



Prevention Research Center for Healthy Neighborhoods
at Case Western Reserve University

2018 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 Fall of 2018, the PRCHN conducted the YRBS among 7th and 8th grade students in Cuyahoga County middle schools. A more detailed description of the methodology is available at our website, http://prchn.org/yrbs_home.aspx.

This brief report presents results from the 2018 Cuyahoga County Middle 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](#)

Data for similar behaviors can be found at our website, http://prchn.org/yrbs_home.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 States have a diagnosable mental illness and nearly 70% do not receive the necessary care.ⁱⁱⁱ Currently, suicide is the second leading cause of death among youth aged 13-19 years.^{iv}

Overall Prevalence

The following table summarizes depressive symptoms and suicide risk behaviors among the 12,936 middle school students who completed the 2018 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 the 12 months before the survey.)	20.1 (19.2 - 21.0)
Felt sad or hopeless (Almost every day for 2 weeks or more in a row; during the 12 months before the survey.)	28.3 (27.2 - 29.4)
Seriously considered attempting suicide (During the 12 months before the survey.)	14.2 (13.4 - 15.1)
Made a suicide plan (During the 12 months before the survey.)	11.8 (11.1 - 12.5)
Attempted suicide (One or more times during the 12 months before the survey.)	8.7 (8.0 - 9.3)
Knew someone who completed suicide	29.5 (28.2 - 30.7)

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 2018, we were able to weight to 4 of 6 regions in Cuyahoga County. The columns under Outer Ring - West and Outer Ring - East do not include data because school participation within these regions 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 the 12 months before the survey.)	20.9 (19.0 - 23.0)	24.5 (21.9 - 27.2)	23.3 (21.8 - 24.9)	21.9 (19.5 - 24.5)	N/A	N/A
Felt sad or hopeless (Almost every day for 2 weeks or more in a row; during the 12 months before the survey.)	28.0 (26.2 - 29.8)	35.0 (31.8 - 38.3)	31.3 (29.2 - 33.4)	32.6 (30.3 - 35.1)	N/A	N/A
Seriously considered attempting suicide (During the 12 months before the survey.)	14.4 (12.7 - 16.2)	17.8 (15.4 - 20.4)	18.7 (16.9 - 20.6)	14.1 (12.4 - 15.9)	N/A	N/A
Made a suicide plan (During the 12 months before the survey.)	14.7 (13.0 - 16.6)	14.8 (13.0 - 16.8)	15.3 (14.0 - 16.6)	11.6 (10.1 - 13.3)	N/A	N/A
Attempted suicide (One or more times during the 12 months before the survey.)	13.0 (11.4 - 14.7)	14.8 (12.7 - 17.1)	12.6 (11.3 - 13.9)	7.5 (6.2 - 9.2)	N/A	N/A
Knew someone who completed suicide	28.6 (25.9 - 31.4)	34.1 (31.2 - 37.1)	36.9 (35.1 - 38.7)	29.5 (27.3 - 31.8)	N/A	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, and grade level. 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	26.3	24.8	- 27.9
Male	14.2	13.1	- 15.5
Race/Ethnicity			
White	18.1	16.8	- 19.4
Black	21.5	20.1	- 23.0
Hispanic	27.5	24.4	- 30.8
Other/Multiple	25.4	22.3	- 28.6
Grade			
7th	19.1	17.8	- 20.6
8th	20.6	19.4	- 21.8
Total	20.1	19.2	- 21.0

Felt sad or hopeless			
Category	%	CI	
Gender			
Female	36.8	35.2	- 38.6
Male	20.3	19.2	- 21.6
Race/Ethnicity			
White	26.1	24.5	- 27.8
Black	29.4	27.9	- 31.0
Hispanic	38.2	35.2	- 41.3
Other/Multiple	32.1	29.2	- 35.1
Grade			
7th	26.3	25.0	- 27.7
8th	29.9	28.1	- 31.8
Total	28.3	27.2	- 29.4

