



Prevention Research Center for Healthy Neighborhoods
at Case Western Reserve University

2013 Cuyahoga County Youth Risk Behavior Survey: Physical Activity

Introduction

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 2013, the PRCHN conducted the YRBS among 9th through 12th grade students in Cuyahoga County high 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 2013 Cuyahoga County High School Youth Risk Behavior Survey, with a particular focus on Physical Activity, including sedentary behaviors. In this brief report, we present:

- [Overall Prevalence](#)
- [Regional Prevalence](#)
- [Demographic Prevalence](#)
- [Trend Report](#)
- [Comparison to State and Nation](#)

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

Physical Activity

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.^{i,ii} 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.ⁱ

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.ⁱⁱⁱ 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.^{iv} 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 2013
PA-8.2.3: Increase the proportion of adolescents in grades 9 through 12 who view television, videos, or play video games for no more than 2 hours a day to at least 73.9%	68.7 % of Cuyahoga County high school students reported watching television for 2 or fewer hours a day.
PA-8.2.3: 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 no more than 2 hours a day to at least 82.6%	62.1% of Cuyahoga County high school students reported using a computer for non-school for 2 or fewer hours per day.

Overall Prevalence

The following table summarizes physical activity behaviors among the 16,855 high school students who completed the 2013 Cuyahoga County YRBS. Prevalence estimates and 95% confidence intervals were computed for all variables.

Risk Behavior	% (95% Confidence Interval)
Participated in 60 or more minutes of physical activity on 5 or more days (During the 7 days before the survey.)	47.0 (45.6-48.3)
Did not participate in 60 or more minutes of physical activity on any day (During the 7 days before the survey.)	15.6 (14.8-16.3)
Walk or ride bike to school 3 or more times in an average school week (When the weather allows.)	22.4 (21.4-23.5)
Walk or ride bike from school 3 or more times in an average school week (When the weather allows.)	28.2 (26.8-29.5)
Watched television 3 or more hours per day (On an average school day.)	31.3 (30.0-32.6)
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.)	37.9 (36.5-39.3)
Played on one or more sports teams (During the past 12 months.)	61.7 (60.4-63.1)

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 2013, 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 that 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.)	32.8 (30.6-35.0)	31.4 (28.9-34.0)	43.4 (40.4-46.5)	46.4 (43.3-49.5)	49.9 (46.7-53.1)	n/a
Did not participate in 60 or more minutes of physical activity on any day (During the 7 days before the survey.)	24.6 (22.6-26.6)	25.5 (22.8-28.2)	18.1 (16.2-20.0)	12.7 (11.2-14.1)	14.0 (12.0-15.9)	n/a
Walk or ride bike to school 3 or more times in an average school week (When the weather allows.)	29.9 (27.7-32.1)	33.1 (29.4-36.7)	36.0 (33.6-38.5)	25.5 (22.7-28.2)	10.3 (8.3-12.3)	n/a
Walk or ride bike from school 3 or more times in an average school week (When the weather allows.)	32.2 (30.1-34.2)	38.5 (34.2-42.8)	44.2 (41.0-47.5)	34.1 (30.8-37.3)	14.9 (12.7-17.1)	n/a
Watched television 3 or more hours per day (On an average school day.)	50.0 (47.6-52.3)	41.0 (37.9-44.1)	42.6 (39.5-45.6)	27.0 (24.0-30.0)	25.0 (22.0-27.9)	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.)	48.6 (45.9-51.3)	51.8 (49.0-54.6)	40.7 (38.2-43.2)	39.7 (36.7-42.8)	35.6 (32.7-38.4)	n/a
Played on one or more sports teams (During the past 12 months.)	51.8 (49.5-54.2)	43.7 (40.2-47.2)	57.3 (54.8-59.9)	57.0 (53.6-60.4)	69.8 (66.9-72.8)	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, grade level, and family affluence (a proxy for socioeconomic status). 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
Gender		
Female	39.4	37.7 - 41.1
Male	54.3	52.5 - 56.1
Race/Ethnicity		
White	53.2	51.3 - 55.0
Black	38.9	36.9 - 40.9
Hispanic	32.8	29.1 - 36.5
Other	43.4	39.1 - 47.7
Grade		
9th	51.3	49.1 - 53.4
10th	49.5	46.9 - 52.0
11th	46.6	44.0 - 49.1
12th	40.1	37.3 - 42.8
Family Affluence		
Low	38.0	35.6 - 40.4
Medium	44.3	42.3 - 46.2
High	54.3	52.3 - 56.2
Total	47.0	45.6 - 48.3

