



**Miami County
Public Health**

Prevent. Promote. Protect

Suicide Awareness

Miami County, OH

2011-2020

Prepared by Miami County Public Health

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Table of Contents

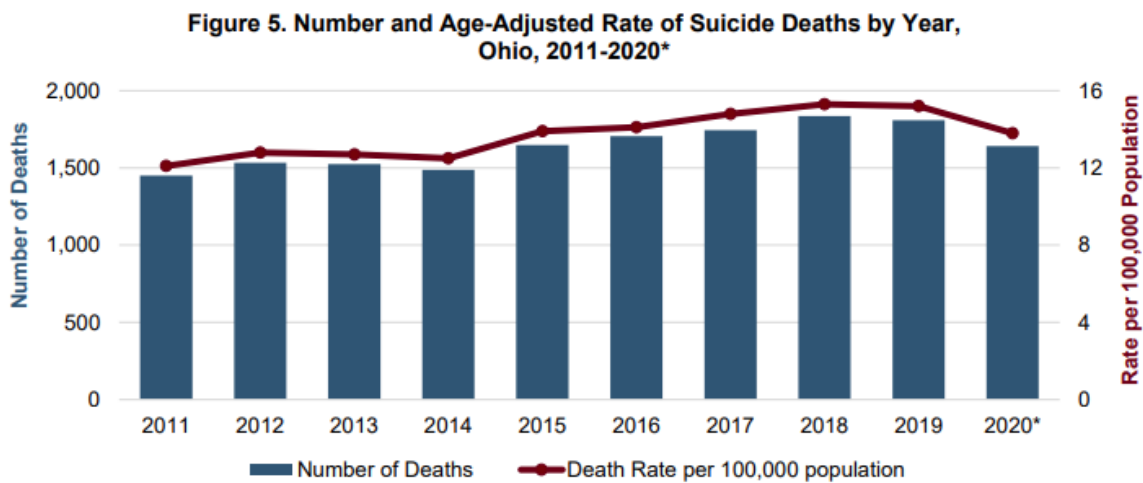
Overview	4
Risk and Protective Factors	6
Suicide Seasonality	7
Demographics	8
Mechanisms	11
Location	13
Youth Risk Behavior Survey	14
Reference	15

Overview

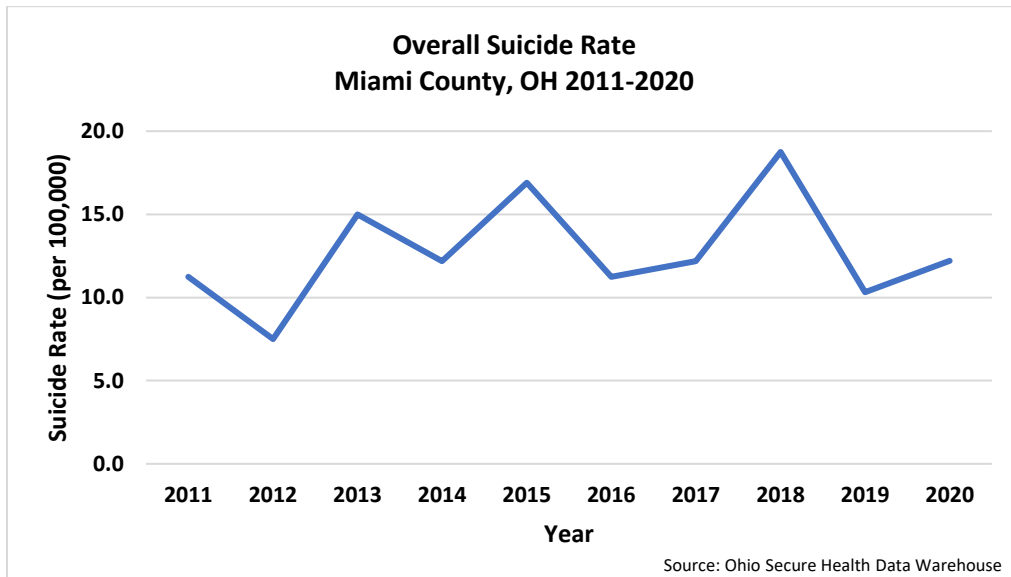
Suicide is death caused by injuring oneself with the intent to die. There is no single cause of suicide. There are many factors that can increase the risk for suicide or protect against it.¹

The purpose of this report is to take a deeper look at the trends, provide information, and resources to the community. The aim for this report is to decrease the suicide rate within the county over time. The data was aggregated to a 10-year period to summarize, organize, and analysis the data into a simpler easy to read summary.

