

# Trends in the West Virginia Youth Risk Behavior Survey, 2017

## West Virginia high school students' wellness behaviors



Patricia Cahape Hammer, June 2018  
West Virginia Department of Education  
Office of Data Management and Information Systems

The results of the 2017 West Virginia Youth Risk Behavior Survey (YRBS), conducted in collaboration with the Centers for Disease Control and Prevention (CDC), have many stories to tell about our high school students' life experiences. The high school survey monitors six types of health-risk behaviors that contribute to the leading causes of death and disability among youth and adults. We look here at two of those categories related to student wellness: weight management/dietary behaviors and physical activity. Risk-taking behaviors, especially injury and violence, tobacco use, alcohol and other drug use, and sexual behaviors, are reported separately.<sup>1</sup> The survey results presented here reveal how wellness behaviors have changed over time and how they are reflected in the lives of students at various academic achievement levels.

The 2017 YRBS was completed by 1,563 students in randomly selected classrooms within 35 randomly selected public high schools in West Virginia during the spring of 2017. The school response rate was 100% and the student response rate was 78%. Students completed an anonymous, 91-item questionnaire. Survey procedures protected the privacy of students by allowing for anonymous and voluntary participation.

For detailed reports based on this survey produced by the CDC and the West Virginia Department of Education, visit [wvde.us/data-management-information-systems/data-analysis-research-and-program-evaluation/](http://wvde.us/data-management-information-systems/data-analysis-research-and-program-evaluation/) and click on the "CDC youth risk behavior surveillance" menu button.

### Wellness behaviors over time

Most of the trends reported here span the 18 years from 1999 to 2017, with exceptions as noted. The first category of wellness behaviors is reviewed in two sections: "Weight management" and "Dietary behaviors." These two sections are followed by "Physical activity."

#### Weight management

The percentage of W.Va. high school **students who were above normal weight increased:**

Students who were overweight (based on body mass index greater than or equal to the 85th percentile, but less than the 95th percentile)	14% (1999)	16% (2017)
Students who had obesity (BMI 95th percentile or higher)	13% (1999)	20% (2017)

But the percentage of **students who described themselves as slightly or very overweight decreased.**

	35% (1999)	31% (2017)
--	------------	------------

The percentage of <b>students who were trying to lose weight remained about the same.</b>	47% (1999)	45% (2017)
---	------------	------------

<sup>1</sup> See Hammer, P. C. (2018). West Virginia high school students' risk-taking behaviors: Trends in the West Virginia Youth Risk Behavior Survey, 2017. Charleston, WV: West Virginia Department of Education: Office of Data Management and Information Systems. Available at [wvde.us/data-management-information-systems/data-analysis-research-and-program-evaluation/](http://wvde.us/data-management-information-systems/data-analysis-research-and-program-evaluation/)

## Dietary behaviors

The **consumption of soda or pop** at least one time a day during the seven days before the survey **decreased greatly** among W.Va. high school students. 46% (2007) 26% (2017)

**Some dietary behaviors remained about the same**, including the percentage of students who

Ate fruit or drank 100% fruit juice at least once during the seven days before the survey.	58% (1999)	54% (2017)
Ate breakfast all seven days before the survey.	39% (2013)	35% (2017)

**Other dietary behaviors worsened.** The percentage of **students who did not eat or drink** any of the following items during the seven days before the survey increased:

Green salad	33% (1999)	43% (2017)
Potatoes (excluding French fries, fried potatoes and chips)	20% (1999)	30% (2017)
Carrots	53% (1999)	60% (2017)
Other vegetables	15% (1999)	23% (2017)
Milk	17% (2013)	23% (2017)

## Physical activity

Only **one sedentary behavior decreased** among W.Va. high school students: Fewer students in 2017 spent three or more hours on an average school day watching television. 32% (1999) 24% (2017)

**Participation in at least one community or school sports teams remained about the same:** About 50% of students during the 12 months before the survey, in both 1999 and 2017.

