b>19.6%</b> (18.7 - 20.7) 3676
<b>Ever diagnosed with asthma</b> (Been told they have asthma by a doctor or nurse)					
<b>25.0%</b> (23.3 - 26.7) 1167	<b>23.7%</b> (21.8 - 25.7) 1110	<b>22.6%</b> (21.6 - 23.6) 3362	<b>19.3%</b> (18.3 - 20.4) 2626	<b>23.1%</b> (22.3 - 24.0) 4529	<b>20.4%</b> (19.5 - 21.4) 3736
<b>Ever been to the emergency room or urgent care center because of asthma</b> (One or more times in the past 12 months before the survey; among students with asthma.)					
<b>32.2%</b> (28.7 - 35.8) 484	<b>27.2%</b> (23.2 - 31.6) 425	<b>18.8%</b> (17.0 - 20.8) 803	<b>18.4%</b> (16.4 - 20.6) 698	<b>22.3%</b> (20.6 - 24.1) 1287	<b>21.0%</b> (19.1 - 22.9) 1124
<b>Missed school because they were sick</b> (During the past 30 days before the survey.)					
<b>46.9%</b> (45.1 - 48.7) 2185	<b>48.1%</b> (45.9 - 50.4) 2288	<b>45.2%</b> (43.9 - 46.4) 6722	<b>43.5%</b> (42.0 - 45.0) 6021	<b>45.6%</b> (44.5 - 46.6) 8907	<b>44.7%</b> (43.4 - 45.9) 8309
<b>Saw a doctor or nurse for routine check-up</b> (During the 12 months before the survey.)					
<b>60.2%</b> (57.9 - 62.5) 2776	<b>59.0%</b> (56.5 - 61.5) 2786	<b>67.4%</b> (66.2 - 68.6) 10000	<b>73.8%</b> (72.4 - 75.1) 10191	<b>65.7%</b> (64.6 - 66.7) 12776	<b>70.0%</b> (68.7 - 71.2) 12978
<b>Saw a dentist for routine check-up</b> (Not including emergencies, during the 12 months before the survey.)					
<b>62.9%</b> (60.7 - 65.0) 2899	<b>62.1%</b> (60.0 - 64.1) 2929	<b>74.2%</b> (73.1 - 75.2) 11013	<b>77.8%</b> (76.4 - 79.1) 10734	<b>71.5%</b> (70.5 - 72.4) 13912	<b>73.8%</b> (72.6 - 74.9) 13663
<b>Saw a doctor, nurse, therapist, social worker, or counselor for a mental health issue</b> (During the 12 months before the survey.)					
<b>27.3%</b> (25.5 - 29.2) 1253	<b>29.9%</b> (28.2 - 31.7) 1406	<b>23.4%</b> (22.3 - 24.5) 3458	<b>28.8%</b> (27.4 - 30.2) 3956	<b>24.3%</b> (23.4 - 25.3) 4711	<b>29.1%</b> (28.0 - 30.2) 5362
<b>Received appropriate help when student felt sad, empty, hopeless, angry or anxious</b> (Sometimes, most of the time or always.)					
N/A	<b>46.3%</b> (44.0 - 48.6) 1589	N/A	<b>48.6%</b> (46.9 - 50.2) 4701	N/A	<b>48.0%</b> (46.6 - 49.3) 6291

Compared to 2013, Summit County high school students in 2018 were significantly less likely to report obtaining eight or more hours of sleep on an average school night (26.8% vs. 19.6%) and to have been diagnosed with asthma (23.1% vs. 20.4%). In addition, compared to 2013, Summit County high school students in 2018 were more likely to have seen a doctor or nurse for a check-up (65.7% vs. 70.0%), to have seen a dentist for a routine check-up (71.5% vs. 73.8%), and to have seen a doctor, nurse, therapist, social

## 2018 SUMMIT COUNTY HS YRBS: Other Health Topics

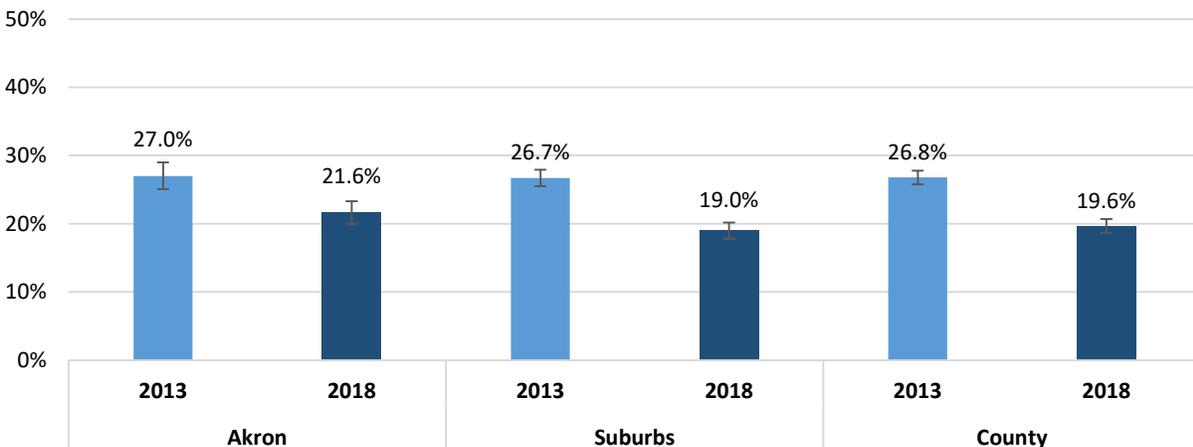
worker, or counselor for a mental health issue (24.3% vs. 29.1%) during the 12 months before the survey. There was no significant difference between 2013 and 2018 in rates of having been to the emergency room or urgent care due to asthma among students diagnosed with asthma (22.3% vs. 21.0%), or missing school because they were sick (45.6% vs. 44.7%). 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 obtaining eight or more hours of sleep on an average school night (21.6% vs. 19.0%), had seen a doctor, nurse, therapist, social worker, or counselor for a mental health issue (29.9% vs. 28.8%), and had received the appropriate help they needed when feeling sad, empty, hopeless, angry, or anxious (46.3% vs. 48.6%). The below graphs illustrate regional differences in the 2018 rates of students who had been diagnosed with asthma, had been to an emergency room or urgent care due to asthma, had missed school because they were sick, and had seen a doctor or nurse for a check-up, had seen a dentist for a routine check-up.

Also illustrated in the graphs below are rates of change in prevalence within the regions from 2013 to 2018 for obtaining eight or more hours of sleep on an average school night, to have been diagnosed with asthma, to have seen a doctor or nurse for a check-up, to have seen a dentist for a routine check-up, and to have seen a doctor, nurse, therapist, social worker, or counselor for a mental health issue. 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.

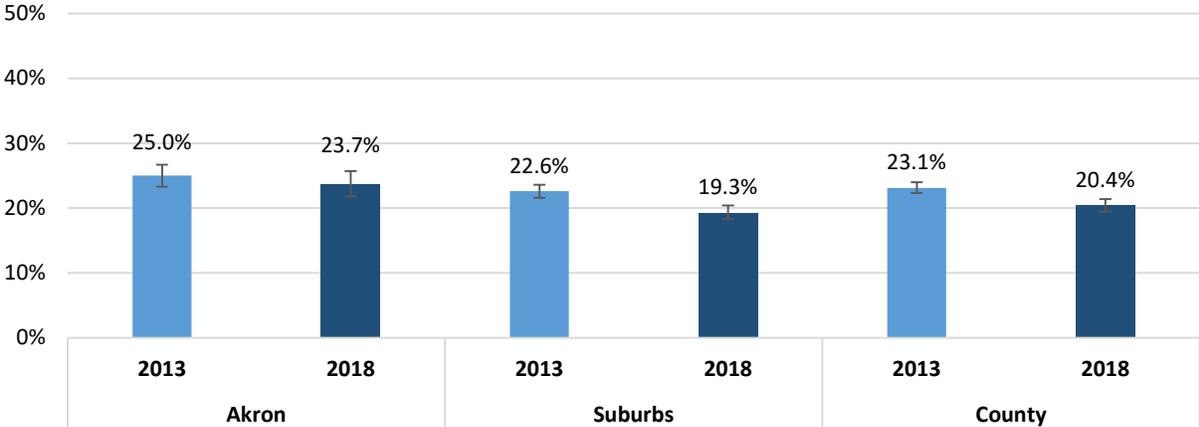
In Summit County, students were asked how many hours of sleep they get on an average school night. The chart below shows the prevalence for students who reported obtaining eight or more hours of sleep on an average school night. The prevalence of obtaining recommended sleep has decreased significantly for both Akron (27.0% vs. 21.6%) and the suburbs (26.7% vs. 19.0%) between 2013 and 2018.