Suicide was among the top 9 leading causes of death for people ages 10-64 and second leading cause of death for people ages 10 -14 and 25-34 in 2020 in the United States.² In the figure below, from 2011 to 2020, the number and the rate of suicide deaths in Ohio increased overall (13% and 14%, respectively).³



Overview (Cont.)



The above graph shows the suicide rate in Miami County between 2011 to 2020. In 2011, the rate was 11.2 per 100,000 residents and in 2020, the rate was 12.2 per 100,000 residents. Miami County lost 136 lives to suicide between 2011 to 2020.

Risk & Protective Factors

Risk Factors

Suicide is usually not caused by a single event or situation. A range of factors contributes to increase risk of suicides such as, individual, relationship, community, and societal levels. Those risk factors listed can increase the possibility of a person attempt suicide. Below are some of the factors that leads to suicide attempts.⁵

Individual factors

- Previous suicide attempts
- History of depression and other mental illnesses
- Job/financial problems or loss
- Impulsive or aggressive tendencies

Relationship factors

- Bullying
- High conflict or violent relationships
- Family/loved one's history of suicide

Community Risk Factors

- Suicide cluster in the community
- Stress of acculturation
- Discrimination

Societal Risk Factors

- Stigma associated with help-seeking and mental illness
- Easy access to lethal means of suicide among people at risk
- Unsafe media portrayals of suicide

Protective factors

Similar to risk factor, a range of factors at the individual, relationship, community, and societal levels can protect people from suicide.²

Individual protective factors

- Effective coping and problem-solving skills
- Strong sense of cultural identity

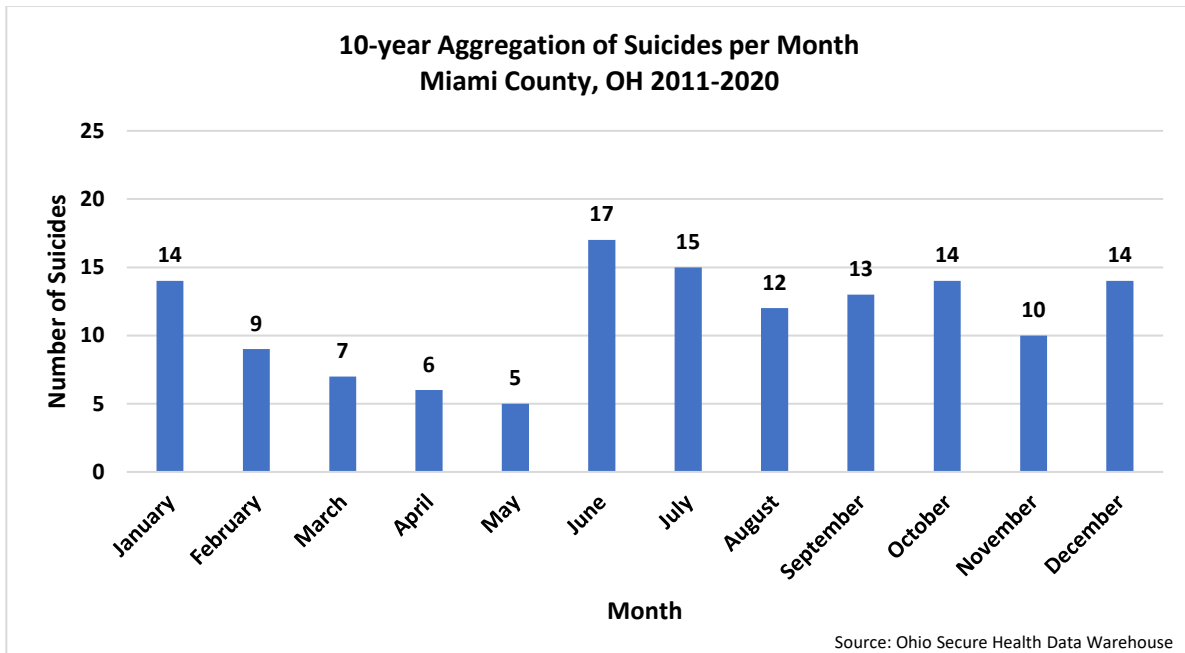
Relationship protective factors

- Support from partners, friends, and family
- Feeling connected to other

Societal protective factors

- Reduced access to lethal means of suicide among people at risk
- Cultural, religious, or moral objections to suicide

