



Suicide in Wisconsin Impact and Response

Wisconsin Data and the Wisconsin Suicide Prevention Plan

Released September 2020

prevent **suicide**[®]
W I S C O N S I N

PARTNERS SAVING LIVES IN OUR STATE



If you or
someone you
know is in
suicidal crisis
or emotional
distress, help
is available.

Resources:

The [National Suicide Prevention Lifeline](#), available 24/7: 1-800-273-8255 (TALK)

- ▶ **Veterans Crisis Line** press 1, or send a text message to 838255
- ▶ **Deaf or Hard of Hearing** use video relay or voice/caption at main number, or for TTY dial 1-800-799-4889
- ▶ **En Español**, Nacional de Prevención del Suicidio: 1-888-628-9454

The National Suicide Prevention Lifeline can also be contacted through [Lifeline Chat](#).

A list of Wisconsin county crisis lines can be found at: <https://www.preventsuicidewi.org/county-crisis-lines>.

Crisis Text Line: Text **HOPELINE to 741741** to text with a trained crisis counselor, available 24/7.

The [Trevor Project](#), a crisis intervention and suicide prevention service for LGBTQ young people, available 24/7.

- ▶ [TrevorLifeline](#), call 1-866-488-7386
- ▶ [TrevorText](#), text **START to 678678**
- ▶ [TrevorChat](#), **instant messaging** (with computer)

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Produced in Partnership with



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Executive Summary

Suicide continues to grow as a public health issue in Wisconsin. Among state residents, the suicide rate increased by 40% from 2000-2017. This is an issue associated with tremendous loss that affects individuals, families, and communities across the state. Suicide is also a complex issue, as it involves many factors that can increase the risk of suicidal thoughts and behaviors. Such risk factors include mental health and substance use issues, financial difficulties, physical illness, social isolation, childhood and historical trauma, and ease of access to the methods people use in suicide attempts. These risks can be decreased and suicide can be prevented, though support is needed to help inform prevention efforts in the state.

Suicide in Wisconsin: Impact and Response seeks to help inform efforts through a two-part report. By first presenting in-depth data, stakeholders will gain insight about the people and populations in Wisconsin who experience self-harm injuries, as well as suicidal thoughts, behaviors, deaths, and associated risk factors. The report then presents the Wisconsin Suicide Prevention Plan, a comprehensive approach to reduce suicide attempts and deaths. *Suicide in Wisconsin: Impact and Response* updates two previous reports, *The Burden of Suicide* (2014) and the *Wisconsin Suicide Prevention Strategy* (2015).

The Wisconsin Suicide Prevention Plan was produced in collaboration with the Prevent Suicide Wisconsin Steering Committee. Prevent Suicide Wisconsin is a statewide public-private partnership that was formed over a decade ago when stakeholders identified the need to create an umbrella organization for suicide prevention efforts in Wisconsin.

The plan consists of four strategies:

- 1. Increase and Enhance Protective Factors.** This involves promoting healthy communities by increasing social connectedness for all members, as well as supporting efforts to reduce access to lethal means by people who are at acute risk of suicide (such as through safe storage of medications and firearms).
- 2. Increase Access to Care for At-Risk Populations.** This includes supporting innovative ways to expand access to health care services, including behavioral health, through technologies (such as telehealth), peer-led support services, and stigma reduction.
- 3. Implement Best Practices for Prevention in Health Care Systems.** This means promoting a systematic Zero Suicide approach to suicide prevention in health and behavioral health care organizations, which includes implementation of evidence-based tools for screening, assessment, treatment, and follow-up care.
- 4. Improve Surveillance of Suicide and Evaluation of Prevention Programs.** This includes working to improve data collection systems to enhance the capacity for investigating and reporting suicide deaths, as well as expanding the ability of prevention programs to evaluate the effectiveness of their efforts.

Suicide prevention is best accomplished through comprehensive efforts that make use of data in conjunction with evidence-based and best practices for prevention, while also reflecting the needs and cultures of our local communities. For these efforts to be effective, it will take coordination and cooperation from every sector of society, including government, public health, health care, employers, education, business, media, and community groups. Many people and organizations in the state have already been leading the way in this work. *Suicide in Wisconsin: Impact and Response* represents another step in that direction.

Impact: Wisconsin Data Overview

Demographics

- ▶ The **suicide rate** among Wisconsin residents **increased by 40%**, 2000–2017.
- ▶ The **majority** of suicide deaths were **male**, 2013–2017.
- ▶ The **majority** of those **hospitalized** or presenting at the **emergency department** with **self-harm injuries** were **female**, 2016–2017.
- ▶ The suicide rate was **highest** among individuals ages **45–54**, 2013–2017.
- ▶ The suicide rate (per 100,000) for Wisconsin residents ages 45–54 has **more than doubled** from 2000 to 2017.
- ▶ Suicide rates were **highest** among **American Indians/Alaska Natives** and **Whites**, 2013–2017.
- ▶ Suicide rates were **higher** in **rural** counties than **urban/suburban** counties, 2013–2017.

Circumstances of Suicide Deaths

- ▶ **Firearm** was the **most commonly used method** of suicide, 2013–2017.
- ▶ 71% of all **deaths by firearm** in Wisconsin from 2013 through 2017 were **suicide deaths**.
- ▶ Nearly **1 in 4** individuals who died by suicide had a **previous suicide attempt**, 2013–2017.
- ▶ **Prescription medications** were the **most common type of substances** determined to **contribute** to death among poisoning suicides, 2014–2017.
- ▶ Among suicide deaths in which toxicology testing was performed, **alcohol** was the **most commonly detected substance**, 2014–2017. Approximately **1 in 4** individuals who died by suicide had a reported **alcohol issue** that **contributed** to suicide, 2013–2017.
- ▶ Approximately **1 in 4** individuals who died by suicide had a reported **physical health problem**, 2013–2017.
- ▶ Approximately **1 in 5** individuals who died by suicide had a reported **job problem, financial problem, or both**.
- ▶ **1 in 3** individuals who died by suicide had a reported **intimate partner issue**, 2013–2017.

887

Wisconsin
Residents Died
by Suicide in 2018.

Suicide among Veterans

- ▶ Veterans accounted for almost **1 in every 5** suicide deaths, 2013–2017.
- ▶ Veterans who died by suicide were **more likely to have a reported physical health problem** and **less likely to have reported a mental health issue** when compared with non-veterans, 2013–2017.
- ▶ Veterans were **more likely** to use a **firearm** (70% of all veteran suicides) as the method of suicide and be **male** (97% of all veteran suicides) when compared to non-veterans, 2013–2017.

Suicide among Youth

- ▶ **271 adolescents** (ages 10–19) **died by suicide** from 2013–2017.
- ▶ Suicide was the **second leading cause of death among 10 to 19 year olds**, 2013–2017.
- ▶ **Suicidal ideation** was reported by approximately **1 in 6** Wisconsin public high school students, 2017 Youth Risk Behavior Survey.
- ▶ Adolescents who died by suicide were **more likely to disclose suicide intent to a friend or peer** when compared with adults, 2013–2017.
- ▶ Adolescents who died by suicide were **more likely** to have a reported **family problem, school problem, or both** when compared with adults, 2013–2017.
- ▶ **Females ages 15–17** had the **highest rates** of emergency department visits and hospitalization stays with **self-harm injuries**, 2016–2017.

Suicide among Lesbian, Gay, Bisexual, and Transgender (LGBT) Individuals

- ▶ **Half of LGBT youth** in Wisconsin public high schools reported **depression**, 2017 Youth Risk Behavior Survey.
- ▶ LGBT youth are **3 times more likely** than their heterosexual peers to have **considered suicide**, 2017 YRBS.

Response: Wisconsin Suicide Prevention Plan

Core Concepts

The Wisconsin Suicide Prevention Plan is designed to increase the effectiveness of suicide prevention efforts by focusing on guiding principles that will promote widespread use of best practices for suicide prevention in Wisconsin. Core concepts include:

- ▶ **Evidence-based prevention**—Use the best available research and data throughout the process of planning and implementing suicide prevention efforts and promote the widespread use of evidence-based and best practices that have been shown to be effective.
- ▶ **Coordinated efforts**—Mobilize coordinated, effective efforts by state agencies, the Prevent Suicide Wisconsin Steering Committee, local suicide prevention coalitions, and other partners.
- ▶ **Statewide impact**—Work to make evidence-based and best practices reach a saturation level across the state by focusing on promotion of a select number of targeted initiatives for a given time period.
- ▶ **Results-oriented progress**—Monitor the progress of the prevention plan at the state level.

Prevent Suicide Wisconsin

Prevent Suicide Wisconsin (PSW) is a statewide public-private partnership that was formed in 2009 when stakeholders identified the need to create an umbrella organization for suicide prevention efforts in Wisconsin. Mental Health America (MHA) of Wisconsin administers PSW and its public communications efforts, including a website and e-newsletter. The mission of PSW is to reduce the number of suicide attempts and deaths that take place in the state each year.

PSW supports suicide prevention in Wisconsin through:

- ▶ Support of local suicide prevention coalitions.
- ▶ Organization of the annual Prevent Suicide Wisconsin educational conference.
- ▶ Communication through the Prevent Suicide Wisconsin e-news and website.
- ▶ Opportunities for funding through grants, mini-grants, or special projects.
- ▶ Training in Zero Suicide for health and behavioral health care organizations.
- ▶ Technical assistance and training.

The **Prevent Suicide Wisconsin Steering Committee** includes state agencies, local coalition leaders, and local health departments, as well as people with lived experience of suicide. The steering committee meets quarterly and provides oversight to Wisconsin's suicide prevention efforts, including programs supported by both state and federal grants. Members of the steering committee also made important contributions to the development of the Wisconsin Suicide Prevention Plan. Their efforts and insights were essential to this process and are very much appreciated. In addition, the steering committee serves as the Priority Action Team for the suicide priority of Healthy Wisconsin, the State Health Assessment and Health Improvement Plan.



Strategies for Suicide Prevention

The Wisconsin Suicide Prevention Plan includes the four strategic areas below that, taken together, make up a comprehensive approach to suicide prevention. The full plan is presented in Part 3 of this report.

Strategy 1: Increase and Enhance Protective Factors

1A Implement strategies that reduce the impact of adverse childhood experiences (ACEs) and promote social-emotional development in children.

1B Promote healthy communities by increasing social connectedness in multiple settings, including schools, workplaces, and community, faith-based, cultural, and social organizations.

1C Support efforts, including safe storage of medications and firearms, to reduce access to lethal means by people who are at acute risk of suicide.

Strategy 2: Increase Access to Care for At-Risk Populations

2A Expand access to services for mental health and substance use treatment, as well as for physical health care.

2B Support innovative ways to expand access to care, including technologies and peer-led or other non-clinical support services.

2C Increase the public's knowledge of risk factors for suicide, recognition of warning signs in individuals, and preparedness to support and respond to those individuals.

Strategy 3: Implement Best Practices for Prevention in Health Care Systems

3A Promote a systematic “Zero Suicide”¹ approach, rooted in the understanding that suicide is preventable in people receiving treatment services.

3B Expand the use of evidence-based screening, assessment, and suicide-specific treatments for those at risk.

3C Improve care transitions for people with suicidal thoughts and behaviors who are discharged from emergency departments or inpatient settings.

Strategy 4: Improve Surveillance of Suicide and Evaluation of Prevention Programs

4A Use Wisconsin data to describe the impact of suicidal thoughts, attempts, and deaths and expand data linkages to further the understanding of suicide.

4B Work in collaboration with existing organizations to standardize and enhance capacity for investigating and reporting suicide deaths.

4C Improve and expand evaluation of suicide prevention programs.

1. The Zero Suicide framework is a systemwide, organizational commitment to safer suicide care in health and behavioral health systems. The Zero Suicide Toolkit is available on the Suicide Prevention Resource Center website at <http://zerosuicide.sprc.org/>.

Language Matters

When talking about suicide deaths and suicidal thoughts or behavior, the words we use matter.² Our language and depictions may inadvertently reinforce stigma and negative stereotypes, be offensive to people who have been affected by suicide, or lead to an increase in suicidal behavior (also known as suicide contagion).³ There are many opportunities in our conversations and communications to practice using language that avoids these pitfalls and instead helps create a better foundation for preventing suicide.

Best Practice Language for Suicide Prevention	Language to Avoid for Suicide Prevention
<p>Died by suicide</p> <p>Took his/her/their own life</p> <p>Killed him/her/them self</p> <p>Suicide death</p>	<p>Committed suicide (Implies a crime or wrongdoing)</p> <p>Chose to kill him/her/them self (Implies a rational choice when it might have been crisis-driven)</p> <p>Successful or completed suicide (Implies the death was a positive outcome or an achievement)</p> <p>Suicided (Sounds dehumanizing, implies judgment)</p>
<p>Suicide attempt</p>	<p>Failed or unsuccessful suicide attempt (Implies failure or lack of success when surviving a suicide attempt)</p>
<p>Disclosed suicidal thoughts</p>	<p>Threatened suicide (Implies violence rather than help-seeking)</p>
<p>Describe behavior in neutral terms (What does the behavior look like?)</p>	<p>Manipulative or attention-seeking behavior</p> <p>Suicidal gesture (Implies judgment about or blame for the behavior)</p>
<p>Has bipolar disorder (Or other mental health condition)</p>	<p>Is bipolar (Implies the person is defined by their diagnosis)</p>
<p>Working with or supporting a suicidal patient</p>	<p>Dealing with a suicidal patient (Implies the person is a burden)</p>
<p>Use straightforward terms to describe trends, e.g., “increasing” or “rising”</p>	<p>Strong terms with shock value, such as “skyrocketing” or “epidemic” (Can decrease public will to address an issue)</p>
<p>Limit descriptions of suicide events and provide suicide prevention resources in communications (Does not apply to official death investigations)</p>	<p>Quoting from a suicide note (Can contribute to contagion)</p> <p>Detailed descriptions of the location or method of death, memorials or funerals, or the grief of family and friends (Can contribute to contagion)</p>

2. Language Matters, NowMattersNow.org.

3. Suicide Reporting Recommendations, American Association of Suicidology.

Part 1 » Wisconsin Data

Introduction

In order to prevent suicide, we must gain a better understanding of suicidal behavior. With this knowledge, we can identify important risk and protective factors and begin to form a comprehensive prevention plan around them. Throughout Part 1 of this report, we examine the data on characteristics of suicide deaths, hospitalizations with self-harm injuries, emergency department visits with self-harm injuries, and related behaviors, as well as highlight important analyses in order to develop an understanding of potential risk and protective factors. However, we never want to lose sight of the fact that these data represent people in our communities throughout the state, including family, friends, neighbors, and coworkers.

To understand the incidence of suicidal behavior in Wisconsin, we can look at suicide deaths, hospitalizations and emergency department visits with self-harm injuries, and suicidal thoughts or plans based on survey data. The Wisconsin Violent Death Reporting System (WVDRS)⁴ and Wisconsin Vital Records death certificates capture important information about suicide deaths, while inpatient hospitalizations and emergency department visits with self-harm injuries serve as indicators of potential suicide attempts. Although data on adult suicidal thoughts and behaviors is limited, a survey of Wisconsin high school students, the Youth Risk Behavior Survey (YRBS), examines the prevalence of suicidal thoughts, behaviors, and related risk factors among youth.



Rates in Wisconsin:

- ▶ For **2013–2017**, the age-adjusted **suicide** rate was **14.4** per 100,000. This represents close to **4,300** deaths during this time period.
- ▶ For **2016–2017**, the age-adjusted rate of **hospitalization with self-harm** injuries was **85.3** per 100,000. This represents close to **9,400** admissions during this time period.
- ▶ For **2016–2017**, the age-adjusted rate of **emergency department visits with self-harm** injuries was **69.6** per 100,000. This represents close to **7,500** emergency department visits during this time period.

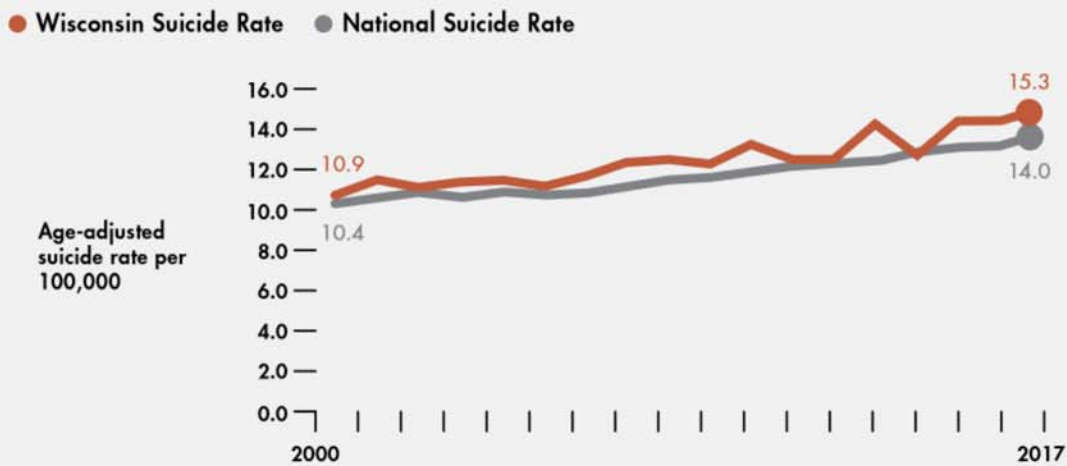
Analytic notes: Please make note of differences in years of data for suicides (2013–2017) versus hospitalizations and emergency department visits for self-harm injuries (2016–2017). An explanation is provided in Appendix 4, Analytic Notes. Also, when used in Parts 1 and 2 of this report, the term “significance” refers to statistical significance.

Email questions related to the Wisconsin data presented in this report to: DHSDPHDataResourceCenter@dhs.wisconsin.gov.

4. The Wisconsin Violent Death Reporting System is part of the National Violent Death Reporting System, which is administered by the Centers for Disease Control and Prevention (CDC).

Wisconsin Suicide Trends

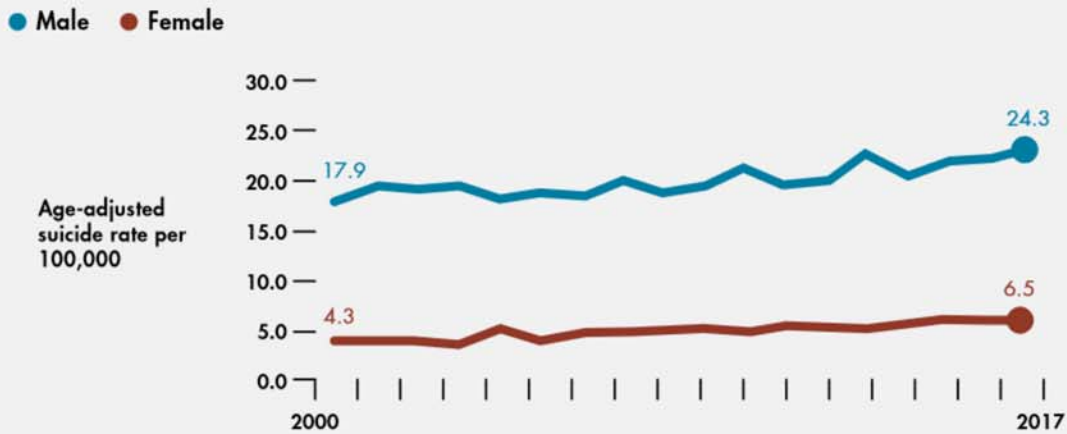
Figure 1. Suicide rate among Wisconsin residents increased by 40%, 2000–2017.



Data sources: Resident death certificates, Office of Health Informatics, Division of Public Health, Wisconsin Department of Health Services, 2000–2017. Mortality data from the National Vital Statistics System (NVSS), 2000–2017, retrieved from: <https://wisqars-viz.cdc.gov:8006/>. Accessed: October 2019

Figure 1. The number of suicides in the U.S. has increased from 29,312 in 2000 to 47,168 in 2017. The U.S. rate of suicide increased by approximately 35% (from 10.4 to 14.0 per 100,000) during this time period. In Wisconsin, the number of suicides has increased from 588 deaths in 2000 to 918 deaths in 2017. The suicide rate in Wisconsin was consistently above the national suicide rate.

Figure 2. Suicide rate increased among males by 36% and among females by 49%, 2000–2017.



Data source: Resident death certificates, Office of Health Informatics, Division of Public Health, Wisconsin Department of Health Services, 2000–2017.

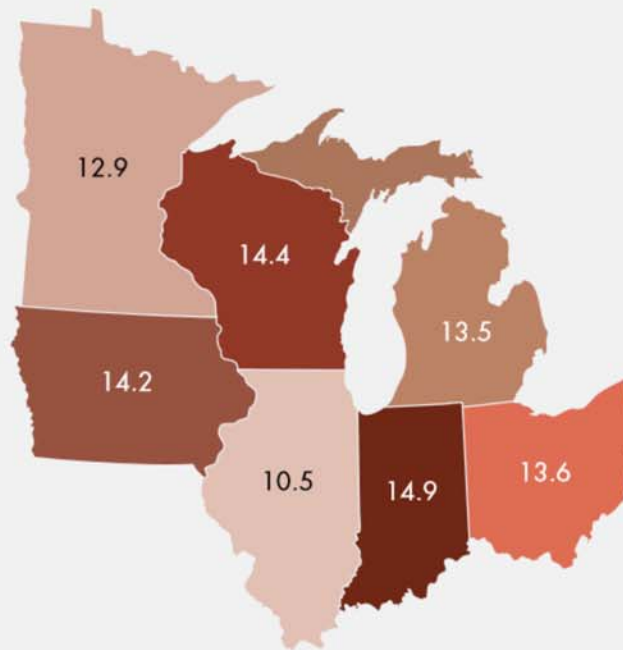
Figure 2. The rates of suicide for both males and females increased from 2000–2017. Females experienced a larger percent increase in suicide rate over this time period. However, in 2017, the suicide rate among males was almost 4 times greater when compared to females.

Wisconsin Suicide by Geography

Suicide rates can vary greatly depending on the location of residence. Each state, county, and community has varying resources available to people experiencing suicidal thoughts and behavior. Social and economic conditions in specific areas can contribute to geographic variation in suicide. In addition, factors such as stigma can differ among specific populations and can create barriers to accessing mental health and substance use services.

Figure 3. The Wisconsin suicide rate ranks 2nd highest among the Midwestern states shown below, 2013–2017.

Age-adjusted suicide rate per 100,000



Data sources: Resident death certificates, Office of Health Informatics, Division of Public Health, Wisconsin Department of Health Services, 2013–2017 (Wisconsin data). Centers for Disease Control and Prevention, National Center for Health Statistics. Underlying Cause of Death 2013–2017 on CDC WONDER Online Database, released December, 2018 (Minnesota, Iowa, Illinois, Indiana, Ohio, and Michigan data).

Figure 3. The age-adjusted suicide rate in Wisconsin was significantly higher when compared with Ohio, Michigan, Minnesota, and Illinois. The age-adjusted suicide rate was not significantly different from Iowa and Indiana.

Figure 4. Suicide rates were significantly **higher in dark red** counties when compared to the state, 2013–2017.

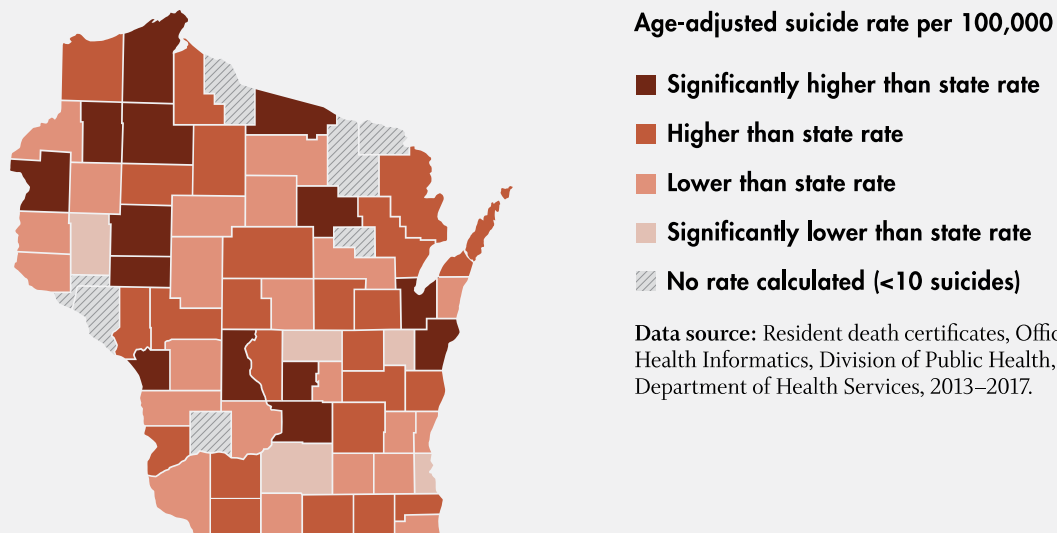


Figure 4. Among the counties for which a suicide rate was calculated, the rates of suicide were significantly higher in Bayfield, Brown, Chippewa, Columbia, Eau Claire, Juneau, La Crosse, Langlade, Marquette, Manitowoc, Polk, Sawyer, Vilas, and Washburn when compared to the state rate. The rates of suicide were significantly lower in Calumet, Dane, Dunn, Milwaukee, and Waushara when compared to the state rate. A table with counts and rates for counties is provided in Appendix 5.

Analytic notes: Because of the way rates are compared, a small difference may be statistically significant while a larger one is not. A statistically significant difference means that the difference in rate between county and state was very unlikely to be due to chance. For counties listed as being higher or lower than the state rate, but not statistically significant, the difference in rate could be due to chance. Also, rates were not calculated for counties with less than 10 suicides from 2013–2017, as low counts can produce unstable rates.

Figure 5. Suicide rate in rural counties was **higher** than **urban** counties, 2013–2017.

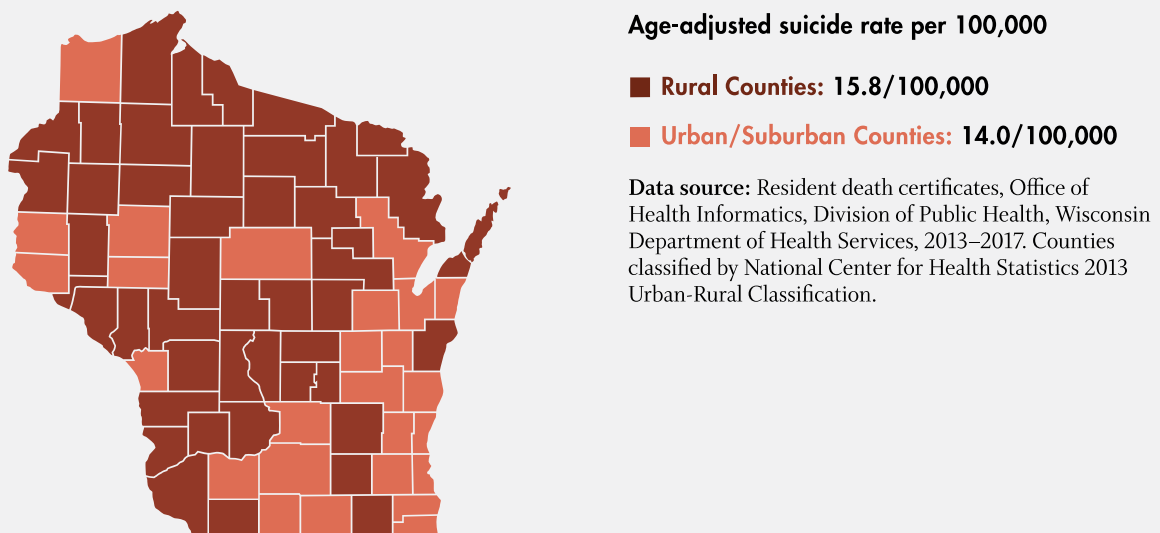


Figure 5. Rural counties had a significantly higher rate of suicide when compared with urban counties for this time period.

Wisconsin Self-harm Injury Rates

Definitions:

- ▶ **Treated and released emergency department visits:** Includes non-fatal emergency department visits that did not result in immediate transfer to a hospital stay.
- ▶ **Hospitalization:** Refers to non-fatal hospital stays, including non-fatal emergency department visits that result in immediate transfer to a hospital stay.

Refer to Appendix 4, Analytic Notes, for more technical documentation.

It is important to recognize the broader picture when examining the impact of suicide in our communities. Suicide deaths, while representing tremendous loss, represent a small proportion of the numbers of individuals who experience suicidal thoughts and self-harm behavior. Evidence-based strategies and best practices to prevent suicide should be directed across the full spectrum of behaviors and life events that are associated with suicide risk. For example, a review of emergency department and hospitalization data, which includes people who are treated and released from emergency departments or hospitalization stays with self-harm injuries, illustrates a broader impact of suicide in our communities.

