



Prevention Research Center for Healthy Neighborhoods
at Case Western Reserve University

2019 Cuyahoga County Youth Risk Behavior Survey: Violence

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 2019, 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, www.prchn.org/YRBSDataCollectionAnalysis.aspx.

This brief report presents results from the 2019 Cuyahoga County High School Youth Risk Behavior Survey, with a particular focus on Violence. In this brief report, we present:

- [Overall Prevalence](#)
- [Demographic Prevalence](#)
- [Trend Report](#)

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

Violence

In the United States, youth violence is the second leading cause of death for people 15 to 24 years of age. Adolescents can experience violence along a continuum that may begin with verbal harassment and advance into physical acts of violence.ⁱ Violence affects the quality of life of those who experience it and those who witness the acts. Some identified risk factors thought to be associated with increased risk for youth involvement in violent behaviors include poverty in the community, substance use, poor family functioning, and poor academic performance.ⁱⁱ Bullying and being bullied at school are associated with key violence-related behaviors including carrying weapons, fighting and sustaining injuries from fighting.ⁱⁱⁱ

Overall Prevalence

The following table summarizes violence related behaviors among the 15,350 high school students who completed the 2019 Cuyahoga County YRBS. Prevalence estimates and 95% confidence intervals were computed for all dichotomous variables. The 2019 Ohio Youth Risk Behavior Survey prevalence for shared variables is also shown. A statistically significant difference exists between groups if the 95% confidence intervals do not overlap.

Risk Behavior	Cuyahoga County % (95% Confidence Interval)	Ohio % (95% Confidence Interval)
Carried a weapon (Such as a gun, knife, or club; one or more times during the 30 days before the survey.)	9.4 (8.7 - 10.1)	10.9 (8.3 - 14.1)
Did not go to school because of safety concerns (One or more times during the 30 days before the survey.)	8.1 (7.4 - 8.7)	n/a
Threatened or injured with a weapon, on school property Such as a gun, knife, or club; one or more times during the 12 months before the survey.)	8.5 (7.9 - 9.1)	n/a
Could get a loaded gun (In less than 24 hours.)	27.2 (26.1 - 28.3)	n/a
In a physical fight (One or more times during the 12 months before the survey.)	27.4 (26.2 - 28.6)	19.0 (16.2 - 22.2)
Forced to have sexual intercourse	6.5 (6.0 - 7.1)	n/a
Forced to do sexual things by someone they were dating or going out with (Such as kissing, touching, or being physically forced to have sexual intercourse; one or more times during the 12 months before the survey, among the students dating.)	11.5 (10.5 - 12.5)	7.4 (5.9 - 9.3)
Physically injured by someone they were dating or going out with (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 the students dating.)	9.1 (8.3 - 9.9)	10.2 (8.0 - 12.8)
Bullied on school property (During the 12 months before the survey.)	16.4 (15.5 - 17.3)	13.9 (12.4 - 15.5)
Electronically bullied (Such as through e-mail, chat rooms, instant messaging, websites, or text messaging; during the 12 months before the survey.)	14.2 (13.2 - 15.4)	13.3 (11.6 - 15.1)
Electronically bullied someone (Such as through texting, Instagram, Facebook, or other social media; during the 12 months before the survey.)	9.2 (8.5 - 10.0)	n/a

Demographic Prevalence

The tables below allow for further comparisons of violence related behaviors between demographic groups. Data are presented by gender, race/ethnicity, grade level, and sexual identity. In following tables, LGB stands for lesbian, gay, or bisexual. A statistically significant difference exists between groups if the 95% confidence intervals do not overlap.