### Obtain 8+ hours of sleep on an average school night By region, 2013 vs. 2018



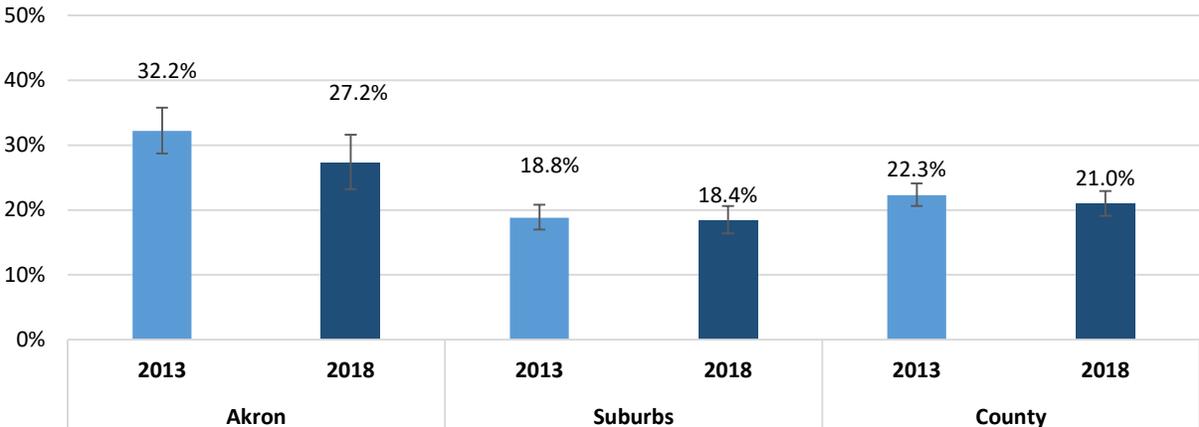
In Summit County, students were asked if they were ever told by a doctor or nurse that they have asthma. In 2018, the prevalence for ever having been diagnosed with asthma was significantly higher in Akron (23.7%) than in the suburbs (19.3%). The prevalence of ever having been diagnosed with asthma also significantly declined in the suburbs from 2013 to 2018 (22.6% vs. 19.3%).

**Ever diagnosed with asthma by doctor or nurse  
By region, 2013 vs. 2018**



In Summit County, students were asked how many times during the past 12 months did they go to an emergency room or urgent care center because of their asthma. In 2018, the prevalence for having been to the emergency room or urgent care center because of their asthma (among students who had diagnosed with asthma) was significantly higher in Akron (27.2%) than in the suburbs (18.4%).

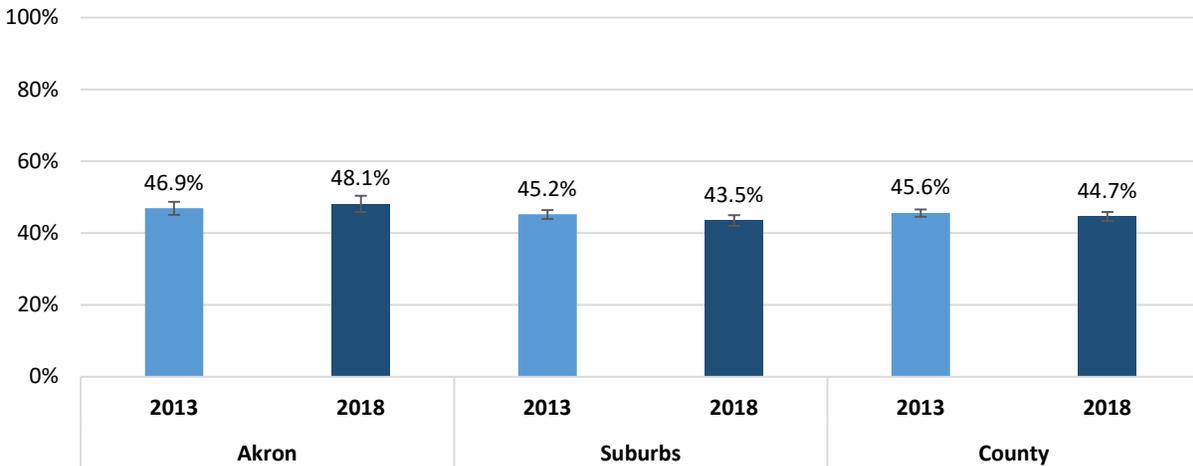
**Ever been to ER or urgent care due to their asthma  
By region, 2013 vs. 2018**



## 2018 SUMMIT COUNTY HS YRBS: Other Health Topics

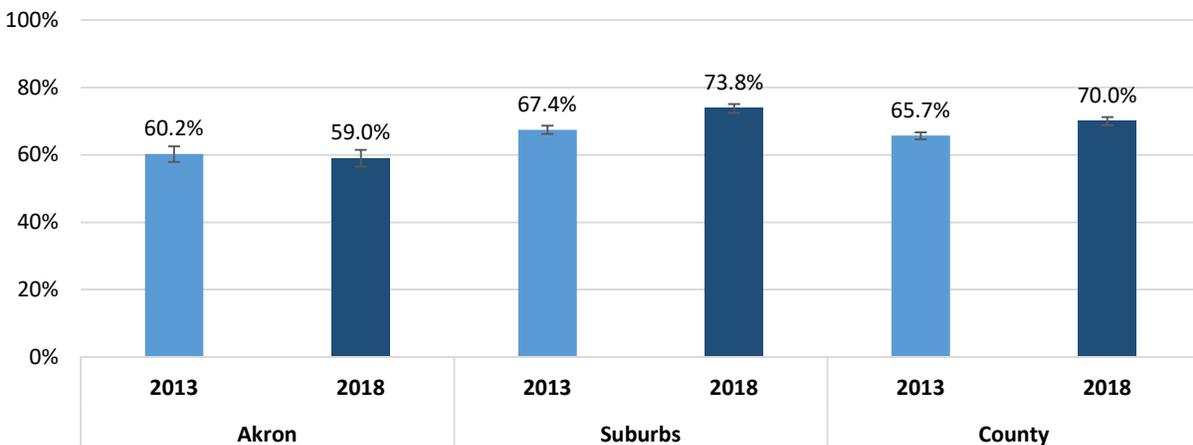
In Summit County, students were asked on how many days during the past 30 days they had not gone to school because they were sick. In 2018, the prevalence for having missed school at least one day during the 30 days before the survey because of sickness was significantly higher among students in Akron (48.1%) than for students in the suburbs (43.5%).

### Missed school because they were sick By region, 2013 vs. 2018



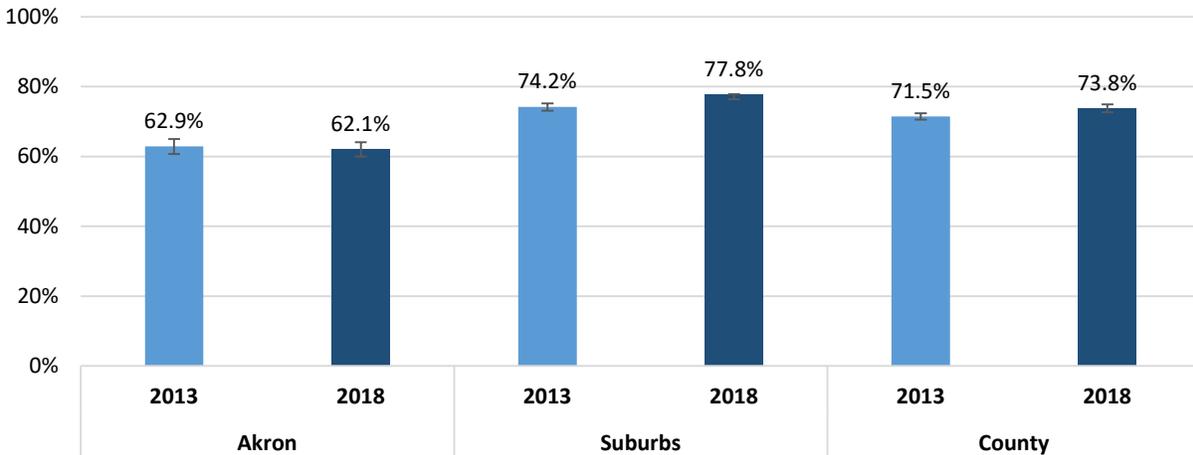
In Summit County, students were asked when the last time was that saw a doctor or nurse for a check-up or physical exam when they were not sick or injured. The graph below shows the students who reported that they had seen a doctor or nurse within the past 12 months for a routine check-up. In 2018, the prevalence for having seen a doctor or nurse for a routine check-up within the past 12 months was significantly lower among students in Akron (59.0%) than for students in the suburbs (73.8%). The prevalence of ever having seen a doctor or nurse for a routine check-up also significantly increased in the suburbs from 2013 to 2018 (67.4% vs. 73.8%).

### Saw a doctor or nurse for a routine check-up By region, 2013 vs. 2018



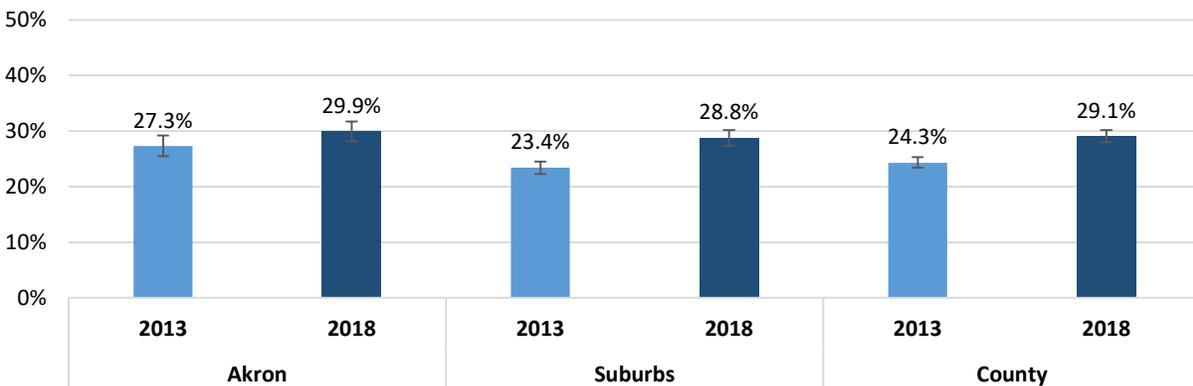
In Summit County, students were asked when the last time was that they saw a dentist for a check-up, exam, teeth cleaning, or other dental work. The graph below shows those students who reported having seen a dentist for a routine check-up during the past 12 months. In 2018, the prevalence for having seen a dentist for a routine check-up during the past 12 months was significantly lower among students in Akron (62.1%) than for students in the suburbs (77.8%). The prevalence of having seen a dentist for a routine check-up during the past 12 months also significantly increased in the suburbs from 2013 to 2018 (74.2% vs. 77.8%).