The following data on self-harm injuries presented in this report comes from hospital and emergency department visit records based on codes from the ICD-10-CM. (International Classification of Diseases, 10th Revision, Clinical Modification. See Analytic Notes in Appendix 4.) Emergency department visit data includes only non-fatal, treated and released visits. Hospitalization data includes only non-fatal hospital stays.

In Wisconsin, the age-adjusted rate of emergency department visits with self-harm injuries was 69.6 per 100,000, accounting for 7,482 visits from 2016–2017. The age-adjusted rate of hospitalization with self-harm injuries was 85.3 per 100,000, accounting for 9,398 admissions during the same time period.

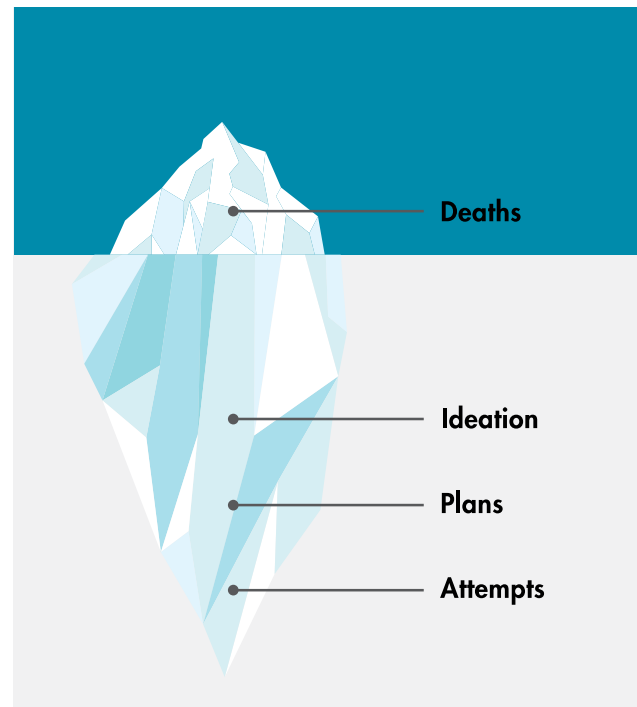
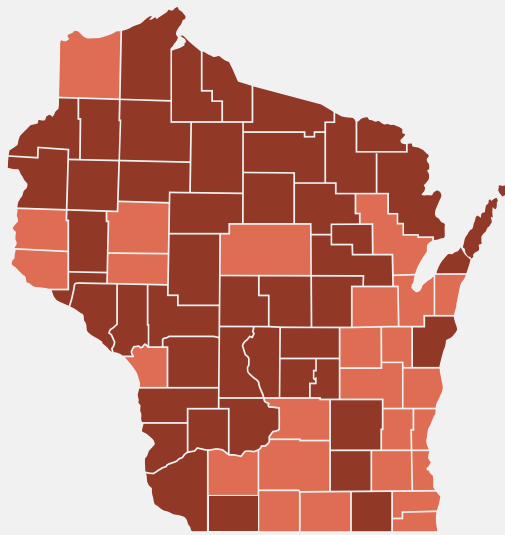


Figure 6. The rate of **hospitalization with self-harm** injuries among **urban** counties was higher than **rural** counties, 2016–2017.



Age-adjusted rate of hospitalization with self-harm injuries per 100,000

■ **Rural Counties: 73.6/100,000**

■ **Urban/Suburban Counties: 90.3/100,000**

Data source: Wisconsin hospital inpatient discharges, Office of Health Informatics, Division of Public Health, Wisconsin Department of Health Services, 2016–2017. Counties classified by National Center for Health Statistics 2013 Urban-Rural Classification.

Figure 6. Urban counties had a significantly higher rate of hospitalization with self-harm injuries when compared to rural counties from 2016–2017.

For emergency department visits with self-harm injuries, the rate for rural counties was 68.4 per 100,000 and 70.2 per 100,000 for urban counties from 2016–2017. However, these rates were not significantly different. (County rural and urban classification was determined using the National Center for Health Statistics 2013 Urban-Rural County Classification.)

Suicide and Self-harm Injuries by Sex and Age

Men are at a greater risk of dying from suicide than women. In contrast, women are seen in hospitals and emergency departments for suicide attempts and other self-harm injuries more often than men. These differences may be explained by men choosing more lethal methods of suicide, such as firearms, which reduce the window of opportunity for intervention and saving lives. Other factors include the person's intent, health status, and proximity to family members or friends who have the ability to intervene before a self-harm injury or suicide attempt becomes fatal.

Suicide and self-harm injuries also vary depending on a person's age. For the period of 2013–2017, suicide rates peaked for males and females ages 45–54. Many factors can contribute to this variation, including an increased likelihood of chronic disease, disability, or terminal illness, insufficient social support, access to lethal means, and feelings of isolation due to life circumstances in adults. Conversely, emergency department visits and hospitalization rates with self-harm injuries were highest among younger ages. Lower rates of suicide among youth may be related to limited access to more lethal means of suicide, such as firearms.

Figure 7.

The **majority** of **suicide deaths** were **male**, 2013–2017.

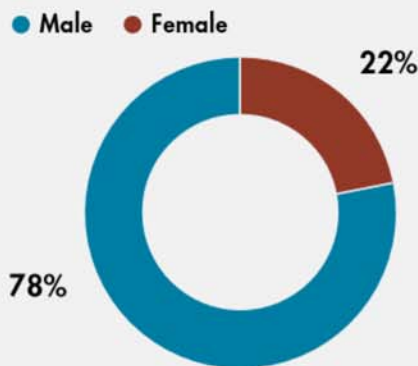


Figure 7. From 2013–2017, 927 females and 3,357 males died by suicide. Males account for approximately 3 out of every 4 suicide deaths.

Data source: Resident death certificates, Office of Health Informatics, Division of Public Health, Wisconsin Department of Health Services, 2013–2017.

Figure 8.

The **majority** of **hospitalizations with self-harm injuries** were **female**, 2016–2017.

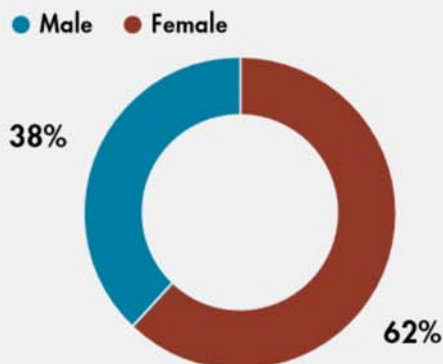


Figure 8. From 2016–2017, 5,788 hospitalizations with self-harm injuries were among females and 3,610 were among males. Females account for almost 2 in every 3 hospitalizations with self-harm injuries.

Data source: Wisconsin hospital inpatient discharges, Office of Health Informatics, Division of Public Health, Wisconsin Department of Health Services, 2016–2017.

Figure 9.

The **majority** of **emergency department visits with self-harm injuries** were **female**, 2016–2017.

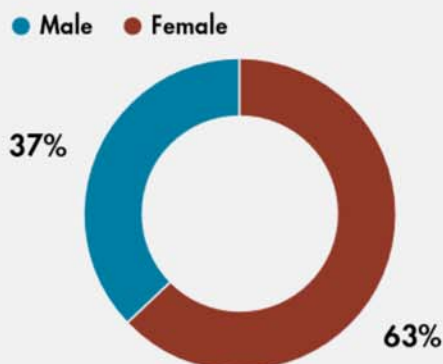


Figure 9. From 2016–2017, 4,709 emergency department visits with self-harm injuries were among females and 2,773 were among males. Females account for almost 2 in every 3 emergency department visits with self-harm injuries.

Data source: Wisconsin hospital emergency department visits, Office of Health Informatics, Division of Public Health, Wisconsin Department of Health Services, 2016–2017.

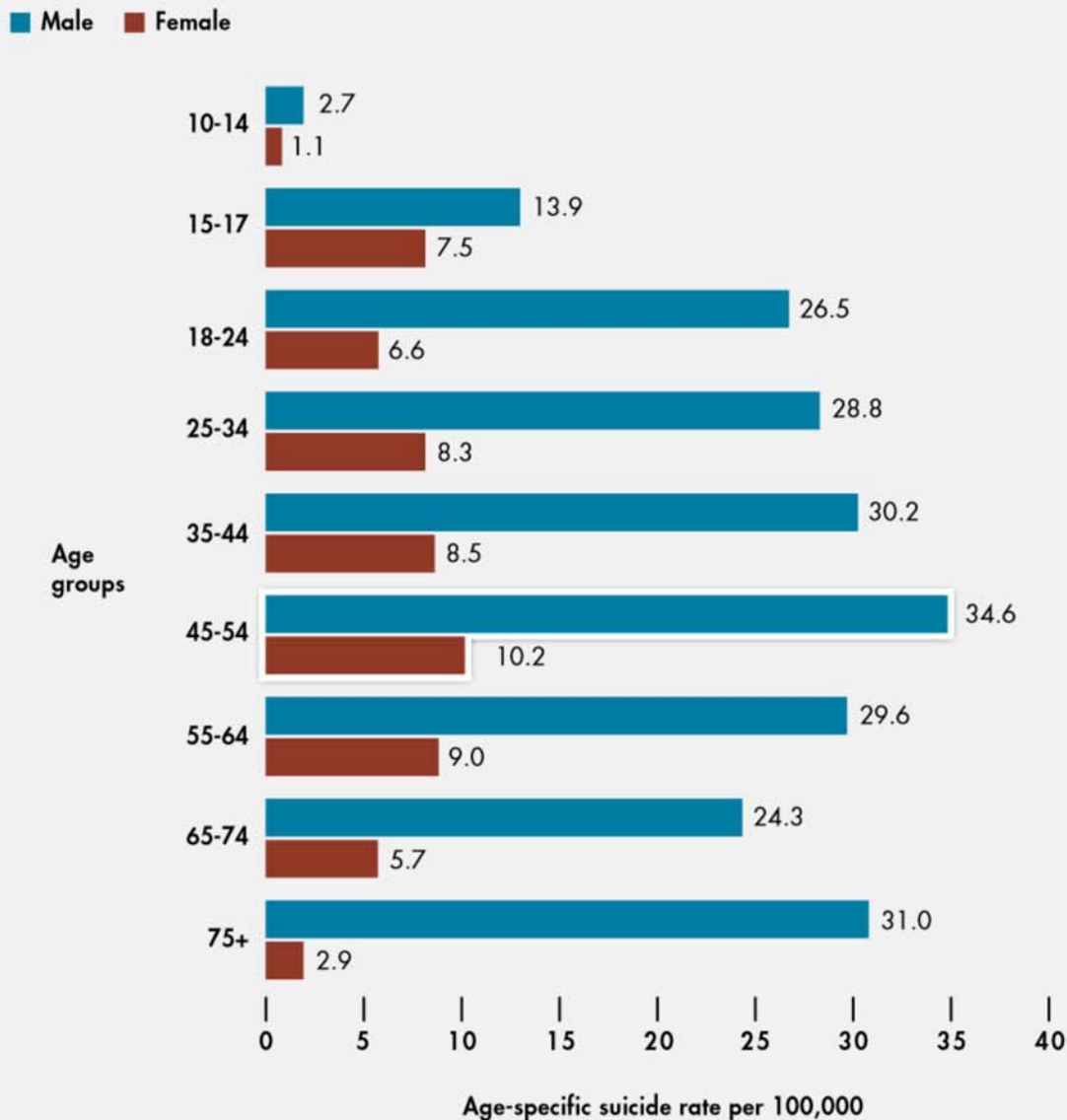
Figure 10. Suicide rate was highest among ages 45–54, 2013–2017.

Figure 10. Suicide rates were highest for both males and females ages 45–54. Among females, suicide rates decreased after this peak for all older age groups. Among males, suicide rates decreased for the 55–64 and 65–74 age groups but then increased again for those 75 and older.

In addition, the age-specific suicide rate increased among all age groups (10–14, 15–17, 18–24, 25–34, 35–44, 45–54, 55–64, 65–74, 75–84, and 85+) from 2000–2017. The greatest increase was among those aged 55–64, in which the rate more than doubled (137%) over this time period (from 9.4 to 22.3 per 100,000).

Analytic notes: Rates shown are not age-adjusted. No significance testing was performed.

Data source: Resident death certificates, Office of Health Informatics, Division of Public Health, Wisconsin Department of Health Services, 2013–2017.

Figure 11. The rate of hospitalization with self-harm injuries for females, ages 15 to 17, was more than three times higher compared to males, 2016–2017.

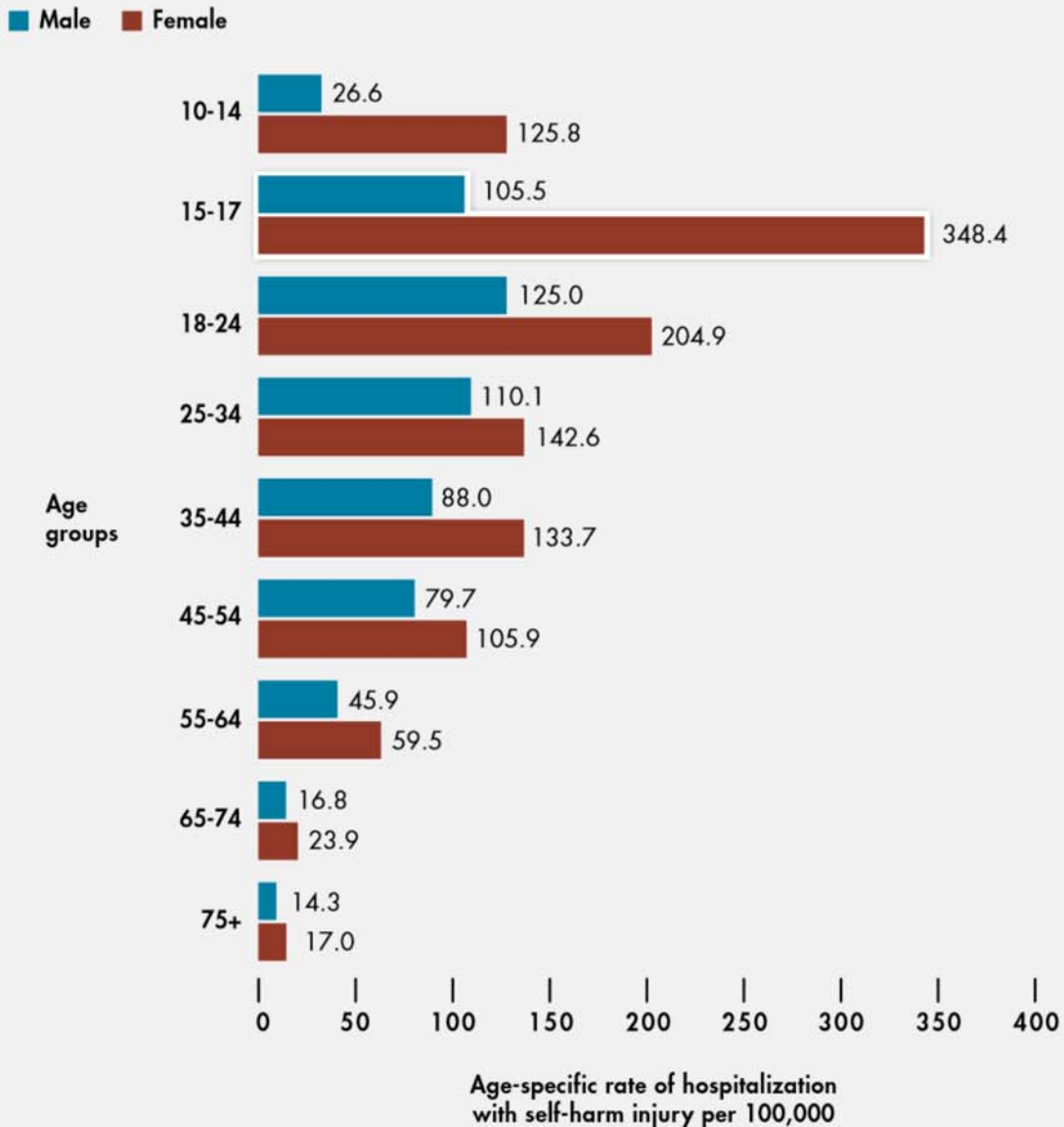


Figure 11. The population with the highest hospitalization rate with self-harm injuries was females ages 15–17. When considering only males, the rate of hospitalization with self-harm injuries was highest for those ages 18–24. Rates of hospitalization with self-harm injuries decreased after age 17 for females and after age 24 for males.

Data source: Wisconsin hospital inpatient discharges, Office of Health Informatics, Division of Public Health, Wisconsin Department of Health Services, 2016–2017.

Figure 12. The rate of **emergency department (ED) visits with self-harm** injuries for **females**, ages 15–17, was more than **three times higher** compared to **males**, 2016–2017.

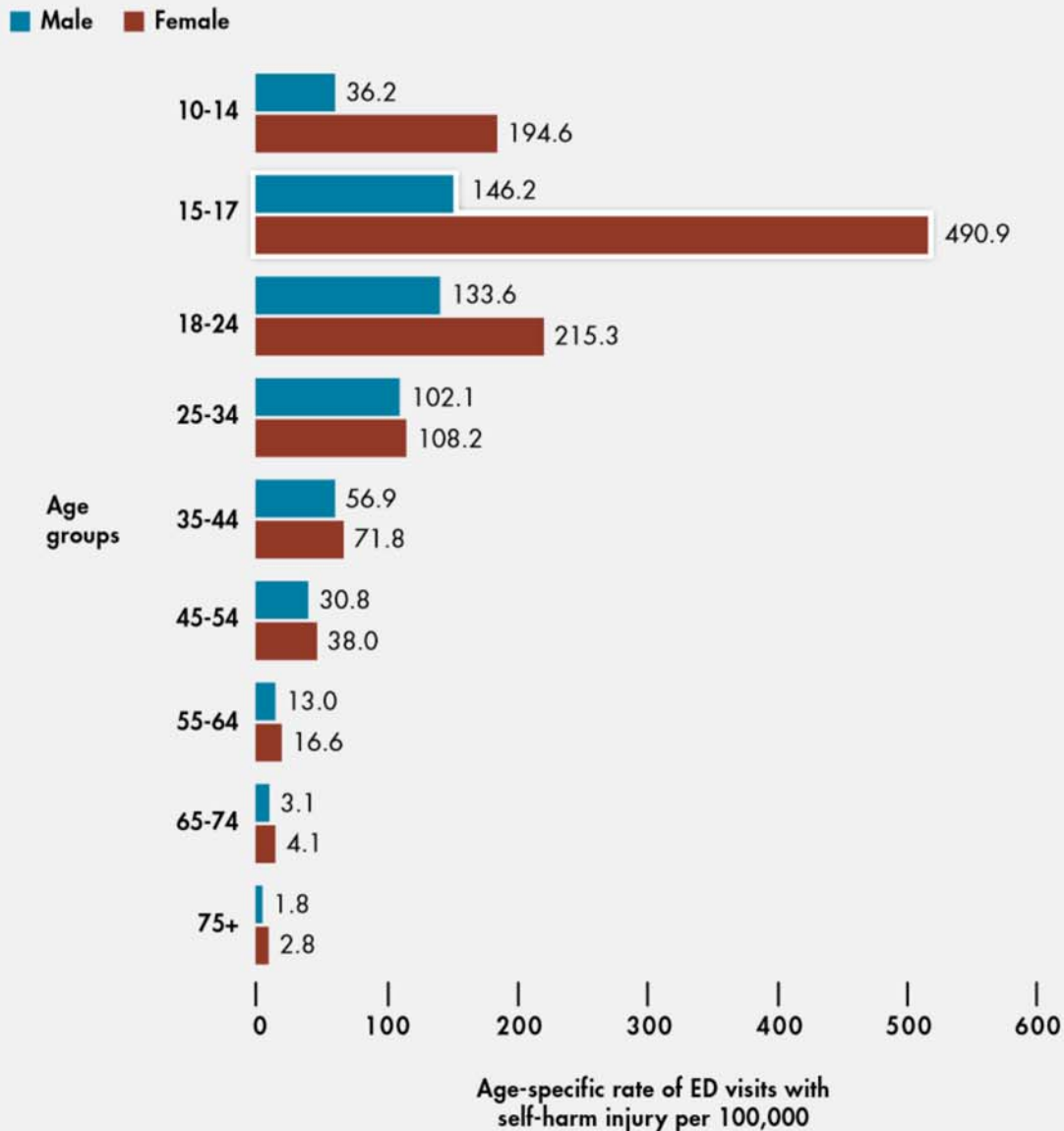


Figure 12. Rates of emergency department visits with self-harm injuries were highest among those ages 15–17 for both females and males. Rates of self-harm emergency department visits decreased after age 17 for both females and males.

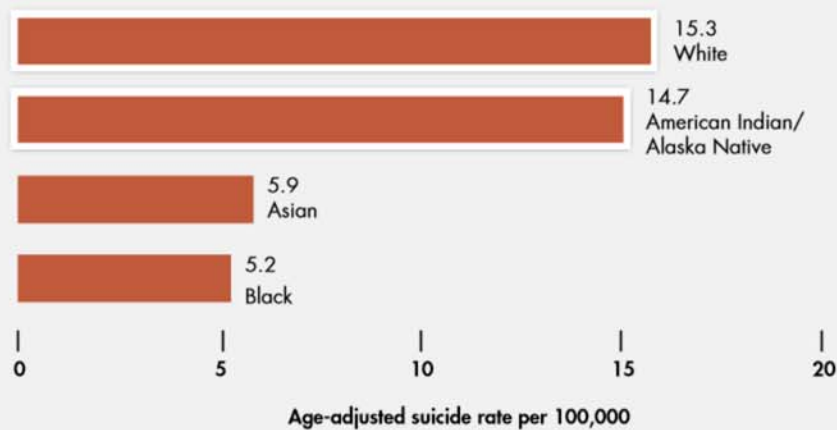
Data source: Wisconsin hospital emergency department visits, Office of Health Informatics, Division of Public Health, Wisconsin Department of Health Services, 2016-2017.

Suicide and Self-harm Injuries among Racial and Ethnic Groups

In addition to the sex and age disparities illustrated in the previous sections, data reveal additional subpopulations whose risk for suicide or self-inflicted injuries may be elevated. Suicide rates were highest among Whites and American Indians/Alaska Natives. Non-Hispanic groups had higher rates of suicide than the Hispanic population. Self-harm injury rates were highest among Blacks and American Indians/Alaska Natives.

Note: While using person-first language (“people who were identified as being white”) is usually preferable, for the data presented here we have chosen to use shorter forms (“Whites”) for clarity and consistency with how such data is typically presented.

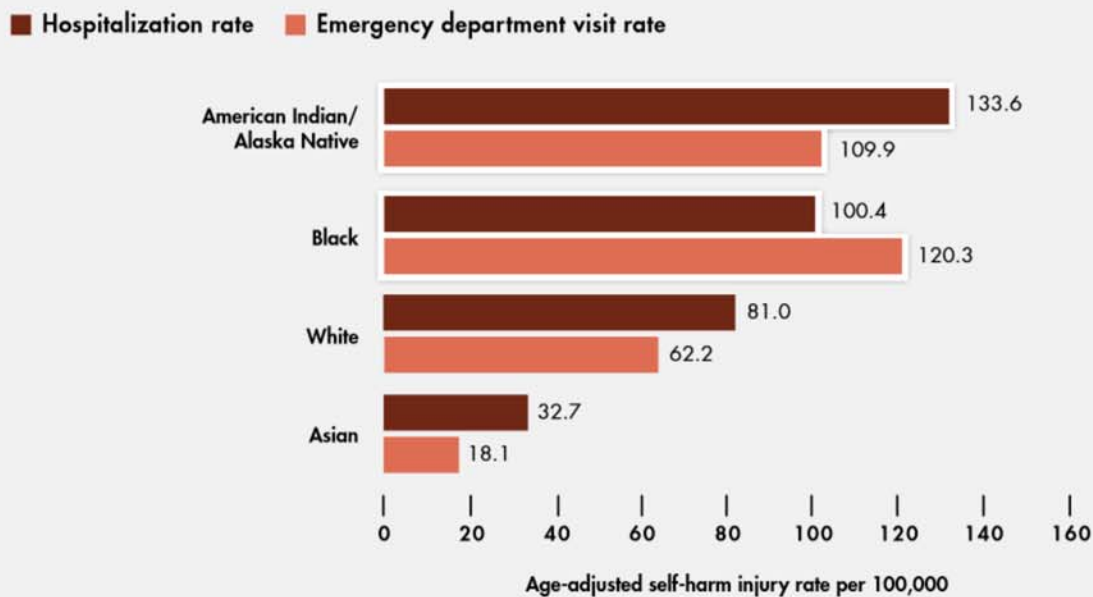
Figure 13. Suicide rate was higher among Whites and American Indians/Alaska Natives compared to Asians and Blacks, 2013–2017.



Data source: Resident death certificates, Office of Health Informatics, Division of Public Health, Wisconsin Department of Health Services, 2013–2017.

Figure 13. From 2013–2017, 4,069 Whites, 108 Blacks, 51 American Indians/Alaska Natives, and 48 Asians died by suicide. The rate of suicide was significantly higher among Whites and American Indians/Alaska Natives when compared to Asians and Blacks.

Figure 14. Hospitalization and emergency department visit rates with self-harm injuries were highest among American Indians/Alaska Natives and Blacks, 2016–2017.



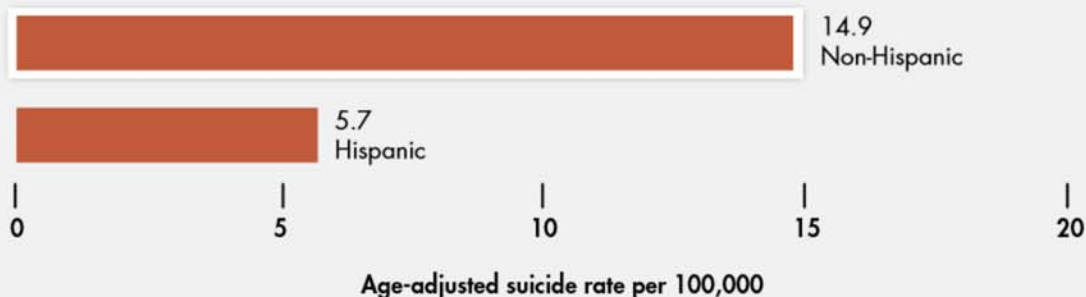
Data sources: Wisconsin hospital inpatient discharges and emergency department visits, Office of Health Informatics, Division of Public Health, Wisconsin Department of Health Services, 2016–2017.

Figure 14. From 2016–2017, there were 7,330 White, 843 Black, 172 American Indian/Alaska Native, and 122 Asian hospitalizations with self-harm injuries. The rate of hospitalization with self-harm injuries for 2016–2017 was significantly higher among American Indians/Alaska Natives compared to Blacks, Whites, and Asians.

From 2016–2017, there were 5,367 White, 1,083 Black, 165 American Indian/Alaska Native, and 79 Asian emergency department visits with self-harm injuries. The rate of emergency department visits with self-harm injuries was significantly higher among American Indians/Alaska Natives and Blacks when compared to Whites and Asians from 2016–2017.

Analytic note: Approximately 5% of stays and visits were missing race information or were listed as “other race.”

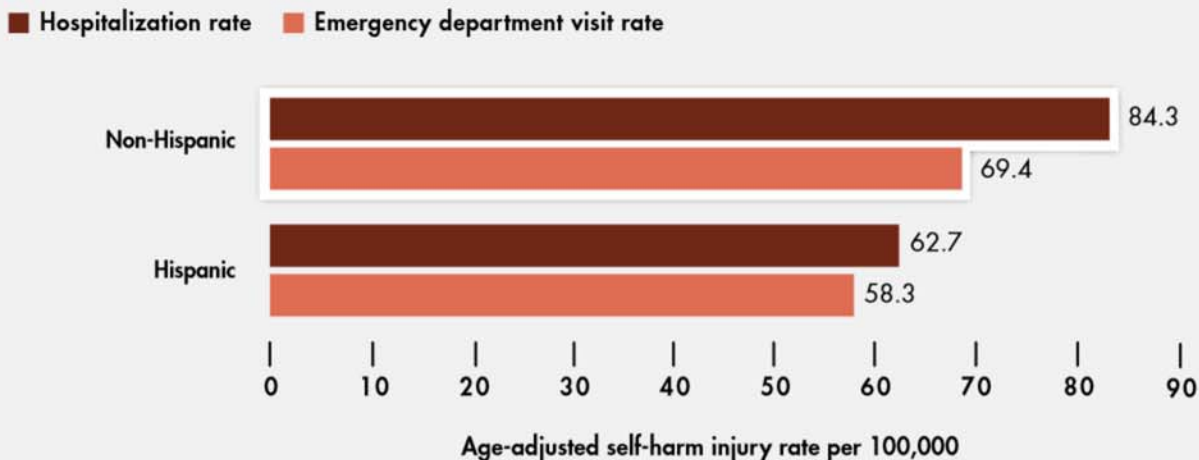
Figure 15. Suicide rate was higher among non-Hispanics compared to Hispanics, 2013–2017.