**Other physical activity behaviors worsened.**

Were physically active at least 60 minutes per day on at least five of the seven days before the survey	52% (2011)	44% (2017)
Attended physical education classes on all 5 days in an average week when they were in school	36% (1993)	27% (2017)
Played video or computer games or used a computer for non-school related activities three or more hours a day on an average school day.	28% (2007)	41% (2017)

### Screen time: A decade of change

While the percentage of W.Va. high school students who watched television for three or more hours a day on an average school day decreased from 32% to 24% during the years from 2007 to 2017, the percentage of students who devoted the same amount of time to playing video or computer games (or otherwise using a computer for non-school related purposes) increased from 28% to 41% during that same decade. These two comparisons show changes in which types of media students spend their time. They also show, when added together, an overall increase in the percentage of students engaged for three or more hours a day in "screen time," from 60% to 65%.

## Wellness behaviors by levels of academic achievement

In addition to reporting student behaviors over time, the YRBS also reports differences in wellness behaviors by students' self-reported level of academic performance. The results shown below – from the 2017 survey – indicate the percentage of students *within* (not *across*) each academic achievement level who indicated agreement with the item.

### Weight management

Among W.Va. high school students there was **no significant association between academic achievement and weight management**,\* including among students who

Were overweight (based on body mass index greater than or equal to the 85th percentile, but less than the 95 percentile)	16% (A's)	16% (B's)	16% (C's)	12% (D's/F's)
Had obesity (BMI 95th percentile or higher)	18% (A's)	19% (B's)	26% (C's)	20% (D's/F's)
Described themselves as slightly or very overweight	30% (A's)	30% (B's)	32% (C's)	28% (D's/F's)
Were trying to lose weight	48% (A's)	40% (B's)	44% (C's)	37% (D's/F's)

### Dietary behaviors

There were also **dietary behaviors that showed no significant association\* with academic achievement**, including students who, during the seven days before the survey, consumed the following foods at least one time a day:

Fruit or 100% fruit juice	53% (A's)	58% (B's)	52% (C's)	43% (D's/F's)
Vegetables, including green salad, potatoes (excluding French fries, fried potatoes and chips), carrots or other vegetables	57% (A's)	55% (B's)	51% (C's)	51% (D's/F's)
A glass or carton of milk	31% (A's)	32% (B's)	36% (C's)	38% (D's/F's)

There were **two dietary behaviors that did show a significant association\* with academic achievement**.

During the seven days before the survey, lower achieving students were

Less likely to have eaten breakfast on all seven days	37% (A's)	35% (B's)	30% (C's)	23% (D's/F's)
More likely to have consumed a can, bottle or glass of soda or pop, one or more times a day.	23% (A's)	25% (B's)	38% (C's)	42% (D's/F's)

## Physical activity

There were **no significant associations\* between academic achievement and physical activity or getting enough sleep** during the seven days leading up to the survey, as shown below.

---

Being physically active (that is, activity that increased heart beat and breathing hard) at least 60 minutes per day on all seven days before the survey	23% (A's)	24% (B's)	22% (C's)	26% (D's/F's)
Attending physical education classes at least one day before the survey	38% (A's)	42% (B's)	39% (C's)	42% (D's/F's)
Getting eight or more hours of sleep on school nights.	23% (A's)	21% (B's)	21% (C's)	20% (D's/F's)
<b>Higher rates of lower-achieving students tended to watch television three or more hours a day</b> than their higher-achieving peers.	22% (A's)	24% (B's)	30% (C's)	34% (D's/F's)
<b>Higher percentages of higher-achieving students tended to play on sports teams</b> compared with lower-achieving students.	56% (A's)	49% (B's)	42% (C's)	40% (D's/F's)

---

This publication was supported by Cooperative Agreement Number 1U87PS004130 from the Centers for Disease Control and Prevention. Its contents are solely the responsibility of the authors and do not necessarily represent the official views of the Centers for Disease Control and Prevention.