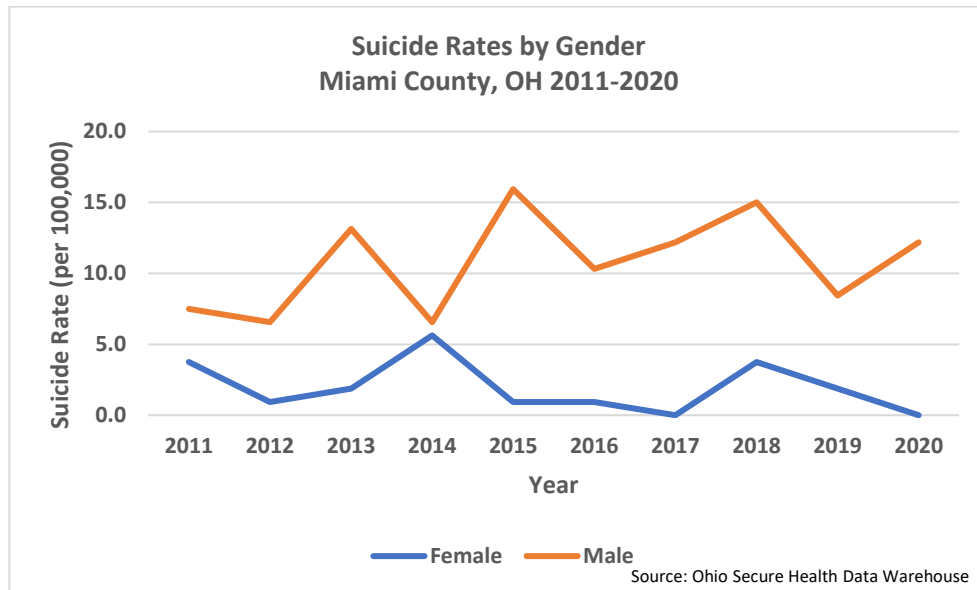
Suicide Seasonality



According to John Hopkins Medicine, the suicide rate is at its highest in April, May, and June. Studies have suggested that inflammation from various sources, including allergic reactions, can cause or worsen depression.⁶ Mortality data collected from Miami County shows that suicide rates were the highest mostly in the summer months. In a ten-year period, the latter half of the year recorded higher suicide numbers. While the first couple months in the past decade reported lower suicide numbers excluding January.

Demographics

In 2021, the population in Miami County was approximately 109,264.⁷ White residents make up 92.9% of the total population, while Black residents made up 2.7%.⁷ Between 2011 to 2020, 131 Whites and 5 Blacks committed suicide in Miami County. The data only included Black and White individuals; there was no data on other races in the ten-year period.

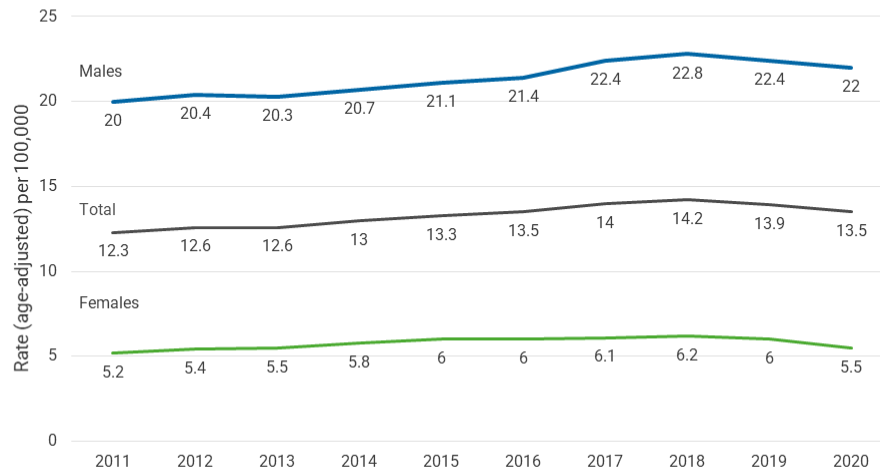


- Between 2011 to 2020 Miami County reported 21 female and 115 male suicides.
- The highest rate for females was 5.6 in 2014, while for males the highest rate was reported in 2015 at 15.9.