Carried a weapon		
Category	%	CI
Gender		
Female	4.7	4.1 - 5.3
Male	13.8	12.6 - 15.0
Race/Ethnicity		
White	8.0	7.1 - 9.1
Black	10.3	9.4 - 11.3
Hispanic	14.3	12.4 - 16.4
Other/Multiple	11.0	9.1 - 13.4
Grade		
9th	9.5	8.5 - 10.6
10th	8.6	7.5 - 9.9
11th	9.5	7.9 - 11.4
12th	9.5	8.1 - 11.1
Sexual Identity		
Heterosexual	8.9	8.1 - 9.7
LGB	11.5	9.8 - 13.5
Not sure	12.5	9.1 - 16.9
Total	9.4	8.7 - 10.1

Did not go to school because of safety concerns		
Category	%	CI
Gender		
Female	8.5	7.7 - 9.4
Male	7.4	6.5 - 8.5
Race/Ethnicity		
White	5.0	4.4 - 5.8
Black	11.3	10.2 - 12.6
Hispanic	11.8	10.2 - 13.6
Other/Multiple	10.2	8.3 - 12.4
Grade		
9th	9.0	7.6 - 10.6
10th	7.5	6.4 - 8.8
11th	7.2	6.0 - 8.7
12th	7.9	6.4 - 9.6
Sexual Identity		
Heterosexual	6.8	6.2 - 7.4
LGB	14.3	12.3 - 16.6
Not sure	13.3	10.2 - 17.0
Total	8.1	7.4 - 8.7

Threatened or injured with a weapon, on school property		
Category	%	CI
Gender		
Female	7.7	7.0 - 8.5
Male	9.1	8.2 - 10.0
Race/Ethnicity		
White	6.1	5.3 - 7.0
Black	10.9	10.0 - 12.0
Hispanic	12.0	10.2 - 14.0
Other/Multiple	10.7	8.9 - 12.8
Grade		
9th	8.9	7.8 - 10.1
10th	9.4	8.1 - 11.0
11th	7.7	6.4 - 9.3
12th	7.4	6.0 - 9.1
Sexual Identity		
Heterosexual	7.7	7.0 - 8.4
LGB	12.6	10.7 - 14.8
Not sure	11.3	8.7 - 14.6
Total	8.5	7.9 - 9.1

Could get a loaded gun (in less than 24 hours)		
Category	%	CI
Gender		
Female	22.5	21.1 - 24.0
Male	31.7	30.1 - 33.4
Race/Ethnicity		
White	27.5	25.9 - 29.0
Black	26.7	24.9 - 28.6
Hispanic	34.4	31.6 - 37.4
Other/Multiple	21.0	18.2 - 24.2
Grade		
9th	26.6	24.7 - 28.6
10th	25.5	23.3 - 27.7
11th	27.2	24.9 - 29.5
12th	29.5	27.0 - 32.1
Sexual Identity		
Heterosexual	26.7	25.5 - 27.9
LGB	33.0	30.3 - 35.8
Not sure	21.3	17.0 - 26.3
Total	27.2	26.1 - 28.3

In a physical fight		
Category	%	CI
Gender		
Female	21.0	19.7 - 22.3
Male	33.4	31.6 - 35.2
Race/Ethnicity		
White	19.7	18.2 - 21.3
Black	36.2	34.5 - 38.0
Hispanic	36.1	33.5 - 38.8
Other/Multiple	27.3	23.8 - 31.0
Grade		
9th	34.0	31.7 - 36.5
10th	27.7	25.2 - 30.3
11th	24.0	22.0 - 26.1
12th	22.5	20.2 - 25.0
Sexual Identity		
Heterosexual	27.3	26.0 - 28.7
LGB	29.8	27.3 - 32.4
Not sure	21.8	18.3 - 25.7
Total	27.4	26.2 - 28.6

Forced to have sexual intercourse		
Category	%	CI
Gender		
Female	8.9	8.0 - 9.9
Male	4.2	3.5 - 4.9
Race/Ethnicity		
White	5.8	5.0 - 6.6
Black	7.0	6.2 - 7.9
Hispanic	9.8	8.4 - 11.3
Other/Multiple	8.3	6.7 - 10.2
Grade		
9th	4.4	3.6 - 5.3
10th	5.7	4.7 - 6.7
11th	7.6	6.4 - 9.0
12th	8.6	7.2 - 10.1
Sexual Identity		
Heterosexual	5.0	4.4 - 5.6
LGB	15.9	13.8 - 18.2
Not sure	8.3	5.7 - 11.8
Total	6.5	6.0 - 7.1

