



Prevention Research Center for Healthy Neighborhoods
at Case Western Reserve University

2013 Cuyahoga County Youth Risk Behavior Survey: Depression and Suicide

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 2013, the PRCHN conducted the YRBS among 9th through 12th grade students in Cuyahoga County high schools. A more detailed description of the methodology is available at our website, <http://prchn.org/yrbs.aspx>.

This brief report presents results from the 2013 Cuyahoga County High School Youth Risk Behavior Survey, with a particular focus on Depression and Suicide. In this brief report, we present:

- [Overall Prevalence](#)
- [Regional Prevalence](#)
- [Demographic Prevalence](#)
- [Trend Report](#)
- [Comparison to State and Nation](#)

Data for similar behaviors can be found at our website, <http://prchn.org/yrbs.aspx>.

Depression and Suicide

Mental illness encompasses a variety of diagnosable disorders that occur when there are alterations in the thinking, mood, or behavior of a person that result in distress or impaired functioning.ⁱ Some mental illnesses include symptoms of depression, anxiety, and suicidal ideation.ⁱⁱ

Adolescents are particularly vulnerable to the development of mental health issues given that the period of adolescence is a critical time for mental, social, and emotional development. Ultimately, many mental illnesses first surface during adolescence; 20% of adolescents in the United State have a diagnosable mental illness and nearly 70% do not receive the necessary care.ⁱⁱⁱ

Healthy People 2020

Where possible, the Cuyahoga County Youth Risk Behavior Survey (YRBS) data are compared to the Healthy People 2020 benchmarks.^{iv} 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 2013
MHMD-2: Reduce the suicide attempts by adolescents to no more than 1.7 suicide attempts per 100 population	10.2% of Cuyahoga County high school students reported attempting suicide one or more times during the past 12 months.
MHMD-4.1: Reduce the proportion of adolescents aged 12 to 17 years who experience major depressive episodes to no more than 7.4%	25.6% of Cuyahoga County high school students reported feeling so sad and hopeless almost every day for two weeks or more in a row during the past 12 months.

Overall Prevalence

The following table summarizes depression and suicide among the 16,855 high school students who completed the 2013 Cuyahoga County YRBS. Prevalence estimates and 95% confidence intervals were computed for all variables.

Risk Behavior	% (95% Confidence Interval)
Purposely hurt self without wanting to die (Such as cutting or burning self; during 12 months before survey.)	16.7 (15.9-17.6)
Felt sad or hopeless (Almost every day for two weeks or more in a row, during the 12 months before the survey.)	25.6 (24.6-26.5)
Seriously considered attempting suicide (During the 12 months before the survey.)	13.8 (13.0-14.6)
Attempted suicide (One or more times during the 12 months before the survey.)	10.2 (9.5-10.9)

Regional Prevalence

The table below represents depression and suicide 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 2013, we were able to weight to 5 of 6 regions in Cuyahoga County. The column under Outer Ring—West does not include data because school participation within that region 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)
Purposely hurt self without wanting to die (Such as cutting or burning self; during 12 months before survey.)	18.7 (17.0-20.4)	24.4 (21.7-27.2)	17.2 (15.3-19.0)	16.9 (15.1-18.8)	14.2 (12.2-16.3)	n/a
Felt sad or hopeless (Almost every day for two weeks or more in a row, during the 12 months before the survey.)	26.3 (24.4-28.2)	35.3 (32.5-38.1)	28.2 (26.0-30.4)	26.8 (24.1-29.5)	21.6 (18.9-24.3)	n/a
Seriously considered attempting suicide (During the 12 months before the survey.)	14.8 (13.4-16.2)	18.8 (16.5-21.1)	14.5 (12.4-16.5)	14.9 (12.9-16.9)	12.3 (10.4-14.2)	n/a
Attempted suicide (One or more times during the 12 months before the survey.)	15.5 (13.9-17.0)	15.9 (13.4-18.3)	11.8 (10.0-13.7)	8.5 (6.9-10.0)	8.2 (6.5-9.8)	n/a

Demographic Prevalence

The tables below allow for further comparisons of depression and suicide between demographic groups. Data are presented by gender, race/ethnicity, grade level, and family affluence (a proxy for socioeconomic status). A statistically significant difference exists between groups if the 95% confidence intervals do not overlap.

Purposely hurt self without wanting to die		
Category	%	CI
Gender		
Female	22.0	20.7 - 23.3
Male	11.7	10.7 - 12.7
Race/Ethnicity		
White	15.8	14.6 - 17.0
Black	17.0	15.8 - 18.2
Hispanic	28.0	25.3 - 30.8
Other	18.4	15.5 - 21.2
Grade		
9th	20.0	18.2 - 21.9
10th	16.6	15.1 - 18.1
11th	15.1	13.4 - 16.9
12th	14.0	12.4 - 15.6
Family Affluence		
Low	19.5	17.8 - 21.2
Medium	17.1	15.6 - 18.5
High	14.9	13.6 - 16.1
Total	16.7	15.9 - 17.6