Demographics (Cont.)

SPRC | Suicide Prevention Resource Center

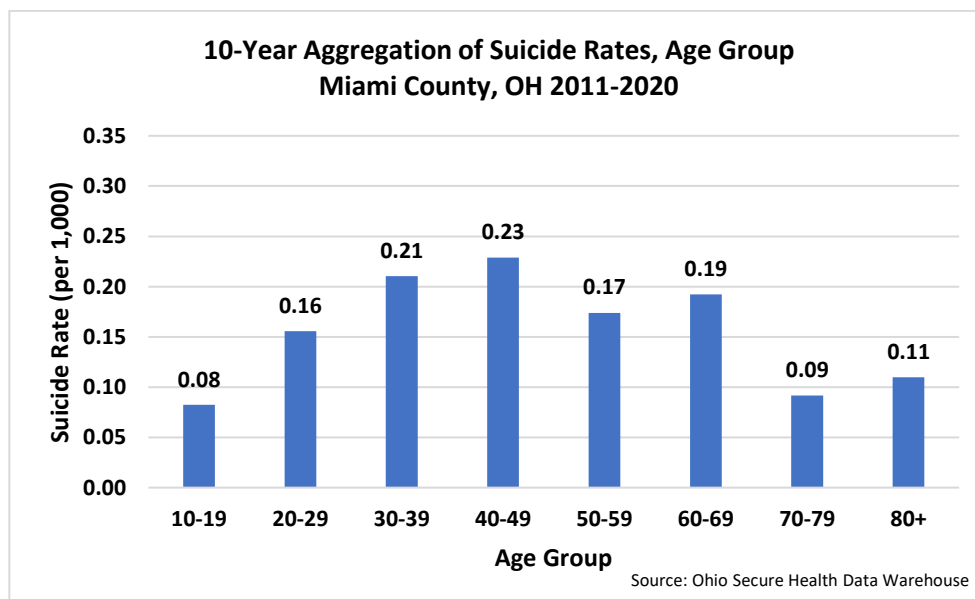
Suicide Rates by Sex, United States 2011-2020



www.sprc.org

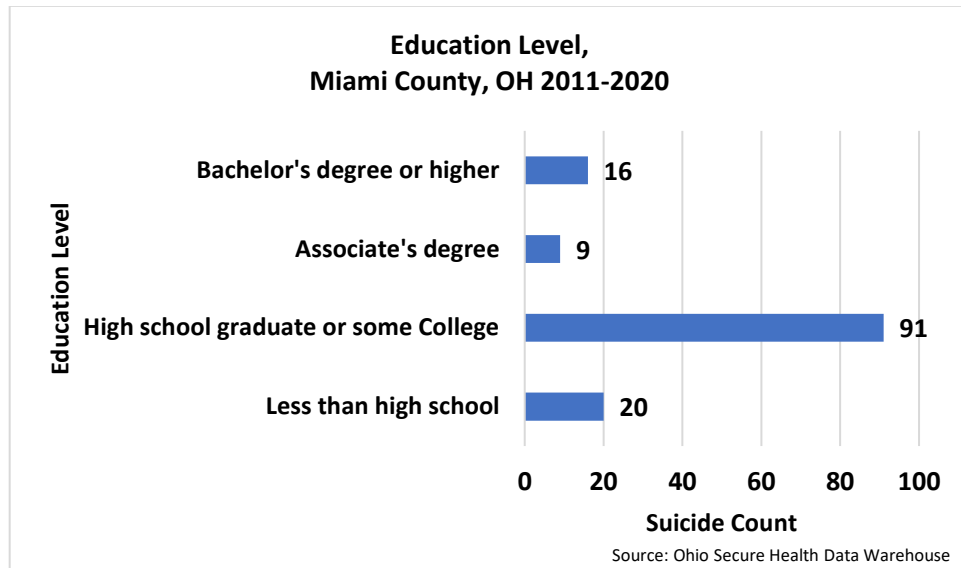
Source: CDC, 2021

The graph above provides an overall view of suicide rates by sex in the United States from 2011 to 2020. Suicide increased from 12.3 to 13.5 per 100,000 in the United States in a ten-year period. The rates in a ten-year period for males increased from 20 to 22 and for females increased from 5.2 to 5.5 per 100,000.⁶

