



Prevention Research Center for Healthy Neighborhoods  
at Case Western Reserve University

# 2014 Cuyahoga County Youth Risk Behavior Survey: Physical Activity

## Introduction

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The Prevention Research Center for Healthy Neighborhoods (PRCHN) at Case Western Reserve University has administered the Youth Risk Behavior Survey (YRBS) in school districts throughout Cuyahoga County since 2000. The YRBS is a cross-sectional tool developed by the Centers for Disease Control and Prevention (CDC) to track adolescent risk behavior over time. In spring of 2014, the PRCHN conducted the YRBS among 7<sup>th</sup> and 8<sup>th</sup> grade students in Cuyahoga County middle schools. A more detailed description of the methodology is available at our website, <http://prchn.org/yrbs.apxs>.

This brief report presents results from the 2014 Cuyahoga County Middle School Youth Risk Behavior Survey, with a particular focus on Physical Activity, including sedentary behaviors. In this brief report, we present:

- [Healthy People 2020](#)
- [Overall Prevalence](#)
- [Regional Prevalence](#)
- [Demographic Prevalence](#)
- [Trend Report](#)

Data for similar behaviors can be found at our website, <http://prchn.org/yrbs.aspx>.

## Physical Activity

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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>i,ii</sup> Over time, regular physical activity decreases the risk of high blood pressure, heart disease, diabetes, cancers, and premature death. The 2005 Dietary Guidelines for Americans recommends that youth engage in at least 60 minutes of physical activity on most, preferably all, days of the week.<sup>i</sup>

Television (TV) viewing, computer usage, and video/DVD usage are all considered sedentary behaviors. Child and adolescent TV viewing, in particular, is associated with childhood and adult obesity and youth who engage in less than two hours of TV viewing per day tend to be more active. Computer usage and video game playing are associated with physical inactivity among adolescents and young adults.

When students are watching television excessively, they are less likely to be spending time doing homework or reading, participating in after school activities, exercising frequently or being engaged in other intellectually stimulating activities.<sup>iii</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.

## Healthy People 2020

Where possible, the Cuyahoga County Youth Risk Behavior Survey (YRBS) data are compared to the Healthy People 2020 benchmarks.<sup>iv</sup> This allows us to consider Cuyahoga County's progress towards the 10-year national objectives aimed at improving the health of all Americans.

Healthy People 2020 Objectives	Cuyahoga County 2014
<b>PA-8.2.3:</b> Increase the proportion of adolescents, aged 6-14, who view television 2 or fewer hours on a school day to 86.8%	68.0% of Cuyahoga County middle school students reported watching television 2 or fewer hours per day
<b>PA-8.2.3:</b> Increase the proportion of adolescents, aged 6-14, who use a computer or play computer games outside of school (for non-school work) for 2 or fewer hours on a school day to 100.0%	53.4% of Cuyahoga County middle school students reported using computers 2 or fewer hours per day

## Overall Prevalence

The following table summarizes physical activity behaviors among the 12,607 middle school students who completed the 2014 Cuyahoga County YRBS. Prevalence estimates and 95% confidence intervals were computed for all variables.

Risk Behavior	% (95% Confidence Interval)
<b>Participated in 60 or more minutes of physical activity on 5 or more days</b> (During the 7 days before the survey.)	51.2% (50.2-52.1)
<b>Did not participate in 60 or more minutes of physical activity on any day</b> (During the 7 days before the survey.)	9.6% (9.0-10.2)
<b>Watched television 3 or more hours per day</b> (On an average school day.)	32.0% (31.2-32.9)
<b>Used computers 3 or more hours per day</b> (Played video or computer games or used a computer for something that was not school work on an average school day.)	46.6% (45.7-47.5)
<b>Played on one or more sports teams</b> (During the past 12 months.)	70.1% (69.2-71.0)
<b>Walked or rode bike to school every day</b> (In an average school week)	19.1% (18.4-19.9)
<b>Walked or rode bike home from school every day</b> (In an average school week)	23.8% (23.0-24.6)

## Regional Prevalence

The table below represents physical activity behaviors in the six regions of Cuyahoga County. This division was conducted to provide a geographic representation of the prevalence of different risk behaviors in Cuyahoga County. In 2014, we were able to weight to 5 of 6 regions in Cuyahoga County. The column under Outer Ring-West does not include data because school participation within this region was insufficient to permit weighting.