Forced to do sexual things by someone they were dating or going out with		
Category	%	CI
Gender		
Female	15.6	14.1 - 17.2
Male	7.3	6.2 - 8.6
Race/Ethnicity		
White	13.1	11.4 - 14.9
Black	8.9	7.7 - 10.2
Hispanic	13.5	11.5 - 15.8
Other/Multiple	17.5	14.0 - 21.6
Grade		
9th	10.9	8.9 - 13.2
10th	12.0	10.1 - 14.2
11th	11.7	9.6 - 14.1
12th	11.0	9.2 - 13.2
Sexual Identity		
Heterosexual	9.5	8.5 - 10.7
LGB	21.6	18.7 - 24.8
Not sure	16.1	11.7 - 21.8
Total	11.5	10.5 - 12.5

Physically injured by someone they were dating or going out with		
Category	%	CI
Gender		
Female	10.1	8.9 - 11.3
Male	7.9	6.8 - 9.1
Race/Ethnicity		
White	7.9	6.8 - 9.1
Black	9.6	8.4 - 10.9
Hispanic	12.9	11.0 - 15.1
Other/Multiple	13.4	10.6 - 16.8
Grade		
9th	8.3	6.8 - 10.2
10th	7.3	5.9 - 8.9
11th	9.1	7.6 - 10.8
12th	11.1	9.6 - 12.7
Sexual Identity		
Heterosexual	7.9	7.0 - 8.8
LGB	14.5	12.1 - 17.3
Not sure	16.8	11.9 - 23.2
Total	9.1	8.3 - 9.9

Bullied on school property			
Category	%	CI	
Gender			
Female	19.4	18.1	- 20.9
Male	13.2	12.0	- 14.5
Race/Ethnicity			
White	20.2	18.7	- 21.7
Black	11.2	10.2	- 12.3
Hispanic	16.4	14.6	- 18.4
Other/Multiple	17.8	15.1	- 20.9
Grade			
9th	19.6	17.8	- 21.5
10th	17.6	16.0	- 19.3
11th	15.9	14.3	- 17.8
12th	11.6	9.9	- 13.6
Sexual Identity			
Heterosexual	14.2	13.3	- 15.2
LGB	27.4	24.9	- 30.1
Not sure	24.6	19.6	- 30.2
Total	16.4	15.5	- 17.3

Electronically bullied			
Category	%	CI	
Gender			
Female	17.7	15.9	- 19.6
Male	10.8	9.7	- 11.9
Race/Ethnicity			
White	18.0	16.2	- 20.0
Black	9.1	8.1	- 10.2
Hispanic	15.0	13.4	- 16.9
Other/Multiple	15.0	12.4	- 18.0
Grade			
9th	14.1	12.6	- 15.8
10th	15.3	12.3	- 18.9
11th	14.6	12.6	- 16.8
12th	12.7	11.1	- 14.5
Sexual Identity			
Heterosexual	12.4	11.2	- 13.6
LGB	24.4	21.9	- 27.0
Not sure	20.0	15.2	- 25.7
Total	14.2	13.2	- 15.4

Electronically bullied someone		
Category	%	CI
Gender		
Female	8.2	7.1 - 9.3
Male	10.2	9.2 - 11.3
Race/Ethnicity		
White	9.9	8.8 - 11.1
Black	7.7	6.8 - 8.8
Hispanic	11.3	9.5 - 13.5
Other/Multiple	10.9	9.0 - 13.2
Grade		
9th	9.0	7.7 - 10.6
10th	10.1	8.6 - 11.8
11th	9.2	7.8 - 10.8
12th	8.0	6.7 - 9.5
Sexual Identity		
Heterosexual	8.6	7.9 - 9.4
LGB	11.8	9.6 - 14.3
Not sure	13.6	9.3 - 19.6
Total	9.2	8.5 - 10.0

Cuyahoga County Trend Data

The following table presents the prevalence of violence related behaviors among Cuyahoga County high school students in 2011, 2013, 2015, 2017, and 2019. The prevalence for each year is given (when available), with 95% confidence intervals below.