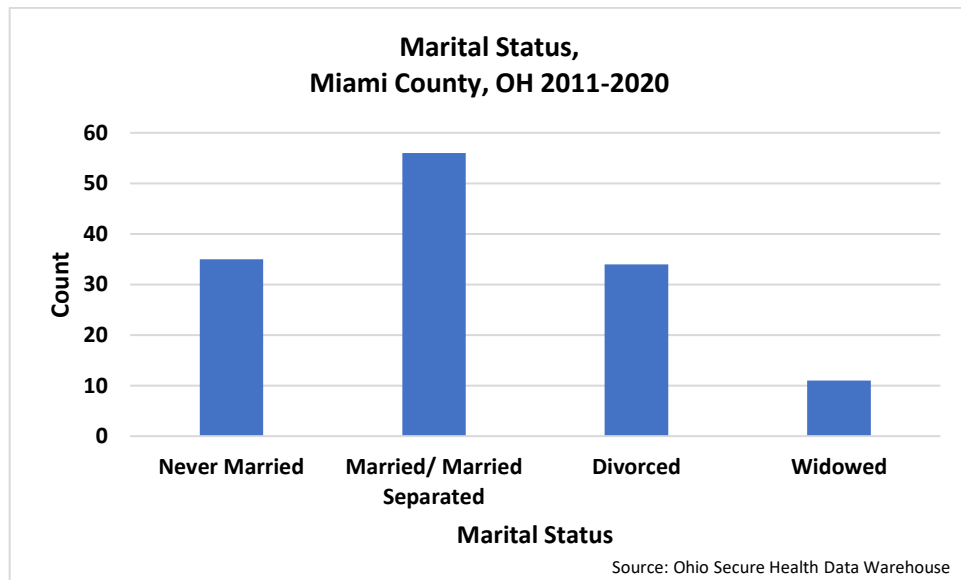


- The 40-49 age group had the highest rates of suicide between 2011 to 2020 at 0.23 per 1,000.
- The 10-19 and 70-79 age group observed the lowest rate of suicide in Miami County.

Demographics (cont.)



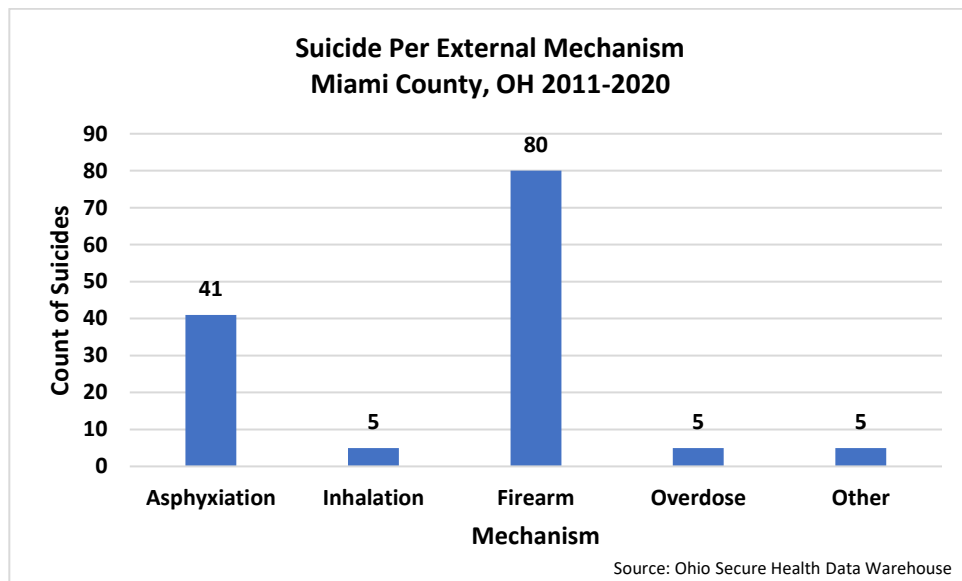
- Individuals who are High School Graduates or have some college credits had the highest number of suicide cases from 2011 to 2020.
- Individuals who hold an Associate degree or higher had the lowest suicide cases in Miami County in a ten-year period.