Data source: Resident death certificates, Office of Health Informatics, Division of Public Health, Wisconsin Department of Health Services, 2013–2017.

Figure 15. From 2013–2017, 112 Hispanics and 4,154 non-Hispanics died by suicide. The rate of suicide among non-Hispanics was significantly higher when compared to Hispanics.

Figure 16. Hospitalization and emergency department visit rates with self-harm injuries were higher among non-Hispanics compared to Hispanics, 2016–2017.



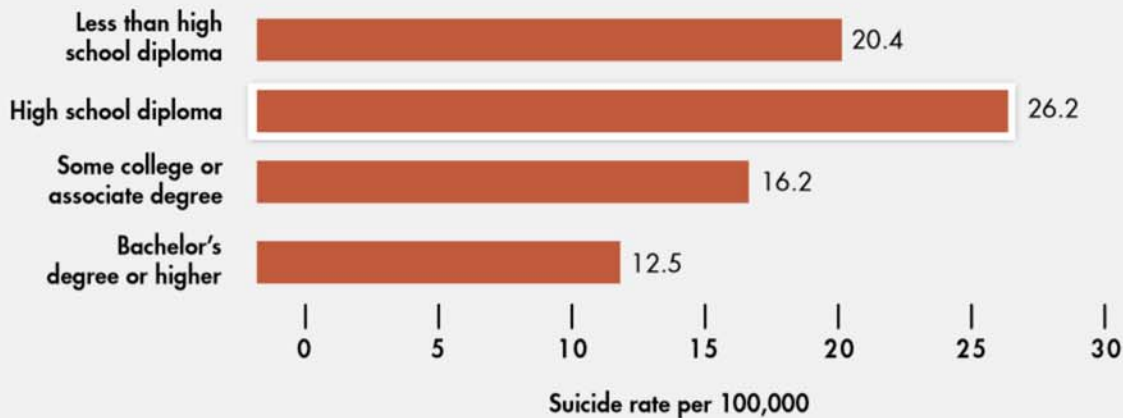
Data sources: Wisconsin hospital inpatient discharges and emergency department visits, Office of Health Informatics, Division of Public Health, Wisconsin Department of Health Services, 2016–2017.

Figure 16. From 2016–2017, there were 5,407 non-Hispanic and 305 Hispanic hospitalizations with self-harm injuries. The rate of hospitalization with self-harm injuries over this time period was significantly higher among non-Hispanics when compared to Hispanics. From 2016–2017, there were 6,808 non-Hispanic and 486 Hispanic emergency department visits with self-harm injuries. The rate of emergency department visits with self-harm injuries was significantly higher among non-Hispanics when compared to Hispanics from 2016–2017.

Suicide by Education Level

The amount of education that an individual has received is often used as a way to provide insight on the person's financial stability, which is known to affect mental health and well-being. According to the data, individuals with a high school diploma and no post-secondary education appeared to be at heightened risk for suicide, while individuals with a bachelor's degree or higher appeared to be at reduced risk.

Figure 17. Suicide rates were lower among individuals with some college or more education compared to individuals with a high-school or less education, 2013–2017.



Data source: Resident death certificates, Office of Health Informatics, Division of Public Health, Wisconsin Department of Health Services, 2013–2017. U.S. Census Bureau, 2013–2017 American Community Survey 5-Year Estimates.

Figure 17. Among all suicide deaths, 3,625 had known educational attainment and were 25 years of age or older from 2013–2017. From this sample, 352 had less than a high school diploma, 1,626 had a high school diploma, 974 had some college credits or an associate degree, and 673 had a bachelor's degree or higher. The rate of suicide among those with a high school diploma as the highest level of educational attainment was significantly higher than all other educational levels from 2013–2017.

Analytic notes: Data includes only Wisconsin residents 25 years of age or older. Age-adjustment was not performed. Wisconsin population distribution by educational attainment was gathered from American Community Survey 5-Year Estimates, 2013–2017.

Veteran Suicide

Veterans (defined in this report as individuals with current or previous military service) often experience higher rates of negative health outcomes, including posttraumatic stress disorder, substance use disorder, depression, and suicide.⁵ From 2013–2017, 714 veterans died by suicide, which accounted for approximately 1 in every 5 Wisconsin suicides.

The average age of veteran suicide deaths (59) was significantly higher when compared to non-veteran suicide deaths (43). Veterans were also significantly more likely to use a firearm (70% of all veteran suicides) as the method of suicide and be male (97% of all veteran suicides) when compared to non-veterans. Among non-veterans, 45% of all suicide deaths used a firearm and 75% were male.

Figure 18. The proportion of **veterans** who died by suicide was **greater** in **older age groups** than younger age groups, 2013–2017.

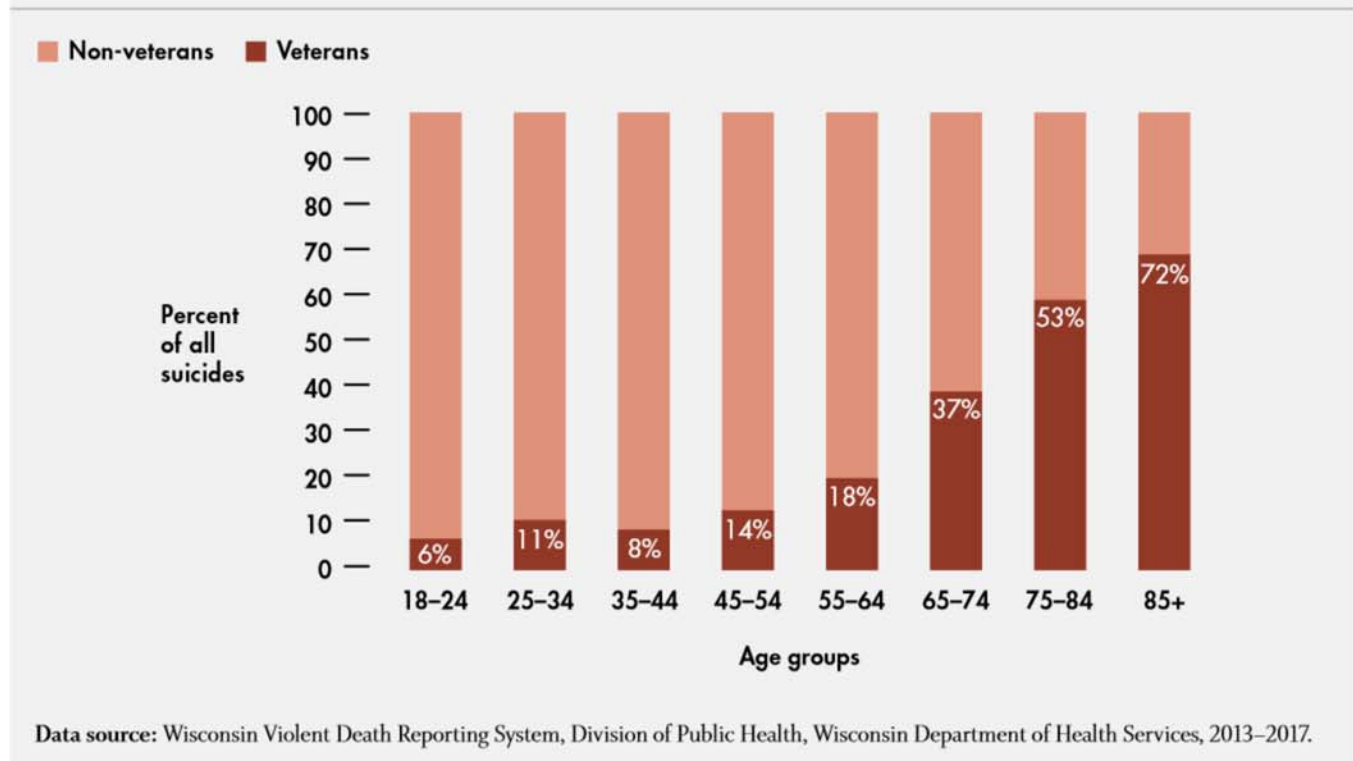
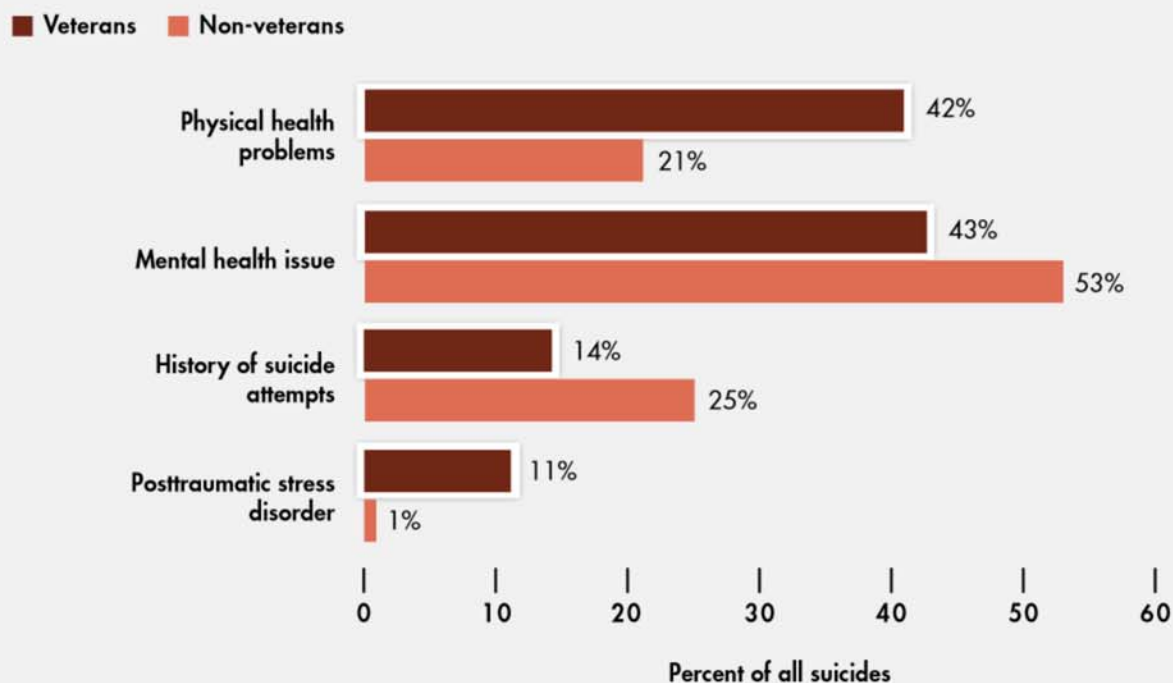


Figure 18. The proportion of suicides that were veterans increased with age from 2013–2017. For example, 8% of suicides among those ages 35–44 were veterans and 72% were veterans among those ages 85 or older.

5. Olenick M, Flowers M, Diaz VJ. US veterans and their unique issues: enhancing health care professional awareness. *Adv Med Educ Pract.* 2015;6:635–639. Published 2015 Dec 1. doi:10.2147/AMEP.S89479.

Figure 19. Veterans who died by suicide were **more likely** to have a reported **physical health problem** compared with **non-veterans**, 2013–2017.



Data source: Wisconsin Violent Death Reporting System, Division of Public Health, Wisconsin Department of Health Services, 2013–2017.

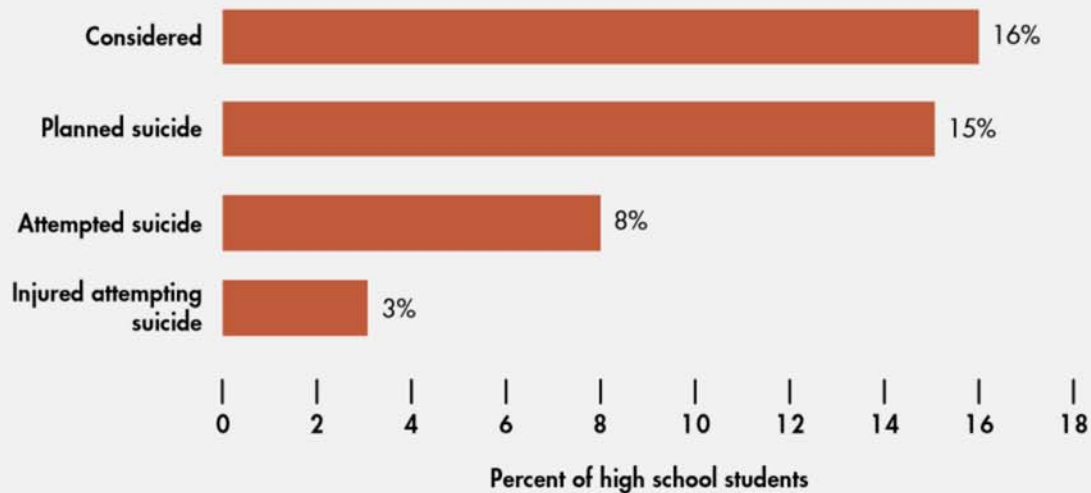
Figure 19. Veterans were significantly more likely to have a reported physical health problem when compared to non-veterans from 2013–2017. They were significantly less likely to have a mental health issue or history of suicide attempts reported when compared to non-veterans. Posttraumatic stress disorder was also significantly more common among veterans who died by suicide when compared to non-veterans.

Youth Suicide

Although suicide rates are lowest among youth, suicide in this age group is a significant public health issue, representing the second leading cause of death among adolescents (ages 10–19) in Wisconsin and nationally for many years. From 2013–2017, 271 adolescents died by suicide in Wisconsin.

In addition to Wisconsin Violent Death Reporting System data, this portion of the report shows data from the Wisconsin Youth Risk Behavior Survey (YRBS), which is conducted as part of a national effort by the U.S. Centers for Disease Control and Prevention to monitor health-risk behaviors of the nation's high school students. The YRBS was completed by 2,067 high school students from 43 public, charter, and alternative high schools in Wisconsin during spring of 2017.

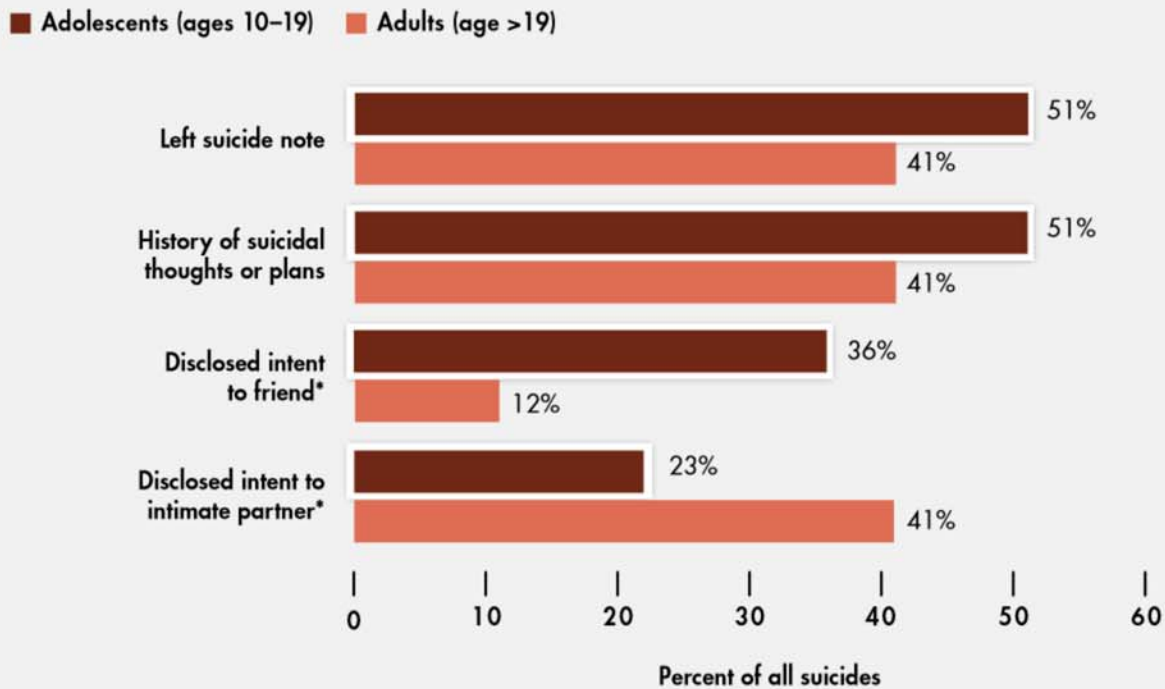
Figure 20. Suicidal ideation was reported by approximately **1 in 6** Wisconsin public **high school students**, 2017.



Data source: Youth Risk Behavior Survey, Department of Public Instruction, 2017.

Figure 20. Youth in Wisconsin exhibit a number of suicidal behaviors, as reflected in information from the YRBS report. For example, approximately 1 in 6 Wisconsin public high school students considered suicide during the past 12 months. A similar number of students made a plan about how they would attempt suicide, and nearly 1 in every 13 students reported a suicide attempt. Approximately 3% of students reported a suicide attempt that resulted in an injury. Students who attempted suicide also reported higher victimization rates.

Figure 21. Adolescents who died by suicide were **more likely** to **disclose suicide intent** to a **friend** compared with **adults**, 2013–2017.

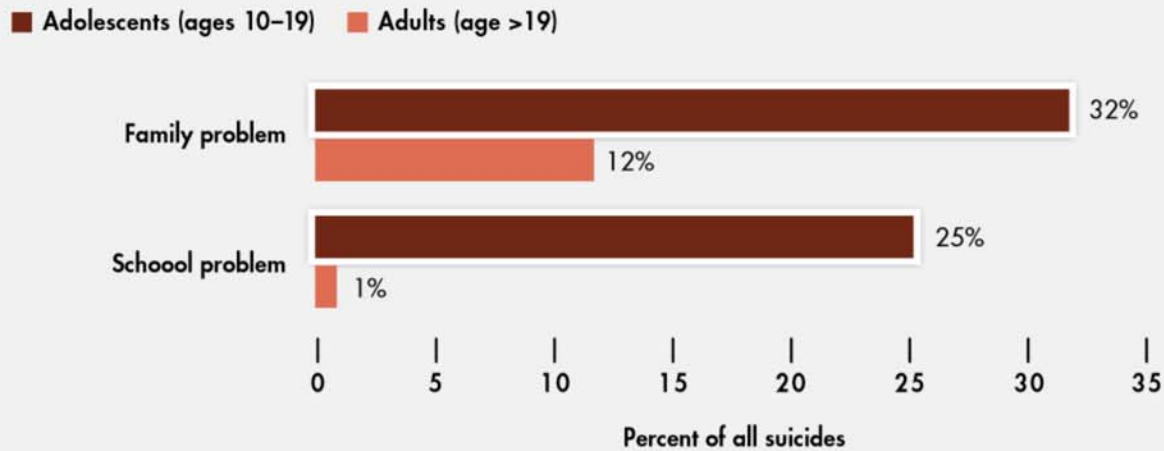


Data source: Wisconsin Violent Death Reporting System, Division of Public Health, Wisconsin Department of Health Services, 2013–2017.

Figure 21. Youth exhibit different behaviors prior to a suicide than their adult counterparts. For example, youth were significantly more likely than adults to leave a suicide note. Youth who died by suicide were significantly more likely to have a history of suicidal thoughts or plans than adults who died by suicide, and youth who died by suicide were also significantly more likely to disclose their suicide intent to a friend than adults (who were more likely to disclose to an intimate partner).

Analytic note: *Analysis limited to only individuals that disclosed suicidal intent.

Figure 22. Family problems and school problems were more likely to contribute to suicide in adolescents compared to adults, 2013–2017.



Data source: Wisconsin Violent Death Reporting System, Division of Public Health, Wisconsin Department of Health Services, 2013–2017.

Figure 22. Family problems, which were reported in approximately 1 in 3 youth, were significantly more likely to contribute to suicide among youth when compared to adults. School problems were also significantly more likely to contribute to suicide among youth. Approximately 1 in 4 youth who died by suicide had a reported school problem.

Trends in Youth Suicide

During the 1990s and early 2000s, suicidal ideation and suicides among youth decreased. However, the trend has reversed in recent years and rates have started to increase again, both in Wisconsin and nationally. According to a report based on 2017 YRBS data, Youth suicide is one of the most pressing problems facing schools and their communities.⁶ In addition, the most recent YRBS data showed an uptick in young females considering suicide.

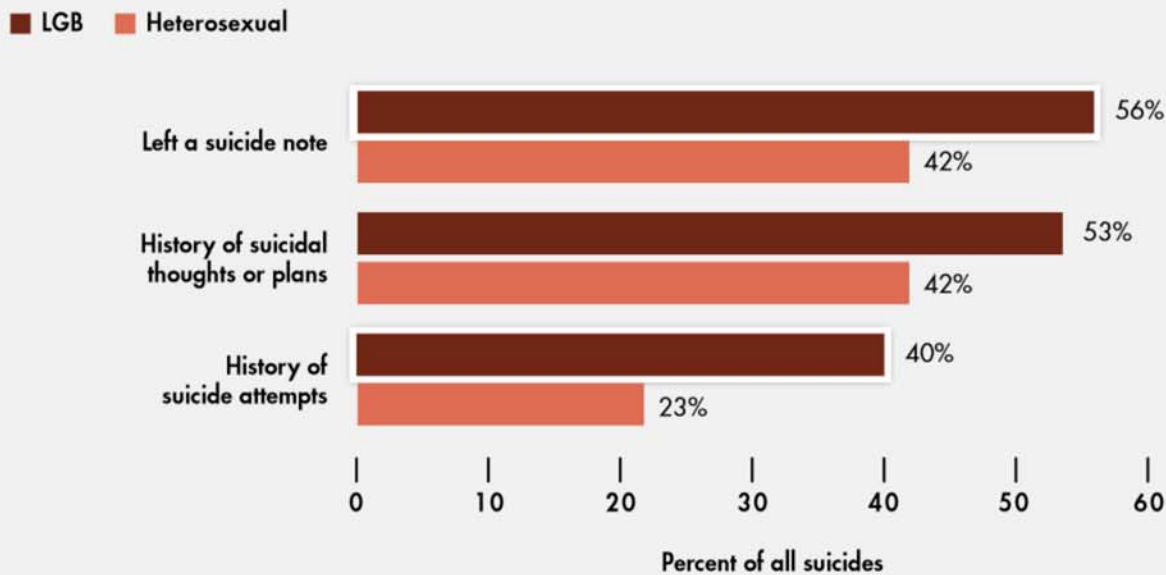
6. Wisconsin Department of Public Instruction. Wisconsin's 2017 Youth Risk Behavior Survey Special Topic: Suicide.

Lesbian, Gay, Bisexual, and Transgender (LGBT) Suicide

Sexual orientation data was unknown for 30% of all suicide deaths reported to WVDRS. In addition, WVDRS does not include data on gender identity, such as transgender. From 2013–2017, 55 suicide deaths were reported as lesbian, gay, or bisexual (LGB). Of those, 20 were reported as being lesbian, 22 as gay, and 13 as bisexual.⁷ However, undercounting is possible due to the difficulty of coroners and medical examiners obtaining sexual orientation information for many suicide deaths. The following data are based on the 55 LGB suicide deaths and compared to cases reported as heterosexual.

Compared to heterosexuals, LGB individuals died from suicide at a younger age. The average age of suicide deaths among LGB individuals was 32 compared to heterosexuals whose average age of suicide death was 46. LGB individuals were also significantly more likely to use hanging as the method of suicide and significantly less likely to use a firearm. The majority of LGB individuals who died by suicide were reported as being white (87%).

Figure 23. LGB individuals who died by suicide were more likely to leave a suicide note and have a history of suicide attempts compared to heterosexuals, 2013–2017.



Data source: Wisconsin Violent Death Reporting System, Division of Public Health, Wisconsin Department of Health Services, 2013–2017.

Figure 23. LGB individuals were significantly more likely to leave a suicide note and have a history of suicide attempts. A history of suicidal thoughts and plans was not significantly different when comparing LGB and heterosexual individuals.

7. Data from WVDRS is shown for sexual orientation only (LGB). Data from the 2017 YRBS includes sexual orientation and gender identity (LGBT).

Figure 24. LGB individuals who died by suicide were more likely to have a history of treatment for mental health or substance use compared to heterosexuals, 2013-2017.

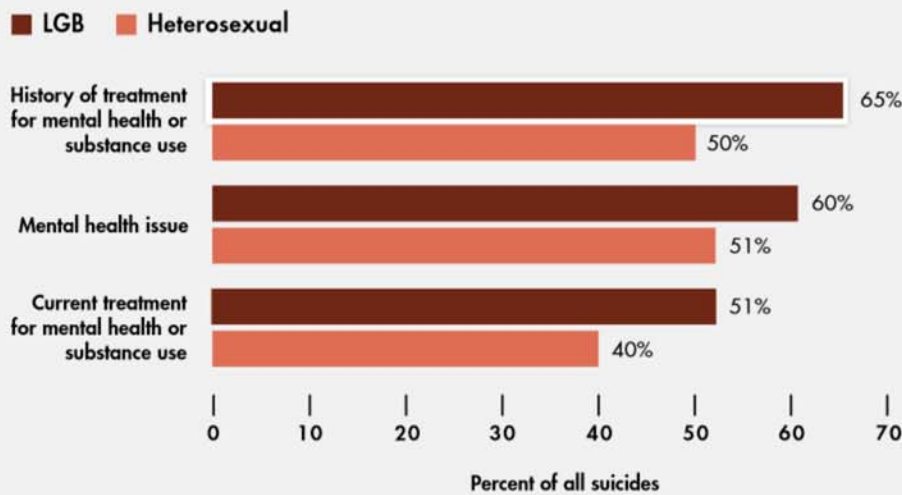


Figure 24. LGB individuals were significantly more likely than heterosexuals to have a history of treatment for mental health or substance use issues. However, the difference between these groups was not significantly different for having a mental health issue and being in current treatment for a mental health or substance use issue.

Data source: Wisconsin Violent Death Reporting System, Division of Public Health, Wisconsin Department of Health Services, 2013-2017.

Figure 25. LGB individuals who died by suicide were more likely to have a reported intimate partner issue and problem with a friend or associate compared to heterosexuals, 2013-2017.

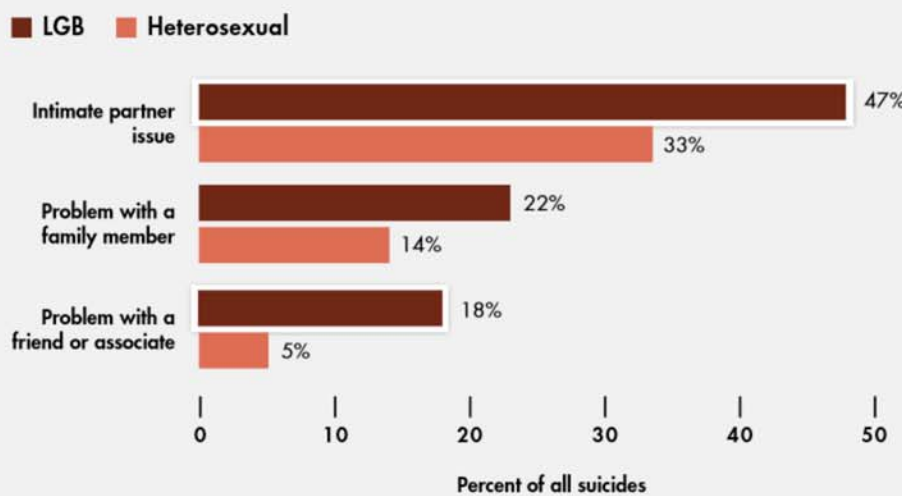
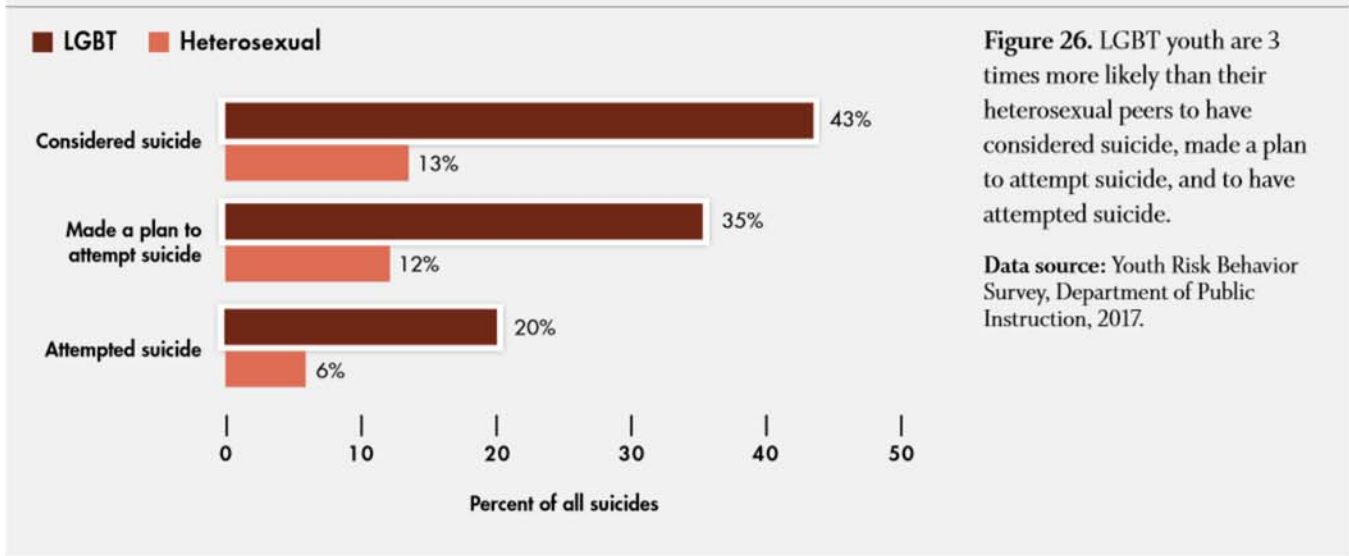


Figure 25. LGB individuals were significantly more likely than heterosexuals to have a reported intimate partner problem or problem with a friend or associate that contributed to the suicide. However, the difference between these groups was not significantly different for a problem with a family member.

