



Prevention Research Center for Healthy Neighborhoods  
at Case Western Reserve University

# 2014 Cuyahoga County Youth Risk Behavior Survey: Methodology

## 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. The national YRBS has tracked many of the major causes of morbidity and mortality for adolescents since 1991. Nationwide, the YRBS is conducted every two years among students in grades 9 through 12.

During the spring of 2014, the Prevention Research Center for Healthy Neighborhoods (PRCHN) conducted the YRBS among 7<sup>th</sup> through 8<sup>th</sup> grade students in Cuyahoga County middle schools. The survey was tailored to fit local needs and addressed a wide range of topics. The 2014 Cuyahoga County Middle School YRBS included questions from the following areas:

- Alcohol Use
- Behaviors that Contribute to Unintentional Injuries
- Depression and Suicide
- Illegal and Prescription Drug Use
- Nutrition
- Obesity and Weight Control
- Physical Activity
- Positive Youth Development
- Preventive Health Care
- Reproductive Health
- Tobacco Use
- Violence

This brief report presents the detailed methodology undertaken by the PRCHN as well as a description of the sample of students that participated.

## Methodology

---

The Prevention Research Center for Healthy Neighborhoods (PRCHN) regularly uses a two-stage cluster sample design that mimics the sampling method of the Centers for Disease Control and Prevention (CDC) and its national Youth Risk Behavior Survey (YRBS). For the 2014 Cuyahoga County Middle School (CCHS) YRBS sample, all public schools in Cuyahoga County that contained grades 7 or 8 were included in the sampling frame.

In the first stage of sampling, all 109 public schools housing grades 7 or 8 in Cuyahoga County were selected to participate. In the second stage of sampling, 7<sup>th</sup> and 8<sup>th</sup> grade classrooms were selected in each participating school. Classroom selection was random, though schools were given the option to have the survey administered to the entire student body (i.e., every classroom) or a random sample of their students. All students in the selected classrooms were eligible to participate.

Student participation was both anonymous and voluntary. Permission slips were mailed to the homes of selected students; parents or guardians that approved for their student to participate took no action while parents or guardians with questions or who did not wish for their student to participate called their school's main office. Student nonparticipation was due to absence on the day of survey administration, parental refusal, or student refusal. Additionally, a small number of questionnaires failed quality control and were removed from the final data set.

Of the 109 schools selected for participation, 97 agreed to take part. A total of 14,682 students were eligible to complete the survey, and 12,607 usable questionnaires remained after the data set was cleaned and edited for inconsistencies. Missing data were not statistically imputed. The school response rate was 89% and the student response rate was 85.9%. The overall response rate was **76.5%** (89% x 85.9%).

The overall response rate allowed for data to be weighted to the population of 7<sup>th</sup> and 8<sup>th</sup> students in Cuyahoga County. Weighting makes the data representative of the population from which it was drawn. A weight was applied to each record to adjust for student non response and the distribution of students by grade, gender, race/ethnicity, and geographic region within Cuyahoga County.

Statistical analyses were conducted on weighted data using SPSS statistical software Complex Samples procedures to account for the complex sampling design. Prevalence estimates and 95% confidence intervals were computed for all variables that could be analyzed in a dichotomous fashion. Therefore, data tables presented may not include every survey item on a given topic. Differences between prevalence estimates were considered statistically significant if the 95% confidence intervals did not overlap.

## Sample Description

The table below presents a demographic profile of students who completed the 2014 Cuyahoga County Middle School YRBS. A total of 12,607 usable surveys were completed.

2014 Cuyahoga County Middle School YRBS		
	N*	Weighted %
Total		%
<b>Gender</b>		
Female	6249	47.6
Male	6237	52.4
<b>Grade Level</b>		
7 <sup>th</sup>	6363	49.9
8 <sup>th</sup>	6130	50.1
<b>Race</b>		
Black**	4512	46.6
White**	4674	45.3
Hispanic	1597	6.2
Other/Multiple	1602	2.0
<b>Family Affluence</b>		
Low	5483	30.1
Medium	3868	33.3
High	3239	36.5

\* Totals do not always add to 12,607 due to missing data.

\*\*Non-Hispanic

## 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 Epidemiology and Biostatistics  
Associate Director, Prevention Research Center for Healthy Neighborhoods  
Case Western Reserve University  
Erika.trapl@case.edu  
216-368-0098

Jean L. Frank, MPH  
Manager of Community Initiatives  
Prevention Research Center for Healthy Neighborhoods  
Case Western Reserve University  
Jean.frank@case.edu  
216-368-5913

## Partners & Funding

---

This work is funded either in whole or in part by a grant awarded by the Ohio Department of Health, Bureau of Child & Family Health Services, Child & Family Health Services Program as a sub-award of a grant issued by the Health Resources and Services Administration (HRSA) under the Maternal and Child Health Block Grant, grant award number B04MC26688, and CFDA number 93.994 and Am. Sub. H.B. 5. This work was also funded by Cooperative Agreement #1-U48-DP-001930 from the Centers for Disease Control and Prevention (CDC). Its contents are solely the responsibility of the PRCHN and do not necessarily represent the official views of the CDC. This work was approved by the Institutional Review Board at Case Western Reserve University, Protocol #2012-274.



CUYAHOGA COUNTY  
BOARD OF HEALTH