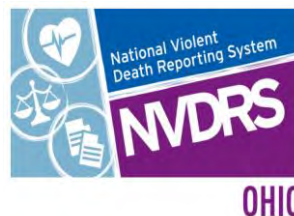


# Youth Suicide in Ohio

A fact sheet from the Ohio Violent Death Reporting System



October 2016

Ohio Department of Health  
Violence and Injury Prevention Program

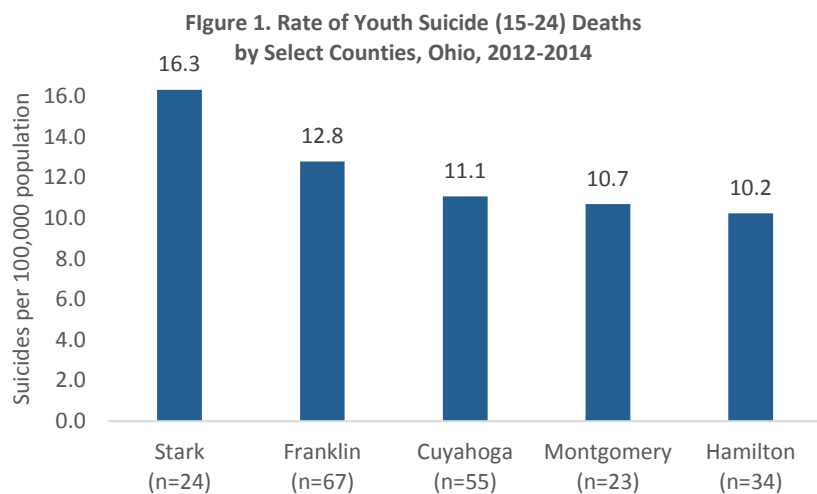
Suicide is a major public health problem that can have devastating effects on individuals, families, and communities. In the United States, suicide is the tenth leading cause of death overall and the **second leading cause of death** among youth and young adults (aged 10-24 years)<sup>i</sup>.

This fact sheet uses data from the **Ohio Violent Death Reporting System (OH-VDRS)** to describe youth suicide deaths. Using information from multiple sources, such as law enforcement and coroner/medical examiner reports, OH-VDRS has a defined procedure for classifying each suicide and its characteristics and circumstances (if known). Ohio is one of 32 states that participates in the National Violent Death Reporting System (NVDRS; see description at the bottom of this page), so comparisons can be made across states. Suicide data underestimate the extent of the problem, with many more people experiencing suicidal thoughts and making suicide plans and nonfatal suicide attempts.<sup>ii</sup>

While many researchers and policy-makers define “youth” suicide as involving victims between the ages of 10 and 24 years old, it is useful to distinguish between younger youth (ages 10-14) and older youth/young adults (15-24), as the prevalence and patterns of suicide within each age group often differ.

## How common is youth suicide?

From 2012 to 2014, an average of **187 Ohio youths died by suicide each year**. This average per year included about 19 youths 10-14 years old and 168 youths 15-24 years old. The number of suicides has not changed markedly during this period. The total number of youth suicides was 193 in 2012, 172 in 2013 and 195 in 2014.



Overall, the rate of suicide among youths 15-24 years old during this period was 10.7 per 100,000. Rates were similar in different types of Ohio counties, ranging from 9.9 per 100,000 in suburban counties to 11.0 per 100,000 in both metropolitan and rural non-Appalachian counties.

Among 5 major metropolitan counties with sufficient data, Stark County had a notably higher rate (16.3 per 100,000) than did the other counties (Figure 1). In the future, additional years of data will permit calculating reliable rates for more individual counties.