Felt sad or hopeless		
Category	%	CI
Gender		
Female	33.3	31.7 - 34.9
Male	18.2	17.0 - 19.4
Race/Ethnicity		
White	23.1	21.7 - 24.6
Black	27.7	26.2 - 29.1
Hispanic	38.1	34.7 - 41.6
Other	28.2	24.9 - 31.5
Grade		
9th	26.7	24.6 - 28.7
10th	25.2	23.5 - 27.0
11th	24.9	22.9 - 26.9
12th	24.6	22.3 - 26.8
Family Affluence		
Low	31.1	29.3 - 32.8
Medium	26.6	24.8 - 28.4
High	21.5	19.8 - 23.1
Total	25.6	24.6 - 26.5

Seriously considered attempting suicide		
Category	%	CI
Gender		
Female	17.8	16.5 - 19.1
Male	9.9	8.9 - 10.8
Race/Ethnicity		
White	12.6	11.6 - 13.7
Black	14.5	13.2 - 15.9
Hispanic	20.5	17.5 - 23.4
Other	17.6	14.8 - 20.3
Grade		
9th	15.8	14.3 - 17.3
10th	13.9	12.6 - 15.2
11th	12.4	10.9 - 13.8
12th	12.0	10.1 - 13.8
Family Affluence		
Low	17.0	15.4 - 18.6
Medium	13.8	12.6 - 15.0
High	11.8	10.6 - 13.0
Total	13.8	13.0 - 14.6

Attempted suicide		
Category	%	CI
Gender		
Female	11.5	10.5 - 12.5
Male	8.8	7.9 - 9.7
Race/Ethnicity		
White	7.2	6.4 - 8.0
Black	13.5	12.3 - 14.6
Hispanic	20.6	17.8 - 23.5
Other	11.7	9.4 - 14.0
Grade		
9th	11.1	9.9 - 12.3
10th	10.3	9.0 - 11.6
11th	9.3	7.7 - 10.9
12th	8.8	7.3 - 10.2
Family Affluence		
Low	13.5	12.1 - 14.9
Medium	9.9	8.7 - 11.0
High	8.4	7.4 - 9.5
Total	10.2	9.5 - 10.9

Cuyahoga County Trend Data

The following table presents the prevalence of depression and suicide among Cuyahoga County high school students in 2009, 2011, and 2013. The prevalence for each year is given (when available), with 95% confidence intervals below.

Cuyahoga County, 2009	Cuyahoga County, 2011	Cuyahoga County, 2013
Purposely hurt self without wanting to die (Such as cutting or burning self; during 12 months before survey.)		
12.8 (11.5-14.1)	10.0 (9.3-10.7)	16.7 (15.9-17.6)
Felt sad or hopeless (Almost every day for two weeks or more in a row, during the 12 months before the survey.)		
25.5 (23.7-27.3)	25.6 (24.6-26.6)	25.6 (24.6-26.5)
Seriously considered attempting suicide (During the 12 months before the survey.)		
11.9 (10.7-13.1)	12.3 (11.5-13.1)	13.8 (13.0-14.6)
Attempted suicide (One or more times during the 12 months before the survey.)		
9.2 (7.9-10.5)	7.5 (6.8-8.2)	10.2 (9.5-10.9)

Comparison to State and Nation

The following table presents the prevalence of depression and suicide among Cuyahoga County high school students, the state of Ohio high school students, and United States high school students. The columns provide the prevalence for Cuyahoga County as reported in 2013 and the state of Ohio and the United States as reported in 2011 (when available).

Cuyahoga County, 2013	Ohio, 2011	United States, 2011
Purposely hurt self without wanting to die (Such as cutting or burning self; during 12 months before survey.)		
16.7 (15.9-17.6)	16.5 (13.4-20.2)	n/a
Felt sad or hopeless (Almost every day for two weeks or more in a row, during the 12 months before the survey.)		
25.6 (24.6-26.5)	27.1 (23.0-31.6)	28.5 (27.2-29.7)
Seriously considered attempting suicide (During the 12 months before the survey.)		
13.8 (13.0-14.6)	14.3 (11.5-17.6)	15.8 (15.1-16.5)
Attempted suicide (One or more times during the 12 months before the survey.)		
10.2 (9.5-10.9)	9.1 (7.1-11.6)	7.8 (7.1-8.5)

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Partners & Funding

This project was made possible by funding by the Ohio Department of Health/Federal Government, Bureau of Child and Family Health Services, Child and Family Health Services Program through the Cuyahoga County Board of Health's Child and Family Health Service Program, as well as 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.



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ⁱ U.S. Department of Health and Human Services. *Mental Health: A Report of the Surgeon General*. 1999. Rockville: U.S. Department of Health and Human Services; Substance Abuse and Mental Health Services Administration, Center for Mental Health Services, National Institutes of Health, National Institutes of Mental Health.

ⁱⁱ Schwarz, SW. (2009). *Adolescent Mental Health in the United States*. New York: National Center for Children in Poverty.

ⁱⁱⁱ Centers for Disease Control and Prevention. *School Connectedness: Strategies for Increasing Protective Factors Among Youth*. Atlanta, GA: U.S. Department of Health and Human Service, 2009.

^{iv} U.S. Department of Health and Human Services. *Mental Health and Mental Disorders*. Retrieved from 2020 Topics & Objectives: <http://www.healthypeople.gov/2020/topicsobjectives2020/objectiveslist.aspx?topicId=40>