Cuyahoga County, 2011	Cuyahoga County, 2013	Cuyahoga County, 2015	Cuyahoga County, 2017	Cuyahoga County, 2019
Carried a weapon (Such as a gun, knife, or club; one or more times during the 30 days before the survey.)				
10.0 (9.2 - 10.8)	11.9 (11.1 - 12.7)	12.1 (11.2 - 13.0)	13.7 (12.9 - 14.5)	9.4 (8.7 - 10.1)
Did not go to school because of safety concerns (One or more times during the 30 days before the survey.)				
5.4 (4.8 - 6.0)	7.4 (6.8 - 8.0)	8.2 (7.5 - 8.9)	10.6 (9.9 - 11.4)	8.1 (7.4 - 8.7)
Threatened or injured with a weapon, on school property (Such as a gun, knife or club; one or more times during the 12 months before the survey.)				
n/a	6.6 (6.0 - 7.2)	n/a	9.0 (8.3 - 9.7)	8.5 (7.9 - 9.1)
In a physical fight (One or more times during the 12 months before the survey.)				
29.1 (27.8 - 30.4)	26.5 (25.4 - 27.6)	25.4 (23.8 - 27.0)	26.4 (25.3 - 27.5)	27.4 (26.2 - 28.6)
Forced to have sexual intercourse				
6.8 (6.1 - 7.5)	7.9 (7.3 - 8.5)	7.1 (6.5 - 7.8)	7.2 (6.6 - 7.8)	6.5 (6.0 - 7.1)
Forced to do sexual things by someone they were dating or going out with (Such as kissing, touching, or being physically forced to have sexual intercourse; one or more times during the 12 months before the survey, among the students dating.)				
n/a	10.3 (9.5 - 11.0)	10.9 (9.9 - 12.0)	12.6 (11.8 - 13.5)	11.5 (10.5 - 12.5)
Physically injured by someone they were dating or going out with (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 the students dating.)				
n/a	10.2 (9.4 - 11.0)	11.3 (10.3 - 12.4)	10.3 (9.6 - 11.1)	9.1 (8.3 - 9.9)
Bullied on school property (During the 12 months before the survey.)				
18.1 (17.1-19.1)	19.4 (18.3-20.4)	18.9 (17.8-20.2)	17.4 (16.6-18.3)	16.4 (15.5 - 17.3)
Electronically bullied (Such as through e-mail, chat rooms, instant messaging, websites, or text messaging; during the 12 months before the survey.)				
18.9 (17.9-19.9)	14.5 (13.7-15.3)	16.1 (15.0-17.2)	14.7 (13.9 - 15.5)	14.2 (13.2 - 15.4)

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
Assistant Professor, Department of Population & Quantitative Health Sciences
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 Evaluation and Surveillance
Prevention Research Center for Healthy Neighborhoods
Case Western Reserve University
Jean.frank@case.edu
216-368-5913

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

Catherine C. Osborn, MA
School-Based Evaluation and Surveillance Coordinator
Prevention Research Center for Healthy Neighborhoods
Case Western Reserve University
Catherine.osborn@case.edu
216-368-5771

Oluchi O. Onyeukwu, BS
Surveillance and Evaluation Intern
Prevention Research Center for Healthy Neighborhoods
Case Western Reserve University
Oluchi.onyeukwu@case.edu

Funding

This work is a product of the Prevention Research Center for Health Neighborhoods, a Health Promotion and Disease Prevention Research Center supported by Cooperative Agreement Number 1U48DP005030 from the Centers for Disease Control and Prevention, and funded either in whole or in part by Cooperative Agreement #PS18-1807 from the U.S. Centers for Disease Control and Prevention, Division of Adolescent School Health (CDC-DASH), and by TP1AH000093-01-00 from The Office of Adolescent Health. This work is also supported by the Cleveland Foundation and the Educational Service Center of Northeast Ohio. The findings and conclusions in this report are those of the author(s) and do not necessarily represent the official position of the Centers for Disease Control and Prevention. CWRU IRB Protocol #2012-274.

ⁱ Robers, S., Zhang, J., and Truman, J. (2012). Indicators of School Crime and Safety: 2011 (NCES 2012-002/NCJ 236021). National Center for Education Statistics, U.S. Department of Education, and Bureau of Justice Statistics, Office of Justice Programs, U.S. Department of Justice. Washington, DC.

ⁱⁱ U.S. Department of Health and Human Services. (2001). Youth Violence: 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.

ⁱⁱⁱ National Center for Education Statistics. (2019). *Indicators of School Crime and Safety: 2018*. Washington, DC: U.S. Department of Education.