- Individuals who are either still Married or Separated had the highest suicide count from 2011 to 2020 in Miami County.
- While individuals who were Never Married or Divorced had similar suicide count.

Mechanisms

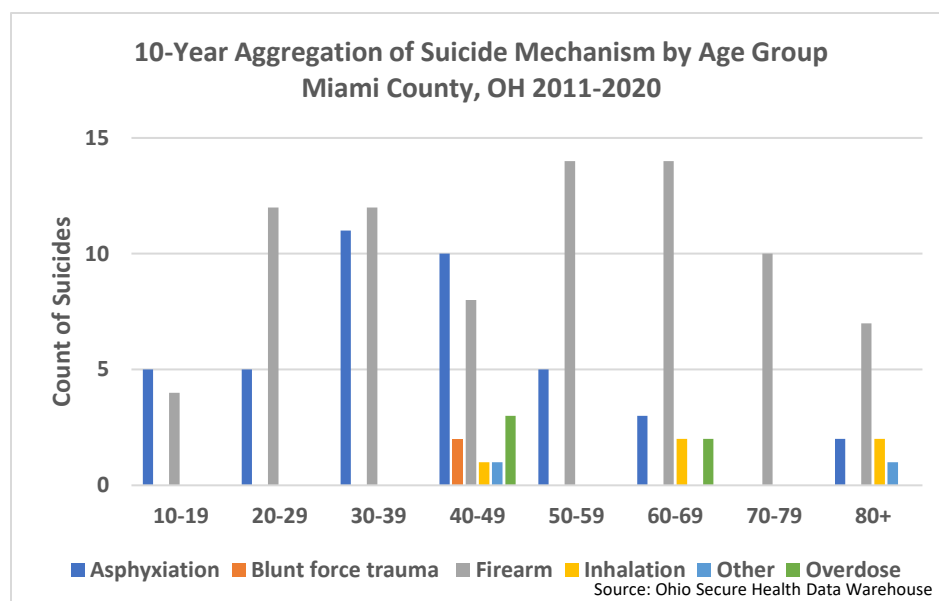
For this section, the causes of suicide were classified by similarity to each other. **Asphyxiation** contains individuals who committed suicide by hanging, strangulation, or suffocation. **Inhalation** contains individuals who inhaled carbon dioxide. **Firearm** contains individuals who use any form of guns for method of suicide. **Overdose** contains individuals who intentionally take a toxic amount of a substance to commit suicide. **Other** contains groups with low case counts or had incomplete information on the mechanism.



- Firearms was the leading mechanism of suicide. It was followed by asphyxiation.
- Firearms represents 58.8% of all suicides from 2011 to 2020. Asphyxiation accounted for 30.1% of suicides deaths in Miami County.

Mechanisms (cont.)