**Saw a dentist for a routine check-up  
By region, 2013 vs. 2018**



In Summit County, students were asked when the last time was that they saw a doctor, nurse, therapist, social worker, or counselor for a mental health issue. The graph below shows those students who reported having seen a doctor, nurse, therapist, social worker, or counselor for a mental health issue during the past 12 months. The prevalence of having been seen for a mental health issue during the past 12 months significantly increased in the suburbs from 2013 to 2018 (23.4% vs. 28.8%).

**Saw a doctor, nurse, therapist, social worker or counselor for  
mental health issue  
By region, 2013 vs. 2018**



Demographics

Obtained eight or more hours of sleep on an average school night			
Category	%	CI	
<b>Gender</b>			
Female	17.5	16.4	- 18.7
Male	21.9	20.4	- 23.5
<b>Race/Ethnicity</b>			
White	18.9	17.8	- 20.2
Black	21.6	19.7	- 23.6
Asian	25.8	21.7	- 30.3
Hispanic	22.2	18.1	- 26.9
Other	19.2	16.1	- 22.6
<b>Grade</b>			
9th	27.0	25.0	- 29.0
10th	21.1	19.4	- 23.0
11th	16.4	14.8	- 18.1
12th	14.4	12.7	- 16.4
<b>Total</b>	<b>19.6</b>	<b>18.7</b>	<b>- 20.7</b>

Ever diagnosed with asthma			
Category	%	CI	
<b>Gender</b>			
Female	20.8	19.5	- 22.1
Male	19.9	18.6	- 21.2
<b>Race/Ethnicity</b>			
White	19.2	18.1	- 20.3
Black	25.7	23.4	- 28.1
Asian	7.9	5.7	- 11.1
Hispanic	22.9	18.3	- 28.3
Other	26.1	22.9	- 29.6
<b>Grade</b>			
9th	19.2	17.5	- 21.0
10th	21.3	19.5	- 23.3
11th	20.0	18.3	- 21.9
12th	21.0	19.1	- 23.0
<b>Total</b>	<b>20.4</b>	<b>19.5</b>	<b>- 21.4</b>

In Summit County, 19.6% of students got an average of eight or more hours of sleep on an average school night. The prevalence of eight or more hours of sleep was higher among male (21.9%) than female (17.5%) students. The prevalence of eight or more hours of sleep was higher among Asian (25.8%) students than White (18.9%) students. The prevalence of eight or more hours of sleep was higher among 9<sup>th</sup> grade (27.0%) students than 10<sup>th</sup>, 11<sup>th</sup> and 12<sup>th</sup> grade (21.1%, 16.4%, 14.4%) students, respectively. The prevalence of eight or more hours of sleep was higher among 10<sup>th</sup> grade (21.1%) students than 11<sup>th</sup> and 12<sup>th</sup> grade (16.4%, 14.4%) students respectively.

In Summit County, 20.4% of students had ever been told by a doctor or nurse that they had asthma. The prevalence of having been told they had asthma by a doctor or nurse was lower among Asian (7.9%) than among White, Black, Hispanic, or Other/Multiple (19.2%, 25.7%, 22.9%, 26.1%) students, respectively. The prevalence of having been told by a doctor or nurse that they had asthma was higher among Black (25.7%) and Other/Multiple (26.1%) students than White (19.2%) students.

2018 SUMMIT COUNTY HS YRBS: Other Health Topics

Ever been to the emergency room or urgent care center because of asthma			
Category	%	CI	
<b>Gender</b>			
Female	21.8	19.3	- 24.6
Male	20.0	17.6	- 22.6
<b>Race/Ethnicity</b>			
White	16.8	14.9	- 18.9
Black	31.9	27.6	- 36.4
Asian	14.3	9.2	- 21.6
Hispanic	38.1	27.2	- 50.3
Other	27.7	22.7	- 33.3
<b>Grade</b>			
9th	24.1	20.6	- 28.1
10th	19.4	16.2	- 23.1
11th	19.7	16.5	- 23.4
12th	19.2	15.4	- 23.7
<b>Total</b>	<b>21.0</b>	<b>19.1</b>	<b>- 22.9</b>

In Summit County, 21.0% of students with asthma had been to the emergency room or urgent care center one or more times because of their asthma during the past 12 months prior to the survey. The prevalence of students with asthma having gone to the emergency room or urgent care center was lower among White (16.1%) or Asian (14.3%) students than among Black, Hispanic and Other/Multiple (31.9%, 38.1%, 27.7%) students, respectively.

Missed school because they were sick			
Category	%	CI	
<b>Gender</b>			
Female	49.2	47.6	- 50.9
Male	39.7	38.0	- 41.4
<b>Race/Ethnicity</b>			
White	44.6	43.2	- 46.1
Black	44.3	41.6	- 46.9
Asian	31.5	27.1	- 36.4
Hispanic	54.0	48.0	- 59.9
Other	51.7	47.7	- 55.8
<b>Grade</b>			
9th	41.1	38.2	- 44.0
10th	44.0	41.7	- 46.3
11th	46.0	43.5	- 48.6
12th	47.3	44.3	- 50.3
<b>Total</b>	<b>44.7</b>	<b>43.4</b>	<b>- 45.9</b>

In Summit County, 44.7% of students did not go to school on one or more days in the 30 days prior to the survey because they were sick. The prevalence of not going to school because they were sick was higher among female (49.2%) than male (39.7%) students. The prevalence of not going to school because they were sick was higher among Hispanic and Other/Multiple (54.0%, 51.7%) students, respectively, than among White (44.6%) or Asian (31.5%) students.

2018 SUMMIT COUNTY HS YRBS: Other Health Topics

Saw a doctor or nurse for routine check-up			
Category	%	CI	
<b>Gender</b>			
Female	70.9	69.3	- 72.5
Male	69.0	67.3	- 70.6
<b>Race/Ethnicity</b>			
White	73.3	72.0	- 74.7
Black	59.2	56.1	- 62.2
Asian	55.1	50.7	- 59.4
Hispanic	59.9	53.5	- 66.0
Other	67.4	63.6	- 71.0
<b>Grade</b>			
9th	69.3	66.7	- 71.8
10th	70.0	67.5	- 72.3
11th	71.5	69.1	- 73.8
12th	69.5	66.4	- 72.5
<b>Total</b>	<b>70.0</b>	<b>68.7</b>	<b>- 71.2</b>

Saw a dentist for routine check-up			
Category	%	CI	
<b>Gender</b>			
Female	74.6	73.2	- 76.1
Male	72.8	71.3	- 74.3
<b>Race/Ethnicity</b>			
White	78.6	77.3	- 79.9
Black	59.2	56.8	- 61.6
Asian	49.6	44.2	- 55.1
Hispanic	57.0	50.4	- 63.4
Other	64.0	59.8	- 68.1
<b>Grade</b>			
9th	75.8	73.2	- 78.2
10th	75.9	73.5	- 78.1
11th	75.2	72.7	- 77.6
12th	69.5	66.5	- 72.3
<b>Total</b>	<b>73.8</b>	<b>72.6</b>	<b>- 74.9</b>

In Summit County, 70.0% of students had seen a doctor or nurse for a check-up or physical exam one or more times when they were not sick or injured in the 12 months prior to the survey. The prevalence of having seen a doctor or nurse for a check-up or physical exam when they were not sick or injured was higher among White (73.3%) students than Asian and Hispanic (55.1%, 59.9%) students, respectively. The prevalence of having seen a doctor or nurse for a check-up or physical exam when they were not sick or injured was higher among Other/Multiple (67.4%) students than among Asian (55.1%) students. The prevalence of having seen a doctor or nurse for a check-up or physical exam when they were not sick or injured was higher among 11<sup>th</sup> grade (71.5%) students than 9<sup>th</sup> grade (69.3%) students, respectively.

In Summit County, 73.8% of students had seen a dentist for a check-up, exam, teeth cleaning, or other routine dental work (not including emergencies) one or more times, in the 12 months prior to the survey. The prevalence of having seen a dentist for routine dental work was higher among White (78.6%) students than Black, Asian, Hispanic, and Other/Multiple (59.2%, 49.6%, 57.0%, 64.0%) students, respectively. The prevalence of having seen a dentist for routine dental work was higher among Black and Other/Multiple (59.2%, 64.0%) students than among Asian (49.6%) students. The prevalence of having seen a dentist for routine dental work was higher among 10<sup>th</sup> grade (75.9%) students than 12<sup>th</sup> grade (69.5%) students, respectively.