Risk Behavior	CMSD-East % (95% CI)	CMSD-West % (95% CI)	Inner Ring-East % (95% CI)	Inner Ring-West % (95% CI)	Outer Ring-East % (95% CI)	Outer Ring-West % (95% CI)
Participated in 60 or more minutes of physical activity on 5 or more days (During the 7 days before the survey.)	33.2% (30.5-35.9)	29.9% (27.0-33.0)	48.9% (46.6-51.1)	54.3% (52.0-56.6)	60.6% (57.6-63.4)	N/A
Did not participate in 60 or more minutes of physical activity on any day (During the 7 days before the survey.)	18.1% (16.2-20.1)	17.9% (15.3-20.9)	11.1% (9.8-12.4)	7.2% (5.7-8.9)	5.9% (4.4-7.7)	N/A
Watched television 3 or more hours per day (On an average school day.)	56.5% (54.0-59.0)	43.2% (40.9-45.5)	44.0% (41.9-46.0)	23.6% (21.4-26.0)	23.4% (21.2-25.8)	N/A
Used computers 3 or more hours per day (Played video or computer games or used a computer for something that was not school work on an average school day.)	60.3% (57.6-62.8)	59.4% (56.7-62.0)	51.0% (49.0-53.0)	48.4% (45.8-51.0)	38.1% (35.6-40.7)	N/A
Played on one or more sports teams (During the past 12 months.)	62.3% (59.9-64.7)	59.3% (56.2-62.4)	66.8% (64.8-68.7)	61.6% (58.1-65.0)	78.5% (76.1-80.7)	N/A
Walked or rode bike to school every day (In an average school week)	33.6% (30.9-36.4)	28.1% (25.7-30.6)	23.4% (21.7-25.1)	21.1% (18.7-23.7)	7.6% (6.3-9.0)	N/A
Walked or rode bike home from school every day (In an average school week)	35.0% (32.5-37.6)	29.2% (26.5-32.0)	31.0% (29.3-32.7)	33.4% (30.6-36.3)	10.1% (8.8-11.6)	N/A

## Demographic Prevalence

The tables below allow for further comparisons of physical activity behaviors between demographic groups. Data are presented by gender, race/ethnicity, and grade level. A statistically significant difference exists between groups if the 95% confidence intervals do not overlap.

Participated in 60 or more minutes of physical activity on 5 or more days			
Category	%	CI	
<b>Gender</b>			
Female	43.9	42.5-	45.3
Male	57.9	56.5-	59.2
<b>Race/Ethnicity</b>			
White	59.9	58.7-	61.1
Black	41.1	39.4-	42.8
Hispanic	31.8	29.0-	34.7
Other/Multiple	52.2	48.9-	55.4
<b>Grade</b>			
7th	51.7	50.2-	53.3
8th	50.9	49.3-	52.5
<b>Total</b>	<b>51.2</b>	<b>50.2-</b>	<b>52.1</b>

Did not participate in 60 or more minutes of physical activity on any day			
Category	%	CI	
<b>Gender</b>			
Female	10.9	10.0-	11.8
Male	8.2	7.5-	8.9
<b>Race/Ethnicity</b>			
White	5.7	5.1-	6.4
Black	13.7	12.7-	14.9
Hispanic	18.8	16.1-	21.8
Other/Multiple	11.6	9.6-	14.1
<b>Grade</b>			
7th	9.1	8.1-	10.0
8th	9.7	8.8-	10.6
<b>Total</b>	<b>9.6</b>	<b>9.0-</b>	<b>10.2</b>

Watched television 3 or more hours per day			
Category	%	CI	
<b>Gender</b>			
Female	31.8	30.6-	33.0
Male	32.1	30.9-	33.3
<b>Race/Ethnicity</b>			
White	18.7	17.8-	19.7
Black	50.9	49.4-	52.4
Hispanic	39.8	36.6-	43.1
Other/Multiple	39.8	36.6-	43.1
<b>Grade</b>			
7th	32.8	31.0-	34.6
8th	31.0	29.4-	32.7
<b>Total</b>	<b>32.0</b>	<b>31.2-</b>	<b>32.9</b>

Used computers 3 or more hours per day			
Category	%	CI	
<b>Gender</b>			
Female	47.9	46.6-	49.1
Male	45.7	44.4-	46.9
<b>Race/Ethnicity</b>			
White	40.2	38.9-	41.4
Black	55.5	54.0-	56.9
Hispanic	56.2	53.0-	59.3
Other/Multiple	40.0	36.6-	43.5
<b>Grade</b>			
7th	44.5	42.9-	46.1
8th	48.5	47.0-	50.0
<b>Total</b>	<b>46.6</b>	<b>45.7-</b>	<b>47.5</b>

