



Prevention Research Center for Healthy Neighborhoods
at Case Western Reserve University

2013 Cuyahoga County Youth Risk Behavior Survey: Unintentional Injuries

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.aspx>.

This brief report presents results from the 2013 Cuyahoga County High School Youth Risk Behavior Survey, with a particular focus on behaviors that contribute to Unintentional Injury. 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>.

Behaviors that Contribute to Unintentional Injuries

Motor vehicle accidents are the leading cause of death for children and youth ages 5 to 24.ⁱ The use of seat belts and child safety restraints greatly reduces the chance of fatalities and serious injuries in motor vehicle crashes. The 2013 YRBS also asked students how often they had worn a bicycle helmet when riding a bike. Head injury is the leading cause of death in bicycle crashes and use of bicycle helmets is the single most effective way of reducing head injuries and fatalities.^{ii iii}

Teenagers are more likely than their older counterparts to underestimate the risk in which certain behaviors may place them.^{iv} Teens are also more likely to be distracted drivers. Nearly 40% of teens report that they have been in a car when the driver used a cell phone to text or email and ultimately, text messaging creates a crash risk 23 times higher than driving undistracted.^v

Healthy People 2020

Where possible, the Cuyahoga County Youth Risk Behavior Survey (YRBS) data are compared to the Healthy People 2020 benchmarks.^{vi} 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
SA-1: Reduce the proportion of adolescents who report that they rode, during the previous 30 days, with a driver who had been drinking alcohol to no more than 25.5%	22.5% of Cuyahoga County high school students reported that they rode with a driver who had been drinking alcohol at least once during the past 30 days.
IVP-15: Increase the use of safety belts to 92.4%	88.2% of Cuyahoga County high school students reported usually or always wearing a seatbelt when riding a motor vehicle.

Overall Prevalence

The following table summarizes behaviors that contribute to unintentional injuries 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)
Rarely or never wore a seatbelt (When riding in a car driven by someone else.)	11.8 (11.0-12.5)
Rarely or never wore a bicycle helmet (Among students who had ridden a bicycle during the 12 months before the survey.)	86.2 (85.1-87.3)
Rode with a driver who had been drinking alcohol (During the past 30 days.)	22.5 (21.4-23.6)
Drove when drinking alcohol (During the 30 days before the survey.)	8.2 (7.2-9.2)
Texted or e-mailed while driving (Among students who had driven a vehicle during the 30 days before the survey.)	43.5 (41.0-46.0)

Regional Prevalence

The table below represents behaviors that contribute to unintentional injuries by 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)
Rarely or never wore a seatbelt (When riding in a car driven by someone else.)	22.4 (20.7-24.1)	19.4 (17.0-21.8)	15.5 (13.4-17.6)	9.1 (7.4-10.8)	5.8 (4.5-7.1)	n/a
Rarely or never wore a bicycle helmet (Among students who had ridden a bicycle during the 12 months before the survey.)	95.2 (94.0-96.5)	94.9 (92.3-97.5)	87.9 (86.3-89.5)	94.3 (92.7-96.0)	61.1 (56.6-65.6)	n/a
Rode with a driver who had been drinking alcohol (During the past 30 days.)	26.2 (24.3-28.0)	22.5 (19.2-25.8)	25.0 (22.8-27.2)	21.6 (18.9-24.3)	18.0 (15.8-20.2)	n/a
Drove when drinking alcohol (During the 30 days before the survey.)	6.3 (5.0-7.6)	7.8 (5.9-9.7)	7.2 (5.7-8.7)	8.8 (6.2-11.4)	6.3 (4.5-8.2)	n/a
Texted or e-mailed while driving (Among students who had driven a vehicle during the 30 days before the survey.)	31.2 (28.2-34.1)	24.3 (21.0-27.6)	34.4 (30.4-38.3)	42.0 (35.7-48.2)	51.5 (46.4-56.5)	n/a

Demographic Prevalence

The tables below allow for further comparisons of behaviors that contribute to unintentional injuries 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.

Rarely or never wore a seatbelt		
Category	%	CI
Gender		
Female	8.8	7.9 - 9.7
Male	14.4	13.3 - 15.5
Race/Ethnicity		
White	6.3	5.5 - 7.2
Black	18.6	17.3 - 19.9
Hispanic	21.6	18.6 - 24.6
Other	10.5	8.4 - 12.6
Grade		
9th	12.2	10.7 - 13.7
10th	11.6	10.3 - 12.8
11th	11.5	9.9 - 13.0
12th	11.0	9.2 - 12.7
Family Affluence		
Low	21.3	19.5 - 23.0
Medium	11.3	10.1 - 12.5
High	6.5	5.7 - 7.4
Total	11.8	11.0 - 12.5

Rarely or never wore a bicycle helmet		
Category	%	CI
Gender		
Female	85.7	84.0 - 87.3
Male	86.6	85.2 - 88.0
Race/Ethnicity		
White	81.5	79.9 - 83.2
Black	94.8	93.9 - 95.6
Hispanic	93.5	90.6 - 96.3
Other	82.7	79.3 - 86.1
Grade		
9th	85.7	83.6 - 87.9
10th	86.0	84.0 - 88.0
11th	86.2	83.9 - 88.4
12th	87.5	85.0 - 90.0
Family Affluence		
Low	95.4	94.2 - 96.6
Medium	89.3	87.7 - 90.9
High	79.8	77.9 - 81.6
Total	86.2	85.1 - 87.3

