



Prevention Research Center for Healthy Neighborhoods
at Case Western Reserve University

2019 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 fall of 2019, the Prevention Research Center for Healthy Neighborhoods (PRCHN) conducted the YRBS among 9th through 12th grade students in Cuyahoga County high schools. The survey was tailored to fit local needs and addressed a wide range of topics. The 2019 Cuyahoga County High 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
- Marijuana Use
- Other Drug Use
- Sexual Behaviors
- Obesity and Weight Control
- Dietary Behaviors
- Physical Activity
- Positive Youth Development
- Preventative Health Care
- Other Health Behaviors

This brief report presents the detailed [methodology](#) undertaken by the PRCHN as well as a [sample description](#).

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 2019 Cuyahoga County High School (CCHS) YRBS sample, all public schools in Cuyahoga County that contained grades 9 through 12 were included in the sampling frame.

In the first stage of sampling, all 67 high schools (schools with grades 9 through 12) in Cuyahoga County were selected to participate. In the second stage of sampling, 9th through 12th 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 67 schools selected for participation, 51 agreed to take part. A total of 19,637 students were eligible to complete the survey, and 15,350 usable questionnaires remained after the data set was cleaned and edited for inconsistencies. Missing data were not statistically imputed. The school response rate was 76.0% and the student response rate was 77%. The overall response rate was **60%** (76% x 77%).

The overall response rate allowed for data to be weighted to the population of 9th through 12th grade 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 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 2019 Cuyahoga County High School YRBS. A total of 15,350 usable surveys were completed.

2019 Cuyahoga County High School YRBS		
	N	Weighted %
Total	15350	100%
Gender		
Female	7919	48.9%
Male	7333	51.1%
Grade Level		
9 th	4565	26.9%
10 th	4228	25.5%
11 th	3446	23.3%
12 th	2995	24.3%
Race		
Black*	5591	39.5%
White*	5448	52.1%
Hispanic	2293	5.0%
Other/Multiple	1780	3.4%
Family Affluence		
Low	2764	17.2%
Medium	6155	48.3%
High	4393	34.5%
Sexual Identity		
Heterosexual (Straight)	12188	82.3%
Lesbian, gay, or bisexual	2277	13.4%
Not sure	718	4.3%

*Non-Hispanic

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