Data source: Wisconsin Violent Death Reporting System, Division of Public Health, Wisconsin Department of Health Services, 2013-2017.

Although information on sexual orientation and gender identity from surveillance data is relatively limited, other data sources, including national surveys and the Youth Risk Behavior Survey (YRBS), provide additional insight into the suicidal behaviors experienced by LGBT individuals. For instance, one study found that 40 percent of transgender people attempted suicide sometime in their lifetime, and of those who attempted, 73 percent made their first attempt before the age of 18.⁸

8. U.S. Transgender Survey Report, 2015. National Center for Transgender Equality.

Figure 26. LGBT youth are more likely to be suicidal than their heterosexual peers, 2017.

Additionally, LGBT youth report the following risk factors in the YRBS:

- ▶ Less sense of school belonging: LGBT students are less likely to feel supported and connected to their school. They are twice as likely as other students to say they do not feel like they belong at their school.
- ▶ Lack of supportive adults: LGBT youth are the least likely group to have a supportive adult at school. About 58% say they do not have one teacher or other adult at school they can talk to if they have a problem compared to 28% of heterosexual youth.
- ▶ Bullying: LGBT students are 50% more likely than their peers to have been bullied at school or online.
- ▶ Mental health: LGBT students report higher rates of depression and anxiety. 1 in 2 LGBT students reports depression compared to approximately 1 in 4 heterosexual peers.

Note for Interpretation of Data

It is important to emphasize that being White, less educated, LGBT, or a veteran is not actually *predictive* of suicide, nor does being a member of one of these groups necessarily increase inherent suicide risk. Rather, circumstances and behaviors that these groups experience more frequently than other groups may explain why they also experience higher rates of suicide. For instance, individuals who are less educated may work in lower paying jobs and face financial, housing, and job insecurity that could increase risk. Also, individuals may have underlying conditions, such as mental health or substance use issues, which can increase the risk of suicide.

Part 2 » Risk Factors

Risk factors for suicide include the characteristics and circumstances of a person or their environment that increase the likelihood that they may die by suicide. Some examples of risk factors include access to lethal means, mental health challenges, relationship issues, and substance use.

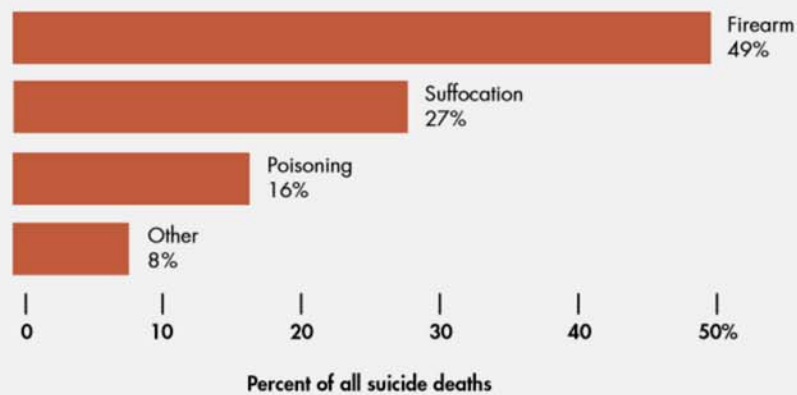
Data presented in Part 2 of this report includes information from the Wisconsin Violent Death Reporting System (WVDRS) related to these risk factors. WVDRS collects information on the specific circumstances (depressed mood, substance use issue, intimate partner issue, etc.) that are reported or perceived in the investigation reports (coroner/medical examiner report, law enforcement report, and death certificate) as being related to the violent death (suicide). For the vast majority of circumstances, it is sufficient to code a circumstance if it was included in the investigation reports or occurred before or right after the fatal injury (preceding or impending events). Circumstantial information is typically based on information reported to death investigators and may not be based on actual medical or other records. Specific definitions for these circumstances can be found in Appendix 3.



Suicide Method

The method of suicide refers to how the individual carries out the suicide. This can be influenced by the availability, acceptability, and lethality of a given method. An individual's age and sex can also influence the method of suicide that an individual uses.

Figure 27. Firearm was the **most commonly** used **method of suicide**, 2013–2017.



Data source: Wisconsin Violent Death Reporting System, Division of Public Health, Wisconsin Department of Health Services, 2013–2017.

Figure 27. Nearly half of Wisconsin residents who died by suicide between 2013 and 2017 died from firearm injury. Nearly 1 in 3 Wisconsin suicides during this time period were suffocation injuries (which include hanging, strangulation, and suffocation). Almost 1 in 6 Wisconsin suicides were poisoning deaths.

Analytic notes: The “Other” category includes drowning, motor vehicle, fire, and other. Suffocation includes hanging, strangulation, and suffocation.

Figure 28. Males were **more likely** than **females** to use **firearms** or **suffocation** as **method of suicide**, 2013–2017.

● Male ● Female

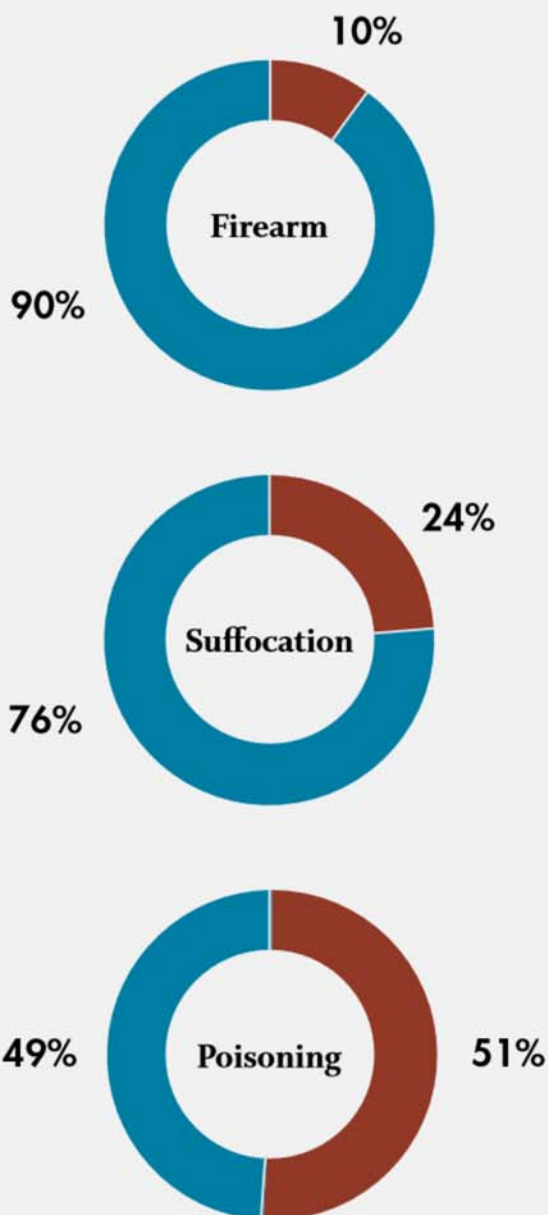
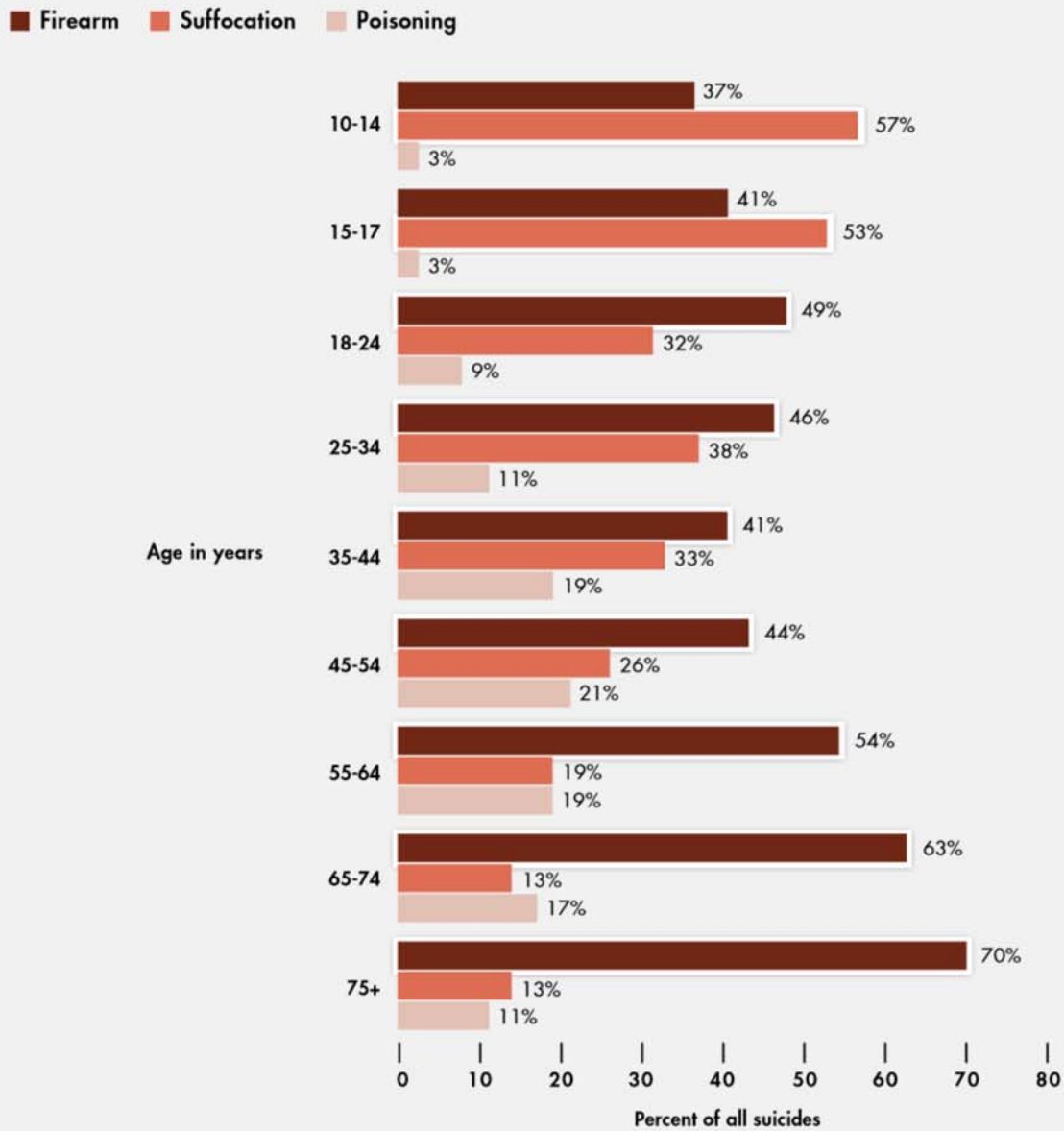


Figure 28. These charts show the percentage of males and females who died by a particular method of suicide. The method of suicide used by an individual is associated with their sex. From 2013–2017, males were significantly more likely to use a firearm and suffocation as the method of suicide than females. Suicide deaths by poisoning were relatively equally distributed among males and females.

Data source: Wisconsin Violent Death Reporting System, Division of Public Health, Wisconsin Department of Health Services, 2013–2017.

Figure 29. Suffocation was the most common method of suicide for those **10 to 17**. **Firearm** was the most common method of suicide for those **18 and older**, 2013–2017.



Data source: Wisconsin Violent Death Reporting System, Division of Public Health, Wisconsin Department of Health Services, 2013–2017.

Figure 29. The mechanism of injury used in suicide deaths is also associated with the age of the individual who died by suicide. The proportion of suicide by firearm increases with age, while the proportion of suicide by suffocation decreases with age. Suicide by poisoning peaks at ages 45–54.

Toxicology of Suicide Deaths

Definitions:

- ▶ **Detected substances:** These are substances that have been detected in toxicology testing. This can be an indication of the decedent's state of mind during the incident. Detected substances can be at levels that do not cause toxicity and may not have contributed to the cause of death. Detected substances are included for all suicide methods (such as poisoning, firearm, and suffocation).
- ▶ **Substances that contributed to death:** These are substances that the coroner or medical examiner determined reached toxic levels and impacted organ function resulting in death. Substances determined to contribute to death are included only for poisoning suicides.

Drugs, including prescription medications, are often involved in suicides even when they are not the cause of death. Use of alcohol and drugs by an individual under psychological duress may decrease one's inhibitions, may promote feelings of depression and hopelessness, impair problem-solving abilities, and increase aggression.⁹ Alcohol and drug use may also be associated with suicide through shared risk factors, such as depression, impulsivity, or a tendency to pursue thrill-seeking or life-threatening behaviors.¹⁰

Data in this section was obtained from toxicology testing results. Approximately 63% of all suicides had toxicology results reported to WVDRS. Data was limited to 2014–2017 because several substances (anticonvulsants, antipsychotics, barbiturates, benzodiazepines, and muscle relaxants) were not added to WVDRS until August 2013.

9. Conner, K.R., & Chiapella P. (2004). Alcohol and suicidal behavior: Overview of a research workshop. *Alcoholism: Clinical and Experimental Research*, 28(5), 2S-5S.

10. Goldston, D.B. (2004). Conceptual issues in understanding the relationship between suicidal behavior and substance use during adolescence. *Drug and Alcohol Dependence*, 76(7), S79–S91.



Figure 30. Alcohol, antidepressants, benzodiazepines, and opioids were the 4 most commonly detected substances among all suicide deaths, 2014–2017.

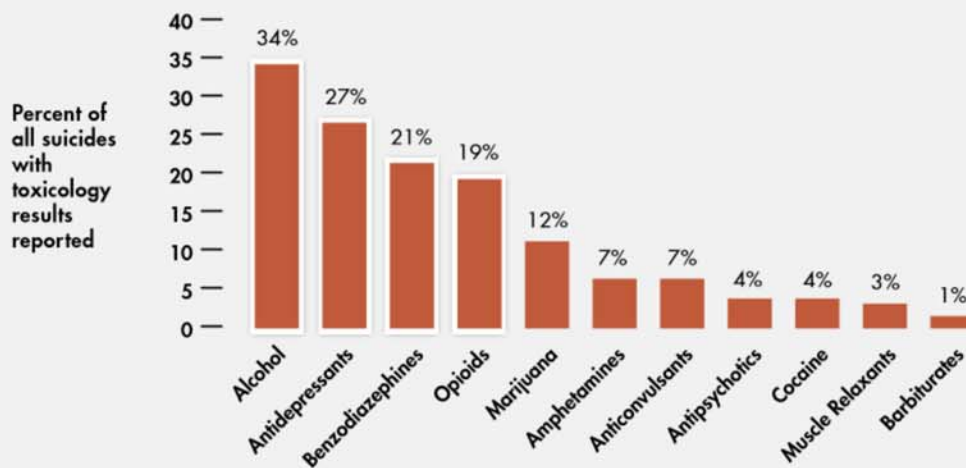


Figure 30. Among the 63% of suicide deaths in which toxicology data were available, alcohol was the most commonly detected substance, followed by antidepressants, benzodiazepines, and opioids. Additionally, more than one substance was often detected among people who died by suicide. The average number of substances detected was 2.9, which indicates that many Wisconsin residents who died by suicide between 2014 and 2017 were using multiple substances at the time of death.

Data source: Wisconsin Violent Death Reporting System, Division of Public Health, Wisconsin Department of Health Services, 2014–2017.

Figure 31. Alcohol was the most commonly detected substance among firearm and suffocation suicide deaths. Antidepressants were the most commonly detected substance among poisoning suicide deaths, 2014–2017.

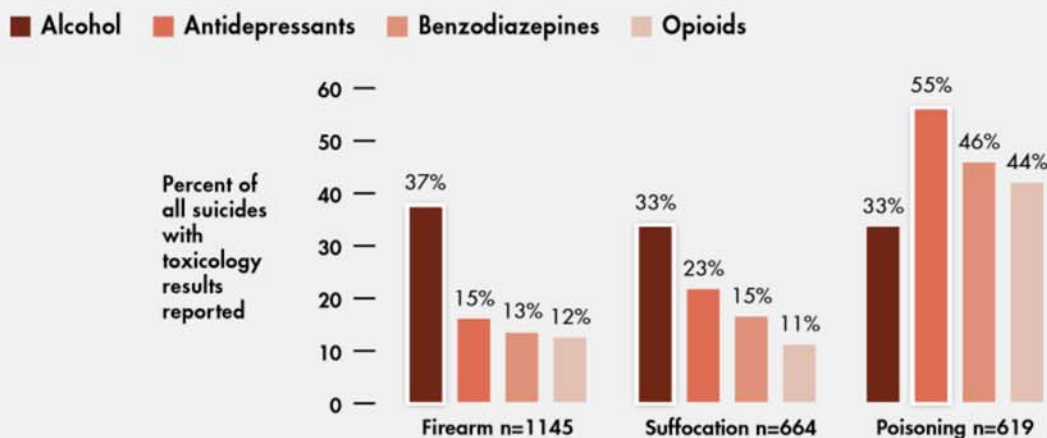


Figure 31. Based on the available data, alcohol was the most commonly detected substance among firearm and suffocation suicides. In contrast, antidepressants were the most commonly detected substance among poisoning suicide deaths.

Data source: Wisconsin Violent Death Reporting System, Division of Public Health, Wisconsin Department of Health Services, 2014–2017

Figure 32. Opioids were the most common type of substance determined to contribute to death among poisoning suicides, 2014–2017.

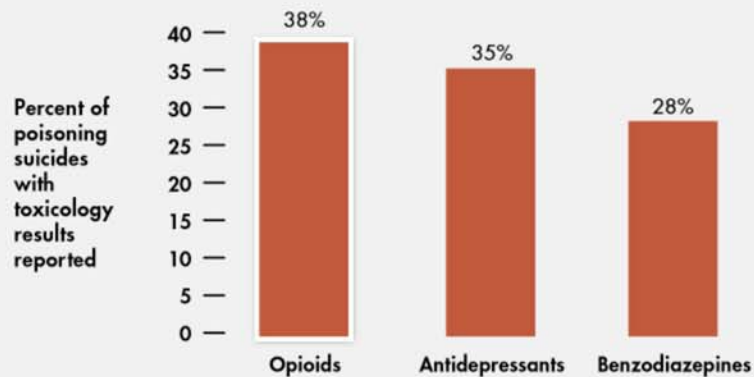


Figure 32. Toxicology data can also provide information on the substances that are determined to directly contribute to poisoning suicide deaths. Among Wisconsin residents who died by poisoning suicide between 2014 and 2017, opioids were the most common type of substance determined to contribute to death, followed by antidepressants and benzodiazepines.

Analytic note: Substances contributing to poisoning suicide were determined by the coroner or medical examiner.

Data source: Wisconsin Violent Death Reporting System, Division of Public Health, Wisconsin Department of Health Services, 2014–2017.

Figure 33. Prescription medications were the most common substance group determined to contribute to death among poisoning suicides, 2014–2017.

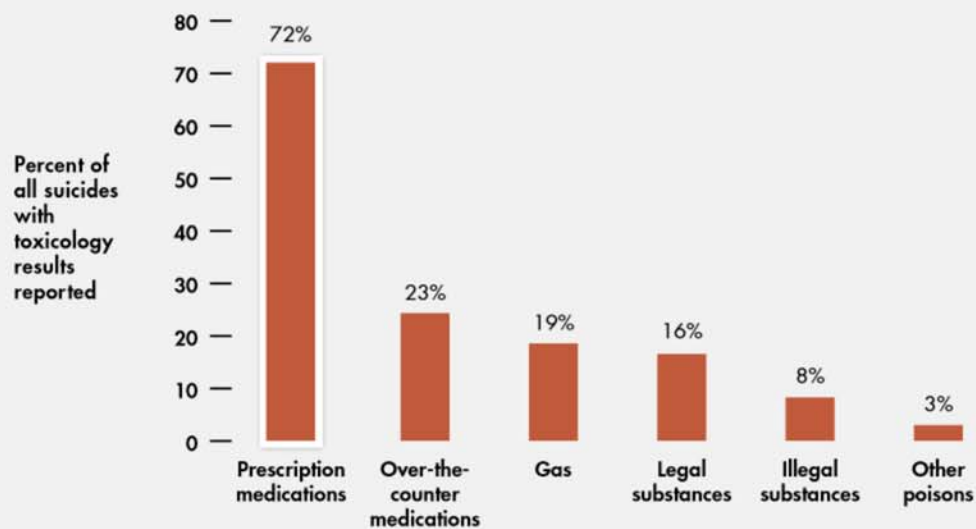


Figure 33. Prescription medications were determined to be the most common substance group that contributed to poisoning suicides among Wisconsin residents between 2014 and 2017.

Analytic notes: Prescription refers to medication prescribed by a doctor, such as oxycodone or AMBIEN®; over the counter (OTC) refers to medications available without prescription, such as Advil® or ZYRTEC®; gas refers to poisons that can be inhaled, such as carbon monoxide or propane; legal refers to substances available legally, such as alcohol or nicotine; illegal refers to substances not available legally or by prescription, such as heroin or cocaine; other poison refers to substances not intended for human consumption, such as household cleaners (does not include gas, which is a separate category).

Data source: Wisconsin Violent Death Reporting System, Division of Public Health, Wisconsin Department of Health Services, 2014–2017.

Individual and Relationship Factors

Factors associated with suicide occur at multiple levels, including the individual and interpersonal (relationships) levels. Individual level factors include mental health and substance use issues, as well as physical health problems. Relationship level factors include issues such as a problem with family, an intimate partner, or a friend.

Individual Factors

Figure 34. Less than half of people who died by suicide left a suicide note, disclosed their intent, or had a history of suicide attempts, 2013–2017.

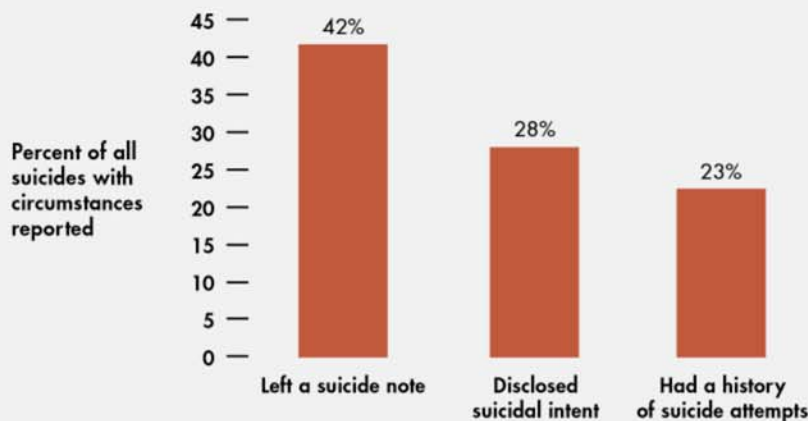


Figure 34. From 2013–2017, less than half of individuals who died by suicide left a suicide note, while a little more than 1 in every 4 disclosed their suicidal intent to others. Additionally, slightly less than 1 in every 4 people who died by suicide had a reported history of suicide attempts.

Data source: Wisconsin Violent Death Reporting System, Division of Public Health, Wisconsin Department of Health Services, 2013–2017.

Figure 35. Females who died by suicide were **more likely** to have a **history of suicide attempts** compared to **males**, 2013–2017.

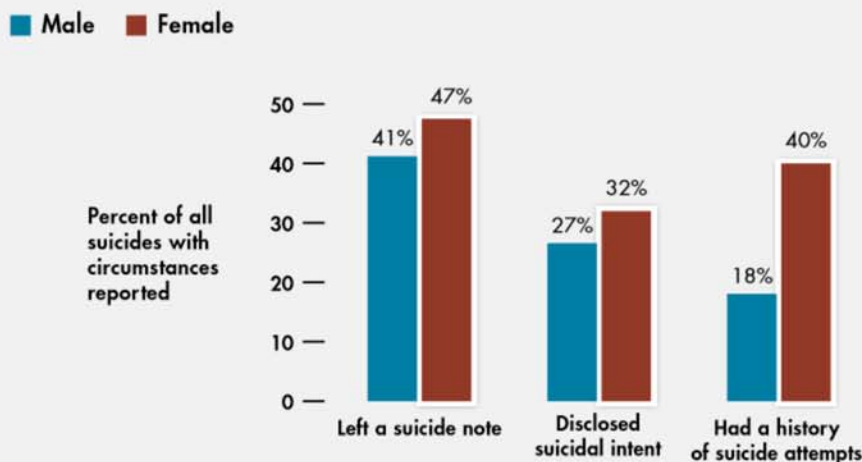
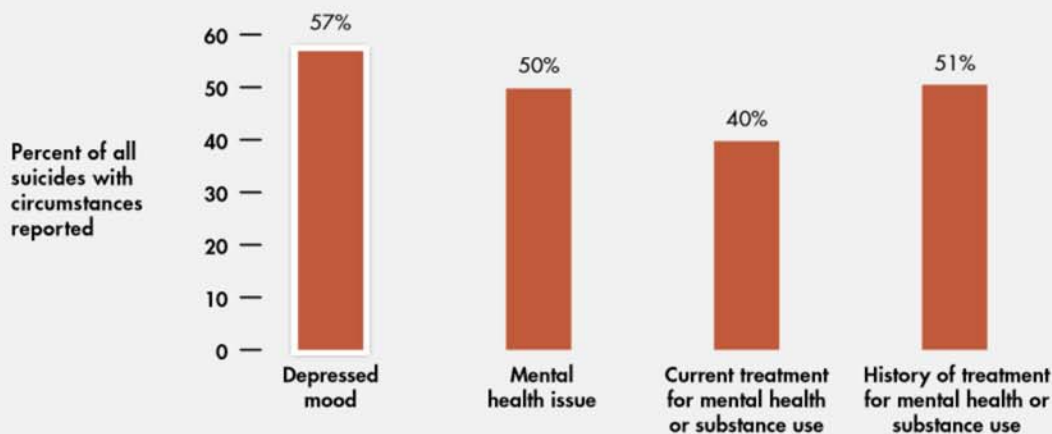


Figure 35. When comparing individual-level circumstances and sex, females were significantly more likely than males to leave a suicide note, disclose suicidal intent to others, and have a reported history of suicide attempts.

Data source: Wisconsin Violent Death Reporting System, Division of Public Health, Wisconsin Department of Health Services, 2013–2017.

Figure 36. The **most commonly** reported circumstances among suicide deaths were feeling **depressed**, having a **mental health issue**, and having a **history of treatment for mental health or substance use issues**, 2013–2017.



Data source: Wisconsin Violent Death Reporting System, Division of Public Health, Wisconsin Department of Health Services, 2013–2017.

Figure 36. Of Wisconsin residents who died by suicide between 2013 and 2017, more than half of suicide deaths were preceded by a reported depressed mood. This does not necessarily mean that the individual had a clinical diagnosis or that the depressed mood directly contributed to the death. In addition, half of suicides had a reported mental health issue. This means that the individual was receiving current treatment (i.e., the individual had a current prescription for a psychiatric medication, saw a mental health professional within the past two months, or participated in treatment for substance use) at the time of the suicide. Over half of people who died by suicide had a history of treatment for mental health or substance use issues, and 40% were currently in treatment for mental health or substance use issues.