### About the data

The Ohio Violent Death Reporting System (OH-VDRS) collects detailed information on deaths that occur in Ohio resulting from homicide, suicide, unintentional firearm deaths, legal intervention, and deaths for which intent could not be determined. OH-VDRS is part of the National Violent Death Reporting System (NVDRS) that gathers information from multiple sources including death certificates, medical examiner reports, and law enforcement reports in order to create a definitive accounting of violent deaths in 32 states. Researchers, legislators, community leaders and others use these data to guide prevention efforts. OH-VDRS is funded by the US Centers for Disease Control and Prevention. This brief uses the most recent available data from 2012 to 2014. Comparisons with other states are for the years 2011-2013 and include data from 17 states, including Alaska, Colorado, Georgia, Kentucky, Maryland, Massachusetts, New Jersey, New Mexico, North Carolina, Ohio, Oklahoma, Oregon, Rhode Island, South Carolina, Utah, Virginia, and Wisconsin. Age-adjusted rates employ the US population standard million for 2000. For more information, visit: <http://www.healthy.ohio.gov/vipp/ohvdrs.aspx>

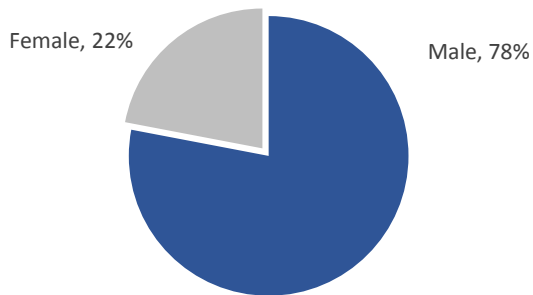
This publication was authored by Kenneth Steinman of the Ohio State University College of Public Health for the Ohio Department of Health's Violence and Injury Prevention Program. Support was provided by the National Violent Death Reporting System Cooperative Agreement 2U17CE001702 (CFDA 93.136) from the Centers for Disease Control and Prevention (CDC). Its contents are solely the responsibility of the authors and do not necessarily represent the official views of the CDC.

**Ohio's rate of youth suicide is about average compared to other states** that also participate in the NVDRS. For 10-14 year-olds, Ohio's suicide rate was 1.78 per 100,000, whereas other state rates ranged from 0.90 per 100,000 in Virginia to 3.60 per 100,000 in Colorado, with a overall national rate of 1.69 per 100,000. Among 15-24 year-olds, Ohio had a suicide rate of 11.27 per 100,000, with other state rates ranging from 4.60 per 100,000 in Rhode Island to 35.33 per 100,000 in Alaska, with a overall national rate of 11.39 per 100,000.

## What are the characteristics of youth who die by suicide?

**Three quarters of youth suicide deaths in Ohio are males** (Figure 2). The proportion of youth suicides who are male is lower among 10-14 year-olds (70%) compared to 15-24 year-olds (79%). Other research indicates that females are more likely than males to report having suicidal thoughts and behaviors.<sup>iii</sup> Thus, females are more likely to attempt suicide, whereas males are more likely to complete it.

Figure 2. Youth Suicide (10-24) Victims by Sex, Ohio, 2012-2014



Youth suicide in Ohio is **most common among non-Hispanic whites** (Figure 3). Compared to rates for Hispanic youth (5.2 per 100,000) and rates for non-Hispanic African-American youth (5.8 per 100,000), rates of suicide for white non-Hispanic youth (8.4 per 100,000) are markedly higher. (Data for other racial/ethnic group were insufficient for analyses). This racial/ethnic pattern was similar for both males and females. Moreover, the racial/ethnic disparities in Ohio's youth suicide rate are similar to those observed in other NVDRS states.

In 86% of youth suicide cases, investigators were able to determine the circumstances surrounding the death. These data offer further insights into the victims of youth suicide:

### Mental/Behavioral Health

- 44% had a known mental health diagnosis;
- 27% were currently in treatment for mental illness;
- 25% of victims had a depressed mood;
- 5% were alcohol dependent;
- 19% had another substance use problem;

### Current problems

- 38% had an intimate partner problem at the time of death;
- 21% had experienced a crisis in the past two weeks;
- Other types of problems (e.g., school, financial, criminal) were much less common.