2018 SUMMIT COUNTY HS YRBS: Other Health Topics

<b>Saw a doctor, nurse, therapist, social worker, or counselor for a mental health issue</b>			
<b>Category</b>	<b>%</b>	<b>CI</b>	
<b>Gender</b>			
Female	32.5	31.1	- 34.0
Male	25.3	23.8	- 26.8
<b>Race/Ethnicity</b>			
White	28.8	27.5	- 30.2
Black	30.0	27.8	- 32.3
Asian	17.6	14.3	- 21.5
Hispanic	34.2	29.1	- 39.7
Other	35.1	31.4	- 39.1
<b>Grade</b>			
9th	30.4	28.1	- 32.9
10th	28.4	26.2	- 30.7
11th	30.2	28.0	- 32.4
12th	27.3	25.2	- 29.4
<b>Total</b>	<b>29.1</b>	<b>28.0</b>	<b>- 30.2</b>

<b>Received appropriate help when student felt sad, empty, hopeless, angry or anxious</b>			
<b>Category</b>	<b>%</b>	<b>CI</b>	
<b>Gender</b>			
Female	50.3	48.6	- 52.0
Male	44.6	42.6	- 46.6
<b>Race/Ethnicity</b>			
White	48.9	47.3	- 50.6
Black	43.8	40.8	- 46.9
Asian	50.9	45.4	- 56.3
Hispanic	48.9	42.2	- 55.7
Other	46.1	41.5	- 50.8
<b>Grade</b>			
9th	49.1	46.1	- 52.1
10th	47.8	45.2	- 50.4
11th	48.5	45.9	- 51.1
12th	46.7	43.9	- 49.5
<b>Total</b>	<b>48.0</b>	<b>46.6</b>	<b>- 49.3</b>

In Summit County, 29.1% of students had seen a doctor, nurse, therapist, social worker, or counselor for a mental health issue during the 12 months prior to the survey. The prevalence of having seen a doctor, nurse, therapist, social worker, or counselor for a mental health issue was higher among female (32.5%) than male (25.3%) students. The prevalence of having seen a doctor, nurse, therapist, social worker, or counselor for a mental health issue was higher among Black, Hispanic and Other/Multiple (30.0%, 34.2%, 35.1%) students than White and Asian (28.8%, 17.6%) students, respectively. The prevalence of having seen a doctor, nurse, therapist, social worker, or counselor for a mental health issue was higher among 9<sup>th</sup> grade (30.4%) students than 10<sup>th</sup> and 12<sup>th</sup> grade (28.4%, 27.3%) students, respectively.

In Summit County, 48.0% of students reported that they were sometimes, most of the time, or always able to get the help they needed when feeling sad, empty, hopeless, angry, or anxious. The prevalence of being able to get the help they needed was higher among female (50.3%) than male (44.6%) students. The prevalence of being able to get the help they needed was higher among White (48.9%) students than Black (43.8%) students.

## 2018 SUMMIT COUNTY HS YRBS: Other Health Topics

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- <sup>i</sup> 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.
- <sup>ii</sup> Wolson, A., Carskadon, M. 1998. Sleep schedules and daytime functioning in adolescents. *Soc Res Child Dev*
- <sup>iii</sup> Smith, C., Lapp, L. 1991. Increases in the number of REMS and REM density in humans following an intensive learning period. *Sleep*. 14:325-330.
- <sup>iv</sup> Noland, H., Price, J., Dake, J., Telljohann, S. 2009. Adolescents' sleep behaviors and perceptions of sleep. *Journal of School Health*. 79(5):224-230.

## Section 16: Sexual Minority Youth

On the 2018 Summit County High School Youth Risk Behavior Survey, students were asked about their sexual orientation (heterosexual/straight, gay, lesbian, bisexual, or unsure) and whether they describe themselves as transgender. For the following analysis, students who reported that they were lesbian, gay, or bisexual and/or transgender were categorized as sexual minority youth or LGBT. Students categorized as “unsure” were those who did not describe themselves as transgender but reported that they were unsure about their sexual orientation. Remaining students who answered these questions and reported being heterosexual and cisgender were categorized as non-sexual minority youth. Sexual minority youth are at increased risk for experiencing discrimination, violence, and report significantly higher rates of bullying, negative mental health experiences and substance use than their non-sexual minority peers<sup>i,ii,iii</sup>.

In Summit County, 12.3% of students identified as LGBT or sexual minority youth. Regionally, students in Akron were significantly more likely to identify as LGBT (14.9%) and unsure (5.7%) than students in the suburbs (11.4% and 2.8%, respectively).

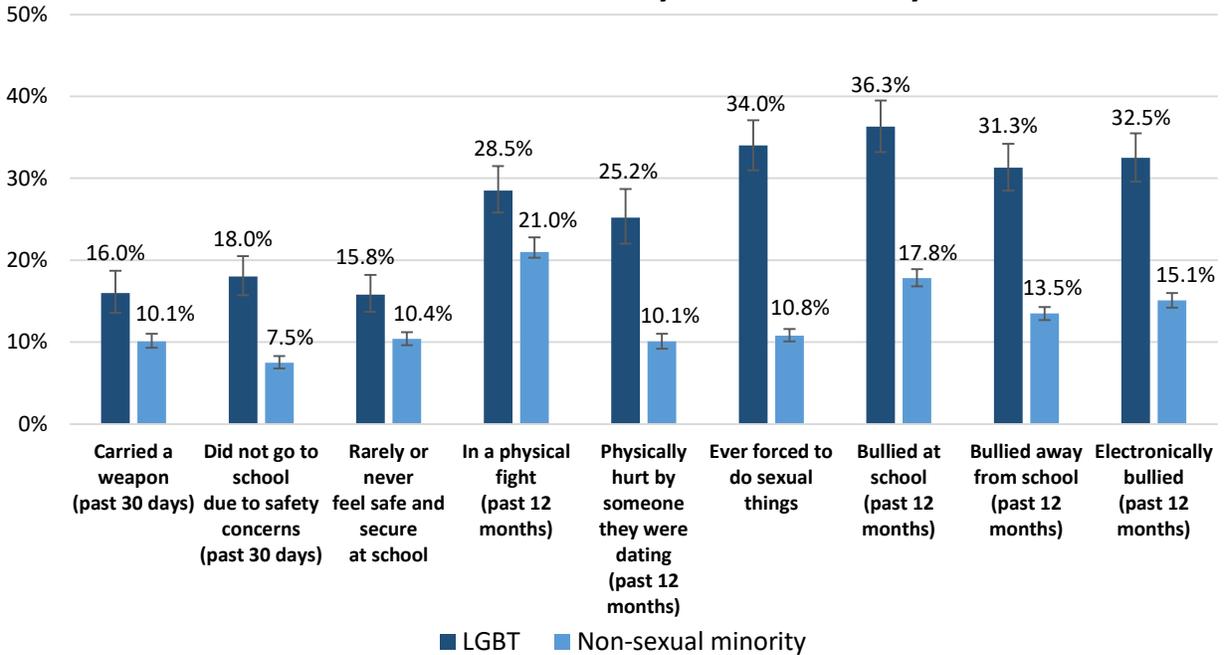
<b>Sexual Minority Status</b>			
	<b>Non-Sexual Minority</b>	<b>LGBT</b>	<b>Unsure</b>
	% Population N	% Population N	% Population N
Summit County	<b>84.1%</b> 17150	<b>12.3%</b> 2512	<b>3.6%</b> 730
<b>Region</b>			
Akron	<b>79.4%</b> 4418	<b>14.9%</b> 827	<b>5.7%</b> 318
Suburbs	<b>85.9%</b> 12732	<b>11.4%</b> 1685	<b>2.8%</b> 411

## Violence-Related Risk Behaviors by Sexual Minority Status

Non-sexual minority youth % (Confidence Interval) Population N	Sexual minority youth % (Confidence Interval) Population N
<b>Carried a weapon</b> (Such as a gun, knife, or club; one or more times during the past 30 days before the survey.)	
<b>10.1%</b> (9.3 - 11.0) 1730	<b>16.0%</b> (13.6 - 18.7) 400
<b>Did not go to school because they felt unsafe at or on the way to or from school</b> (One or more times during the 30 days before the survey.)	
<b>7.5%</b> (6.8 - 8.3) 1284	<b>18.0%</b> (15.7 - 20.5) 449
<b>Rarely or never feel safe and secure at school</b>	
<b>10.4%</b> (9.6 - 11.2) 1607	<b>15.8%</b> (13.7 - 18.2) 361
<b>In a physical fight</b> (One or more times during the 12 months before the survey.)	
<b>21.5%</b> (20.3 - 22.8) 3673	<b>28.5%</b> (25.8 - 31.5) 711
<b>Physically hurt on purpose by someone they were dating or going out with</b> (Such as being hit, slammed into something, or injured with an object or weapon; one or more times during the 12 months before the survey, among students dating.)	
<b>10.1%</b> (9.2 - 11.0) 1101	<b>25.2%</b> (22.0 - 28.7) 420
<b>Ever forced to do sexual things</b> (Such as kissing, touching, or being physically forced to have sexual intercourse.)	
<b>10.8%</b> (10.1 - 11.6) 1835	<b>34.0%</b> (31.0 - 37.1) 837
<b>Ever bullied on school property</b> (During the past 12 months before the survey.)	
<b>17.8%</b> (16.8 - 18.9) 3033	<b>36.3%</b> (33.2 - 39.5) 903
<b>Ever bullied away from school property</b> (During the past 12 months before the survey)	
<b>13.5%</b> (12.7 - 14.3) 2295	<b>31.3%</b> (28.5 - 34.2) 777
<b>Ever electronically bullied</b> (Such as through email, chat rooms, instant messaging, websites, or text messaging; during the 12 months before the survey.)	
<b>15.1%</b> (14.2 - 16.0) 2562	<b>32.5%</b> (29.6 - 35.5) 805

Summit County students who identified as LGBT were significantly more likely than non-sexual minority students to report that they carried a weapon in the past 30 days, did not go to school because of safety concerns, rarely or never feel safe and secure at school, were in a physical fight, were physically hurt on purpose by someone they were dating, were ever forced to do sexual things, or were ever bullied in the past 12 months at school, away from school, or electronically.