Figure 37. Females who died by suicide were **more likely** to have had a known mental health issue, been receiving treatment for mental health or substance use at the time of death, and a history of treatment for mental health or substance use compared with **males**, 2013–2017.

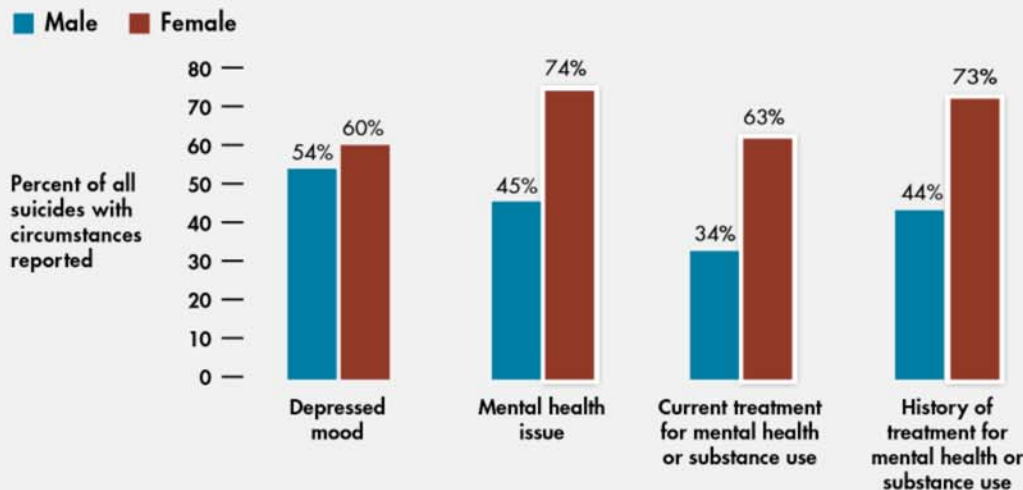


Figure 37. Females were significantly more likely to have a reported mental health issue, be receiving treatment for mental health or substance use, or have had a history of treatment for mental health or substance use from 2013–2017.

Data source: Wisconsin Violent Death Reporting System, Division of Public Health, Wisconsin Department of Health Services, 2013–2017.

Figure 38. Approximately **1 in every 4** people who died by suicide had a reported **alcohol issue**, 2013–2017.

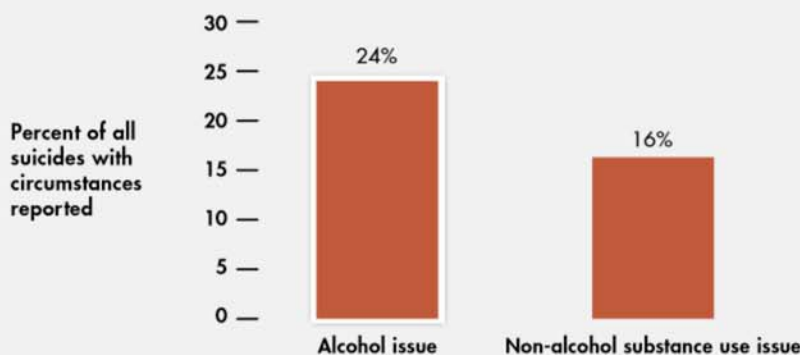


Figure 38. Almost 1 in every 4 suicides had a reported issue with alcohol from 2013–2017. Approximately 16% were reported to have an issue with a substance other than alcohol.

Data source: Wisconsin Violent Death Reporting System, Division of Public Health, Wisconsin Department of Health Services, 2013–2017.

Figure 39. Females who died by suicide were **more likely** to have a **non-alcohol substance use issue** reported compared with **males**, 2013–2017.

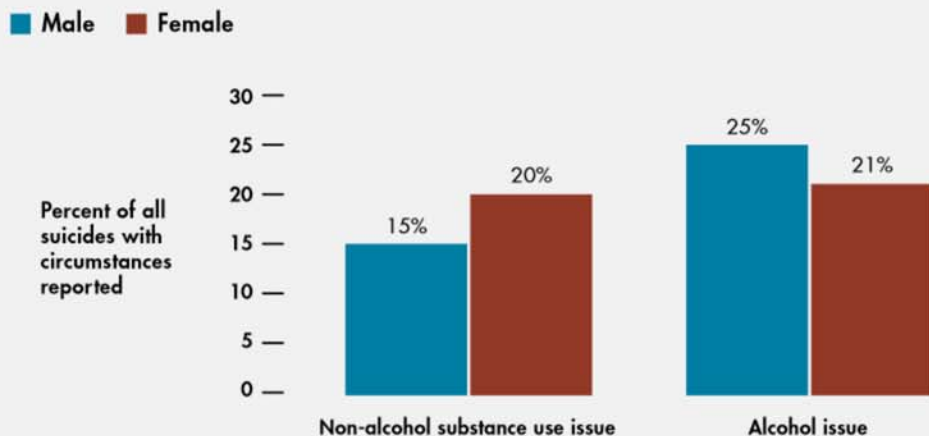


Figure 39. When comparing circumstances reported for males versus females who died by suicide, a substance use issue with a substance other than alcohol was significantly more likely to be reported for females from 2013–2017. A substance use issue with alcohol was reported significantly more often for males than females.

Data source: Wisconsin Violent Death Reporting System, Division of Public Health, Wisconsin Department of Health Services, 2013–2017.

Figure 40. Approximately **1 in every 4** people who died by suicide had a reported **physical health problem** that contributed to the suicide, 2013–2017.

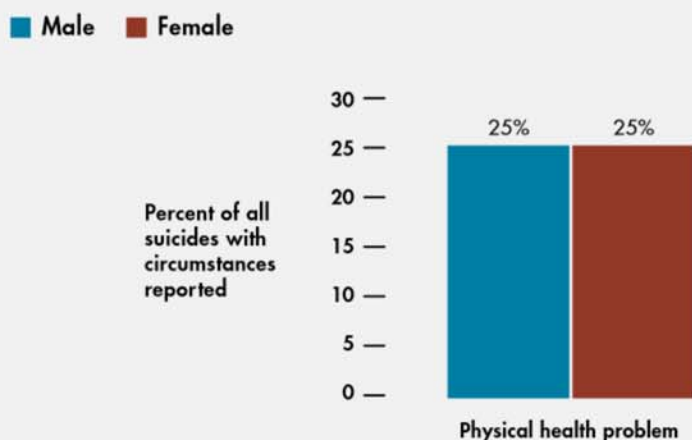
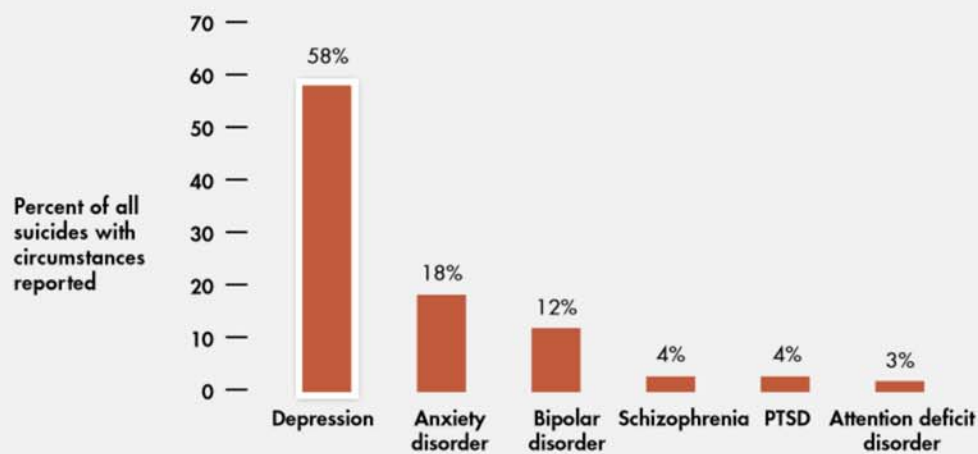


Figure 40. Approximately 1 in every 4 suicides had a reported physical health problem that contributed to the suicide from 2013–2017. No significant difference was found when comparing physical health problem by sex.

Data source: Wisconsin Violent Death Reporting System, Division of Public Health, Wisconsin Department of Health Services, 2013–2017.

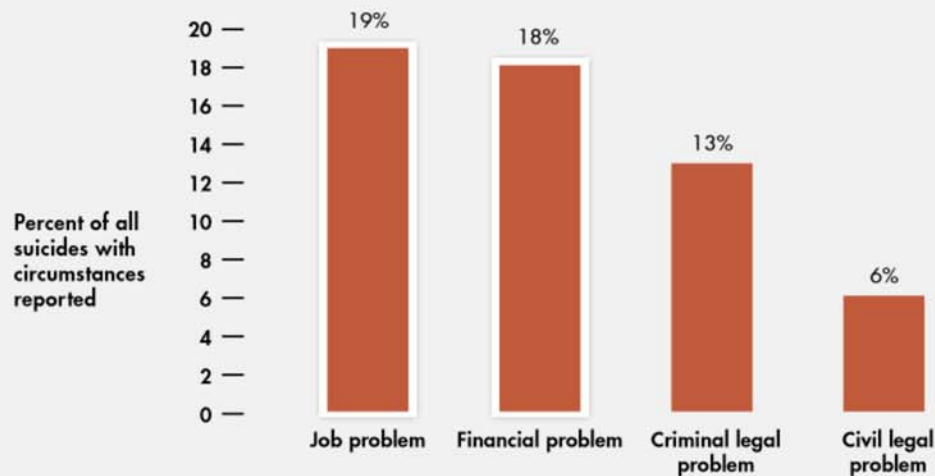
Figure 41. Depression was the most common diagnosed mental health condition among people who died by suicide, 2013–2017.



Data source: Wisconsin Violent Death Reporting System, Division of Public Health, Wisconsin Department of Health Services, 2013–2017.

Figure 41. From 2013–2017, data shows that over half of people who died by suicide were diagnosed with depression, while the remaining five mental health conditions were reported at smaller proportions.

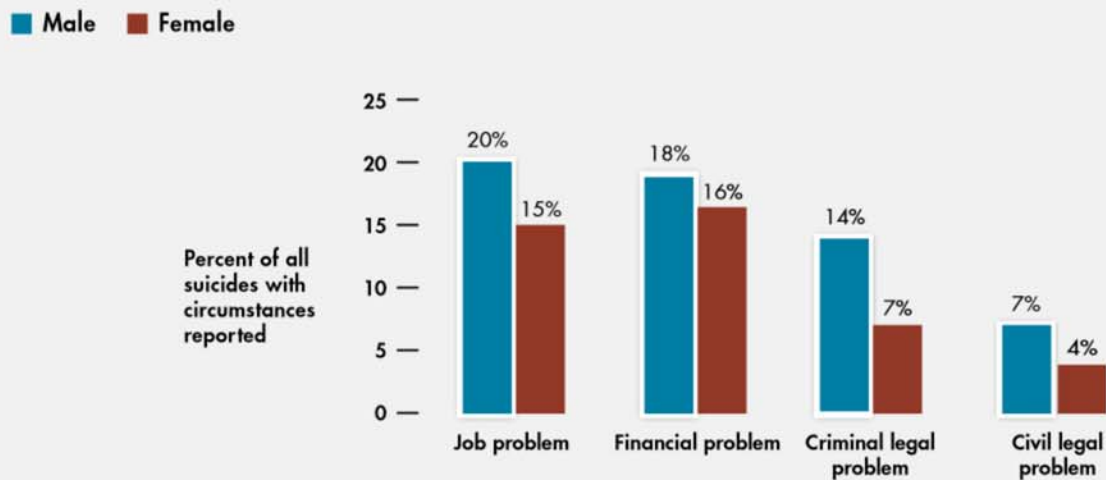
Figure 42. Of people who died by suicide, approximately 1 in every 5 had a reported job problem, and approximately 1 in every 5 had a reported financial problem, 2013–2017.



Data source: Wisconsin Violent Death Reporting System, Division of Public Health, Wisconsin Department of Health Services, 2013–2017.

Figure 42. From 2013–2017, 1 in every 5 individuals reported a job or financial problem. Also, criminal legal problems were determined to be related to the suicide among 13% of people who died by suicide.

Figure 43. Males who died by suicide were **more likely** than **females** to have **job, financial, or legal** problems reported, 2013–2017.



Data source: Wisconsin Violent Death Reporting System, Division of Public Health, Wisconsin Department of Health Services, 2013–2017.

Figure 43. Financial and legal circumstances that may have contributed to the suicide death also vary by sex. Males were significantly more likely to have a reported job, financial, criminal legal, or civil legal problem when compared to females.

Relationship Factors

Figure 44. More than 1 in every 3 people who died by suicide had a reported intimate partner issue, 2013–2017.

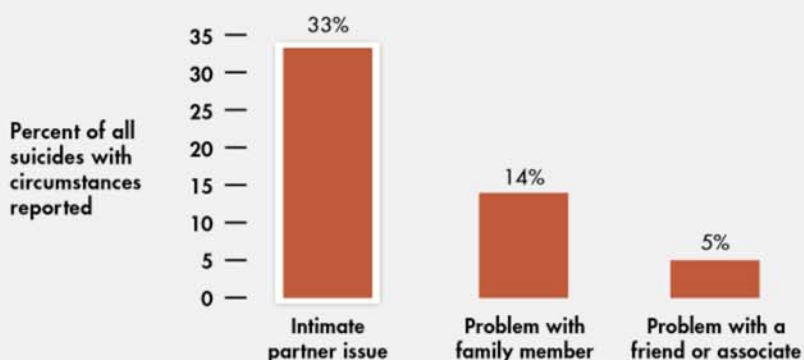


Figure 44. The presence of some level of intimate partner issues were reported in more than 1 in every 3 cases of suicide in Wisconsin. A problem with a family member was reported for 14% of suicide deaths and a problem with a friend or associate was reported for 5% of suicide deaths from 2013–2017.

Data source: Wisconsin Violent Death Reporting System, Division of Public Health, Wisconsin Department of Health Services, 2013–2017.

Figure 45. Nearly 1 in every 5 suicide deaths occurred after a recent argument or conflict, 2013–2017.

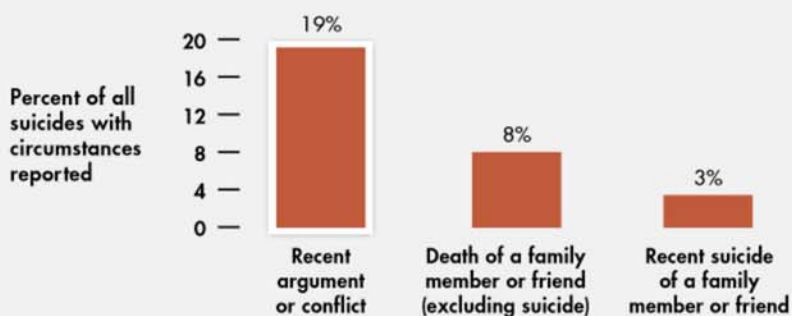


Figure 45. From 2013–2017, arguments or conflicts that contributed to the suicide were reported to have occurred recently or directly prior to the suicide incident among approximately 1 in every 5 suicide cases. A death of a family member (excluding suicide) reportedly contributed to 8% of suicides and a recent suicide of a family member or friend reportedly contributed to 3% of suicides.

Data source: Wisconsin Violent Death Reporting System, Division of Public Health, Wisconsin Department of Health Services, 2013–2017.

Conclusion

While the circumstances surrounding every suicide are different, the data presented throughout this section can be used as a guide to help identify and target programming towards the populations with the highest need for prevention of suicide and self-harm injury. Understanding how the different risk and protective factors interact, overlap, and impact different populations could help increase the effectiveness of suicide prevention efforts and warrants further investigation. For effective programming, prevention strategies should also address individual, relationship, and community levels of risk factors for greatest impact. In Part 3 of this report, specific strategies and recommendations for effective suicide prevention will be presented.

Part 3: Wisconsin Suicide Prevention Plan

The strategies presented in Part 3 of this report constitute the Wisconsin Suicide Prevention Plan. They align with those in the National Strategy for Suicide Prevention, which was released in 2012.¹¹ Each strategy in the Wisconsin plan includes three guiding principles that were created based on current efforts in the state and input from the Prevent Suicide Wisconsin Steering Committee. The guiding principles provide direction to actions that stakeholders can take to engage in effective suicide prevention efforts. The state updates its suicide prevention plan approximately every five years and will work in the interim to keep stakeholders apprised of advances in the field.

Strategy 1: Increase and Enhance Protective Factors

- 1A Implement strategies that reduce the impact of adverse childhood experiences (ACEs) and promote social-emotional development in children.
- 1B Promote healthy communities by increasing social connectedness in multiple settings, including schools, workplaces, and community, faith-based, cultural, and social organizations.
- 1C Support efforts, including safe storage of medications and firearms, to reduce access to lethal means by people who are at acute risk of suicide.

Strategy 2: Increase Access to Care for At-Risk Populations

- 2A Expand access to services for mental health and substance use treatment, as well as for physical health care.
- 2B Support innovative ways to expand access to care, including technologies and peer-led or other non-clinical support services.
- 2C Increase the public's knowledge of risk factors for suicide, recognition of warning signs in individuals, and preparedness to support and respond to those individuals.

Strategy 3: Implement Best Practices for Prevention in Health Care Systems

- 3A Promote a systematic “Zero Suicide” approach, rooted in the understanding that suicide is preventable in people receiving treatment services.
- 3B Expand the use of evidence-based screening, assessment, and suicide-specific treatments for those at risk.
- 3C Improve care transitions for people with suicidal thoughts and behaviors who are discharged from emergency departments or inpatient settings.

Strategy 4: Improve Surveillance of Suicide and Evaluation of Prevention Programs

- 4A Use Wisconsin data to describe the impact of suicidal thoughts, attempts, and deaths and expand data linkages to further the understanding of suicide.
- 4B Work in collaboration with existing organizations to standardize and enhance capacity for investigating and reporting suicide deaths.
- 4C Improve and expand evaluation of suicide prevention programs.

11. National Strategy for Suicide Prevention: <https://theactionalliance.org/our-strategy>

Strategy 1

Increase and Enhance Protective Factors

1A

Implement strategies that reduce the impact of adverse childhood experiences (ACEs) and promote social-emotional development in children.

Definitions:

- ▶ **Adverse childhood experiences (ACEs):** ACEs are potentially traumatic events that occur in childhood (0–17 years old).
- ▶ **Social and Emotional Learning (SEL):** According to the Collaborative for Academic, Social, and Emotional Learning, SEL is the process through which children and adults acquire and effectively apply the knowledge, attitudes, and skills necessary to understand and manage emotions, set and achieve positive goals, feel and show empathy for others, establish and maintain positive relationships, and make responsible decisions.

Adverse childhood experiences (ACEs) are potentially traumatic events that happen while a person is growing up, and they can have a lasting, negative effect on an individual's health into adulthood. Examples include experiences such as abuse, neglect, exposure to violence, parental incarceration, divorce, or household issues with mental health or substance use. ACEs increase the risk for poor health outcomes, including the risk of suicidal behaviors.

The type of ACE that was experienced also significantly affects a person's risk of attempting suicide. According to the research,¹² suicide attempts were approximately:

- ▶ 2 times as likely where there was a substance use issue in the home.
- ▶ 2 times as likely for those whose parents had divorced or separated.
- ▶ 2.5 times as likely for those with an incarcerated family member.
- ▶ 2.5 times as likely if a mother experienced violence in the house.
- ▶ 3 times as likely for those who had a relative with mental illness in the house.

- ▶ 3 times as likely for those who experienced physical abuse or sexual abuse.

- ▶ 5 times as likely for those reporting emotional abuse.

Though ACEs may increase the odds of having health challenges, ACEs *do not* necessarily lead to worse health outcomes. Increasing protective factors may help mitigate risk associated with ACEs and improve health outcomes. The risk of negative health effects of ACEs can be reduced when people have a strong support system and the skills to successfully cope with life's many challenges. For adults, learning how to adapt to change and recover from setbacks can mean thoughtfully considering behavior and attitudes, learning from the past, and finding healthy ways to cope with daily stress. Some ways to build and maintain a healthy foundation at any stage in life include:

- ▶ Building strong relationships with family and friends.
- ▶ Setting realistic personal goals.
- ▶ Acknowledging when positive choices have been made.
- ▶ Eating well, getting plenty of sleep, and staying active.
- ▶ Taking proactive action when faced with a challenge.

12. Dube SR, Anda RF, Felitti VJ, Chapman DP, Williamson DF, Giles WH. Childhood abuse, household dysfunction, and the risk of attempted suicide throughout the life span. *Journal of the American Medical Association*. 2001;286(24):3089–3095.

For children, this positive support can be provided through:

- ▶ Caring relationships with parents, teachers, counselors, or other adults actively involved in a child's life.
- ▶ Good peer relationships.
- ▶ Positive coping style.
- ▶ Good social skills.

This is particularly important for youth who identify as lesbian, gay, or bisexual (LGB). The CDC has reported that LGB youth are 4.5 times more likely, and questioning youth are over twice as likely, to consider attempting suicide as their heterosexual peers.¹³ Note that this CDC report did not include gender identity, such as transgender, as that data was not being collected until recently. Suicidal behavior among this population can be related to experiences of discrimination, family rejection, harassment, bullying, violence, and victimization. For those youth with baseline risk for suicide, especially those with a mental health condition, these experiences can place them at increased risk.

Schools have a great ability to lessen the impact of traumatic events in a young person's life. Schools can become trauma-sensitive schools, which then makes them a protective factor for affected students and increases the social-emotional and academic skills of the entire school body.

Another way to help build a foundation for a healthy and successful life is through social and emotional learning (SEL). SEL is the process through which children and adults acquire and effectively apply the knowledge, attitudes, and skills necessary to understand and manage emotions, set and achieve positive goals, feel and show empathy for others, establish and maintain positive relationships, and make responsible decisions. For children, making SEL skills part of the learning equation helps them succeed in school and life. With social and emotional skills, children can manage their feelings, build healthy relationships, and navigate social environments.

When the adults in children's lives are supported by good policies and training, children develop the skills needed to prepare them for the world. The Wisconsin Department of Public Instruction (DPI), in partnership with the Collaborative for Academic, Social, and Emotional Learning (CASEL), is committed to providing resources to schools and families to support comprehensive social and emotional learning opportunities for students.

DPI also provides information and resources for youth suicide prevention to school staff, administrators, school boards, and other members of the school community. These resources include data about youth suicide; information about Wisconsin laws addressing prevention; web-based training; student programs; as well as strategies for prevention, intervention, and postvention.

Alongside building individual resilience, there is a need to build resilient, healthy communities, as well as prevent ACEs at the community-level when possible. Community resilience is built by strengthening social inclusion and connectedness, economic opportunities, affordable housing, welcoming and affirming spaces, equal access to high-quality schools, and environments that promote good physical and mental health. In this way, the systemic root causes of risk behaviors and negative health outcomes can be addressed to improve health for all Wisconsin residents.

13. Center for Disease Control and Prevention. Youth Risk Behavior Survey—Data Summary & Trends Report: 2007–2017.

VOICES FROM THE FIELD



We know that just one engaged relationship with a trusted adult is the biggest protective factor for kids. We also know that these relationships and mutual supports are a key protective factor for adults when facing toxic stress. With the Coalition, we nurture the system of relationships around children by promoting compassion resilience of caregivers, by uplifting those most impacted by trauma as decision-makers, and by intentionally building community. When we transform our relationships, such as who listens to whom and who learns from whom, then we also change the power dynamics in the decisions that are key to reducing trauma and promoting the best outcomes for our whole community.

– Blake T., Milwaukee Coalition for Children's Mental Health

1A: Implement strategies that reduce the impact of adverse childhood experiences

Opportunities for Action	Resources
<p>Support programs and policies that promote the development of social skills and emotion regulation as key components of children's health and education.</p>	<p>Safe Schools Initiative https://dpi.wi.gov/sspw/safe-schools</p> <p>Resources to Build SEL Expertise https://dpi.wi.gov/sspw/mental-health/social-emotional-learning/build-your-sel-expertise</p> <p>Adolescent Connectedness https://www.cdc.gov/healthyouth/protective/youth-connectedness-important-protective-factor-for-health-well-being.htm</p> <p>The Collaborative for Academic, Social, and Emotional Learning https://casel.org</p>
<p>Work with partners to facilitate the provision of supportive services for children and families who experience adversity.</p>	<p>Compassion Resilience Toolkit https://compassionresiliencetoolkit.org/</p> <p>Student Services/Prevention and Wellness Team https://dpi.wi.gov/sspw</p> <p>Model School Policy Resource https://www.sprc.org/resources-programs/model-school-policy-suicide-prevention-model-language-commentary-resources</p> <p>Wisconsin Child Abuse and Neglect Prevention Board https://preventionboard.wi.gov/Pages/Homepage.aspx</p> <p>Wisconsin Safe and Healthy Schools http://wisheschools.org/</p> <p>Resilient Wisconsin https://www.dhs.wisconsin.gov/resilient/index.htm</p>
<p>Support the implementation of programs to create schools that are safe and just for all students, including lesbian, gay, bisexual, and transgender (LGBT) students.</p>	<p>Trauma-Sensitive Schools https://dpi.wi.gov/sspw/mental-health/trauma</p> <p>Bullying Prevention Resources https://dpi.wi.gov/sspw/safe-schools/bullying-prevention</p> <p>Safe Schools for LGBT students https://dpi.wi.gov/sspw/safe-schools/lgbt</p> <p>GSAFE https://gsafewi.org/</p>
<p>Use Youth Risk Behavior Survey data to inform school-based suicide prevention efforts.</p>	<p>Youth Risk Behavior Survey Special Topic: Suicide and Help Seeking https://dpi.wi.gov/sites/default/files/imce/sspw/pdf/yrbssuicidehelpseeking.pdf</p>

Increase and Enhance Protective Factors

1B

Promote healthy communities by increasing social connectedness in multiple settings, including schools, workplaces, and community, faith-based, cultural, and social organizations.

Definitions:

- ▶ **Mental Health First Aid (MHFA):** MHFA is an 8-hour course that teaches a person how to identify, understand, and respond to signs of mental illnesses and substance use disorders.
- ▶ **National Alliance on Mental Illness (NAMI):** NAMI is the nation's largest grassroots mental health organization dedicated to building better lives for the millions of Americans affected by mental illness.
- ▶ **Question, Persuade, and Refer (QPR):** QPR is a program containing the three steps anyone can learn to help save a life from suicide. People trained in QPR learn how to recognize the warning signs of a suicide crisis and how to question, persuade, and refer someone to help.
- ▶ **Social determinants of health (SDOH):** SDOH are defined by the World Health Organization as the conditions in which people are born, grow, live, work, and age that are shaped by the distribution of money, power, and resources at global, national, and local levels.
- ▶ **Wisconsin Initiative for Stigma Elimination (WISE):** WISE is a statewide coalition of organizations and individuals building resilient and hopeful communities by promoting inclusion and support for all affected by mental health challenges.

Social isolation and feelings of loneliness are key risk factors for suicide among both adolescent and adult Wisconsin residents. Research consistently demonstrates the role of connectedness and sense of belonging as protective factors for suicide. Social gatherings for adults and extracurricular activities for youth are important protective factors. Affinity groups or cultural events that validate and celebrate students' race, ethnicity, or sexual identity can be particularly important.¹⁴ Youth who feel connected at school and at home were found to be as much as 66% less likely to experience health risk behaviors related to sexual health, substance use, violence, and mental health in adulthood.¹⁵ Both perceived and actual social disconnectedness can lead to suicidal thoughts. This is a great cause for concern in Wisconsin as many people in the state experience low levels of social support.¹⁶

Enhancing connectedness and social cohesion is one of the most direct ways we can address mental health challenges related to suicidal thoughts, including depression, hopelessness, anxiety, and substance use. Connectedness to others, including family members, teachers, and coworkers, as well as community, faith-based, and social organizations, plays a critical role in protecting individuals from suicide. Community-based efforts in workplaces, schools, and other public spaces can encourage openness around talking about suicide. Policies can be designed to ensure the availability of welcoming and affirming spaces, promote positive interactions in the community, and thus increase the feeling of belonging.

There is a strong evidence base behind prevention strategies such as: group educational, social, or physical activities that promote social interactions, regular attendance, and community

14. Wisconsin Department of Public Instruction. Wisconsin's 2017 Youth Risk Behavior Survey Special Topic: Suicide.

15. Steiner RJ, Sheremenko G, Lesesne C, et al. Adolescent Connectedness and Adult Health Outcomes. *Pediatrics*. 2019;144(1):e20183766.

