

# 2018 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 2018, 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 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

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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 2018 Cuyahoga County Middle School (CCMS) 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 103 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. Survey information and opt-out instructions were sent 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 103 schools selected for participation, 94 agreed to take part. A total of 18,976 students were eligible to complete the survey, and 12,936 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 88.8%. The overall response rate was 81.1% (91.3% x 88.8%).

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 2018 Cuyahoga County Middle School YRBS. A total of 12,936 usable surveys were completed.

2018 Cuyahoga County Middle School YRBS		
	N*	Weighted %
Total		%
Gender		
Female	6422	47.5
Male	6435	52.5
Grade Level		
7 <sup>th</sup>	6338	50.1
8 <sup>th</sup>	6478	49.9
Race		
Black**	4372	34.5
White**	4848	55.6
Hispanic	1723	5.7
Other/Multiple**	1707	4.3
Family Affluence		
Low	2064	15.8
Medium	5076	43.3
High	4754	40.9

<sup>\*</sup> Totals do not always add to 12,936 due to missing data.

<sup>\*\*</sup>Non-Hispanic

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