



Prevention Research Center for Healthy Neighborhoods  
at Case Western Reserve University

# 2019 Cuyahoga County Youth Risk Behavior Survey: Marijuana Use

## Introduction

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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 2019, the PRCHN conducted the YRBS among 9<sup>th</sup> through 12<sup>th</sup> grade students in Cuyahoga County high schools. A more detailed description of the methodology is available at our website, [www.prchn.org/YRBSDataCollectionAnalysis.aspx](http://www.prchn.org/YRBSDataCollectionAnalysis.aspx).

This brief report presents results from the 2019 Cuyahoga County High School Youth Risk Behavior Survey, with a particular focus on Marijuana Use. In this brief report, we present:

- [Overall Prevalence](#)
- [Demographic Prevalence](#)
- [Trend Report](#)

Data for similar behaviors can be found at our website, [www.prchn.org/yrbs\\_home.aspx](http://www.prchn.org/yrbs_home.aspx).

## Marijuana Use

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Marijuana is used for the intoxication or high that it gives users. For most youth, marijuana is not difficult to obtain.<sup>i</sup> Many think marijuana is not as harmful as other illicit drugs; however, it has both short- and long-term health effects. The short-term effects include memory problems, loss of coordination, anxiety attacks, and increased heart rate.<sup>ii</sup> Possible long-term effects include respiratory problems, a weakened immune system, and cognitive deficits.<sup>iii</sup> While causation is complex, teens that use marijuana, are also more likely to have lower achievement, more delinquent behavior and aggression, and weaker relationships with parents.<sup>ii</sup>

## Overall Prevalence

The following table summarizes marijuana use among the 15,350 high school students who completed the 2019 Cuyahoga County YRBS. Prevalence estimates and 95% confidence intervals were computed for all dichotomous variables. The 2019 Ohio Youth Risk Behavior Survey prevalence for shared variables is also shown. A statistically significant difference exists between groups if the 95% confidence intervals do not overlap.

Risk Behavior	Cuyahoga County % (95% Confidence Interval)	Ohio % (95% Confidence Interval)
<b>Ever used marijuana</b> (Used marijuana 1 or more times during their life.)	34.5 (33.0 - 36.0)	29.7 (25.0 - 34.8)
<b>Tried marijuana before age 13 years</b>	6.0 (5.4 - 6.5)	n/a
<b>Current marijuana use</b> (Used marijuana 1 or more times during the 30 days before the survey.)	20.3 (19.2 - 21.5)	15.8 (11.4 - 21.6)
<b>Usually smoked marijuana in a blunt</b> (Among students who used marijuana during the 30 days before the survey.)	52.6 (50.1 - 55.2)	n/a
<b>Students perceive great risk of harm from smoking marijuana</b> (Physically or in other ways, if smoke marijuana regularly.)	22.8 (21.4 - 24.3)	n/a

## Demographic Prevalence

The tables below allow for further comparisons of marijuana use between demographic groups. Data are presented by gender, race/ethnicity, grade level, and sexual identity. In following tables, LGB stands for lesbian, gay, or bisexual. A statistically significant difference exists between groups if the 95% confidence intervals do not overlap.

Ever used marijuana			
Category	%	CI	
<b>Gender</b>			
Female	37.5	35.4	39.7
Male	31.4	29.7	33.1
<b>Race/Ethnicity</b>			
White	30.0	27.9	32.2
Black	40.7	38.7	42.8
Hispanic	40.9	37.9	44.0
Other/Multiple	28.7	25.7	31.9
<b>Grade</b>			
9th	23.4	21.3	25.5
10th	29.1	26.3	32.0
11th	38.1	35.1	41.3
12th	48.4	45.9	50.9
<b>Sexual Identity</b>			
Heterosexual	32.7	31.2	34.3
LGB	47.4	43.9	50.9
Not sure	29.5	24.4	35.2
<b>Total</b>	<b>34.5</b>	<b>33.0</b>	<b>36.0</b>

Tried marijuana before age 13 years			
Category	%	CI	
<b>Gender</b>			
Female	5.1	4.5	5.8
Male	6.7	5.9	7.6
<b>Race/Ethnicity</b>			
White	3.6	3.0	4.3
Black	8.4	7.6	9.3
Hispanic	12.0	10.2	14.0
Other/Multiple	7.4	5.8	9.4
<b>Grade</b>			
9th	8.0	6.8	9.5
10th	5.1	4.1	6.2
11th	4.5	3.6	5.6
12th	5.8	4.5	7.4
<b>Sexual Identity</b>			
Heterosexual	5.3	4.8	6.0
LGB	9.0	7.6	10.6
Not sure	8.3	5.6	12.0
<b>Total</b>	<b>6.0</b>	<b>5.4</b>	<b>6.5</b>