16. Behavioral Risk Factor Surveillance System (BRFSS), Emotional Support and Life Satisfaction, 2017.

CDC's *Preventing Suicide: A Technical Package of Policies, Programs, and Practices* highlights strategies based on the best available evidence to help states and communities prevent suicide.

Ideally, prevention addresses all levels of influence: individual, relationship, community, and societal.

involvement among older adults; support for community centers and other venues that facilitate local residents' efforts to socialize, participate in recreational or educational activities, gain information, and seek counseling; and intergenerational mentorship.

Interventions for preventing suicide that have the most complete and inclusive view of the issue will take into account the conditions in which we live, work, play, and grow, also known as social determinants of health (SDOH). SDOH contribute to health disparities among various groups of people in ways that are different across gender, race, class, disability status, and sexual identity. For example, ways in which individuals who identify as LGBTQ or people of color are often impacted include: lack of physically safe or socially inclusive and affirming environments; stigma; limited stable housing and employment opportunities; historical trauma; and discrimination. People engaging in prevention efforts should consider how interventions might take into consideration or address institutional racism, homophobia, and other types of oppression. Such prevention efforts may involve developing new partnerships or working across sectors including:

- ▶ Public health
- ▶ Business, labor, and economic development
- ▶ Health services
- ▶ Education
- ▶ Veterans and the military
- ▶ Government
- ▶ Justice
- ▶ Housing
- ▶ Media
- ▶ Community organizations (foundations, faith-based groups, etc.)

1B: Promote healthy communities by increasing social connectedness

Opportunities for Action	Resources
Facilitate outreach to individuals at risk of isolation, such as older adults living alone, or people living with disabilities, mental health conditions, or addiction.	<p>QPR Institute https://qprinstitute.com/</p> <p>Mental Health First Aid https://www.mentalhealthfirstaid.org/</p> <p>Programs and Services for Older Adults in Wisconsin https://www.dhs.wisconsin.gov/aging/services</p>
Engage faith-based organizations in efforts to prevent social isolation and provide training as appropriate.	<p>Faith. Hope. Life. https://theactionalliance.org/faith-hope-life</p>
Utilize peer or other support groups to facilitate meaningful social connections among those who are experiencing suicidal thoughts, who have attempted suicide, or who have lost loved ones to suicide.	<p>AFSP – I’ve Lost Someone https://afsp.org/find-support/ive-lost-someone/</p> <p>WISE (Wisconsin Initiative for Stigma Elimination) https://wisewisconsin.org/up-to-me/</p> <p>Alternatives to Suicide https://www.westernmassrlc.org/alternatives-to-suicide</p> <p>NAMI Wisconsin https://namiwisconsin.org/education-programs/</p> <p>NAMI Connection https://www.nami.org/Find-Support/NAMI-Programs/NAMI-Connection</p> <p>Prevent Suicide Wisconsin Suicide Loss Support https://www.preventsuicidewi.org/suicide-loss-support</p>

Increase and Enhance Protective Factors

IC

Support efforts, including safe storage of medications and firearms, to reduce access to lethal means by people who are at acute risk of suicide.

Definitions:

- ▶ **Means reduction:** Means reduction involves reducing a suicidal person's access to lethal means or methods, which are the substances, implements, or weapons capable of causing death.
- ▶ **Counseling on Access to Lethal Means (CALM):** CALM is a free online course that focuses on how to reduce access to the methods people use to kill themselves. It covers how to: identify people who could benefit from lethal means counseling; ask about their access to lethal methods; and work with them and their families to reduce access.
- ▶ **American Foundation for Suicide Prevention (AFSP):** AFSP raises awareness, funds scientific research, and provides resources and aid to those affected by suicide.
- ▶ **Suicide Prevention Resource Center (SPRC):** SPRC is the federally supported national resource center devoted to advancing suicide prevention infrastructure and capacity building through consultation, training, and the provision of information, resources, and tools in support of suicide prevention efforts.

The means by which people attempt or die by suicide play an important role in prevention. Creating suicide safe environments means lessening the chances for someone who is thinking about or planning suicide to ultimately die by suicide. Temporarily removing access to lethal means when someone is experiencing thoughts of suicide may interrupt an attempt or make an attempt less lethal, providing additional valuable time for others to intervene. Encouragingly, research shows that most people (90%) who survive a suicide attempt do not go on to die by suicide, and 70% of people who survive a suicide attempt never reattempt.¹⁷ And safe environments can help prevent attempts in the first place.

Figure 46. Firearm was the most commonly used method of suicide, 2013–2017.

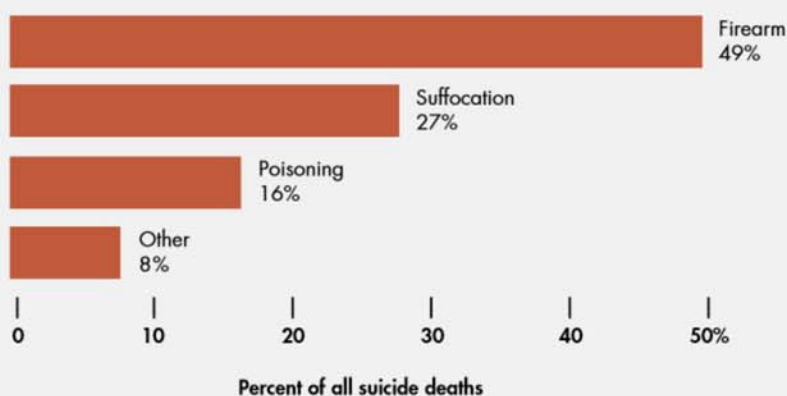


Figure 46. Analytic notes: The “Other” category includes drowning, motor vehicle, fire, and other. Suffocation includes hanging, strangulation, and suffocation.

Data source: Wisconsin Violent Death Reporting System, Division of Public Health, Wisconsin Department of Health Services, 2013–2017.

17. <https://www.hsph.harvard.edu/means-matter/means-matter/survival/>

One area of safety relates to firearms. There are growing efforts in Wisconsin and nationally to offer safe storage to gun owners who feel they or their loved ones might be at risk. These efforts have often taken the form of what is called “The Gun Shop Project.” The Gun Shop Project’s work is guided by the New Hampshire Firearm Safety Coalition, a group of mental health and public health practitioners, firearm retailers, and firearm rights advocates. The project developed materials with and for firearm retailers and range owners on ways they can help prevent suicide. Its objectives are to:

- ▶ Share guidelines on how to avoid selling or renting a firearm to a suicidal customer.
- ▶ Encourage gun stores and firing ranges to display and distribute suicide prevention materials tailored to their customers.

Another collaborative effort to educate and partner to prevent suicide is the American Foundation for Suicide Prevention’s (AFSP’s) work with the National Shooting Sports Foundation on the Firearms and Suicide Prevention Program. It is an educational program which focuses on risk factors and warning signs and actions that can be taken to create safety: temporary removal of firearms from the home during periods of risk; safe storage (locked and unloaded) at all times; and denying sale when appropriate. AFSP Wisconsin is training volunteers to lead this program throughout the state and partner with interested gun shop and range owners and the firearms community broadly. The education is paired with the distribution of resource materials to locations where firearms are sold.

Safety is also a concern with medications, especially prescription drugs, which are another means by which people attempt to take their own lives. Safe storage of medications includes storing them out of sight and even using a lockbox, safe, or locked medicine cabinet to prevent access by a person who is at acute risk of attempting suicide. Properly disposing of medications that are no longer needed is another way to create safety by reducing potential access.

Reducing access to lethal means, such as firearms and medication, can determine whether a person at risk for suicide lives or dies. Mental health professionals and laypeople alike can learn how to work with suicidal individuals to reduce their access to means. Counseling on Access to Lethal Means is a free online course that covers how to: identify people who could benefit from lethal means counseling; ask about their access to lethal methods; and work with them—and their families and friends—to reduce access. In addition, there are coalitions and local health departments that distribute gun locks and medication lock boxes to support lethal means safety efforts. Suicide recognition and response trainings often include information about local groups that coordinate these activities, and there are sometimes grants available to purchase these resources.

Safety planning for those at risk of suicide can include considerations about safe storage of the means one might use to kill oneself. The Safety Planning Intervention includes a written, prioritized list of positive coping strategies and resources that is created in collaboration with the person at risk. It is a prevention tool that is designed to increase survival in those who experience suicidal thoughts and behaviors. Safety planning is a core component of Zero Suicide trainings and is currently being used in multiple settings throughout Wisconsin and the United States.

A Mount Horeb gun shop owner bought a safe to store guns for anyone if they feel they are at risk for suicide. What started as one small action to prevent suicides in one community turned into a larger conversation about safe storage of firearms and gun safety in Wisconsin.

VOICES FROM THE FIELD



There is a desperate need in the firearms industry for simple training to recognize and limit access to people who may be in a time of crisis. This can be taught easily to gun shop and range owners and employees in very little time. A small investment of time is worth so much more than losing a person’s life. The Gun Shop Project as well as the National Shooting Sports Foundation both have excellent resources that can be obtained at little to no cost to the people wanting them.

– Chuck L., Gun Shop Owner—
Mount Horeb

1C: Support efforts to increase safety with lethal means

Opportunities for Action	Resources
<p>Promote training for safety planning that includes lethal means safety and encourage the use of evidence-based safety planning tools.</p>	<p>CALM – Counseling on Access to Lethal Means https://www.sprc.org/resources-programs/calm-counseling-access-lethal-means</p> <p>Safety Planning Intervention http://zerosuicide.edc.org/resources/zero-suicide-research-base-engage-element-safety-planning</p> <p>Safety Plan Mobile App https://zerosuicide.sprc.org/resources/safety-plan-mobile-app</p> <p>Means Matter (Harvard TH Chan School of Public Health) https://www.hsph.harvard.edu/means-matter/</p> <p>Emergency Department Means Restriction Education (For adult caregivers of at-risk youth in the ED) https://www.sprc.org/resources-programs/emergency-department-means-restriction-education</p> <p>Lethal Means & Suicide Prevention: A Guide for Community & Industry Leaders https://theactionalliance.org/resource/lethal-means-suicide-prevention-guide-community-industry-leaders</p>
<p>Engage gun shops in safe storage efforts and disseminate gun locks and other firearm locking equipment.</p>	<p>Firearms and Suicide Prevention https://afsp.org/firearms-and-suicide-prevention-education-program</p> <p>Project Child Safe http://www.projectchildsafesafe.org/about</p> <p>New Hampshire Gun Shop Project https://www.hsph.harvard.edu/means-matter/gun-shop-project/</p> <p>Gun locks can be distributed by local coalitions https://www.preventsuicidewi.org/find-a-local-coalition</p>
<p>Encourage individuals to dispose of medications and household chemicals safely.</p>	<p>Prescription Drug Take Back https://www.fda.gov/drugs/disposal-unused-medicines-what-you-should-know/drug-disposal-drug-take-back-locations</p> <p>Safe Disposal http://dnr.wi.gov/topic/healthwaste/businesspharm.html</p>

Strategy 2

Increase Access to Care for At-Risk Populations

2A

Expand access to services for mental health and substance use treatment, as well as for physical health care.

Definitions:

- ▶ **The Patient Protection and Affordable Care Act (ACA):** The ACA is the comprehensive health care reform law enacted in 2010 that aims to make affordable health insurance and health care services available to more people.
- ▶ **Culturally and Linguistically Appropriate Services (CLAS) Standards:** CLAS Standards are national standards for health and health care services that are intended to improve the quality of services and help bring about positive health outcomes for diverse populations.
- ▶ **Parity laws:** These are federal and state laws that affect how insurance plans and policies cover mental health and substance use treatment, requiring that the coverage provided is not more restrictive than coverage for medical or surgical treatment.

In Wisconsin, 40% of people who died by suicide were receiving treatment for mental health or substance use issues at their time of death (See **Figure 36.**) When such services are covered by a health insurance plan or policy, it is crucial that people are getting the benefits they are entitled to under the law. One such law is the federal Mental Health Parity and Addiction Equity Act (MHPAEA), which requires that the financial requirements (such as co-pays and deductibles) and treatment limitations (such as visit limits) applicable to insurance benefits for mental health or substance use disorders are no more restrictive than the requirements or limitations applied to other medical benefits.

Another federal law, the Patient Protection and Affordable Care Act (ACA), has strengthened MHPAEA's mandate. The ACA requires insurers who offer coverage through the Marketplace to cover mental health and substance use disorders on an equal basis with coverage for physical health services and not place any annual or lifetime dollar limits on that coverage. Individuals and organizations can continue to work to ensure that access to mental health and substance use treatment for suicidal clients is not limited by insurance benefits that are more restrictive than benefits for other medical issues.

VOICES FROM THE FIELD



Our American Foundation for Suicide Prevention (AFSP) Field Advocates met with lawmakers in Madison on March 7, 2019, our first AFSP Advocacy Day in Wisconsin, to encourage them to prioritize suicide prevention initiatives for all Wisconsin residents, including efforts to ensure parity in insurance coverage for mental health and substance use conditions. The hope was that by meeting with them we would increase awareness and resources for suicide to save lives in Wisconsin.

– Gena Orlando, Wisconsin Area Director, American Foundation for Suicide Prevention



Lack of insurance is another barrier to accessing physical and mental health care services that, if addressed, could be protective for people at risk of suicide and self-harming behavior. In 2018, results of a state survey showed that the following groups were significantly less likely to be insured:¹⁸

- ▶ Hispanics
- ▶ Lower income populations
- ▶ Adults ages 18–44

Suicide prevention efforts targeted toward these populations should address insurance coverage in order to improve access to health care services. Along with services for mental health and substance use, access to physical health care is important. Data shows that in Wisconsin, 25% of people who died by suicide had a physical health problem that was relevant to their death (See **Figure 40.**)

The ACA has provisions to help address gaps in insurance coverage. It created the Marketplace where people who do not have access to employer-based coverage can buy health insurance at affordable rates. It also seeks to expand access to care by increasing the proportion of the population eligible for public insurance (Medicaid). To date, Wisconsin has not opted into Medicaid expansion. However, it is estimated that expansion would enable an estimated 82,000 additional individuals in the state to access affordable health coverage. By covering individuals who currently lack insurance, uncompensated care for providers would decline. In addition, expansion has been linked to positive health outcomes for individuals.

Another way to expand access is by increasing the availability of services that meet the National Standards for Culturally and Linguistically Appropriate Services (CLAS). Some individuals and populations experience barriers to care due to services that are not responsive to their needs based on culture, identity, or language. The National CLAS Standards are intended to advance health equity, improve quality, and help eliminate health care disparities by establishing a blueprint for health and health care organizations to provide effective, equitable, understandable, and respectful quality care and services that are responsive to diverse cultural health beliefs and practices, preferred languages, health literacy, and other communication needs. Health care providers and organizations can receive training in the National CLAS Standards to help them incorporate the standards into their practice. There are 15 standards in all, and compliance with the standards can lead to better outcomes for diverse populations, as well as improve the quality of services for everyone.

18. Wisconsin Family Health Survey, 2018: Key Findings. Wisconsin Department of Health Services, September 2019.

2A: Expand access to services

Opportunities for Action	Resources
<p>Support efforts to ensure that parity requirements for insurance are being met.</p>	<p>Wisconsin Office of the Commissioner of Insurance, Consumer Health Information https://oci.wi.gov/Documents/Consumers/PI-008.pdf</p> <p>American Foundation for Suicide Prevention https://afsp.org/mental-health-parity</p> <p>Mental Health America https://www.mhanational.org/tags/parity</p>
<p>Assist with outreach strategies to ensure that all eligible people are enrolled in Medicaid or private insurance through the Marketplace.</p>	<p>Covering Wisconsin https://www.coveringwi.org/</p> <p>ForwardHealth https://www.dhs.wisconsin.gov/forwardhealth/index.htm</p> <p>Federal Health Insurance Marketplace www.healthcare.gov</p> <p>Wisconsin Office of the Commissioner of Insurance https://oci.wi.gov/Pages/Consumers/HealthCareReform.aspx</p>
<p>Promote and advance the adoption of the National Culturally and Linguistically Appropriate Services (CLAS) Standards.</p>	<p>Wisconsin Department of Health Services' National CLAS Standards webpage https://www.dhs.wisconsin.gov/minority-health/clas.htm</p> <p>Federal HHS Think Cultural Health https://thinkculturalhealth.hhs.gov/clas</p>
<p>Build on efforts to integrate mental health and substance use disorder treatment with primary care systems to reduce stigma around accessing services and improve integrated care.</p>	<p>Center of Excellence for Integrated Health Solutions https://www.thenationalcouncil.org/integration</p> <p>Health Resources and Services Administration https://www.hrsa.gov/behavioral-health</p>

Increase Access to Care for At-Risk Populations

2B

Support innovative ways to expand access to care, including technologies and peer-led or other non-clinical support services.

VOICES FROM THE FIELD



The Medical College of Wisconsin's Department of Psychiatry has developed a concept for an innovative consult program which could deliver specialized psychiatry consultation services to primary care providers across the state by building onto the infrastructure of the state supported Child Psychiatry Consultation Program, including general psychiatry, geriatric psychiatry, veteran psychiatry, addiction psychiatry, perinatal psychiatry, and non-opiate pain management expertise. No other state has something like this population health focused program. The State of Wisconsin funded the development of a business plan for this program.

– Jon A. Lehrmann, MD, Professor and Chairman, Department of Psychiatry and Behavioral Medicine, Medical College of Wisconsin

Definitions:

- ▶ **Clinical services:** These are services provided by a licensed clinician (e.g., a doctor, psychologist, or counselor) to treat individuals who have mental health or substance use disorder diagnoses. Such services are often provided in a clinical setting, such as a hospital or medical office.
- ▶ **Non-clinical support services:** These are services provided by a variety of professionals and laypeople in diverse settings to assist individuals with mental health or substance use issues, regardless of whether they have a diagnosis.
- ▶ **App:** An “app” or “smartphone app” is a mobile application, which is a type of software designed to run on a mobile device, such as a smartphone or tablet computer.
- ▶ **Telehealth:** Telehealth involves the use of telecommunications and virtual technology to deliver health care outside of traditional health care facilities. Telehealth, which requires access only to telecommunications, is the most basic element of “eHealth,” which uses a wider range of information and communication technologies.

A person's care for mental health or substance use conditions, as well as suicidal thoughts and behaviors, can sometimes be met in settings other than clinical settings. With advancements in technology, individuals have more options for accessing telehealth, as well as online or mobile resources. In addition, access to non-clinical support services has been increasing and could be expanded further. These services are often provided by people who have experienced life struggles similar to those being experienced by individuals seeking services.

Smartphone apps

Apps are free or inexpensive tools that can supplement clinical services or can be used by an individual to manage their condition on their own. They work by collecting data from users, such as tracking symptoms, and then providing feedback or even recommendations to their users. The number of apps is increasing rapidly, and there are apps designed for a wide range of mental health conditions. Texting or app-based messaging crisis lines can also meet a need for individuals who prefer to type or text rather than speak on the phone with someone, or for individuals who are deaf or hard of hearing. While apps are seen as a promising and low-cost way to address gaps in access to mental health treatment, their effectiveness is still being studied. Caution is advised when considering use of these apps, as some may make claims not supported by research and may also sell the user data they collect.

Clinical provider telephone consultation

The Wisconsin Child Psychiatry Consultation Program (CPCP) provides consultation, education, and referral support to enrolled primary care providers caring for children and adolescents with behavioral health challenges. The Wisconsin CPCP is similar to other national models designed to address child and adolescent psychiatry shortages. Since its establishment in 2014, CPCP has grown rapidly and successfully, with increased resources, as a model to expand access to behavioral health expertise to primary care providers across the state. There is potential for this type of consultation service to be expanded to serve adults in Wisconsin as well.

Peer support and certified peer specialists

In this context, a peer is someone who shares the experience of living with a mental health or substance use issue, which may include having experienced suicidal thoughts or behaviors. As peer support, they develop trust with a person experiencing similar challenges by providing a nonjudgmental and safe space to explore issues, give and receive encouragement, share knowledge, and support a person's path to recovery. Peer support can increase access to needed help by providing a form of care within a relationship of equals that is non-clinical, strengths-based, and self-directed. For some people, this is the form of care that works best for them. Peer support can also provide benefits as part of mental health and substance use treatment services. That type of peer support may be provided by a certified peer specialist, a title for an individual who has had formal training and continuing education in the peer specialist model of mental health and substance use disorder support. Certified peer specialists are increasingly being used in crisis intervention services programs (also called emergency mental health services programs) to add the wisdom of lived experience to the resolution of crisis situations.

Peer groups

Alternatives to Suicide is one example of a peer-led group. Alternatives to Suicide is specifically for people living with suicidal thoughts. People attending these groups are encouraged to talk openly about their current issues, share ideas for coping, and discuss challenges and successes.

Peer-run respites

A peer-run respite is a place where adults with mental health and substance use concerns who are experiencing increased stress or symptoms can seek respite by being a guest in a home-like, peer-supported environment. Peer-run respites are managed by people who have also lived through emotional, psychological, and life challenges. Staff are on-site 24/7 and are trained in how to help guests improve their quality of life. Guests share their recovery goals, which may include connecting with community resources, engaging in wellness activities like art or exercise, or finding a safe space for healing. There is not a doctor on staff, and there is no medication management or therapy provided, though staff can assist guests in connecting with mental health or substance use services in the community. Prospective guests contact the peer-run respite to schedule overnight stays, which typically last less than one week.

This model has been successful in Wisconsin with hundreds of Wisconsin residents having received support and direct referrals to community resources. These services are provided without cost to guests and are designed to aid in the guest's recovery, avert crises, and avoid psychiatric hospitalizations.

VOICES FROM THE FIELD



As a peer specialist I am honored to listen to stories of recovery that have included an attempt or multiple attempts at suicide then to find out that due to shame a person has kept this a secret. Peer specialists are a critical component in addressing suicide prevention.

– M.N., certified peer specialist

The goal is not to simply force someone to stay alive from moment to moment. Rather, it is to support them to create meaning and a life that they want to live. Not killing one's self is simply a side-effect of all that.

– Alternatives to Suicide,
Wildflower Alliance
(formerly Western Mass
Recovery Learning Community)

Telehealth model

One way to assess availability of behavioral health services is to measure the ratio of the population (number of residents) to the number of mental health and substance use providers in a given county. The following map depicts those ratios, which vary widely across the state. A lower ratio, as depicted by the lighter blue shades, indicates a higher number (greater availability) of behavioral health care providers. Many counties across the state have high ratios (darker red) that suggest significantly limited availability of behavioral health care providers.

Figure 47. Counties shown in dark red have the lowest availability of mental health and substance use providers, 2017.

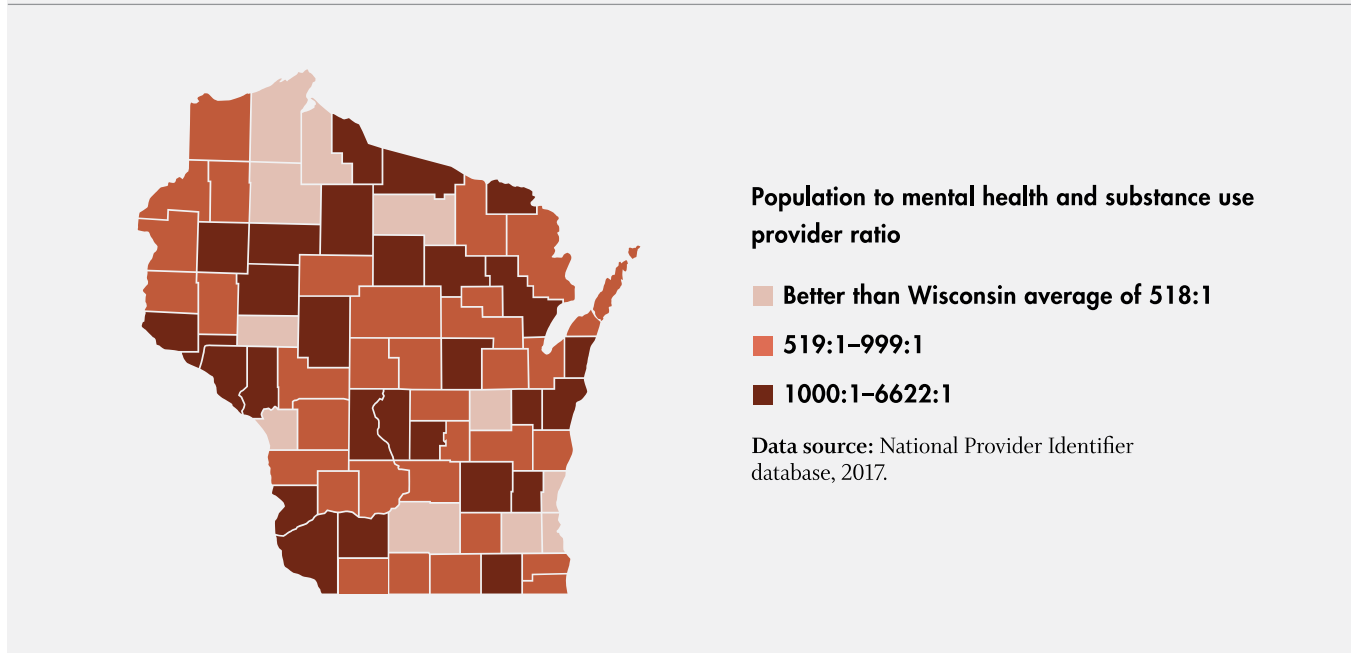


Figure 47. Data presented here includes both mental health and substance use providers in the National Provider Identifier database. This shows that counties in Wisconsin have varying mental health and substance use provider capacity. Notably, rural areas often have high ratios of population to provider, which can signify shortages and affect access. This ratio would be the number of people living in the county that would be under the care of one provider, if hypothetically every person living in the county was seeking services and each provider had an equal number of clients.

Project ECHO® (Extension for Community Healthcare Outcomes) is a nationally recognized telehealth model to extend specialist care through primary care systems and providers in rural and underserved areas. Developed in New Mexico beginning in 2003, Project ECHO® has now been adopted in over 46 states. This includes Wisconsin at the University of Wisconsin's (UW's) Department of Surgery and Department of Family Medicine and Community Health, as well as the Wisconsin Department of Health Services. The UW Project ECHO® clinics provide expert review and guidance on pediatric emergency care and surgical indications, as well as treatment and response to substance use disorders or addictions.

2B: Support innovative ways to expand access to behavioral health services

Opportunities for Action	Resources
Encourage the safe use of smartphone apps and the evaluation of their effectiveness.	<p>Crisis Text Line Referrals https://www.crisistextline.org/referrals</p> <p>Mental Health Apps (APA) https://www.psychiatry.org/psychiatrists/practice/mental-health-apps</p>
Support the expansion of telehealth.	<p>Project ECHO® Telehealth Model https://echo.unm.edu/about-echo/model/</p>
Support the expansion of clinical provider telephone consult programs.	<p>The Wisconsin Child Psychiatry Consultation Program (CPCP) https://www.dhs.wisconsin.gov/mch/cpcp.htm</p> <p>Medical College of Wisconsin, Department of Psychiatry and Behavioral Medicine https://www.mcw.edu/departments/psychiatry-and-behavioral-medicine</p>
Promote the implementation and expansion of peer-led services and programs.	<p>Peer-Run Respite https://www.dhs.wisconsin.gov/peer-run-respite/index.htm</p> <p>Alternatives to Suicide Peer-to-Peer Groups https://www.westernmassrlc.org/alternatives-to-suicide</p> <p>NAMI Wisconsin Peer Support Groups https://namiwisconsin.org/education-programs/for-individuals-with-mental-illness/</p> <p>NAMI Wisconsin Peer Leadership Council https://namiwisconsin.org/about-nami-wisconsin/peer-leadership-council/</p> <p>NAMI Connection https://namiwisconsin.org/education-programs/for-individuals-with-mental-illness/nami-connection/</p> <p>Wisconsin Peer Specialists http://www.wicps.org/</p>

Increase Access to Care for At-Risk Populations

2C

Increase the public's knowledge of risk factors for suicide, recognition of warning signs in individuals, and preparedness to support and respond to those individuals.



Definitions:

- ▶ **Suicide prevention training:** This is often referred to as “gatekeeper training” when it is provided to the general public. The aim of this type of training is to prepare people to recognize someone at risk of suicide and respond by referring them to appropriate resources.
- ▶ **Postvention:** This is an organized response in the aftermath of a suicide to accomplish one or more of the following:
 - Facilitate the healing of individuals from the grief and distress of suicide loss.
 - Mitigate other negative effects of exposure to suicide.
 - Prevent suicide among people who are at high risk after exposure to suicide.
- ▶ **Suicide contagion:** This describes an increase in suicide and suicidal behaviors due to exposure to such behaviors within one’s family, peer group, or through media reports of suicide or suicide attempts.
- ▶ **Public messaging:** In this context, public messaging is the dissemination of information and messages about suicide in websites, social media, news articles, educational materials, billboards, and other print and digital communications. It is important that this information be conveyed in ways that support suicide prevention rather than increase risk.