Did not participate in 60 or more minutes of physical activity on any day		
Category	%	CI
Gender		
Female	18.6	17.4 - 19.9
Male	12.5	11.5 - 13.6
Race/Ethnicity		
White	10.9	9.9 - 11.9
Black	21.6	20.2 - 23.0
Hispanic	26.3	23.4 - 29.2
Other	16.7	14.1 - 19.4
Grade		
9th	14.0	12.5 - 15.6
10th	15.0	13.5 - 16.5
11th	15.3	13.7 - 16.9
12th	17.7	16.0 - 19.4
Family Affluence		
Low	21.9	20.2 - 23.6
Medium	16.5	15.0 - 18.1
High	11.2	10.1 - 12.3
Total	15.6	14.8 - 16.3

Walk or ride bike to school 3 or more times in an average school week		
Category	%	CI
Gender		
Female	19.9	18.5 - 21.3
Male	24.8	23.3 - 26.3
Race/Ethnicity		
White	15.5	14.1 - 16.8
Black	32.7	30.9 - 34.4
Hispanic	29.4	26.2 - 32.6
Other	22.4	19.0 - 25.8
Grade		
9th	26.4	24.3 - 28.5
10th	23.1	21.1 - 25.1
11th	21.3	19.1 - 23.5
12th	17.9	15.5 - 20.2
Family Affluence		
Low	33.5	31.1 - 35.9
Medium	22.0	20.4 - 23.5
High	16.7	15.1 - 18.2
Total	22.4	21.4 - 23.5

Walk or ride bike from school 3 or more times in an average school week		
Category	%	CI
Gender		
Female	25.6	23.9 - 27.2
Male	30.6	28.9 - 32.3
Race/Ethnicity		
White	21.2	19.5 - 22.9
Black	38.3	36.2 - 40.3
Hispanic	35.9	33.0 - 38.9
Other	28.6	25.0 - 32.2
Grade		
9th	34.1	31.7 - 36.5
10th	30.9	28.5 - 33.3
11th	26.1	23.6 - 28.5
12th	20.1	17.4 - 22.7
Family Affluence		
Low	39.3	36.9 - 41.7
Medium	28.8	26.8 - 30.8
High	21.5	19.7 - 23.3
Total	28.2	26.8 - 29.5

Watched television 3 or more hours per day		
Category	%	CI
Gender		
Female	30.8	29.1 - 32.6
Male	31.6	29.9 - 33.3
Race/Ethnicity		
White	19.9	18.4 - 21.4
Black	48.4	46.6 - 50.2
Hispanic	41.8	38.7 - 45.0
Other	26.7	23.4 - 30.0
Grade		
9th	32.8	30.1 - 35.5
10th	32.2	30.1 - 34.3
11th	29.9	27.3 - 32.6
12th	29.7	26.9 - 32.5
Family Affluence		
Low	43.1	40.6 - 45.7
Medium	32.1	30.1 - 34.1
High	23.8	22.1 - 25.5
Total	31.3	30.0 - 32.6

Used computers 3 or more hours per day		
Category	%	CI
Gender		
Female	36.8	35.0 - 38.5
Male	38.9	37.0 - 40.8
Race/Ethnicity		
White	32.3	30.4 - 34.3
Black	45.3	43.5 - 47.0
Hispanic	50.4	47.0 - 53.8
Other	43.5	39.8 - 47.3
Grade		
9th	42.8	40.2 - 45.4
10th	39.5	37.1 - 41.9
11th	34.8	32.2 - 37.5
12th	33.1	29.9 - 36.2
Family Affluence		
Low	42.2	40.1 - 44.4
Medium	39.7	37.6 - 41.7
High	33.9	31.9 - 36.0
Total	37.9	36.5 - 39.3