Played on one or more sports teams			
Category	%	CI	
<b>Gender</b>			
Female	67.6	66.2-	68.9
Male	72.5	71.4-	73.7
<b>Race/Ethnicity</b>			
White	74.1	72.9-	75.4
Black	66.0	64.5-	67.5
Hispanic	55.5	52.0-	58.9
Other/Multiple	70.9	67.3-	74.3
<b>Grade</b>			
7th	71.2	69.8-	72.6
8th	69.2	67.7-	70.7
<b>Total</b>	<b>70.1</b>	<b>69.2-</b>	<b>71.0</b>

Walked or rode a bike to school every day			
Category	%	CI	
<b>Gender</b>			
Female	17.1	16.2-	18.0
Male	20.9	19.8-	22.0
<b>Race/Ethnicity</b>			
White	13.6	12.7-	14.5
Black	27.1	25.6-	28.6
Hispanic	23.1	20.3-	26.2
Other/Multiple	15.5	13.1-	18.2
<b>Grade</b>			
7th	18.8	17.4-	20.3
8th	19.3	18.0-	20.7
<b>Total</b>	<b>19.1</b>	<b>18.4-</b>	<b>19.9</b>

Walked or rode a bike from school every day			
Category	%	CI	
<b>Gender</b>			
Female	22.2	21.1-	23.3
Male	25.3	24.1-	26.6
<b>Race/Ethnicity</b>			
White	18.9	17.9-	20.0
Black	31.0	29.6-	32.4
Hispanic	26.6	23.9-	29.5
Other/Multiple	19.4	16.5-	22.7
<b>Grade</b>			
7th	22.3	21.0-	23.8
8th	25.3	23.7-	27.0
<b>Total</b>	<b>23.8</b>	<b>23.0-</b>	<b>24.6</b>

## Cuyahoga County Trend Data

The following table presents the prevalence of physical activity behaviors among Cuyahoga County middle school students in 2008, 2010, 2012 and 2014. The prevalence for each year is given (when available), with 95% confidence intervals below. <sup>1</sup>

Cuyahoga County, 2008	Cuyahoga County, 2010	Cuyahoga County, 2012	Cuyahoga County, 2014
<b>Participated in 60 or more minutes of physical activity on 5 or more days</b> (During the 7 days before the survey.)			
49.6% (48.2-50.9)	54.0% (52.4-55.6)	54.7% (53.4-56.0)	51.2% (50.2-52.1)
<b>Did not participate in 60 or more minutes of physical activity on any day</b> (During the 7 days before the survey.)			
7.7% (7.0-8.3)	7.5% (6.6-8.3)	7.1% (6.5- 7.8)	9.6% (9.0-10.2)
<b>Watched television 3 or more hours per day</b> (On an average school day.)			
42.8% (41.4-44.2)	36.8% (34.4-39.1)	34.9% (33.8-35.9)	32.0% (31.2-32.9)
<b>Used computers 3 or more hours per day</b> (Played video or computer games or used a computer for something that was not school work on an average school day.)			
30.8% (29.2-32.3)	30.0% (28.2-31.7)	32.5% (31.4-33.6)	46.6% (45.7-47.5)
<b>Played on one or more sports teams</b> (During the past 12 months.)			
70.3% (68.2-72.4)	70.1% (68.4-71.7)	71.9% (70.7-73.0)	70.1% (69.2-71.0)

<sup>1</sup> The YRBS questions with two or more data points over 2008-2014 are included. The new 2014 questions are not included for the purpose of demonstrating trends. For those questions not asked in 2014, refer to the PRCHN archives at [www.prchn.org.aspx](http://www.prchn.org.aspx) for more detailed information.



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- <sup>i</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>ii</sup> Strong, W., Malina, R., Blimke, C., et al. 2005. Evidence based physical activity for school-age youth. *Journal of Pediatrics*. 146:732-737.
- <sup>iii</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>iv</sup> U.S. Department of Health and Human Services. *Physical Activity*. Retrieved from 2020 Topics & Objectives: <http://www.healthypeople.gov/2020/topicsobjectives2020/objectiveslist.aspx?topicId=40>