Figure 3. Youth Suicide (10-24) Victims by Race and Ethnicity, Ohio, 2012-2014

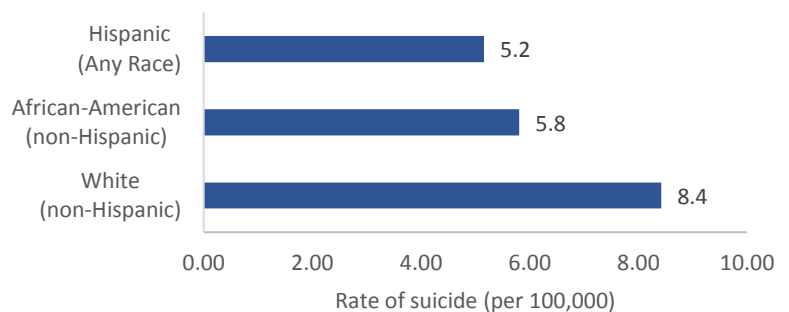
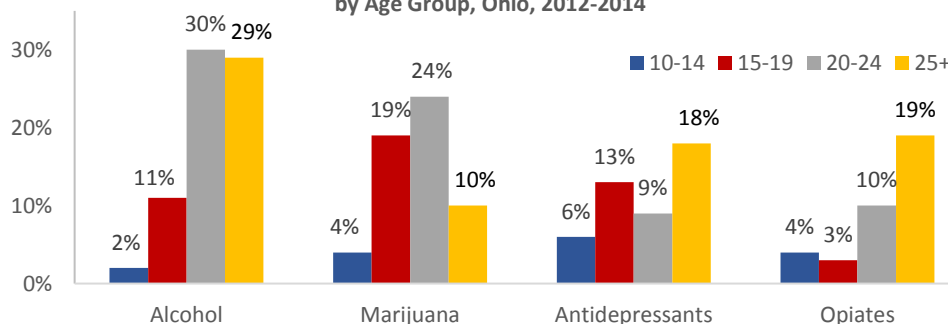


Figure 4. Positive Toxicology Results for Suicide Victims by Age Group, Ohio, 2012-2014



(For deaths where toxicology results were available)<sup>iv</sup>

Most of the circumstances surrounding youth suicides were similar for males and females, although some did differ. Females, for example, were more likely than males to have made previous suicide attempts (33% vs. 18%), a finding consistent with previous research.<sup>iii</sup> Among youth suicide deaths with available toxicology reports,<sup>iv</sup> 23% of decedents 10-14 years old had at least one substance in their system when they died, compared to 42% of

15-19-year-olds and over 60% for suicide deaths in older individuals. A similar pattern emerged for substances like alcohol, antidepressants and opiates (Figure 4). Marijuana, however, was most common in suicide deaths 15-24 years old.

## How and where does youth suicide occur?

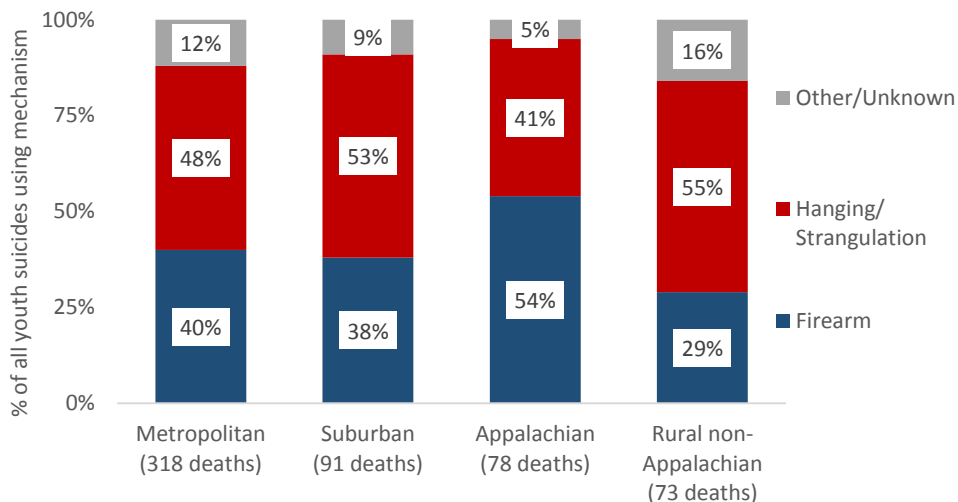
Nearly 77% of youth suicide happened in or around a house or apartment. Less than 3% occurred at school.