Played on one or more sports teams			
Category	%	CI	
Gender			
Female	56.2	54.4 -	58.1
Male	67.1	65.4 -	68.8
Race/Ethnicity			
White	67.1	65.1 -	69.0
Black	55.4	53.6 -	57.1
Hispanic	42.6	39.4 -	45.9
Other	57.0	53.1 -	61.0
Grade			
9th	66.5	64.4 -	68.5
10th	64.7	62.4 -	67.1
11th	60.4	57.7 -	63.0
12th	54.7	51.7 -	57.7
Family Affluence			
Low	48.9	46.6 -	51.2
Medium	60.0	58.0 -	62.0
High	70.2	68.3 -	72.1
Total	61.7	60.4 -	63.1

Cuyahoga County Trend Data

The following table presents the prevalence of physical activity behaviors among Cuyahoga County high school students in 2009, 2011, and 2013. The prevalence for each year is given (when available), with 95% confidence intervals below.

Cuyahoga County, 2009	Cuyahoga County, 2011	Cuyahoga County, 2013
Participated in 60 or more minutes of physical activity on 5 or more days (During the 7 days before the survey.)		
44.2 (41.5-46.9)	43.8 (42.4-45.2)	47.0 (45.6-48.3)
Did not participate in 60 or more minutes of physical activity on any day (During the 7 days before the survey.)		
15.4 (13.8-17.0)	14.3 (13.4-15.2)	15.6 (14.8-16.3)
Walk or ride bike to school 3 or more times in an average school week (When the weather allows.)		
n/a	n/a	22.4 (21.4-23.5)
Walk or ride bike from school 3 or more times in an average school week (When the weather allows.)		
n/a	n/a	28.2 (26.8-29.5)
Watched television 3 or more hours per day (On an average school day.)		
34.2 (30.9-37.5)	34.3 (33.0-35.6)	31.3 (30.0-32.6)
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.)		
23.2 (21.1-25.3)	27.2 (26.1-28.3)	37.9 (36.5-39.3)
Played on one or more sports teams (During the past 12 months.)		
59.3 (56.7-61.9)	60.2 (58.9-61.5)	61.7 (60.4-63.1)

Comparison to State and Nation

The following table presents the prevalence of physical activity among Cuyahoga County high school students, the state of Ohio high school students, and United States high school students. The columns provide the prevalence for Cuyahoga County as reported in 2013 and the state of Ohio and the United States as reported in 2011 (when available).

Cuyahoga County, 2013	Ohio, 2011	United States, 2011
Participated in 60 or more minutes of physical activity on 5 or more days (During the 7 days before the survey.)		
47.0 (45.6-48.3)	44.9 (40.0-50.0)	49.5 (47.4-51.5)
Did not participate in 60 or more minutes of physical activity on any day (During the 7 days before the survey.)		
15.6 (14.8-16.3)	16.4 (13.4-19.8)	13.8 (12.8-14.8)
Walk or ride bike to school 3 or more times in an average school week (When the weather allows.)		
22.4 (21.4-23.5)	n/a	n/a
Walk or ride bike from school 3 or more times in an average school week (When the weather allows.)		
28.2 (26.8-29.5)	n/a	n/a
Watched television 3 or more hours per day (On an average school day.)		
31.3 (30.0-32.6)	30.9 (28.2-33.7)	32.4 (30.9-34.0)
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.)		
37.9 (36.5-39.3)	27.4 (24.3-30.7)	31.1 (29.3-32.9)
Played on one or more sports teams (During the past 12 months.)		
61.7 (60.4-63.1)	55.8 (50.3-61.1)	58.4 (56.0-60.7)

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ⁱ 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.

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^{iv} 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>