There are a number of ways to increase the public's knowledge of risk factors and prepare people to respond to individuals who may be in crisis. The Wisconsin Violent Death Reporting System provides narrative information from coroners and medical examiners, as well as law enforcement, that can be used to learn about the circumstances present in the life of individuals who died by suicide. This information can then be used to guide prevention. **Figure 48** displays suicide-related themes that were qualitatively extracted from narratives, broken down by age group. The age groups used represent pre-high school age (10 to 13), high school age (14 to 17), young adult (18 to 24), working age adult (25 to 44), middle years (45 to 64), and retirement age (65 and older). The similarities and differences displayed in this table indicate that, while there are some shared contextual factors present across age groups, different age groups experience different life stressors prior to a death by suicide.

Figure 48. Top 5 suicide-related themes by age group

Themes	10–13	14–17	18–24	25–44	45–64	65+
1.	Recent argument with parent	Recent argument with parent	Alcohol use	Alcohol use	Alcohol use	Physical health problems
2.	Bullying victim	Bullying victim	Legal issues	Financial strain	Physical health problems	Chronic pain
3.	Loss of privileges/items	Self-harm	Substance abuse	Argument with partner	Financial strain	Anxiety
4.	History of self-harm	Alcohol use	Argument with partner	Anxiety	Chronic pain	Cancer diagnosis
5.	Recent suspension from school	Anxiety	Relationship problems	Physical health problems	History of alcohol misuse	History of alcohol misuse

Note: The age groupings used in this analysis differ from age groupings used in other parts of this report. The age groupings here are based on the most common themes.

Source: Wisconsin Violent Death Reporting System, 2012–2016.

Suicide prevention training

There are many tools available for training people to recognize the warning signs of someone who might be in crisis and prepare them to intervene. The Centers for Disease Control and Prevention (CDC) provides a technical package that includes best practices on identifying and supporting people at risk.¹⁹ For example, QPR (Question, Persuade, and Refer) is a short educational program that provides simple instructions for intervening with individuals considering suicide in the same way that CPR provides instructions for assisting people who have a physical need. Though QPR was developed for a general community audience, it can be adapted for use by specific

groups of professionals or volunteers who interact with people at risk of suicide.

It is critical that the public be aware of appropriate referrals when a person is at risk. Crisis intervention approaches provide support and referral services, typically by connecting a person in crisis to trained volunteers or professional staff via telephone hotline, online chat, text messaging, or in-person. Wisconsin crisis intervention services programs (also called emergency mental health services programs) provide 24/7 phone services to most counties. These programs also provide walk-in and mobile services during significant portions of the week.

19. CDC Preventing Suicide: A Technical Package of Policy, Program and Practices. <https://www.cdc.gov/violenceprevention/pdf/suicidetechnicalpackage.pdf>

VOICES FROM THE FIELD



Increasing public awareness of suicide warning signs, how to identify individuals who are struggling, those in crisis, and knowing how to reach out to them, is imperative to reducing the likelihood of the occurrence of suicide. The American Foundation for Suicide Prevention is dedicated to educating communities by offering lifesaving education programs like Talk Saves Lives, More than Sad, and It's Real: College Students and Mental Health, at no cost to participants.

– Gena Orlando, Wisconsin Area Director, American Foundation for Suicide Prevention

Culturally relevant interventions

While suicidal thoughts and behaviors can occur in all populations, there are certain populations at disproportionate risk of suicide, such as: individuals with lower socio-economic status; individuals living with a mental health issue; suicide attempt survivors; veterans and active duty military personnel; individuals who are institutionalized, have been victims of violence, or are experiencing homelessness; lesbian, gay, bisexual, or transgender individuals; and members of certain racial and ethnic groups. Prevention approaches are not “one-size-fits-all.” It is important to further explore and develop culturally relevant resources for groups at disproportionate risk of suicide and offer opportunities for these interventions to take place where groups at risk spend most of their time.

Engaging individuals in non-traditional sectors

Non-traditional sectors, meaning sectors where suicide prevention efforts do not typically occur, that could be engaged in creative efforts include: government (local, state, and federal); social services; business; labor; justice; housing; media; and organizations that comprise the civil society sector, such as faith-based organizations, youth-serving organizations, foundations, and other non-governmental organizations. Countless opportunities exist to educate the public about risk factors for suicide and increase the ability to respond in a supportive, nonjudgmental way.

Postvention approaches

Research has established that family members of people who have died by suicide are at increased risk of suicide themselves.²⁰ Postvention strategies are positive approaches that can be implemented after a suicide death in order to support individuals bereaved by suicide loss. They are activities designed to promote healing and reduce suicide risk among loss survivors. Strategies can include debriefing sessions; counseling; bereavement support groups; and outreach to the affected community through schools, workplaces, and places of worship. In order to be prepared for postvention needs after a suicide death, training on postvention must be provided in advance to first responders, school personnel, coroners and medical examiners, funeral directors, and others who have contact with recently bereaved individuals. Postvention is future prevention.

Safe messaging about suicide

The way that suicide is portrayed in the media, on social media, and in other public forums matters. The media plays a large role in preventing suicide contagion. It is important that media outlets and community organizations use safety-focused guidelines when reporting on suicide events and presenting data. Communications about suicide should be designed to encourage help-seeking, focus on positive prevention efforts, promote hope and resiliency, and include vetted helping resources such as county crisis lines, the National Suicide Prevention Lifeline, and the HOPELINE Crisis Text Line. (See Additional Resources in Appendix 1.)

20. Pittman, A., Osborn, D., King, M., & Erlangsen, A. (2014). Effects of suicide bereavement on mental health and suicide risk. *Lancet Psychiatry*, 1, 86–94. doi: [http://dx.doi.org/10.1016/S2215-0366\(14\)70224-X](http://dx.doi.org/10.1016/S2215-0366(14)70224-X).

Reducing stigma

According to WISE (the Wisconsin Initiative for Stigma Elimination):

The stigma associated with mental illnesses prevents treatment and impedes recovery. It is fundamental to discrimination in housing, employment, healthcare and insurance reimbursement. Stigma impacts productivity in the workforce and community health. Research on addressing discrimination and stigma has shown that individuals' attitudes improve when they have direct contact with people with mental illnesses, when they can get to know people beyond labels and myths (contact strategies). Research also demonstrates that some efforts to reduce stigma such as protesting and education about illnesses, while well intentioned, in some cases have actually increased the negative attitudes and behaviors of stigma. If one of the goals of a presentation is to reduce stigma, contact with a person living in recovery has been shown to be the most effective both immediately after the presentation and in follow-up evaluations.

Targeted media strategies and initiatives within specific sectors, such as workplaces, health systems, and schools, can work to eliminate stigma around mental health and suicide by engaging people with lived experience (those who have survived an attempt or lived with suicidal ideation) to reduce stigma through intentional contact strategies, such as those supported by WISE.

“People with mental health challenges sharing their recovery experiences in a targeted, local, credible, and continuous way is the current, primary, evidence-based practice to reduce stigma.”

– WISE (the Wisconsin Initiative for Stigma Elimination)

Meeting people where they are

- ▶ Several coalitions and local health departments in Wisconsin work with bartenders to disseminate suicide prevention messaging in local bars and restaurants.
- ▶ A faith-based mental health group in Milwaukee hosts suicide prevention events at churches and community centers.
- ▶ A Wisconsin construction company offers QPR trainings at their headquarters.
- ▶ Gun shop owners share their own stories of suicide loss to start the conversation about prevention with their customers.
- ▶ A farmer in rural Wisconsin speaks at mental health awareness events and leads a group to bring other farmers together to talk about daily stress and other issues.

This list is not comprehensive. There are abundant opportunities to reach at-risk individuals in the community, including at: hair salons and barber shops; public transportation; banks and credit unions; domestic violence and homeless shelters; perinatal programs; family courts; re-entry programs for individuals following incarceration; and substance use treatment programs.

2C: Increase the public's knowledge of risk factors and preparedness to respond

Opportunities for Action	Resources
<p>Train communities to identify suicide risk and effectively intervene and support individuals in crisis.</p>	<p>QPR Institute http://www.qprinstitute.com/</p> <p>Mental Health First Aid http://www.mentalhealthfirstaid.org/cs/</p> <p>Applied Suicide Intervention Skills Training-ASIST https://www.livingworks.net/asist</p> <p>Talk Saves Lives https://afsp.org/our-work/education/talk-saves-lives-introduction-suicide-prevention/</p> <p>Wisconsin County Crisis Lines https://www.preventsuicidewi.org/county-crisis-lines</p> <p>National Suicide Prevention Lifeline 1-800-273-8255 (TALK) https://suicidepreventionlifeline.org/</p> <p>HOPELINE Crisis Text Line Text "HOPELINE" to 741741 https://centerforsuicideawareness.org/hopeline/ https://www.crisistextline.org/</p>
<p>Educate communities on the prevalence of suicide and how to provide appropriate support and resources to those experiencing suicidal thoughts or behaviors.</p>	<p>American Foundation for Suicide Prevention (AFSP) Education Programs https://afsp.org/our-work/education/</p> <p>Prevent Suicide Wisconsin Annual Conference https://www.preventsuicidewi.org/conference</p> <p>Prevent Suicide Wisconsin Suicide Prevention Month https://www.preventsuicidewi.org/suicide-prevention-month</p> <p>Suicide Awareness Voices of Education-SAVE https://save.org/</p> <p>Department of Public Instruction (DPI) Training https://dpi.wi.gov/sspw/mental-health/youth-suicide-prevention/training</p> <p>Sowing Seeds of Hope (Farmers, Rural Health) https://www.ruralhealthinfo.org/project-examples/485</p> <p>Suicide Prevention Resource Center (SPRC) About Suicide http://www.sprc.org/about-suicide</p> <p>WISE (Wisconsin Initiative for Stigma Elimination) https://wisewisconsin.org/</p>

Opportunities for Action	Resources
<p>Provide support and resources to communities dealing with suicide loss.</p>	<p>Responding to Grief, Trauma and Loss after a Suicide—National Guidelines https://theactionalliance.org/sites/default/files/inline-files/NationalGuidelines.pdf</p> <p>After a Suicide: A Toolkit for Schools https://afsp.org/our-work/education/after-a-suicide-a-toolkit-for-schools/</p> <p>A Manager’s Guide to Suicide Postvention in the Workplace: Ten Action Steps for Dealing with the Aftermath of Suicide https://www.sprc.org/resources-programs/managers-guide-suicide-postvention-workplace-10-action-steps-dealing-aftermath</p> <p>Postvention: A Guide for Response to Suicide on College Campuses http://hemha.org/postvention_guide.pdf</p> <p>AFSP I’ve Lost Someone https://afsp.org/find-support/ive-lost-someone/</p> <p>Prevent Suicide Wisconsin Suicide Loss Support https://www.preventsuicidewi.org/suicide-loss-support</p>
<p>Share safe and effective messages about suicide and suicide prevention in public communication efforts.</p>	<p>Action Alliance Framework for Successful Messaging http://suicidepreventionmessaging.org/</p> <p>Action Alliance Media Messaging Task Force https://theactionalliance.org/task-force/media-messaging</p> <p>#BeThere https://theactionalliance.org/bethere</p> <p>Recommendations for Reporting on Suicide http://reportingonsuicide.org/</p> <p>Prevent Suicide Wisconsin Prevention Messaging https://www.preventsuicidewi.org/prevention-messaging</p> <p>American Association of Suicidology (AAS) Media Reporting on Suicide https://suicidology.org/reporting-recommendations/</p>

Strategy 3

Implement Best Practices for Prevention in Health Care Systems

3A

Promote a systematic “Zero Suicide” approach, rooted in the understanding that suicide is preventable in people receiving treatment services.

Definitions:

- ▶ **Zero Suicide:** The Zero Suicide framework is a systemwide, organizational commitment to safer suicide care in health and behavioral health care systems.
- ▶ **Suicide Prevention Resource Center (SPRC):** SPRC is the federally supported national resource center devoted to advancing suicide prevention infrastructure and capacity building through consultation, training, and the provision of information, resources, and tools in support of suicide prevention efforts.

VOICES FROM THE FIELD



Involving people with lived experience is important because they may have a different outlook because they have first-hand experience of what it is like to struggle through mental illness or loss from suicide. They can speak the same language as someone that has been through similar struggles.

– Patty Slatter, NAMI Rock County, Person with Lived Experience

The Zero Suicide Framework

The Zero Suicide framework is grounded in the most current, systematic, and evidence-based research in suicide prevention. Core concepts include:

- ▶ **Zero suicide deaths**—If zero isn’t the right number, what is? In trying to determine an “acceptable” number of suicide deaths, you reach the conclusion that zero deaths is a hopeful and aspirational goal.
- ▶ **Paradigm shift**—A fundamental shift away from accepting suicide as an occasional consequence of mental illness to an understanding that suicide is preventable.
- ▶ **Systems approach**—A focus on systemwide quality improvement rather than blame when suicide attempts and deaths do occur.
- ▶ **Quality improvement**—An emphasis on improving systems and developing systemwide policies and procedures instead of relying solely on the efforts of individuals.
- ▶ **Health systems commitment**—Zero Suicide provides an aspirational challenge and practical framework for systemwide transformation in health care systems toward safer suicide care.

With the knowledge that suicide deaths can be prevented for individuals receiving care in health and behavioral health systems, suicide prevention is increasingly being seen as a core responsibility of health care. This culture shift is the foundation of the continuous quality improvement model called Zero Suicide. The Zero Suicide framework is based on a systematic approach to quality improvement; it does not rely on the heroic efforts of individual clinicians but rather the conscientious and consistent use of specific tools and strategies throughout organizations. Just as health systems have been able to initiate systematic practices and policies to eliminate medical errors and falls, the Zero Suicide framework can reduce and has reduced suicide by individuals receiving care, with the aspirational goal of reducing the number of suicides to zero.

Toward Zero Suicide in Wisconsin

- ▶ Across health and behavioral health care settings, there are many opportunities to identify and provide care to those at risk for suicide.
- ▶ The Zero Suicide framework is a systemwide, organizational commitment to safer suicide care in health and behavioral health care systems.
- ▶ 83% of those who die by suicide have seen a health care provider in the year before their death.²¹
- ▶ To assist health and behavioral health organizations adopt the Zero Suicide framework, the Suicide Prevention Resource Center offers a free and publicly available online toolkit that includes modules and resources to address each of the seven elements of Zero Suicide. The toolkit is available at: <https://zerosuicide.sprc.org/toolkit>.

Another key aspect of this quality improvement framework is engaging people with lived experience of suicide (suicidal thoughts and behaviors or suicide loss). For an organization's Zero Suicide implementation plan, one of the goals should be to have an implementation team that includes people with lived experience in developing, implementing, and evaluating efforts. A report from the National Action Alliance, *The Way Forward: Pathways to Hope, Recovery, and Wellness with Insights from Lived Experience*, offers a set of core values to inform suicide prevention and care, as well as specific recommendations for health and behavioral health care organizations and program developers.²²

The Seven Elements of Zero Suicide

- 1. Lead** systemwide culture change aimed at suicide prevention.
- 2. Train** a competent and caring workforce.
- 3. Identify** patients with suicide risk via comprehensive screening.
- 4. Engage** those at risk using a suicide care management plan.
- 5. Treat** those at risk with evidence-based treatments.
- 6. Transition** patients through levels of care with warm hand-offs.
- 7. Improve** systems using data for continuous improvement.

VOICES FROM THE FIELD



From a project management standpoint, an organization cannot embark on this important work without a solid implementation plan. The Zero Suicide framework at zerosuicide.org sets the foundation to implement and sustain all seven components. Advocate Aurora Health is expanding the success of Zero Suicide from Aurora Sheboygan Memorial Medical Center to the entire enterprise—from Wisconsin to Illinois.

— Becky Babcock, Performance Advisory Consultant, Advocate Aurora Health, Sheboygan

21. Ahmedani, B. K., et al. (2014) Health care contacts in the year before suicide death. *Journal of General Internal Medicine* 29(6):870-7.

22. National Action Alliance for Suicide Prevention: Suicide Attempt Survivors Task Force. (2014). *The Way Forward: Pathways to hope, recovery, and wellness with insights from lived experience*. Washington, DC.

3A: Promote a systems change approach

Opportunities for Action	Resources
<p>Promote implementation of the Zero Suicide framework among Wisconsin health and behavioral health systems through training and use of the Zero Suicide Toolkit.</p>	<p>Wisconsin Zero Suicide Training https://www.preventsuicidewi.org/zero-suicide</p> <p>Zero Suicide Toolkit https://zerosuicide.sprc.org/</p> <p>Zero Suicide Research and Outcomes https://zerosuicide.sprc.org/about/research-articles-outcomes</p>
<p>Encourage health providers and behavioral health systems to implement evidence-based and best practices in suicide prevention and suicide care management.</p>	<p>Suicide Care Training Options—SPRC https://zerosuicide.sprc.org/resources/suicide-care-training-options</p> <p>CALM: Counseling on Access to Lethal Means www.sprc.org/resources-programs/calm-counseling-access-lethal-means</p> <p>Question, Persuade, Refer, Train (QPRT): Suicide Triage www.qprinstitute.com</p> <p>Preventing Suicide in Emergency Department Patients https://training.sprc.org/enrol/index.php?id=8</p> <p>Suicide in the Military PsychArmor Institute https://psycharmor.org/courses/suicide-in-the-military</p>
<p>Encourage health and behavioral health care systems to engage people with lived experience of suicide attempts in planning suicide prevention efforts.</p>	<p>Engaging People with Lived Experience https://www.sprc.org/keys-success/lived-experience</p>

Implement Best Practices for Prevention in Health Care Systems

3B

Expand the use of evidence-based screening, assessment, and suicide-specific treatments for those at risk.

Definitions:

- ▶ **Culturally and Linguistically Appropriate Services (CLAS) Standards:** CLAS Standards are national standards for health and health care services that are intended to improve the quality of services and help bring about positive health outcomes for diverse populations.
- ▶ **Counseling on Access to Lethal Means (CALM):** CALM is a free online course that focuses on how to reduce access to the methods people use to kill themselves. It covers how to identify people who could benefit from lethal means counseling; ask about their access to lethal methods; and work with them and their families to reduce access.
- ▶ **Safety plan:** A safety plan is a prioritized written list of coping strategies and sources of support collaboratively developed by a service provider and a client who is at risk of suicide.

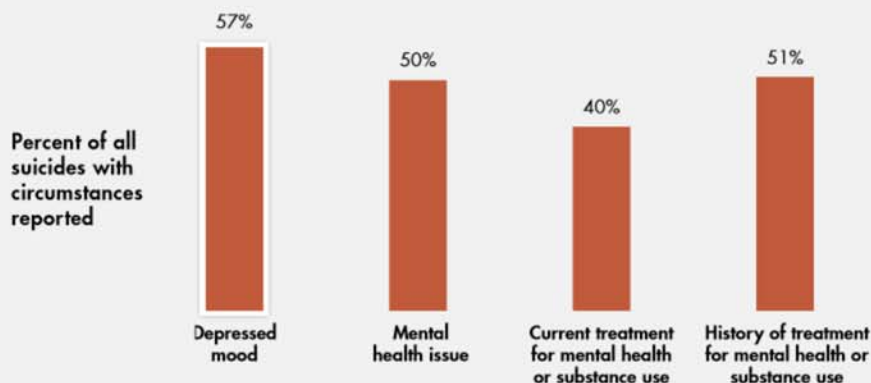
Access to evidence-based screening, assessment, and treatment is vital for preventing suicide in at-risk individuals. Therefore mental health, substance use, and health care providers must be equipped to identify and respond to individuals who may be suicidal. Evidence-based tools and resources should meet CLAS (Culturally and Linguistically Appropriate Services) Standards in order to reduce cultural barriers to receiving services. When providers can deliver services in this way, it leads to improved outcomes for clients.

From 2013–2017, 40% of people who died by suicide were currently in mental health or substance use treatment programs. (See **Figure 49**.) Individuals in these treatment settings

can benefit from systematic and evidence-based screening, assessment, and treatment that will identify them as at risk and engage them in suicide-specific treatment. In this way, behavioral health systems can help prevent suicide in their clients.

Primary and acute care health care settings can also play a role in preventing suicide in their patients by using an evidence-based screening tool to identify those with suicidal thoughts and behaviors, making sure those who screen positive receive a full assessment, and connecting patients with treatment, if needed.

Figure 49. The most commonly reported circumstances among suicides were feeling depressed, having a mental health issue, and having a history of treatment for mental health or substance use issues, 2013–2017.



Data source: Wisconsin Violent Death Reporting System, Division of Public Health, Wisconsin Department of Health Services, 2013–2017.

John R., a farmer from Argyle, Wisconsin, talked openly about his experience of losing his son and dealing personally with suicidal thoughts. He has found counseling to be the key to taking care of his mental health.

VOICES FROM THE FIELD



On the subject of counseling, there should be no fear to admit that you have problems, need to deal with them, and need help expressing them and improving yourself. A failure to do so can put you and everyone you love at risk.

– John R., Argyle, WI

In a Zero Suicide approach:

- ▶ All people receiving care are screened for suicidal thoughts and behaviors at intake.
- ▶ Whenever a patient screens positive for suicide risk, a full risk formulation is completed for the client.
- ▶ All individuals identified to be at risk of suicide are engaged in a suicide care management plan.
- ▶ The patient's status on a suicide care management plan is monitored and documented in an electronic health record or paper record.
- ▶ All clients with suicide risk, regardless of setting, receive evidence-based treatment to address suicidal thoughts and behaviors directly, in addition to treatment for other mental health or substance use issues.
- ▶ Clients with suicide risk are treated in the least restrictive setting possible.

Effective suicide care management is a health care strategy. For the strategy to be effective across various at-risk populations, the care must meet CLAS Standards. National CLAS Standards state that a principal goal in health care is to provide effective, equitable, understandable, and respectful quality care and services that are responsive to diverse cultural health beliefs and practices, preferred languages, health literacy, and other communication needs. Effective suicide care management is a health care strategy. It must be responsive to diverse cultural health beliefs and practices for various at-risk populations.

3B: Support implementation of evidence-based screening, risk assessment, and treatment

Opportunities for Action	Resources
Encourage health care settings to adopt recommended standard care to better identify and support people who are at an increased risk of suicide.	<p>The National Action Alliance, Recommended Standard Care for People with Suicide Risk: Making Health Care Suicide Safe https://theactionalliance.org/healthcare/standard-care</p>
Encourage providers to use evidence-based screening tools to screen for suicide risk.	<p>Columbia Suicide Severity Rating Scale (C-SSRS) http://cssrs.columbia.edu/</p>
Encourage providers to use evidence-based safety planning as an intervention for suicide prevention.	<p>Safety Plan Template—Stanley-Brown https://www.sprc.org/resources-programs/patient-safety-plan-template</p> <p>Safety Planning Intervention for Suicide Prevention, New York Office of Mental Health and Columbia University http://zerosuicide.sprc.org/sites/zerosuicide.sprc.org/files/sp/course.htm</p>
Encourage providers to engage in discussions with people at risk, and a person's self-selected support network, about access to lethal means.	<p>Counseling on Access to Lethal Means (CALM) http://www.sprc.org/resources-programs/calm-counseling-access-lethal-means</p>
Encourage behavioral health providers to practice evidence-based treatments that address suicidal thoughts and behaviors directly.	<p>Assessing and Managing Suicide Risk (AMSR) http://www.sprc.org/training-events/amr</p> <p>Chronological Assessment of Suicide Events (CASE) https://suicideassessment.com/certification-programs/</p> <p>Cognitive Therapy for Suicide Prevention https://www.sprc.org/resources-programs/cognitive-therapy-suicide-prevention</p> <p>Collaborative Assessment and Management of Suicidality (CAMS) https://cams-care.com/</p> <p>Dialectical Behavior Therapy (DBT) https://behavioraltech.org/</p> <p>Recognizing & Responding to Suicide Risk (RRSR) http://www.suicidology.org/trainingaccreditation/rrsr</p>
Encourage providers to adopt the National Culturally and Linguistically Appropriate Services (CLAS) Standards.	<p>Wisconsin Department of Health Services National CLAS Standards webpage https://www.dhs.wisconsin.gov/minority-health/clas.htm</p> <p>Federal HHS Think Cultural Health https://thinkculturalhealth.hhs.gov/clas</p>
Encourage providers to include a person's self-selected support network in all aspects of the person's care.	<p>Promote Social Connectedness and Support https://www.sprc.org/comprehensive-approach/social-connectedness</p>

Implement Best Practices for Prevention in Health Care Systems

3C

Improve care transitions for people with suicidal thoughts and behaviors who are discharged from emergency departments or inpatient settings.

Definitions:

- ▶ **Caring contacts:** These are brief communications with patients during care transitions, such as discharge from treatment, or when patients miss appointments or drop out of treatment. These contacts can promote a patient's feeling of being cared for and increase their participation in collaborative treatment.
- ▶ **Warm hand-off:** A warm hand-off is when an existing provider connects the patient to a new provider, for example by being with the patient when they make an initial appointment, rather than simply providing them with the name and phone number of the provider. The goal of a warm hand-off is to increase the likelihood that a patient will follow up with recommended care.

The risk of suicide attempts and death is highest within the first 30 days after a person is discharged from an emergency department or an inpatient psychiatric unit of a hospital. This high-risk time of transition is often attributed to a lack of continuity of care after discharge. Recently, research has suggested that this one-month period immediately following discharge from a psychiatric inpatient stay should be regarded as a “distinct phase of care associated with an extraordinary suicide risk.”²³

To improve care transitions and reduce risk, partnerships need to be developed between hospitals, including their emergency departments, and stakeholders in the community, such as county human services departments, community-based behavioral health providers, primary care providers, and community support organizations. In addition to warm hand-offs between care settings, patients should also be provided with crisis resources (e.g., local and national 24/7 crisis phone numbers and text lines) at the time of the transition, as well as an invitation to call the unit from which they are being discharged, if further assistance is needed. In these ways, caregivers and clinicians can help reduce the risk by bridging patient transitions from inpatient care or emergency departments to primary care, outpatient behavioral health care, or whichever setting the patient has chosen.



23. Chung D, Hadzi-Pavlovic D, Wang M, *et al.* Meta-analysis of suicide rates in the first week and the first month after psychiatric hospitalization. *BMJ Open* 2019;9:e023883. doi: 10.1136/bmjopen-2018-023883.

The Zero Suicide approach for care transitions recommends that:

- ▶ Organizational policies provide guidance for successful care transitions and specify the contacts and support needed throughout the process to manage any care transition.
- ▶ Follow-up and supportive contacts for individuals on a suicide care management plan are tracked and managed using an electronic health record or paper record.
- ▶ Patients are engaged in an individualized, culturally sensitive manner that takes into account their needs and preferences.
- ▶ Staff are trained in how to provide supportive caring contacts and follow-up care using techniques, such as motivational interviewing, safety planning, warm hand-offs, and caring contacts.
- ▶ Timely supportive contacts (e.g., calls, texts, letters, visits) should be standard at critical times, including after acute care visits, once a patient begins treatment, when a patient is in a higher risk period, or when services are interrupted (e.g., a scheduled appointment is missed).

VOICES FROM THE FIELD



Perhaps the issue is less the medium (letter, text, call, visit, postcard) than the contact. For someone who feels alone and perhaps of diminished value, or even a burden to others, the message can have a remarkable resonance. We often focus on the assumed value of the type of contact, and on who is the messenger. Some might think peer messages better, others focus on professional training, and others are sure that the medium is critical (e.g., a text can't possibly be as good as something more personal). But maybe for many people who might be in a bleak space, it's the simple message of caring and hope that has value.

– Michael Hogan, Ph.D., Hogan Health Solutions (New York State Commissioner of Mental Health, 2007–2012)

3C: Improve care transitions

Opportunities for Action	Resources
Encourage health systems to implement evidence-based practices to improve patient engagement and safety during the transition from inpatient to outpatient care.	National Action Alliance, Best Practices in Care Transitions for Individuals with Suicide Risk: Inpatient Care to Outpatient Care https://theactionalliance.org/resource/best-practices-care-transitions-individuals-suicide-risk-inpatient-care-outpatient-care
Encourage health care organizations to establish referral agreements between acute care settings and outpatient providers to ensure recently discharged high-risk patients have appointments within a reasonable timeframe.	Safe Care Transitions http://zerosuicide.edc.org/toolkit/transition
Encourage emergency departments to provide screening, patient education, discharge planning, and referrals to ensure continuity of care after discharge.	Continuity of Care for Suicide Prevention: The Role of Emergency Departments http://www.sprc.org/sites/default/files/migrate/library/ContinuityCare_Suicide_Prevention_ED.pdf
Encourage implementation of post-discharge follow-up contacts with at risk individuals.	Non-Demand Caring Contacts https://zerosuicide.sprc.org/toolkit/treat/interventions-suicide-risk

Strategy 4

Improve Surveillance of Suicide and Evaluation of Prevention Programs

4A

Use Wisconsin data to describe the impact of suicidal thoughts, attempts, and deaths and expand data linkages to further the understanding of suicide.