## Violence-Related Behaviors by Sexual Minority Status

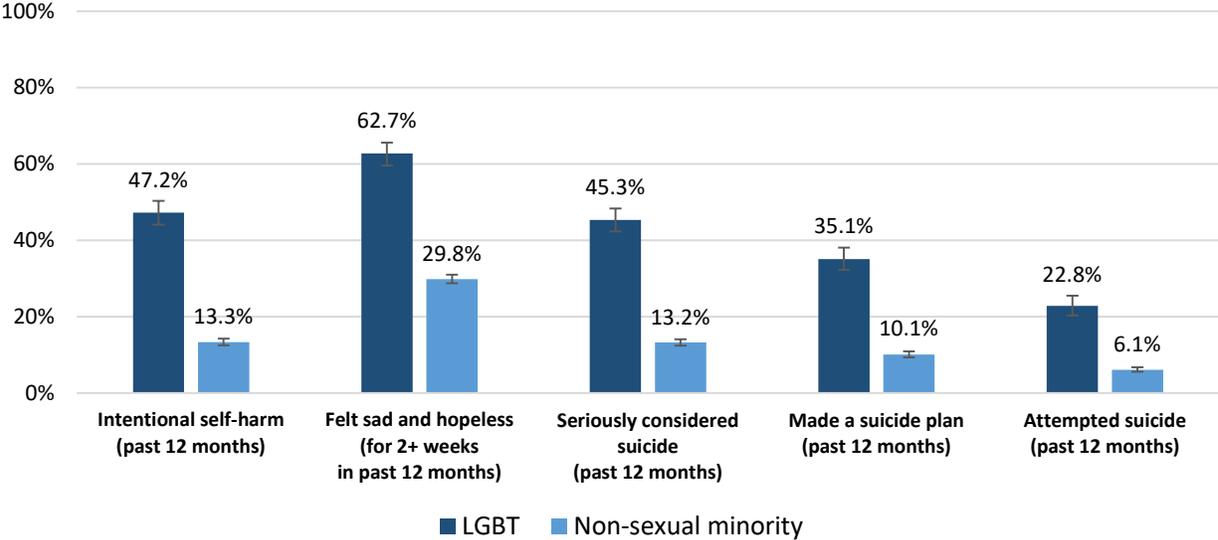


## Mental Health Risk Behaviors by Sexual Minority Status

Non-sexual minority youth % (Confidence Interval) Population N	Sexual minority youth % (Confidence Interval) Population N
<b>Hurt themselves without wanting to die</b> (Such as cutting or burning themselves, during the 12 months before the survey.)	
<b>13.3%</b> (12.5 - 14.2) 2242	<b>47.2%</b> (44.1 - 50.3) 1159
<b>Felt sad and hopeless</b> (Almost every day for two weeks or more that they stopped some usual activities during the 12 months before the survey.)	
<b>29.8%</b> (28.7 - 31.0) 5026	<b>62.7%</b> (59.6 - 65.6) 1550
<b>Seriously considered suicide</b> (During the 12 months before the survey.)	
<b>13.2%</b> (12.4 - 14.1) 2221	<b>45.3%</b> (42.3 - 48.3) 1114
<b>Made a plan about how they would attempt suicide</b> (During the 12 months before the survey.)	
<b>10.1%</b> (9.3 - 10.9) 1691	<b>35.1%</b> (32.2 - 38.1) 860
<b>Attempted suicide</b> (During the 12 months before the survey.)	
<b>6.1%</b> (5.6 - 6.7) 1028	<b>22.8%</b> (20.3 - 25.5) 560

Students who identified as LGBT or sexual minority youth were significantly more likely than students who were non-sexual minority youth to report that they had intentionally self-harmed, felt sad and hopeless for two or more weeks and stopped doing some usual activities, seriously considered suicide, made a suicide plan, or attempted suicide in the past 12 months.

### Mental Health Behaviors by Sexual Minority Status

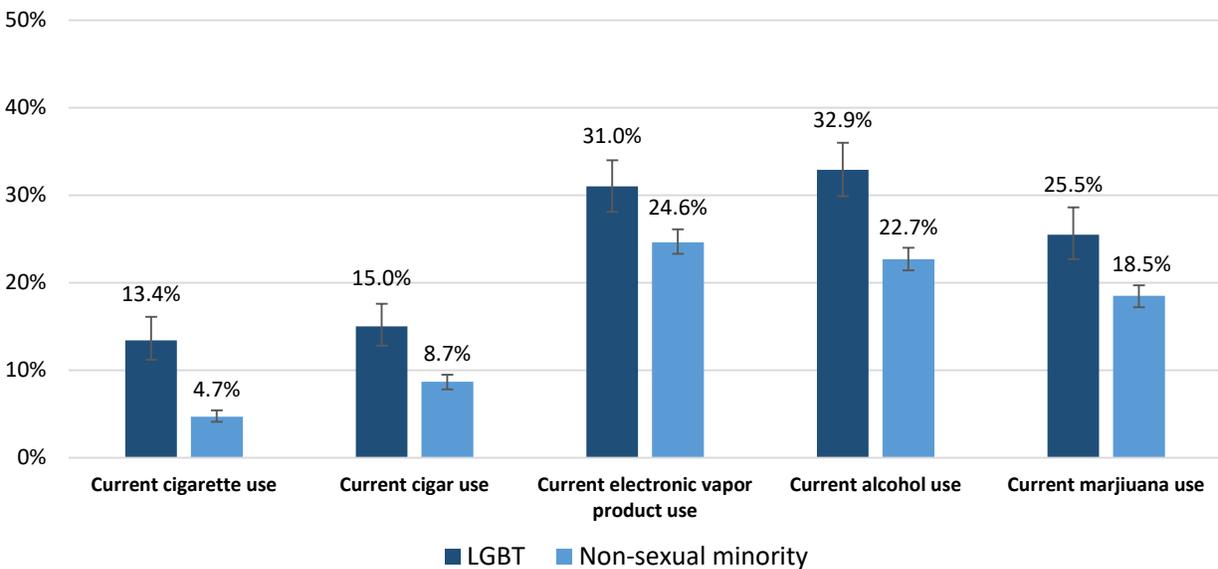


## Current Substance Use by Sexual Minority Status

Non-sexual minority youth % (Confidence Interval) Population N	Sexual minority youth % (Confidence Interval) Population N
<b>Current cigarette use</b> (Smoked cigarettes in the 30 days before the survey)	
<b>4.7%</b> (4.1 - 5.4) 789	<b>13.4%</b> (11.2 - 16.1) 332
<b>Current cigar use</b> (Smoked cigars in the 30 days before the survey)	
<b>8.7%</b> (7.8 - 9.5) 1433	<b>15.0%</b> (12.8 - 17.6) 367
<b>Current electronic vapor device use</b> (Used an electronic vapor product in the 30 days before the survey.)	
<b>24.6%</b> (23.3 - 26.1) 4121	<b>31.0%</b> (28.1 - 34.0) 755
<b>Current alcohol use</b> (Drank alcohol in the 30 days before the survey.)	
<b>22.7%</b> (21.4 - 24.0) 3757	<b>32.9%</b> (29.9 - 36.0) 792
<b>Current marijuana use</b> (Used marijuana in the 30 days before the survey.)	
<b>18.5%</b> (17.2 - 19.7) 3039	<b>25.5%</b> (22.7 - 28.6) 609

Students who identified as LGBT or sexual minority youth were significantly more likely to report current substance use behaviors (tobacco products, alcohol and marijuana) than students who did not identify as sexual minority youth.