Current marijuana use			
Category	%	CI	
<b>Gender</b>			
Female	22.2	20.6	23.9
Male	18.4	17.2	19.8
<b>Race/Ethnicity</b>			
White	18.0	16.4	19.7
Black	23.6	22.0	25.2
Hispanic	24.5	22.0	27.1
Other/Multiple	17.1	14.7	19.8
<b>Grade</b>			
9th	14.0	12.5	15.6
10th	16.0	13.9	18.4
11th	21.8	19.5	24.4
12th	30.1	28.2	32.1
<b>Sexual Identity</b>			
Heterosexual	18.8	17.6	20.0
LGB	30.0	27.1	33.1
Not sure	21.6	16.5	27.7
<b>Total</b>	<b>20.3</b>	<b>19.2</b>	<b>21.5</b>

Usually smoked marijuana in a blunt			
Category	%	CI	
<b>Gender</b>			
Female	55.2	51.8	58.5
Male	50.1	46.3	53.9
<b>Race/Ethnicity</b>			
White	30.7	27.8	33.8
Black	74.4	70.8	77.8
Hispanic	63.2	57.6	68.4
Other/Multiple	52.9	45.8	60.0
<b>Grade</b>			
9th	55.4	48.8	61.7
10th	54.7	48.7	60.7
11th	47.0	40.8	53.2
12th	54.1	48.8	59.4
<b>Sexual Identity</b>			
Heterosexual	53.8	50.7	56.9
LGB	53.1	47.0	59.1
Not sure	35.2	25.1	46.7
<b>Total</b>	<b>52.6</b>	<b>50.1</b>	<b>55.2</b>

Students perceive great risk of harm from smoking marijuana		
Category	%	CI
<b>Gender</b>		
Female	25.3	23.4 - 27.3
Male	20.4	18.7 - 22.1
<b>Race/Ethnicity</b>		
White	26.0	23.9 - 28.2
Black	17.1	15.4 - 18.9
Hispanic	17.5	15.2 - 20.1
Other/Multiple	30.3	26.5 - 34.4
<b>Grade</b>		
9th	26.5	24.2 - 28.9
10th	25.9	22.1 - 30.2
11th	20.0	17.9 - 22.3
12th	18.6	15.6 - 21.9
<b>Sexual Identity</b>		
Heterosexual	24.1	22.5 - 25.7
LGB	14.4	12.3 - 16.9
Not sure	22.9	18.0 - 28.7
<b>Total</b>	<b>22.8</b>	<b>21.4 - 24.3</b>

## Cuyahoga County Trend Data

The following table presents the prevalence of marijuana use among Cuyahoga County high school students in 2011, 2013, 2015, 2017, and 2019. The prevalence for each year is given (when available), with 95% confidence intervals below.

Cuyahoga County, 2011	Cuyahoga County, 2013	Cuyahoga County, 2015	Cuyahoga County, 2017	Cuyahoga County, 2019
<b>Ever used marijuana</b> (Used marijuana 1 or more times during their life.)				
38.1 (36.3 - 39.9)	39.8 (38.2 - 41.5)	36.7 (34.5 - 38.9)	40.3 (38.9 - 41.8)	34.5 (33.0 - 36.0)
<b>Tried marijuana before age 13 years</b>				
6.9 (6.2 - 7.6)	6.6 (6.1 - 7.2)	7.6 (6.8 - 8.4)	8.5 (7.7 - 9.3)	6.0 (5.4 - 6.5)
<b>Current marijuana use</b> (Used marijuana 1 or more times during the 30 days before the survey.)				
22.0 (20.6 - 23.4)	22.9 (21.6 - 24.1)	20.6 (19.0 - 22.3)	24.7 (23.6 - 25.9)	20.3 (19.2 - 21.5)
<b>Usually smoked marijuana in a blunt</b> (Among students who used marijuana during the 30 days before the survey.)				
n/a	n/a	51.0 (48.0 - 53.9)	59.6 (57.8 - 61.4)	52.6 (50.1 - 55.2)
<b>Students perceive great risk of harm from smoking marijuana</b> (Physically or in other ways, if smoke marijuana regularly.)				
48.3 (46.7 - 49.9)	41.9 (40.3 - 43.5)	n/a	n/a	22.8 (21.4 - 24.3)

## Contact Information

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<sup>i</sup> King, K.A., Merianos, A.L., Vidourek, R.A. (2016). Characteristics of marijuana acquisition among a national sample of adolescent users. *American Journal of Health Education*. 47(3): 126-135.

<sup>ii</sup> National Institute on Drug Abuse. NIDA DrugFacts: Marijuana. (2019). *National Institute on Drug Abuse Website*. Available at <https://www.drugabuse.gov/publications/drugfacts/marijuana> Accessed on April 6, 2020.

<sup>iii</sup> Volkow, N.D., Baler, R.D., Compton, W.M., Weis, S.R.B. (2014). Adverse health effects of marijuana use. *NEJM*. 370: 2219-2227.