



Prevention Research Center for Healthy Neighborhoods
at Case Western Reserve University

2012 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 2012, 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.apxs>.

This brief report presents results from the 2012 Cuyahoga County Middle 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](#)

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 2012 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 2012
IVP-15: Increase the use of safety belts to 92.4%	89.7% of Cuyahoga County middle 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 12,341 middle school students who completed the 2012 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.)	10.3% (9.5-11.0)
Rarely or never wore a bicycle helmet (Among students who had ridden a bicycle during the 12 months before the survey.)	78.0% (76.9-79.1)

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 2012, we were able to weight to 4 of 6 regions in Cuyahoga County. The columns under Inner Ring—East and Inner Ring-West do not include data because school participation within those 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)
Rarely or never wore a seatbelt (When riding in a car driven by someone else.)	20.3% (17.6-22.9)	16.8% (14.7-19.0)	N/A	N/A	5.9% (4.7-7.3)	5.8% (4.8-6.8)
Rarely or never wore a bicycle helmet (Among students who had ridden a bicycle during the 12 months before the survey.)	93.6% (92.3-95.0)	92.2% (90.5-93.8)	N/A	N/A	55.8% (52.8-58.8)	74.7% (72.4-76.4)

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, and grade level. 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	8.1	7.3 - 8.9
Male	12.2	11.2 - 13.3
Race/Ethnicity		
Black	15.4	14.0 - 16.7
White	5.6	4.9 - 6.4
Hispanic	18.4	15.6 - 21.3
Other/Multiple	14.5	10.8 - 18.2
Grade		
7th	9.3	8.5 - 10.2
8th	10.7	9.8 - 11.7
Total	10.3	9.5 - 11.0

Rarely or never wore a bicycle helmet		
Category	%	CI
Gender		
Female	76.7	75.1 - 78.3
Male	79.2	77.8 - 80.5
Race/Ethnicity		
Black	89.9	88.6 - 91.1
White	69.1	67.6 - 70.6
Hispanic	90.2	88.1 - 92.2
Other/Multiple	78.5	74.2 - 82.9
Grade		
7th	74.6	73.0 - 76.1
8th	81.3	79.9 - 82.7
Total	78.0	76.9 - 79.1

Cuyahoga County Trend Data

The following table presents the prevalence of behaviors that contribute to unintentional injuries among Cuyahoga County middle school students in 2008, 2010, and 2012. The prevalence for each year is given (when available), with 95% confidence intervals below.

Cuyahoga County, 2008	Cuyahoga County, 2010	Cuyahoga County, 2012
Rarely or never wore a seatbelt (When riding in a car driven by someone else.)		
12.7% (11.8-13.6)	12.3% (11.3-13.3)	10.3% (9.5-11.0)
Rarely or never wore a bicycle helmet (Among students who had ridden a bicycle during the 12 months before the survey.)		
81.4% (80.0-82.7)	82.8% (81.5-84.2)	78.0% (76.9-79.1)

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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.

ⁱⁱⁱ Sosin, D., Sacks, J., Webb, K. 1996. Pediatric head injuries and deaths from bicycling in the United States. *Pediatrics*. 98:868-870.

^{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>