## Current Substance Use (past 30 days) by Sexual Minority Status

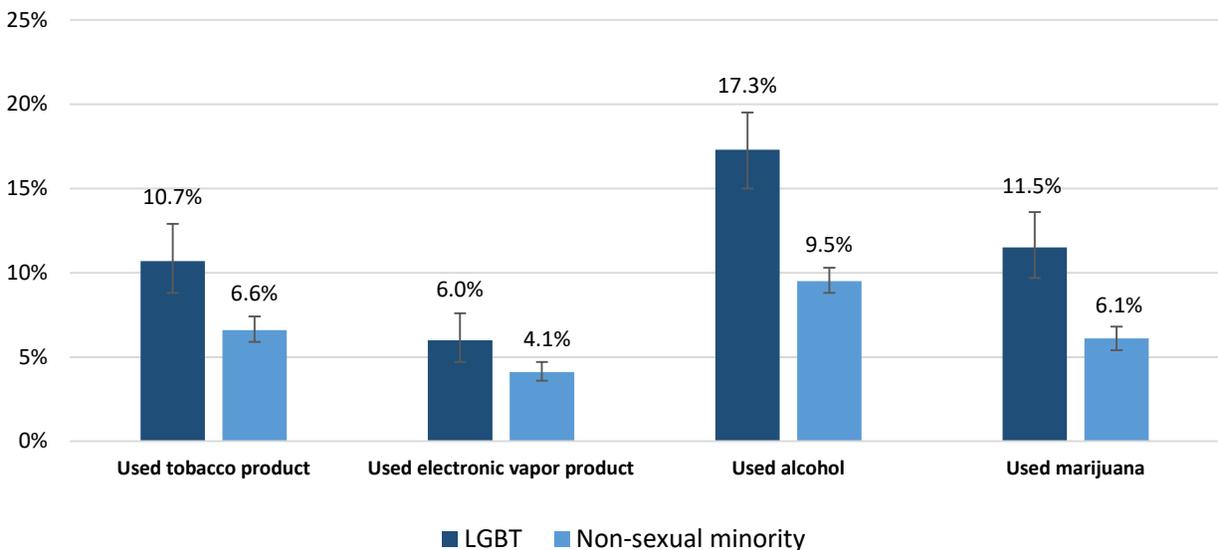


## Early Initiation to Substance Use by Sexual Minority Status

Non-sexual minority youth % (Confidence Interval) Population N	Sexual minority youth % (Confidence Interval) Population N
<b>Used tobacco product for the first time before age 13</b>	
<b>6.6%</b> (5.9 - 7.4) 1097	<b>10.7%</b> (8.8 - 12.9) 258
<b>Used electronic vapor product for the first time before age 13</b>	
<b>4.1%</b> (3.6 - 4.7) 688	<b>6.0%</b> (4.7 - 7.6) 146
<b>Drank alcohol for the first time before age 13</b>	
<b>9.5%</b> (8.8 - 10.3) 1569	<b>17.3%</b> (15.0 - 19.5) 418
<b>Used marijuana for the first time before age 13</b>	
<b>6.1%</b> (5.4 - 6.8) 1011	<b>11.5%</b> (9.7 - 13.6) 277

Students who identified as LGBT or sexual minority youth were significantly more likely to report that they had first used tobacco products, alcohol, and marijuana before the age of 13 years compared to non-sexual minority students. There was no significant difference in the prevalence of using an electronic vapor product before the age of 13 by sexual minority status.

## Substance Use before Age 13 by Sexual Minority Status

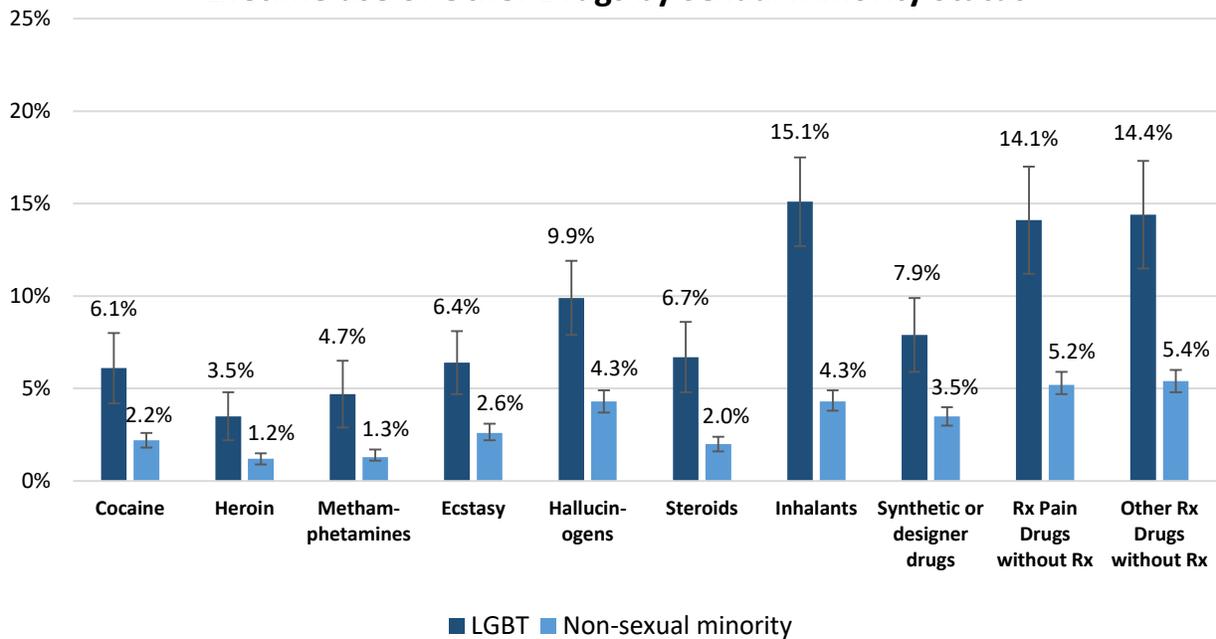


## Lifetime Use of Other Drugs by Sexual Minority Status

Non-sexual minority youth % (Confidence Interval) Population N	Sexual minority youth % (Confidence Interval) Population N
<b>Ever used cocaine</b>	
<b>2.2%</b> (1.8 - 2.6) 360	<b>6.1%</b> (4.6 - 8.0) 149
<b>Ever used heroin</b>	
<b>1.2%</b> (0.9 - 1.5) 199	<b>3.5%</b> (2.6 - 4.8) 86
<b>Ever used methamphetamines</b>	
<b>1.3%</b> (1.1 - 1.7) 221	<b>4.7%</b> (3.4 - 6.5) 114
<b>Ever used ecstasy</b>	
<b>2.6%</b> (2.2 - 3.1) 429	<b>6.4%</b> (5.0 - 8.1) 155
<b>Ever used hallucinogenic drugs</b> (Such as LSD, acid, PCP, ecstasy, angel dust, mescaline, or mushrooms.)	
<b>4.3%</b> (3.7 - 4.9) 705	<b>9.9%</b> (8.1 - 11.9) 240
<b>Ever used steroids</b> (Pills or shots without a doctor's prescription.)	
<b>2.0%</b> (1.6 - 2.4) 326	<b>6.7%</b> (5.2 - 8.6) 162
<b>Ever used inhalants</b> (Sniffed glue, breathed the contents of aerosol spray cans, or inhaled any paints or sprays to get high.)	
<b>4.3%</b> (3.8 - 4.9) 714	<b>15.1%</b> (13.1 - 17.5) 368
<b>Ever used synthetic or designer drugs</b> (Including synthetic marijuana, K2, Spice, fake weed, King Kong, Yucatan Fire, Skunk, Moon Rocks, herbal incense, or bath salts.)	
<b>3.5%</b> (3.0 - 4.0) 577	<b>7.9%</b> (6.3 - 9.9) 191
<b>Ever used prescription pain medication</b> (Without a prescription or differently than prescribed.)	
<b>5.2%</b> (4.7 - 5.9) 850	<b>14.1%</b> (11.7 - 17.0) 334
<b>Ever used other prescription drugs</b> (Without a prescription or differently than prescribed.)	
<b>5.4%</b> (4.8 - 6.0) 873	<b>14.4%</b> (12.0 - 17.3) 341

Sexual minority youth in Summit County were significantly more likely to report ever using illicit drugs and prescription medications without a doctor's prescription than their non-sexual minority peers.

## Lifetime use of Other Drugs by Sexual Minority Status

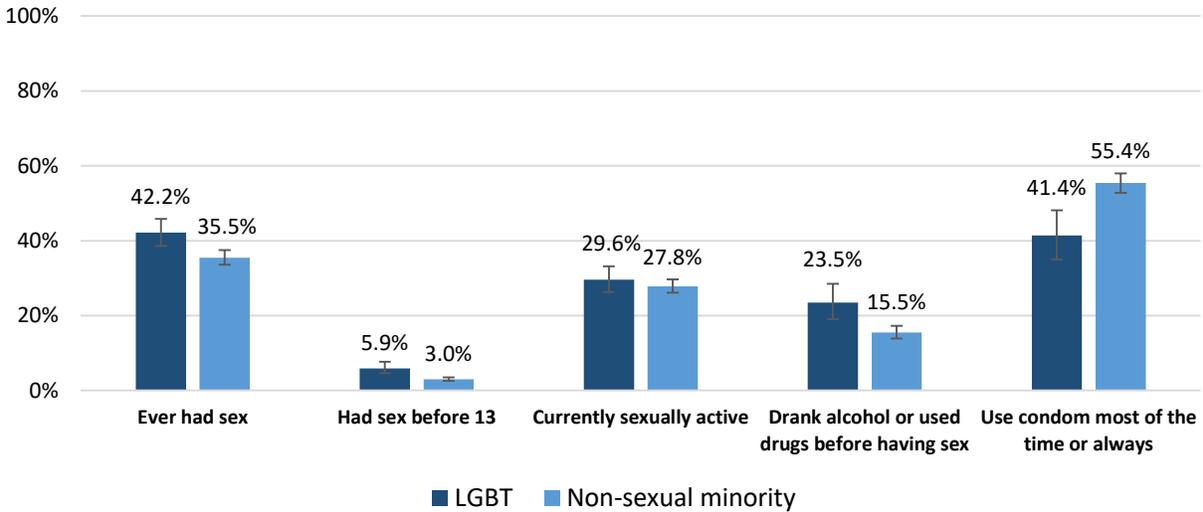


## Sexual Risk Behaviors by Sexual Minority Status

Non-sexual minority youth % (Confidence Interval) Population N	Sexual minority youth % (Confidence Interval) Population N
<b>Ever had sexual intercourse</b> (Had sexual intercourse 1 or more times during their life.)	
<b>35.5%</b> (33.6 - 37.5) 5793	<b>42.2%</b> (38.6 - 45.8) 999
<b>Had sexual intercourse before age 13</b>	
<b>3.0%</b> (2.6 - 3.5) 478	<b>5.9%</b> (4.6 - 7.7) 135
<b>Currently sexually active</b> (Had sexual intercourse with at least 1 person during the 3 months before the survey.)	
<b>27.8%</b> (26.1 - 29.7) 4425	<b>29.6%</b> (26.3 - 33.2) 676
<b>Drank alcohol or used drugs before having sexual intercourse</b> (Among students who were currently sexually active.)	
<b>15.5%</b> (13.9 - 17.3) 869	<b>23.5%</b> (19.1 - 28.5) 230
<b>Condom use</b> (Used a condom most of the time or always during the past 3 months among currently sexually active students, excluding females who have only had sexual contact with females.)	
<b>55.4%</b> (52.8 - 58.0) 2459	<b>41.4%</b> (35.0 - 48.1) 257

Sexual minority youth were significantly more likely than non-sexual minority youth to report that they ever had sexual intercourse, had sexual intercourse before age 13, and drank alcohol or used drugs before having sexual intercourse. There was no significant difference in the likelihood of being currently sexually active between LGBT students and their non-sexual minority peers. Sexual minority students (excluding females who had only had sexual contact with females) were significantly less likely to report that they used a condom most of the time or always.