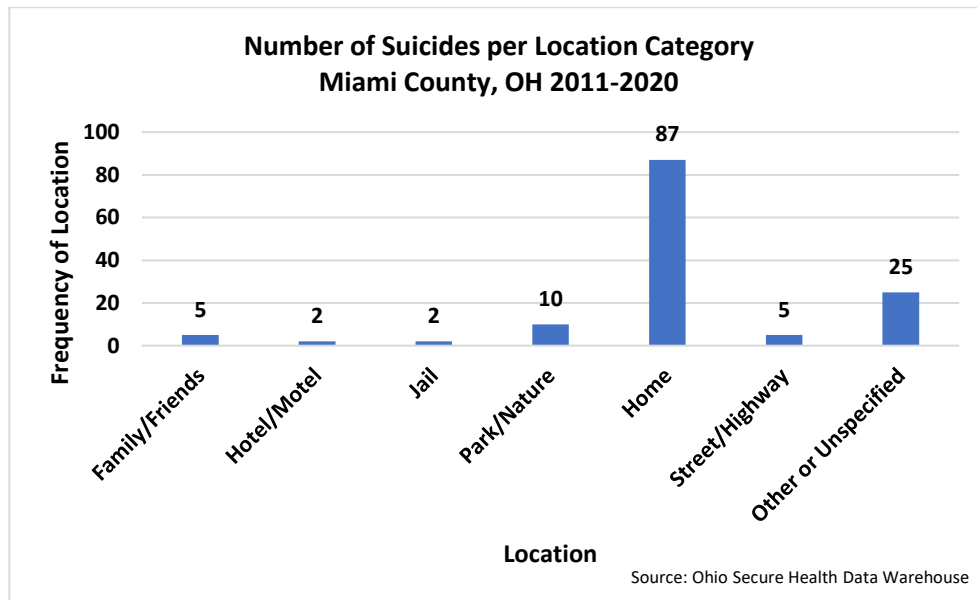
For this section, a 10-year aggregation of suicide mechanism was examined by age group. We want to identify any specific age groups that may be more affected by suicide and by what methods. Below is the data that was gather from 2011 to 2020 in Miami County.



- Firearm was the most used method for suicide in majority of the age groups.
 - Of the 136 lives lost to suicide, 16% served in the Armed Forces. Of those who served in the Armed Forces, 91% used Firearms as method of choice.
 - Firearms use was the highest among those in the 50-59 and 60-69 age group.
- In the 30-39 age group Firearm use was slightly higher than Asphyxiation, while in the 40-49 age group Asphyxiation was slightly higher than Firearm for method of suicide.
- In the 70-79 age group the only method that was used was firearm unlike other age groups who used a variety of methods.
 - The 70-79 age group also reported 22.8% serving in the Armed Forces, the 2nd highest age group only behind individuals 80 and older at 27.3%.

Location

In this section, we are interested in which locations in Miami County residents are committing suicide. The majority (64%) of people committed suicide in their own homes. Residents who committed suicide at Other or Unspecified locations, includes unknown place of suicides attempts, such as individuals who died in a hospital or other medical facilities due to their injuries but did not commit suicide there accounted for 18.4% of cases.



Youth Risk Behavior Survey

The Youth Risk Behavior Survey (YRBS) is a survey conducted in high schools across the state. This effort is led by the U.S. Centers for Disease Control and Prevention (CDC) to monitor students' health risks and behaviors in six categories identified as most likely to result in adverse outcomes. These categories include unintentional injury and violence; tobacco use; alcohol and other drug use; sexual behaviors that contribute to unintended pregnancy and disease; dietary behaviors; and physical inactivity.⁸

While Miami County does not collect YRBS data from Middle and High School students we will look at 2019 data collected from Middle and High School students in Ohio. Since we are focusing on Suicide, we will focus on factors that can contribute to suicide risk in students.

Middle School YRBS

- 27.4% of middle school students felt sad or hopeless during the 12 months before the survey.⁸
- 15.6% of middle school students seriously considered attempting suicide during the 12 months before the survey.⁸
 - Prevalence for female students is significantly higher than for male students, while no significant differences by grade level
- 9.6% of middle school students who attempted suicide during the 12 months before the survey.⁸
 - There was no significant difference between sex and grade level
- 3.4% of middle school students had a suicide attempt that resulted in an injury, poisoning, or overdose that had to be treated by a doctor or nurse, during the last 12 months.⁸
 - There were no significant differences between sex and grade levels.

High School YRBS

- 15.6% of high school students seriously attempting suicide during the 12 months before the survey.⁸
 - Prevalence for female students is significantly higher than for male students while no significant by grade level.
- 6.8% of high school students attempted suicide one or more times during the 12 months before the survey.⁸
 - There is no significant difference by sex or grade level.
- 2.7% of high school students who had a suicide attempt that resulted in an injury, poisoning, or overdose that had to be treated by a doctor or nurse during the 12 months before the survey.⁸
 - There is no significant difference by sex or grade level.
- 27.5% of high school students most of the time or always got the kind of help they need among students who report having felt sad, empty, hopeless, angry, or anxious.⁸
 - Prevalence for 10th grade students is significantly higher than for 9th grade and for 12th grade students.

Reference

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