



Prevention Research Center for Healthy Neighborhoods
at Case Western Reserve University

2016 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 2016, the Prevention Research Center for Healthy Neighborhoods (PRCHN) conducted the YRBS among 7th through 8th grade students in Cuyahoga County middle schools. The survey was tailored to fit local needs and addressed a wide range of topics. The 2016 Cuyahoga County Middle School YRBS included questions from the following areas:

- Behaviors that Contribute to Unintentional Injuries
- Violence
- Depressive Symptoms and Suicide
- Tobacco and Electronic Vapor Use
- Alcohol Use
- Other Drug Use
- Sexual Behavior
- Obesity and Weight Control
- Dietary Behavior
- Physical Activity
- Positive Youth Development
- Preventive Health Care
- Other Health Behaviors

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 2016 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 104 public schools housing grades 7 or 8 in Cuyahoga County were selected to participate. In the second stage of sampling, 7th and 8th 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 104 schools selected for participation, 95 agreed to take part. A total of 14809 students were eligible to complete the survey, and 13,261 usable questionnaires remained after the data set was cleaned and edited for inconsistencies. Missing data were not statistically imputed. The school response rate was 91.3% and the student response rate was 89.5%. The overall response rate was **81.8%** (91.3% x 89.5%).

The overall response rate allowed for data to be weighted to the population of 7th and 8th 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 2016 Cuyahoga County Middle School YRBS. A total of 13,261 usable surveys were completed.

2016 Cuyahoga County Middle School YRBS		
	N*	Weighted %
Total		%
Gender		
Female	6623	48.5
Male	6586	51.5
Grade Level		
7 th	6477	48.9
8 th	6628	51.1
Race		
Black**	4559	37.3
White**	5136	55.5
Hispanic	1574	5.3
Other/Multiple	1729	1.9
Family Affluence		
Low	3506	24.0
Medium	4022	32.3
High	5070	43.6

* Totals do not always add to 13,261 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 School-Based 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 & Evaluation Project Coordinator
Prevention Research Center for Healthy Neighborhoods
Case Western Reserve University
Audrey.kinsella@case.edu
216-368-5746

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 and Family Health Services, Child and 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. 59, and by Cooperative Agreement #U87PS004165-02 from the U.S. Centers for Disease Control and Prevention, Division of Adolescent School Health (CDC-DASH).

This work was also funded by Cooperative Agreement Number 1-U48-DP-005030 from the Centers for Disease Control and Prevention. 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