### Sexual Risk Behaviors by Sexual Minority Status



### Protective Factors by Sexual Minority Youth Status

As noted in Section 14: Positive Youth Development in this report, protective factors are associated with reduced risk behavior engagement in a variety of domains including violence, substance use, mental health, and sexual risk behaviors. Students who identify as LGBT (60.0%) or unsure (55.8%) are significantly less likely to report having three or four of the following protective factors: earning high grades (A’s and B’s), having a parent who regularly talks to them about school, having one or more trusted adults at school, and having one or more trusted friends, compared to non-sexual minority youth (66.7%).

Non-sexual minority youth % (Confidence Interval) Population N	Sexual minority youth % (Confidence Interval) Population N
<b>3 or 4 of Protective Factors</b> (high grades, parent talks to them about school, trusted adult, trusted friend)	
<b>66.7%</b> (65.2 - 68.1) 10302	<b>60%</b> (56.8 - 63.1) 1372

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<sup>i</sup> Zaza S, Kann L, Barrios LC. Lesbian, Gay, and Bisexual Adolescents: Population Estimate and Prevalence of Health Behaviors. *JAMA* 2016.

<sup>ii</sup> Reisner SL, Greytak EA, Parsons JT, Ybarra ML. Gender minority social stress in adolescence: Disparities in adolescent bullying and substance use by gender identity. *J Sex Res*. 2015;52(3):243-256.

<sup>iii</sup> Johns MM, Lowry R, Andrzejewski J, et al. Transgender Identity and Experiences of Violence Victimization, Substance Use, Suicide Risk, and Sexual Risk Behaviors Among High School Students — 19 States and Large Urban School Districts, 2017. *MMWR Morb Mortal Wkly Rep* 2019;68:67–71.

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

Variable	Overall		Akron		Suburbs		Female		Male	
	%	Pop. Est.	%	Pop. Est.	%	Pop. Est.	%	Pop. Est.	%	Pop. Est.
<b>Rarely or never wear seatbelt</b>	7.5%	1521	12.9%	721	5.4%	800	6.5%	671	8.4%	839
<b>Rode in a car with a driver who had been drinking alcohol</b> (past 30 days.)	14.4%	2942	17.4%	968	13.3%	1974	14.8%	1533	14.0%	1390
<b>Drove after drinking alcohol</b> (past 30 days, among students who drove.)	3.0%	590	6.5%	191	4.7%	399	3.7%	209	6.6%	375
<b>Texted or emailed while driving</b> (past 30 days, among students who drove.)	36.7%	3858	27.0%	705	39.8%	3153	36.8%	1931	36.5%	1913
<b>Had a concussion from playing sports or physical activity</b> (past 12 months.)	12.7%	2580	13.1%	726	12.5%	1854	11.3%	1174	14.1%	1400
<b>Carried a weapon</b> (past 30 days.)	11.0%	2240	12.1%	672	10.6%	1568	5.5%	567	16.7%	1656
<b>Did not go to school because of safety concerns</b> (past 12 months.)	9.0%	1827	12.9%	715	7.5%	1111	10.4%	1077	7.4%	735
<b>In a physical fight</b> (past 12 months.)	22.4%	4545	31.8%	1763	18.8%	2782	16.8%	1744	28.2%	2788
<b>Physically hurt on purpose by someone they were dating</b> (past 12 months.)	12.3%	1586	15.7%	565	10.9%	1021	14.1%	945	10.2%	633
<b>Forced to do sexual things</b>	13.9%	2794	12.7%	696	14.3%	2098	22.1%	2265	5.3%	516
<b>Could get and be ready to fire a loaded gun within 24 hours</b>	43.2%	8629	38.9%	2104	44.8%	6525	33.0%	3354	53.7%	5239
<b>Bullied on school property</b> (past 12 months.)	20.4%	4127	15.8%	873	22.1%	3254	24.5%	2533	15.9%	1569
<b>Bullied away from school</b> (past 12 months.)	15.9%	3215	11.3%	620	17.6%	2495	20.3%	2095	11.2%	1101
<b>Electronically bullied</b> (past 12 months.)	17.3%	3505	12.9%	709	19.0%	2796	22.6%	2326	11.8%	1161
<b>Never or rarely feel safe at school</b>	11.2%	2071	16.0%	750	9.6%	1321	10.0%	962	12.4%	1089
<b>Intentionally self-harmed</b> (past 12 months.)	18.0%	3612	17.9%	972	18.0%	2640	25.1%	2565	10.4%	1018
<b>Felt so sad for 2+ weeks that they stopped usual activities</b> (past 12 months.)	34.4%	6907	35.4%	1919	34.1%	4988	45.0%	4613	23.2	2254
<b>Seriously considered suicide</b> (past 12 months.)	17.7%	3543	18.7%	1010	17.3%	2532	23.1%	2355	11.9%	1159
<b>Made a suicide plan</b> (past 12 months.)	13.6%	2701	13.8%	740	13.5%	1960	17.2%	1747	9.6%	928
<b>Attempted suicide</b> (past 12 months.)	8.4%	1675	9.6%	517	7.9%	1157	10.0%	1021	6.5%	632
<b>Used a tobacco product before the age of 13 years</b>	7.1%	1405	8.9%	466	6.5%	939	5.7%	572	8.6%	818
<b>Current cigarette use</b> (smoked cigarettes in past 30 days.)	5.8%	1163	5.7%	306	5.9%	857	5.9%	603	5.7%	547
<b>Current smokeless tobacco use</b> (used smokeless tobacco in past 30 days.)	2.8%	556	1.7%	93	3.2%	463	1.1%	115	4.5%	431
<b>Current cigar use</b> (smoked cigars in past 30 days.)	9.4%	1860	12.3%	639	8.4%	1221	8.9%	903	9.9%	942
<b>Used electronic vapor product before age of 13 years</b>	4.4%	870	4.4%	233	4.4%	637	3.7%	376	5.0%	486
<b>Current electronic vapor product</b> (used electronic vapor product in past 30 days.)	25.0%	4986	15.4%	819	28.6%	4167	25.6%	2615	24.4%	2345
<b>Parents think it is very wrong for student to use tobacco</b>	74.1%	13883	71.1%	3386	75.1%	10497	76.1%	7413	72.0%	6434
<b>Current tobacco use</b> (Used tobacco product in the past 30 days.)	27.6%	5387	21.6%	1108	29.7%	4279	28.4%	2851	26.6%	2511
<b>Drank alcohol before the age of 13</b>	10.5%	2061	11.6%	611	10.1%	1450	9.4%	952	11.6%	1101
<b>Current alcohol use</b> (drank alcohol in past 30 days.)	23.8%	4685	19.7%	1036	25.3%	3649	25.9%	2624	21.5%	2040
<b>Binge drank</b> (4+ drinks for females or 5+ drinks for males, in a row, in past 30 days.)	11.4%	2248	9.1%	480	12.2%	1769	12.0%	1224	10.6%	1013
<b>Someone usually gave them alcohol</b> (among current alcohol users, in past 30 days.)	42.9%	1884	40.8%	386	43.5%	1499	48.0%	1180	36.4%	696
<b>Attended a party where parents permitted underage alcohol use</b> (past 30 days.)	17.3%	3444	14.2%	751	18.5%	2694	19.4%	1976	15.2%	1456
<b>Parents think it is very wrong for student to drink alcohol</b>	51.3%	9604	55.8%	2646	49.8%	6957	52.1%	5076	50.5%	4505