Seriously considered attempting suicide		
Category	%	CI
Gender		
Female	19.3	18.0 - 20.7
Male	9.4	8.3 - 10.6
Race/Ethnicity		
White	11.6	10.4 - 12.9
Black	16.8	15.5 - 18.3
Hispanic	20.6	17.8 - 23.7
Other/Multiple	19.8	17.3 - 22.5
Grade		
7th	12.5	11.5 - 13.5
8th	15.6	14.2 - 17.1
Total	14.2	13.4 - 15.1

Made a suicide plan		
Category	%	CI
Gender		
Female	15.8	14.7 - 17.1
Male	7.9	7.1 - 8.8
Race/Ethnicity		
White	8.9	7.9 - 10.1
Black	14.7	13.6 - 16.0
Hispanic	16.4	13.6 - 19.5
Other/Multiple	18.5	15.9 - 21.4
Grade		
7th	9.9	8.9 - 10.8
8th	13.2	12.1 - 14.4
Total	11.8	8.9 - 12.5

Attempted suicide		
Category	%	CI
Gender		
Female	10.9	9.9 - 12.1
Male	6.4	5.6 - 7.2
Race/Ethnicity		
White	4.7	4.0 - 5.5
Black	12.8	11.6 - 14.1
Hispanic	18.5	15.6 - 21.8
Other/Multiple	14.0	11.6 - 16.8
Grade		
7th	7.6	6.8 - 8.5
8th	9.1	8.0 - 10.3
Total	8.7	8.0 - 9.3

Knew someone who completed suicide		
Category	%	CI
Gender		
Female	34.4	32.7 - 36.1
Male	25.0	23.4 - 26.6
Race/Ethnicity		
White	27.3	25.3 - 29.4
Black	31.8	30.4 - 33.2
Hispanic	37.5	34.4 - 40.7
Other/Multiple	31.5	28.6 - 34.6
Grade		
7th	27.5	25.9 - 29.3
8th	31.0	29.1 - 32.8
Total	29.5	28.2 - 30.7

Cuyahoga County Trend Data

The following table presents the prevalence of depression and suicide among Cuyahoga County middle school students in 2010, 2012, 2014, 2016, and 2018. The prevalence for each year is given (when available), with 95% confidence intervals below.¹

Cuyahoga County, 2010	Cuyahoga County, 2012	Cuyahoga County, 2014	Cuyahoga County, 2016	Cuyahoga County, 2018
Intentional self-harm (Such as cutting or burning self; during 12 months before survey.)				
13.8% (12.8 - 14.8)	14.4% (13.6 - 15.2)	15.2% (14.5 - 15.9)	N/A	20.1% (19.2 - 21.0)
Felt sad or hopeless (Almost every day for two weeks or more in a row, during the 12 months before the survey.)				
21.1% (19.8 - 22.3)	20.1% (19.2 - 21.1)	21.3% (20.5 - 22.1)	22.4% (21.9 - 22.9)	28.3% (27.2 - 29.4)
Seriously considered attempting suicide (During the 12 months before the survey.)				
13.3% (12.3 - 14.3)	13.5% (12.8 - 14.3)	13.9% (13.3 - 14.6)	12.8% (12.4 - 13.2)	14.2% (13.4 - 15.1)
Attempted suicide (One or more times during the 12 months before the survey.)				
9.8% (9.0 - 10.7)	8.7% (8.0 - 9.3)	9.8% (9.3 - 10.4)	N/A	8.7% (8.0 - 9.3)

¹ The YRBS questions with two or more data points over 2010-2018 are included. The new 2018 questions are not included for the purpose of demonstrating trends. For those questions not asked in 2018, refer to the PRCHN archives at www.prchn.org/asp for more detailed information.

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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} Web-based Injury Statistics Query and Reporting System (WISQARS) [database online]. Atlanta, GA: Centers for Disease Control and Prevention, National Center for Injury Prevention and Control; 2018.