



Prevention Research Center for Healthy Neighborhoods
at Case Western Reserve University

2018 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 Fall of 2018, the PRCHN conducted the YRBS among 7th and 8th grade students in Cuyahoga County middle schools. A more detailed description of the methodology is available at our website, http://prchn.org/yrbs_home.aspx.

This brief report presents results from the 2018 Cuyahoga County Middle 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](#)

Data for similar behaviors can be found at our website, http://prchn.org/yrbs_home.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.

Overall Prevalence

The following table summarizes physical activity behaviors among the 12,936 middle school students who completed the 2018 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.)	46.2 (44.9-47.4)
Did not participate in 60 or more minutes of physical activity on any day (During the 7 days before the survey.)	15.1 (14.3-16.0)
Watched television 3 or more hours per day (On an average school day.)	25.7 (24.6-26.8)
Played video or computer games or used a computer 3 or more hours per day (On an average school day for something that was not school work; includes use of Xbox, PlayStation, iPod, iPad or tablet, smartphone, YouTube, Facebook, or other social networking tools, and the Internet.)	51.5 (50.2-52.7)
Played on 1 or more sports teams (During the 12 months before the survey.)	68.9 (67.7-70.2)
Walk or ride bike to or from school 3 or more days (During an average school week when the weather allows.)	26.7 (25.6-27.8)

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 2018, we were able to weight to 4 of 6 regions in Cuyahoga County. The columns under Outer Ring-West and Outer Ring-East do not include data because school participation within these regions 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.)	32.0 (29.2 - 35.0)	33.4 (30.1 - 36.8)	41.0 (39.1 - 43.0)	44.6 (42.0 - 47.3)	N/A	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 (22.3 - 27.0)	23.0 (20.6 - 25.6)	20.5 (18.8 - 22.4)	13.2 (11.5 - 15.3)	N/A	N/A
Watched television 3 or more hours per day (On an average school day.)	40.7 (37.7 - 43.7)	33.6 (30.6 - 36.8)	36.3 (34.4 - 38.3)	22.2 (20.0 - 24.5)	N/A	N/A
Played video or computer games or used a computer 3 or more hours per day (On an average school day for something that was not school work; includes use of Xbox, PlayStation, iPod, iPad or tablet, smartphone, YouTube, Facebook, or other social networking tools, and the Internet.)	59.9 (56.9 - 62.8)	59.9 (56.0 - 63.7)	59.9 (57.7 - 62.0)	54.1 (51.3 - 56.8)	N/A	N/A

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)
Played on 1 or more sports teams (During the 12 months before the survey.)	60.6 (58.3 - 62.9)	53.7 (50.6 - 56.9)	66.0 (64.1 - 68.0)	63.8 (61.4 - 66.1)	N/A	N/A
Walk or ride bike to or from school 3 or more days (During an average school week when the weather allows.)	36.1 (33.4 - 38.9)	31.6 (29.1 - 34.4)	28.6 (27.0 - 30.2)	39.3 (36.6 - 42.2)	N/A	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
Gender		
Female	39.4	37.7 - 41.1
Male	52.5	50.8 - 54.2
Race/Ethnicity		
White	52.5	50.6 - 54.3
Black	38.0	36.3 - 39.7
Hispanic	36.9	33.9 - 39.9
Other/Multiple	41.8	38.0 - 45.8
Grade		
7th	47.0	44.7 - 49.4
8th	45.5	43.5 - 47.5
Total	46.2	44.9 - 47.4

Did not participate in 60 or more minutes of physical activity on any day		
Category	%	CI
Gender		
Female	16.1	14.8 - 17.5
Male	14.0	13.0 - 15.1
Race/Ethnicity		
White	10.1	8.9 - 11.4
Black	21.8	20.4 - 23.2
Hispanic	24.2	21.3 - 27.4
Other/Multiple	16.0	13.6 - 18.6
Grade		
7th	15.1	13.6 - 16.8
8th	14.7	13.4 - 16.1
Total	15.1	14.3 - 16.0

Watched television 3 or more hours per day		
Category	%	CI
Gender		
Female	25.5	24.1 - 27.0
Male	25.8	24.2 - 27.5
Race/Ethnicity		
White	16.4	15.1 - 17.8
Black	40.4	38.8 - 42.0
Hispanic	31.7	28.6 - 35.1
Other/Multiple	27.3	23.9 - 31.0
Grade		
7th	26.6	24.8 - 28.6
8th	24.4	22.6 - 26.2
Total	25.7	24.6 - 26.8

Used computers 3 or more hours per day		
Category	%	CI
Gender		
Female	47.3	45.6 - 49.0
Male	55.3	53.5 - 57.1
Race/Ethnicity		
White	44.8	43.1 - 46.5
Black	61.7	59.9 - 63.6
Hispanic	59.2	56.0 - 62.3
Other/Multiple	51.5	47.4 - 55.6
Grade		
7th	49.1	47.1 - 51.1
8th	53.6	51.5 - 55.7
Total	51.5	50.2 - 52.7