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

Variable	Overall		Akron		Suburbs		Female		Male	
	%	Pop. Est.	%	Pop. Est.	%	Pop. Est.	%	Pop. Est.	%	Pop. Est.
<b>Ever used marijuana</b>	32.2%	6357	38.8%	2036	29.8%	4321	33.4%	3387	30.9%	2941
<b>Used marijuana before the age of 13 years</b>	6.8%	1337	9.9%	518	5.7%	819	5.5%	560	8.0%	763
<b>Current marijuana use</b> (used marijuana in the past 30 days.)	19.2%	3767	23.9%	1233	17.6%	2534	19.3%	1944	19.1%	1805
<b>Usually smoked marijuana</b> (among users, in the past 30 days.)	76.0%	3113	85.3%	1155	71.4%	1957	78.8%	1649	73.3%	1454
<b>Parents think it is very wrong for student to use marijuana</b>	66.5%	12453	58.4%	2782	69.3%	9671	66.7%	6495	66.5%	5925
<b>Ever used cocaine</b>	2.7%	538	2.7%	142	2.7%	395	2.3%	236	3.0%	290
<b>Ever used heroin</b>	1.6%	312	2.0%	103	1.4%	209	0.9%	88	2.2%	211
<b>Ever used methamphetamines</b>	1.8%	363	2.1%	108	1.8%	255	1.4%	144	2.2%	207
<b>Ever used ecstasy</b>	3.1%	611	3.2%	165	3.1%	446	2.1%	214	4.0%	386
<b>Ever used hallucinogenic drugs</b>	5.0%	991	3.6%	189	5.5%	802	4.0%	404	6.0%	577
<b>Ever used steroids</b> (without a prescription or differently than prescribed)	2.7%	526	3.0%	154	2.6%	372	2.2%	223	3.1%	292
<b>Ever used inhalants</b>	5.8%	1144	5.4%	280	5.9%	863	6.0%	604	5.5%	523
<b>Ever used synthetic or designer drugs</b>	4.1%	797	4.4%	226	3.9%	572	3.7%	374	4.3%	412
<b>Ever used prescription pain medicine</b> (without a prescription or differently than prescribed)	6.4%	1230	6.7%	342	6.2%	888	6.9%	685	5.8%	535
<b>Ever used other prescription drugs</b> (without a prescription or differently than prescribed)	6.5%	1262	6.5%	331	6.5%	931	7.1%	709	5.8%	542
<b>Offered, sold or given illegal drugs on school property</b> (past 12 months.)	15.5%	3043	11.4%	588	17.0%	2456	13.9%	1405	17.2%	1627
<b>Attended school under the influence of alcohol or drugs</b> (past 12 months.)	11.1%	2180	13.3%	684	10.3%	1496	10.4%	1053	11.7%	1108
<b>Gambled money or personal items</b> (past 12 months.)	19.6%	3823	19.9%	1011	19.5%	2812	11.1%	1113	28.6%	2689
<b>Felt bad about gambling</b> (among current gamblers, in past 30 days)	5.2%	220	5.4%	61	5.1%	159	3.5%	49	5.9%	168
<b>Lied about gambling</b> (among current gamblers, in past 30 days)	4.7%	201	4.3%	49	4.9%	152	3.0%	41	5.5%	154
<b>Ever had sexual intercourse</b>	35.7%	6935	39.6%	2001	34.4%	4934	34.2%	3425	37.5%	3487
<b>Had sexual intercourse before the age of 13 years</b>	3.4%	630	5.7%	272	2.6%	358	2.0%	191	4.9%	431
<b>Currently sexually active</b> (Had sexual intercourse in the past 3 months.)	27.6%	5213	30.7%	1495	26.6%	3718	27.0%	2649	28.4%	2548
<b>Use a condom always or most of the time</b> (among currently sexually active.)	46.7%	2806	44.2%	659	56.8%	2148	49.3%	1311	57.4%	1488
<b>Used alcohol or drugs before last sexual intercourse</b> (among currently sexually active.)	16.8%	1131	16.8%	328	16.8%	802	17.1%	566	16.5%	560
<b>Ever been or gotten someone else pregnant</b>	2.3%	431	3.9%	191	1.7%	240	1.9%	186	2.6%	235
<b>Used hormonal method to prevent pregnancy</b>	30.7%	2055	27.2%	542	32.1%	1513	39.4%	1300	21.9%	740
<b>Taught about HIV/AIDS in school</b>	85.0%	15916	80.3%	3844	86.6%	12072	84.9%	8269	85.2%	7594
<b>Talked about HIV/AIDS with adults in family</b>	43.7%	8157	49.8%	2375	41.6%	5783	43.2%	4197	44.3%	3933
<b>Overweight</b> (BMI >85 <sup>th</sup> percentile and <95 <sup>th</sup> percentile for age and sex.)	17.0%	3112	18.3%	866	16.5%	2246	18.1%	1679	15.8%	1433
<b>Obese</b> (Having a BMI of >95 <sup>th</sup> percentile for age and sex.)	16.4%	3005	20.4%	964	15.0%	2041	14.5%	1345	18.3%	1660
<b>Described themselves as slightly or very overweight</b>	32.7%	6305	32.8%	1637	32.6%	4668	37.9%	3775	27.0%	2501
<b>Trying to lose weight</b>	45.7%	8826	44.2%	2209	46.2%	6617	57.6%	5749	32.8%	3043

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

Variable	Overall		Akron		Suburbs		Female		Male	
	%	Pop. Est.	%	Pop. Est.	%	Pop. Est.	%	Pop. Est.	%	Pop. Est.
<b>Ate five or more servings of fruits and vegetables per day</b> (past 7 days.)	13.8%	2678	14.6%	736	13.6%	1943	12.8%	1283	14.8%	1374
<b>Ate 2 or more servings of vegetables per day</b> (past 7 days.)	23.0%	4395	21.7%	1073	23.4%	3322	22.2%	2208	23.6%	2159
<b>Ate 2 or more servings of fruit per day</b> (past 7 days.)	23.8%	4594	22.2%	1109	24.4%	3485	22.9%	2289	24.7%	2280
<b>Drank soda or pop every day</b> (past 7 days.)	16.0%	3037	18.2%	890	15.2%	2147	12.6%	1239	19.7%	1782
<b>Drank a caffeine drink every day</b> (past 7 days.)	11.0%	2079	8.3%	404	11.9%	1675	12.3%	1209	9.5%	860
<b>Drank milk every day</b> (past 7 days.)	30.2%	5718	26.3%	1278	31.6%	4440	21.0%	2064	40.2%	3634
<b>Ate fast food one or more times</b> (past 7 days.)	75.1%	14198	75.6%	3696	74.9%	10503	75.1%	7358	75.2%	6804
<b>Did not eat breakfast every day</b> (past 7 days.)	73.2%	13881	78.2%	3826	71.5%	10055	76.7%	7541	69.5%	6294
<b>Went hungry because not enough food at home</b> (past 30 days.)	15.0%	2844	18.5%	905	13.8%	1939	16.0%	1576	13.9%	1256
<b>Did not participate in at least 60 minutes of physical activity on any day</b> (past 7 days.)	17.9%	3392	25.9%	1263	15.2%	2129	20.6%	2018	15.0%	1359
<b>Physically active at least 60 minutes/day on 5 or more days</b> (past 7 days.)	41.8%	7910	34.2%	1670	44.5%	6240	33.9%	3316	50.4%	4561
<b>Watched TV 3+ hours/day</b> (on average school day.)	18.3%	3456	22.7%	1101	16.8%	2355	19.0%	1857	17.7%	1586
<b>Used computer for 3+ hours/day not for school work</b> (on average school day.)	49.7%	9334	52.3%	2517	48.8%	6817	45.0%	4392	54.7%	4903
<b>Played on at least one sports team</b> (past 12 months.)	58.9%	11032	48.3%	2320	62.6%	8712	56.7%	5517	61.4%	5479
<b>Get 8 or more hours of sleep per night</b>	19.6%	3676	21.6%	1040	19.0%	2636	17.5%	1708	21.9%	1955
<b>Have asthma</b>	20.4%	3736	23.7%	1110	19.3%	2626	20.8%	2000	19.9%	1712
<b>Went to ER because of asthma</b> (past 12 months, among students with asthma.)	21.0%	1124	27.2%	425	18.4%	698	21.8%	593	20.0%	520
<b>Missed school because of illness</b> (past 30 days.)	44.7%	8309	48.1%	2288	43.5%	6021	49.2%	4779	39.7%	3497
<b>Saw a doctor or nurse for a routine check-up</b> (past 12 months.)	70.0%	12978	59.0%	2786	73.8%	10191	70.9%	6874	69.0%	6059
<b>Saw a dentist for a routine check-up</b> (past 12 months.)	73.8%	13663	62.1%	2929	77.8%	10734	74.6%	7228	72.8%	6387
<b>Saw a professional for a mental health issue</b> (past 12 months.)	29.1%	5362	29.9%	1406	28.8%	3956	32.5%	3235	25.3%	2207
<b>Get the help they need when they feel sad, empty, or hopeless</b>	48.0%	6291	46.3%	1589	48.6%	4701	50.3%	3914	44.6%	2355
<b>Described their grades in school as A's and B's</b> (past 12 months.)	79.0%	15152	70.2%	3525	82.2%	11627	85.6%	8471	72.1%	6641
<b>Had at least one meal with family</b> (past 7 days.)	83.7%	15840	79.8%	3889	85.1%	11951	83.9%	8249	83.6%	7537
<b>Have one or more supportive adults</b>	78.7%	14458	75.0%	3501	79.9%	10957	79.6%	7648	77.5%	6754
<b>Have one or more trusted friends</b>	88.8%	16333	84.4%	3948	90.3%	12386	89.8%	8631	87.8%	8703
<b>Have one or more trusted teachers or adults at school</b>	64.8%	11955	60.4%	2843	66.3%	9112	65.4%	6302	64.1%	5606
<b>Parents talk with student almost every day about school</b>	53.1%	9766	49.2%	2301	54.4%	7465	52.8%	5078	53.4%	4654
<b>Spent at least one day in clubs or organizations outside of school</b> (past 7 days.)	52.7%	9681	45.8%	2135	55.0%	7546	57.5%	5514	47.2%	4120