Rode with a driver who had been drinking alcohol		
Category	%	CI
Gender		
Female	24.0	22.5 - 25.5
Male	21.0	19.6 - 22.4
Race/Ethnicity		
White	19.8	18.2 - 21.3
Black	25.7	24.3 - 27.1
Hispanic	27.4	24.0 - 30.7
Other	24.2	20.8 - 27.6
Grade		
9th	20.1	18.5 - 21.6
10th	21.6	19.6 - 23.5
11th	22.9	20.8 - 25.0
12th	24.9	22.6 - 27.2
Family Affluence		
Low	25.8	24.0 - 27.6
Medium	21.8	20.0 - 23.6
High	21.1	19.5 - 22.7
Total	22.5	21.4 - 23.6

Drove when drinking alcohol		
Category	%	CI
Gender		
Female	7.0	5.9 - 8.1
Male	9.2	7.8 - 10.6
Race/Ethnicity		
White	8.4	6.9 - 9.9
Black	7.2	6.1 - 8.2
Hispanic	14.2	10.7 - 17.7
Other	9.8	6.6 - 13.0
Grade		
9th	3.7	2.8 - 4.6
10th	4.8	3.7 - 6.0
11th	8.0	6.5 - 9.5
12th	13.7	11.3 - 16.0
Family Affluence		
Low	8.7	6.9 - 10.5
Medium	7.6	6.1 - 9.1
High	8.3	6.9 - 9.7
Total	8.2	7.2 - 9.2

Texted or e-mailed while driving		
Category	%	CI
Gender		
Female	42.8	39.6 - 46.0
Male	44.0	41.1 - 46.8
Race/Ethnicity		
White	49.6	46.0 - 53.2
Black	33.3	30.7 - 35.9
Hispanic	35.9	30.6 - 41.3
Other	42.9	37.0 - 48.8
Grade		
9th	21.6	18.2 - 25.1
10th	24.8	22.1 - 27.5
11th	49.6	46.7 - 52.6
12th	62.6	59.4 - 65.8
Family Affluence		
Low	33.3	29.8 - 36.7
Medium	42.0	38.7 - 45.4
High	48.6	45.4 - 51.8
Total	43.5	41.0 - 46.0

Cuyahoga County Trend Data

The following table presents the prevalence of behaviors that contribute to unintentional injuries 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
Rarely or never wore a seatbelt (When riding in a car driven by someone else.)		
13.0 (11.5-14.5)	14.4 (13.6-15.2)	11.8 (11.0-12.5)
Rarely or never wore a bicycle helmet (Among students who had ridden a bicycle during the 12 months before the survey.)		
83.8 (80.7-86.8)	n/a	86.2 (85.1-87.3)
Rode with a driver who had been drinking alcohol (During the past 30 days.)		
26.7 (25.2-28.2)	21.2 (20.1-22.3)	22.5 (21.4-23.6)
Drove when drinking alcohol (During the 30 days before the survey.)		
8.6 (7.6-9.6)	6.8 (6.1-7.5)	8.2 (7.2-9.2)
Texted or e-mailed while driving (Among students who had driven a vehicle during the 30 days before the survey.)		
n/a	n/a	43.5 (41.0-46.0)

Comparison to State and Nation

The following table presents the prevalence of behaviors that contribute to unintentional injuries 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
Rarely or never wore a seatbelt (When riding in a car driven by someone else.)		
11.8 (11.0-12.5)	16.7 (13.8-20.1)	7.7 (6.5-9.1)
Rarely or never wore a bicycle helmet (Among students who had ridden a bicycle during the 12 months before the survey.)		
86.2 (85.1-87.3)	n/a	87.5 (85.0-89.7)
Rode with a driver who had been drinking alcohol (During the past 30 days.)		
22.5 (21.4-23.6)	21.0 (17.5-25.0)	24.1 (22.9-25.3)
Drove when drinking alcohol (During the 30 days before the survey.)		
8.2 (7.2-9.2)	7.2 (5.8-9.0)	8.2 (7.6-8.8)
Texted or e-mailed while driving (Among students who had driven a vehicle during the 30 days before the survey.)		
43.5 (41.0-46.0)	n/a	32.8 (30.3-35.3)

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ⁱ Web-based Injury Statistics Query and Reporting System (WISQARS) [database online]. Atlanta, GA: National Center for Injury Prevention and Control, Centers for Disease Control and Prevention.

ⁱⁱ Centers for Disease Control and Prevention. 1995. Injury-control recommendations: Bicycle helmets. *Morbidity and Mortality Weekly Report*. 44(RR-1):1-17.

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^{iv} Centers for Disease Control and Prevention. *Teen Drivers: Fact Sheet*. Retrieved January 2013, from www.cdc.gov.

^v Madden, M & Lenhart, A. (2009). *Teens and Distracted Driving*. Washington DC: Pew Research Center.

^{vi} U.S. Department of Health and Human Services. *Injury and Violence Prevention*. Retrieved from 2020 Topics & Objectives: <http://www.healthypeople.gov/2020/topicsobjectives2020/objectiveslist.aspx?topicId=40>