Overall, 48% of youth suicides were by hanging or strangulation and 40% used firearms. However, these proportions varied by sex. Among males, 46% died by firearms and 44% by hanging or strangulation, whereas only 27% of females died by firearms and 57% by hanging or strangulation.

Mechanisms also varied by region: **youth suicides by firearm are more common in Appalachian counties** compared to other types of Ohio counties (Figure 4).<sup>v</sup>

Of youth suicides with known circumstances, 37% left a suicide note and 27% had previously told someone about their intent to kill themselves. These figures were similar for males and females and resembled findings from other NVDRS states.

Figure 4. Mechanism of Death for Youth Suicide Victims (10-24) by Region<sup>iv</sup>, Ohio, 2012-2014



## Where can I learn more?

Youth suicide is a significant public health problem, yet **it can be prevented**. The resources below offer more information about this important topic.

**Ohio Violent Death Reporting System**

<http://www.healthy.ohio.gov/vipp/ohvdrs.aspx>

**Ohio Suicide Prevention Foundation**

<http://www.ohiospf.org/>

**Ohio's Suicide Prevention Plan**

<http://mha.ohio.gov/suicideprevention>

**National Suicide Prevention Lifeline**

<http://suicidepreventionlifeline.org/>

**Centers for Disease Control and Prevention**

<http://www.cdc.gov/violenceprevention/suicide/>

**Suicide Prevention Resource Center**

<http://www.sprc.org/>

If you are in crisis and need to speak with someone immediately, please call the National Suicide Prevention Lifeline 1-800-273-TALK (1-800-273-8255), or text the keyword "4hope" to 741 741.

<sup>i</sup> National Center for Injury Prevention and Control. [10 Leading Causes of Death by Age Group in the United States – 2014](#). Atlanta, GA: Centers for Disease Control and Prevention; 2015.

<sup>ii</sup> Centers for Disease Control and Prevention. [Youth Risk Behavior Surveillance System: High School YRBS](#).

<sup>iii</sup> Cash SJ, Bridge JA. Epidemiology of youth suicide and suicidal behavior. *Curr Opin Pediatr*. 2009 Oct; 21(5): 613–619.

<sup>iv</sup> Toxicology results were available for 83% of youth suicide deaths.

<sup>v</sup> Counties were classified as follows: METROPOLITAN: Allen, Butler, Cuyahoga, Franklin, Hamilton, Lorain, Lucas, Mahoning, Montgomery, Richland, Stark, Summit. SUBURBAN: Auglaize, Clark, Delaware, Fairfield, Fulton, Geauga, Greene, Lake, Licking, Madison, Medina, Miami, Pickaway, Portage, Union, Wood. APPALACHIAN: Adams, Ashtabula, Athens, Belmont, Brown, Carroll, Clermont, Columbiana, Coshocton, Gallia, Guernsey, Harrison, Highland, Hocking, Holmes, Jackson, Jefferson, Lawrence, Meigs, Monroe, Morgan, Muskingum, Noble, Perry, Pike, Ross, Scioto, Trumbull, Tuscarawas, Vinton, Washington. RURAL NON-APPALACHIAN: Ashland, Champaign, Clinton, Crawford, Darke, Defiance, Erie, Fayette, Hancock, Hardin, Henry, Huron, Knox, Logan, Marion, Mercer, Morrow, Ottawa, Paulding, Preble, Putnam, Sandusky, Seneca, Shelby, Van Wert, Warren, Wayne, Williams, Wyandot.