Played on one or more sports teams			
Category	%	CI	
Gender			
Female	65.4	63.5	- 67.2
Male	72.4	70.9	- 73.8
Race/Ethnicity			
White	73.2	71.4	- 75.0
Black	65.0	63.4	- 66.6
Hispanic	58.2	54.7	- 61.6
Other/Multiple	64.6	61.4	- 67.7
Grade			
7th	69.4	67.0	- 71.7
8th	68.8	66.8	- 70.7
Total	68.9	67.7	- 70.2

Walked or rode bike to or from school 3 or more days			
Category	%	CI	
Gender			
Female	25.1	23.8	- 26.4
Male	28.2	26.6	- 30.0
Race/Ethnicity			
White	25.3	23.8	- 26.9
Black	29.6	27.9	- 31.2
Hispanic	27.8	24.9	- 30.8
Other/Multiple	23.1	20.5	- 25.8
Grade			
7th	23.9	21.8	- 26.2
8th	29.7	27.4	- 32.1
Total	26.7	25.6	- 27.8

Cuyahoga County Trend Data

The following table presents the prevalence of physical activity behaviors among Cuyahoga County middle school students in 2010, 2012, 2014, 2016 and 2018. The prevalence for each year is given (when available), with 95% confidence intervals below. ¹

Cuyahoga County, 2010	Cuyahoga County, 2012	Cuyahoga County, 2014	Cuyahoga County, 2016	Cuyahoga County, 2018
Participated in 60 or more minutes of physical activity on 5 or more days (During the 7 days before the survey.)				
54.0% (52.4 - 55.6)	54.7% (53.4 - 56.0)	51.2% (50.2 - 52.1)	51.5% (51.0 - 52.0)	46.2% (44.9 - 47.4)
Did not participate in 60 or more minutes of physical activity on any day (During the 7 days before the survey.)				
7.5% (6.6 - 8.3)	7.1% (6.5 - 7.8)	9.6% (9.0 - 10.2)	12.6% (12.2 - 13.1)	15.1% (14.3 - 16.0)
Watched television 3 or more hours per day (On an average school day.)				
36.8% (34.4 - 39.1)	34.9% (33.8 - 35.9)	32.0% (31.2 - 32.9)	28.1% (27.6 - 28.6)	25.7% (24.6 - 26.8)
Played video or computer games or used a computer 3 or more hours per day (On an average school day for something that was not school work; includes use of Xbox, PlayStation, iPod, iPad or tablet, smartphone, YouTube, Facebook, or other social networking tools, and the Internet.)				
30.0% (28.2 - 31.7)	32.5% (31.4 - 33.6)	46.6% (45.7 - 47.5)	46.5% (46.0 - 47.1)	51.5% (50.2 - 52.7)
Played on one or more sports teams (During the past 12 months.)				
70.1% (68.4 - 71.7)	71.9% (70.7 - 73.0)	70.1% (69.2 - 71.0)	71.2% (70.7 - 71.7)	68.9% (67.7 - 70.2)
Walk or ride bike to or from school 3 or more days (During an average school week when the weather allows.)				
N/A	N/A	N/A	31.9% (31.5 - 32.4)	26.7% (25.6 - 27.8)

¹ The YRBS questions with two or more data points over 2010-2018 are included. The new 2018 questions are not included for the purpose of demonstrating trends. For those questions not asked in 2018, refer to the PRCHN archives at www.prchn.org/aspx for more detailed information.

Contact Information

Prepared by:

Prevention Research Center for Healthy Neighborhoods
Case Western Reserve University
10900 Euclid Avenue
Cleveland, Ohio 44106-7069
www.prchn.org

For more information, please contact:

Erika S. Trapl, PhD
Associate Professor, Department of Population & Quantitative Health Sciences
Associate Director, Prevention Research Center for Healthy Neighborhoods
Case Western Reserve University
Erika.trapl@case.edu
216-368-0098

Jean L. Frank, MPH
Director of Adolescent Surveillance and Evaluation
Prevention Research Center for Healthy Neighborhoods
Case Western Reserve University
Jean.frank@case.edu
216-368-5913

Audrey E. Kinsella, MPH
Community and Evaluation Project Coordinator
Prevention Research Center for Healthy Neighborhoods
Case Western Reserve University
Audrey.kinsella@case.edu
216-368-5746

Catherine C. Osborn, MA
School-based Surveillance & Evaluation Coordinator
Prevention Research Center for Healthy Neighborhoods
Case Western Reserve University
Catherine.osborn@case.edu

Jude Fahoum, BA
School-based Surveillance and Evaluation Specialist
Prevention Research Center for Health Neighborhoods
Case Western Reserve University
Jude.fahoum@case.edu

Marisa Hollinshead, BS
Graduate Assistant
Prevention Research Center for Healthy Neighborhoods
Case Western Reserve University
Marisa.hollinshead@case.edu

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