Prevention is driven by data, so an accurate and comprehensive picture of the impact of suicide (including thoughts, plans, and attempts) is crucial for prevention planning in Wisconsin. At present, data are available on suicide deaths and self-harm emergency department visits and hospitalizations through the Wisconsin Interactive Statistics on Health (WISH) data query system. Information on suicidal thoughts, suicide risk, and suicidal behavior is available through a variety of sources, including the Youth Risk Behavior Survey (YRBS), the Wisconsin Behavioral Risk Factor Survey (BRFS), which is part of the Behavioral Risk Factor Surveillance System (BRFSS), and the County Health Rankings. These data systems alone provide a wealth of information on suicide, but with increased dataset linkage capabilities, a more thorough and complete representation of these issues can be captured.

One means of data collection involves the efforts of death review teams, which could be expanded with additional resources. For instance, it would be helpful if Suicide Death Review Teams (SDRTs) across the state could enter data into a unified database to allow for place-based analysis of risk and protective factors. Also, to enhance the data that is collected, the state could potentially develop guidance for SDRTs similar to those developed for Child Death Review Teams (CDRT).

The CDRT model provides credibility, guidance on running a team, standardization of data reporting, and assistance in informing prevention strategies. The CDRT model has been used in Winnebago County to assist in the formation of a local Opioid Fatality Review Team. This model can also be used by any county wanting to develop teams for suicide death review. In collaboration with partners, the state could potentially improve overall cohesiveness for this type of data collection and application to prevention work.

Another important step for data collection is to ensure that populations at high-risk and populations of smaller numbers are represented in data collection. The following is taken from the Suicide Prevention Resource Center's (SPRC's) State Suicide Prevention Infrastructure Recommendations:²⁴

Well-established, large datasets may not always adequately include underserved communities. In these cases, it's important to make efforts to ensure that underserved communities are better represented (e.g., by targeted recruitment, oversampling, or other methods). When data on underserved populations cannot be obtained reliably or in a large enough number through such channels, the state suicide prevention program should work to address these gaps through stakeholder conversations about other data options, including alternate existing sources and/or the creation of new ones. Partners who represent specific communities can help in a number of ways:

- ▶ Locating existing data on their specific population(s).
- ▶ Exploring gaps in traditional data sources.
- ▶ Supporting data collection among their key audience via qualitative methods, such as focus groups and key informant interviews.
- ▶ Providing data and insight themselves.

The SPRC recommendations also stress that states should actively consult with and include historically underserved groups, such as tribes and refugee populations, in conversations about appropriate ways to ensure that accurate data on suicidal behaviors is collected and used appropriately.

24. Suicide Prevention Resource Center. (2019). Recommendations for state suicide prevention infrastructure. Waltham, MA: Education Development Center, Inc.

4A: Use data to describe the impact and further the understanding of suicide

Opportunities for Action	Resources
Encourage local coalitions and others to use data to inform prevention efforts.	<p>Wisconsin Interactive Statistics on Health (WISH) https://www.dhs.wisconsin.gov/wish/index.htm</p> <p>Wisconsin Behavioral Risk Factor Survey (BRFS) https://www.dhs.wisconsin.gov/stats/brfs.htm</p> <p>County Health Rankings https://www.countyhealthrankings.org/</p> <p>Data You Can Use https://www.datayoucanuse.org/</p>
Work with school districts to encourage participation in the YRBS and utilize survey results to inform local youth suicide prevention efforts.	<p>Wisconsin Department of Public Instruction (DPI)—Youth Risk Behavior Survey https://dpi.wi.gov/sspw/yrbs</p> <p>DPI—Youth Risk Behavior Survey Special Topic: Suicide and Help Seeking https://dpi.wi.gov/sites/default/files/imce/sspw/pdf/yrbssuicidehelpseeking.pdf</p>
Improve qualitative review and documentation of suicide risk among special populations in Wisconsin through interviews, focus groups, etc.	<p>ETR—Advancing Health Equity https://www.etr.org/blog/qualitative-research-helping-to-move-health-equity-forward/</p> <p>University of Wisconsin-Milwaukee, Zilber School of Public Health https://uwm.edu/publichealth/</p>
Develop and provide guidance to Suicide Death Review Teams similar to that for Child Death Review Teams.	<p>Child Death Review Teams https://www.chawisconsin.org/initiatives/injury-prevention-death-review/child-death-review/</p>

Opportunities for Action	Stakeholders
Link information from Suicide Death Review Teams across the state into a unified database.	<ul style="list-style-type: none"> ▶ Suicide Death Review Teams ▶ Medical College of Wisconsin ▶ Wisconsin Department of Health Services ▶ Wisconsin Department of Justice ▶ Children’s Health Alliance
Link data from multiple sources with the Wisconsin Violent Death Reporting System for a more comprehensive review of suicide deaths and self-harm injuries.	<ul style="list-style-type: none"> ▶ Wisconsin Department of Health Services’ outreach to other state agencies and stakeholders

Improve Surveillance of Suicide and Evaluation of Prevention Programs

4B

Work in collaboration with existing organizations to standardize and enhance capacity for investigating and reporting suicide deaths.

Currently, there is no standardization for the data collected in Wisconsin on suicide deaths. Suicides are investigated by coroners and medical examiners, some of whom have received specialized training in death scene investigation. However, there is no state level mandate for training for death scene investigators, which may lead to variability in the quality and quantity of data collected for suicide deaths. Having high quality data regarding suicide deaths is important, as this data will allow for the formulation of data-driven prevention strategies that are specific to our state and its residents.

Development of the suicide death investigation form in Winnebago County

The suicide prevention subcommittee of the Winnebago County Child Death Review Team identified the following:

- ▶ There was no standardization for the collection of data on suicide deaths in Winnebago County. The data that was collected was varied and limited, which made it difficult to identify risk factors and develop prevention strategies that were specific for the community.
- ▶ There is no standardization for the collection of suicide data at the state level in Wisconsin.
- ▶ The Winnebago County Public Health Department took the lead and partnered with other community stakeholders to develop a suicide death investigation form.
- ▶ The suicide death investigation form is designed to be completed by the coroner in partnership with law enforcement.

The suicide death investigation form has multiple uses:

- ▶ Guide coroners and law enforcement, who have varied expertise, to collect standardized data in real time.
- ▶ Identify risk factors and develop robust prevention strategies specific to our community.

- ▶ Collect data on adverse childhood experiences (ACEs) to help identify the impact of ACEs in a suicide death.
- ▶ Gather contact information for family, friends, and co-workers of the deceased, so that grief outreach and suicide prevention education (postvention) can be provided as appropriate.
- ▶ Could be used as a resource for a suicide death review team, as there is currently no state level guidance on that.

Ongoing efforts include:

- ▶ The coroner is filling out the new suicide death investigation form. We are in the process of educating law enforcement about the process of suicide death investigation.
- ▶ The coroner works with Community for Hope, the local suicide prevention support agency, for outreach to survivors of suicide loss.
- ▶ Resources are limited for developing a suicide death review team. It is expected that a small team led by a suicide prevention coordinator will analyze the data, develop reports, and recommend specific suicide prevention strategies to the community.

4B: Standardize and enhance capacity for investigating and reporting suicide deaths

Opportunities for Action	Stakeholders
Provide death investigation guides for coroners, medical examiners, and law enforcement to improve and standardize the data collected on suicide deaths.	<ul style="list-style-type: none"> ▶ Wisconsin Department of Health Services ▶ Wisconsin Coroners and Medical Examiners Association ▶ Wisconsin Department of Justice
Standardize death scene investigation across the state in order to improve the completeness of data collected.	<ul style="list-style-type: none"> ▶ Wisconsin Department of Health Services ▶ Wisconsin Coroners and Medical Examiners Association ▶ Wisconsin Department of Justice ▶ Local Suicide Prevention Coalitions
Work with local suicide prevention coalitions to provide guidance and enhance capacity on the formation of death review teams.	<ul style="list-style-type: none"> ▶ Suicide Death Review Teams ▶ Medical College of Wisconsin ▶ Wisconsin Department of Health Services ▶ Wisconsin Department of Justice ▶ Children's Health Alliance of Wisconsin
Facilitate the administration of psychological autopsies to better determine the proximate causes for the suicide, better understand the pathways that led to the suicide, and uncover potential avenues for prevention.	<ul style="list-style-type: none"> ▶ Psychological Autopsy Investigators ▶ Medical College of Wisconsin
Improve data captured during mental health or self-harm injury hospitalizations or emergency department visits.	<ul style="list-style-type: none"> ▶ Wisconsin Department of Health Services ▶ Wisconsin Hospital Association ▶ Electronic Health Record System Vendors

Improve Surveillance of Suicide and Evaluation of Prevention Programs

4C

Improve and expand evaluation of suicide prevention programs.

The Centers for Disease Control and Prevention has stressed the importance of tracking the progress of prevention efforts and evaluating the impact of those efforts. In *Preventing Suicide: A Technical Package of Policies, Programs, and Practices*, the CDC notes:²⁵

Evaluation data, produced through program implementation and monitoring, is essential to provide information on what does and does not work to reduce rates of suicide and its associated risk and protective factors. The evidence-base for suicide prevention has advanced greatly over the last few decades. However, additional research is needed to understand the impact of programs, policies, and practices on suicide (and suicide attempts, at a minimum), as opposed to merely examining their effectiveness on risk factors. More research is also needed to examine the effectiveness of primary prevention strategies (before risk occurs) and community-level strategies to prevent suicide at the population level.

In addition, researchers have looked at successful prevention programs and identified “9 Principles of Effective Prevention Programs.” One such principle is Outcome Evaluation, which states that “a systematic outcome evaluation is necessary to determine whether a program or strategy worked.”²⁶ Evaluation of suicide prevention activities (gatekeeper training, in particular) must move beyond just considering the number of trainings provided and the number of participants reached, and look instead to evaluating changes in knowledge about suicide, shifting beliefs about prevention, reducing reluctance to intervene, and increasing self-efficacy to intervene. Program evaluation should also consider opportunities for longitudinal (3 month or 6 month) follow-up to determine the number of interventions that occurred as a result of the training.



25. Stone, D.M., Holland, K.M., Bartholow, B., Crosby, A.E., Davis, S., and Wilkins, N. (2017). *Preventing Suicide: A Technical Package of Policies, Programs, and Practices*. Atlanta, GA: National Center for Injury Prevention and Control, Centers for Disease Control and Prevention.

26. Nation, M., Crusto, C., Wandersman, A., Kumpfer, K. L., Seybolt, D., Morrissey-Kane, E., & Davino, K. (2003). What works in prevention: Principles of effective prevention programs. *American Psychologist*, 58, 449–456.

Evaluation questions

While evaluation of efforts remains a gap in Wisconsin and nationally, evaluation is an essential piece of a comprehensive suicide prevention approach. Coalitions, local health departments, and other partners may choose to use the questions below to structure their plans to implement and evaluate a community suicide prevention initiative. When able, local groups should report any results of their evaluations to the state lead on suicide prevention to help inform future prevention efforts. The following evaluation questions are taken from the Washington State Suicide Prevention Plan.²⁷

- 1. What is the problem you want to address?** Explain in one or two sentences what problem your community, institution or system needs to solve. For example: There is not a school counselor at my school; There is not a culturally relevant recognition and referral training available for my community; The suicide rate in my county is higher than the state rate; My healthcare practice does not ask the right questions about patients' suicide risk.
- 2. Which recommendation(s) from the plan do you want to follow to solve this problem?**
- 3. What do you want to be the final outcome?** Briefly explain what will change when your project works. For example: My school will have a counselor available at least half time; A recognition and referral training appropriate for my community's language and culture will exist; My county's suicide rate will go down in the next two years; My practice will have appropriate questions about suicide risk in all forms, protocols and records.
- 4. What resources do you already have for this project?** These could be people who support your project or have the knowledge you need, materials and supplies, funding, space, technology, etc.
- 5. What resources do you need?** Is there anything else that might make it hard to succeed?
- 6. What are the steps to completing your project?** These are the things that need to get done in between starting and completing your project. For example, hiring a staff person, applying for funding or getting donations, finding meeting space, reaching out to elected officials, and learning more about how others have solved the problem.
- 7. How will you evaluate your success?** Will you use an evaluation tool you have, hire an evaluator or rely on project outcomes?
- 8. How will you celebrate your success and thank those who helped?**

4C: Improve and expand evaluation of suicide prevention programs

Opportunities for Action	Resources
<p>Evaluate suicide prevention programs to monitor progress toward goals and whether interventions are having the desired effect.</p> <p>Regularly review program evaluation data to inform decision making around future program implementation.</p>	<p>Preventing Suicide: A Technical Package of Policies, Programs, and Practices https://www.cdc.gov/violenceprevention/pdf/suicideTechnicalPackage.pdf</p> <p>Suicide Prevention Resource Center—Program Evaluation http://www.sprc.org/strategic-planning/implement-evaluate-improve</p> <p>Gatekeeper training for suicide prevention: A theoretical model and review of the empirical literature https://www.sprc.org/resources-programs/gatekeeper-training-suicide-prevention-theoretical-model-and-review-empirical</p> <p>Bystander Intervention Model https://umatter.princeton.edu/action-matters/care-others</p> <p>The 9 Principles of Prevention https://www.wcsap.org/prevention/concepts/9-principles-prevention</p>
<p>Use evidence-based practices in suicide prevention efforts.</p>	<p>Suicide Prevention Resource Center Evidence-Based Prevention https://www.sprc.org/keys-success/evidence-based-prevention</p> <p>What Works for Health https://www.countyhealthrankings.org/take-action-to-improve-health/what-works-for-health</p>

27. Washington State Suicide Prevention Plan: <http://www.sprc.org/sites/default/files/Washington631-058-SuicidePrevPlan.pdf>.

Appendix 1

Additional Resources

NATIONAL

American Association of Suicidology (AAS)

<https://suicidology.org/>

American Foundation for Suicide Prevention (AFSP)

<https://afsp.org/>

#BeThe1To

<https://www.bethe1to.com/>

Centers for Disease Control and Prevention (CDC)

<https://www.cdc.gov/violenceprevention/suicide/index.html>

CDC Preventing Suicide: Fact Sheet

https://www.cdc.gov/violenceprevention/pdf/Suicide-factsheet_508.pdf

CDC Preventing Suicide: A Technical Package of Policy, Programs, and Practices

<https://www.cdc.gov/violenceprevention/pdf/suicideTechnicalPackage.pdf>

Crisis Text Line

<https://www.crisistextline.org/>

Crisis Text Line's Crisis Trends Data

<https://crisistrends.org/>

Mental Health America

<https://www.mhanational.org/>

National Action Alliance for Suicide Prevention

<https://theactionalliance.org/>

National Alliance on Mental Illness (NAMI)

<https://www.nami.org/>

National Institute of Mental Health (NIMH)

<https://www.nimh.nih.gov/health/topics/suicide-prevention/index.shtml>

National Suicide Prevention Lifeline (NSPL)

<https://suicidepreventionlifeline.org/>

National Violent Death Reporting System (NVDRS)

<https://www.cdc.gov/violenceprevention/datasources/nvdrs/index.html>

Now Matters Now

<https://www.nowmattersnow.org/>

Substance Abuse and Mental Health Services Administration (SAMHSA)

www.samhsa.gov

SAMHSA Treatment Locator

<https://findtreatment.samhsa.gov/>

Suicide Awareness and Voices of Education (SAVE)

www.save.org

Suicide Prevention Resource Center (SPRC)

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

The Trevor Project—Crisis Intervention and Suicide Prevention for LGBTQ Young People Under 25

<https://www.thetrevorproject.org/>

Trans Lifeline

<https://www.translifeline.org/>

What Works for Health

<https://www.countyhealthrankings.org/take-action-to-improve-health/what-works-for-health>

Zero Suicide Toolkit

<https://zerosuicide.sprc.org/toolkit>

STATE

American Foundation for Suicide Prevention (AFSP)—Wisconsin Chapter

<https://afsp.org/chapter/afsp-wisconsin/>

Center for Suicide Awareness (CSA)

<https://centerforsuicideawareness.org/>

Medical College of Wisconsin (MCW)

<https://www.mcw.edu/>

Mental Health America (MHA) of Wisconsin

<https://www.mhawisconsin.org/>

National Alliance on Mental Illness (NAMI) Wisconsin
<https://namiwisconsin.org/>

Prevent Suicide Wisconsin (PSW)
<https://www.preventsuicidewi.org/>

Wisconsin Department of Health Services (DHS)
<https://www.dhs.wisconsin.gov/prevent-suicide/index.htm>

Wisconsin Department of Public Instruction (DPI)
<https://dpi.wi.gov/sspw/mental-health/youth-suicide-prevention>

Wisconsin Family Ties
<https://www.wifamilyties.org/>

Wisconsin Initiative for Stigma Elimination (WISE)
<https://wisewisconsin.org/>

LOCAL

County Crisis Lines
<https://www.preventsuicidewi.org/county-crisis-lines>

Suicide Prevention Coalitions
<https://www.preventsuicidewi.org/find-a-local-coalition>

Appendix 2

Voices from the Field—Lived Experience and Provider Perspectives

When you are feeling suicidal, the thought of talking about it seems so overwhelmingly scary. How will the person you decide to talk to react? Will they judge you? Will they freak out? Will they even care at all? For all you know, you might end up having to go to the hospital against your will if you even hint at ever feeling suicidal. It almost seems safer to not say anything at all. All of that changes when you are in a space with other people who've experienced feeling suicidal and are able (and encouraged) to speak about it freely and openly. When you are in a hard space, the most healing thing in the world can be to have someone else say, "Me too." That is the benefit of peer support groups like Alternatives to Suicide and others that are specifically intended for people who've experienced, or are currently struggling with, suicidal thoughts.

– **Val N., CPS; Iris Place Assistant Director, NAMI Fox Valley**

It is important that Wisconsin take a stronger stand in preventing suicide, which must include reducing the stigma of getting help, as well as addressing the means by which suicide is completed. With a greater emphasis on these factors, as well as those listed in the report, Wisconsin will be able to reduce the devastating amount of suicides that occur in our state. As a son of a mother who "committed suicide with a gun, I encourage people to read the report and help to get the methods listed within implemented so fewer families and communities ever have to endure my never-ending nightmare.

– **Khary Penebaker, A Mother's Son, Suicide Loss Survivor**

Diverse & Resilient's (D&R's) work focuses on four key areas: sexual health, cultivating leaders, substance use, and anti-violence. Our goal is to reduce LGBTQ health disparities (including suicide) rooted in anti-LGBTQ discrimination and to increase the safety, support, and well-being of LGBTQ people. Through services such as STI/HIV testing, LGBTQ inclusive evidence-based curriculum implementation, and a statewide LGBTQ Resource Line, D&R increases protective factors for LGBTQ people and builds a future in which LGBTQ people in Wisconsin thrive, living healthy, satisfying lives in safe, supportive communities.

– **Kristen Ramirez, Diverse & Resilient**

After experiencing the loss of six patients to suicide that touched our behavioral health services, Aurora Sheboygan Memorial Medical Center (ASMMC) and the Aurora Sheboygan Market desired to 'find a better way.' Our research led us to the nationally-recognized model of quality improvement called Zero Suicide. With minimal resources, ASMMC committed to implement universal screening, safely manage care transitions, and enhance a continuum of care across settings, providing evidence-based, optimal care for patients at risk for suicide. In our work, there have been many accomplishments within our healthcare system, but the personal stories are the ones that bring the most meaning and reward. Shortly after training one of our medical-surgical units in QPR, the manager reached out and shared this story, "One of my CNAs was assisting with a post-surgical admission. The patient was in a lot of pain and made comments about wishing she were dead. The CNA began to probe further and asked if the patient had a plan to end her life currently or in the past. The patient responded that she had, and the CNA immediately asked for the support of the nurse to assess more fully. When they were putting the safe environment precautions into place, they discovered that the patient had a bottle of narcotics with her in the bed that she had brought in from home that she intended to overdose on." The manager went on to say, "I was so impressed that my CNA was integral in identifying this risk. It proves we are moving in the right direction. In the past, the CNAs never would have felt comfortable asking the question of suicide."

– **Advocate Aurora Health, Sheboygan**

Kathleen Rumsey, Jackson County Department of Health and Human Services—Public Health, shared outreach strategies for training in Question Persuade Refer (QPR):

- ▶ Faith Community—Various individual churches have invited us to teach their staff. More recently we reached out to the organized group of faith leaders in the community. They hosted a luncheon for pastors and others to come together for QPR training. At that luncheon, an Evangelical Lutheran pastor asked us to present to a regional meeting of Evangelical Lutheran pastors.

- ▶ Business Community—We had some good connections with the industrial park. A couple factories asked us to come in and teach QPR to their supervisor/managers in the hour around the shift transition. Different connection points worked at different facilities; for some it was the CEO, while for others, it was the HR or Employee Assistance Program person.
- ▶ School, Afterschool, and Human Services—Staff in these areas have always been open and receptive. We presented to all four grade levels at two of our three schools a few years ago and have been teaching it to freshmen every year since. Last year we were able to get our third school district on board and taught it to the school (students and staff); this year we will teach it to the freshmen. Each school rotates through for a refresher/teaching for the teachers every three years or so. There is similar rotation of refresher and teaching of staff in the afterschool and human services areas.
- ▶ Farmers—We are working on partnering with farmers' organizations.
- ▶ Law Enforcement—Law enforcement personnel have typically had some training around suicide prevention, but we can come in to provide refresher trainings. When we've offered it to law enforcement, we also try to involve other emergency personnel, such as office workers in law enforcement, jail staff, fire (including volunteers), emergency medical services, and others.

Appendix 3

WVDRS Definitions

The Wisconsin Violent Death Reporting System (WVDRS) collects information on the specific circumstances that are reported or perceived in the investigation reports (e.g., coroner or medical examiner report, law enforcement report, and death certificate) as being related to the violent death (e.g., suicide). For the vast majority of circumstances, it is sufficient to code a circumstance if it was included in the investigation reports or occurred before or right after the fatal injury (i.e., preceding or impending events).

Alcohol issue: refers to suicide decedents who were perceived by self or others to have an issue with, or to be addicted to, alcohol or were noted as participating in an alcohol rehabilitation program. This does not refer to issues in the past (i.e., five years ago or more) that have been resolved and no longer appear to apply.

Argument: refers to suicide deaths in which a specific argument (e.g., argument over money, relationship problem, insults, etc.) was perceived to contribute to the death.

Civil legal problem: refers to suicide decedents who were facing civil legal problems (e.g., divorce, custody dispute, civil lawsuit, etc.) at the time of death, and these problems appear to have contributed to the death.

Criminal legal problem: refers to suicide decedents who were facing criminal legal problems (e.g., recent or impending arrest, law enforcement pursuit, impending criminal court date, etc.) at time of death, and these problems appear to have contributed to the death.

Current treatment for mental health or substance use: refers to suicide decedents who were in current treatment (i.e., had a current prescription for a psychiatric medication, saw a mental health professional within the past two months, participated in treatment for substance use or a self-help program, such as Alcoholics Anonymous or Narcotics Anonymous) at the time of injury.

Death of a family member or friend: refers to suicide decedents who were distraught over, or reacting to, a death of a friend or family member. This death could have been recent or many years ago. This excludes suicide because suicide of a family member or friend is captured in a separate variable.

Depressed mood: refers to suicide decedents who were perceived by self or others to be depressed at the time of the injury. A clinical diagnosis is not needed.

Disclosed suicidal intent: refers to suicides in which the decedent disclosed suicidal thoughts or plans to another person recently or within the last month, whether explicitly (e.g., “I have been thinking about suicide lately.”) or indirectly (e.g., “I know how to put a permanent end to this pain.”).

Family problem: refers to suicide decedents who were experiencing a relationship problem with a family member other than an intimate partner (e.g., a child, mother, in-law, etc.) and this appears to have contributed to the death.

Financial problem: refers to suicide decedents who were experiencing a problem, such as bankruptcy, overwhelming debts, or foreclosure of a home or business, and this appears to have contributed to the death.

History of suicidal thoughts or plans: refers to suicide decedents who have at any time in their life expressed suicidal thoughts or plans. The decedent may or may not have disclosed suicidal thoughts or plans close the time of the suicide.

History of suicide attempts: refers to suicide decedents who were known to have made a previous suicide attempt before the fatal incident, regardless of the severity of those attempts or whether any resulted in injury. The victim must engage in a potentially injurious behavior.

History of treatment for mental health or substance use: refers to suicide decedents who were noted as ever having received treatment (i.e., had a current prescription for a psychiatric medication, saw a mental health professional within the past two months, or participated in a self-help program, such as Alcoholics Anonymous or Narcotics Anonymous) for a mental health issue (including alcohol and other substance use issues), either at the time of death or in the past.

Intimate partner issue: refers to suicide decedents who were experiencing issues with a current or former intimate partner (e.g., divorce, break-up, argument, jealousy, etc.) at the time of the death, and this appears to have contributed to the death.

Job problem: refers to suicide decedents who were either experiencing a problem at work (e.g., tensions with a co-worker, poor performance reviews, increased pressure, feared layoff, etc.) or were having a problem with joblessness (e.g., recently laid off, having difficulty finding a job, etc.) at the time of the death, and this appears to have contributed to the death.

Left suicide note: refers to suicide decedents who left suicide notes (or other recorded communication). Notes can be written or electronic.

Mental health issue: refers to suicide decedents who had been identified as currently having a mental health issue, including those disorders and syndromes listed in the Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition (DSM-5), with exception of alcohol or other substance dependence (as these are captured in separate variables). There does not need to be any indication that the mental health condition directly contributed to death.

Non-alcohol substance use issue: refers to suicide decedents who were perceived by self or others to have an issue with, or to be addicted to, drugs other than alcohol. There does not need to be any indication that the addiction directly contributed to the death.

Physical health problem: refers to suicide decedents who were experiencing physical health problems (e.g., terminal disease, debilitating conditions, chronic pain, etc.) that were relevant to the event.

Problem with a friend or associate: refers to suicide decedents who were experiencing a relationship problem with someone other than an intimate partner or other family member (e.g., friend, schoolmate, etc.) at the time of death, and this appears to have contributed to the death.

Suicide of a family member or friend: refers to suicide decedent who experienced a suicide of a family member or friend that appears to have contributed to the death. There is no time limit for when the suicide of the family or friend occurred, except that it occurred during the victim's lifetime and that it is noted to have contributed to the victim's death.

School problem: refers to suicide decedents who experienced a problem related to school (e.g., poor grades, difficulty with a teacher, bullying, etc.) at the time of the incident and this appears to have contributed to the death.

Appendix 4

Analytic Notes

Mortality Data

1. All data shown in this report includes Wisconsin residents only (unless otherwise noted).
2. Data shown in this report from vital records death certificates includes all Wisconsin resident deaths.
3. Data shown in this report from the Wisconsin Violent Death Reporting System (WVDRS) does not include Wisconsin residents who were injured or died outside of Wisconsin.
4. Vital records and WVDRS data used for suicide represents unique individuals, meaning an individual is represented only once in the data.
5. Vital records death certificate data includes deaths with an ICD-10 (International Classification of Diseases, 10th revision) code of suicide as the underlying cause of death.

Self-Harm Injury Data

6. Hospitalization and emergency department data represents hospital and emergency department discharges and not unique individuals, i.e., an individual could be represented multiple times if they were discharged from a hospital or emergency department more than once.
7. Hospitalization and emergency department data are shown only for years 2016–2017 based on codes from the ICD-10-CM (International Classification of Diseases, 10th Revision, Clinical Modification).
8. The coding system changed from the 9th Revision of the ICD to the 10th Revision in October 2015 and self-harm injury data prior to 2016 is not comparable.
9. Hospitalization data shown in this report includes only non-fatal hospital stays with an initial self-harm injury code.
10. Emergency department visit data shown in this report includes only non-fatal treated and released visits with an initial self-harm injury code.
11. Hospitalization and emergency department visits include those stays and visits with a self-harm ICD-10-CM code in any of the 9 diagnosis fields or 2 external cause of injury fields.

Statistical Methods

12. Geographic variables are based on patient's or decedent's place of residence.
13. WVDRS circumstance data are limited to cases in which circumstances were reported. See also Appendix 3, WVDRS Definitions.
14. All age-adjusted rates in this report use U.S. standard population in 2000. A table of weights and age-groupings is shown in the accompanying table.
15. Tests for significant differences were calculated for independent rates (males versus females, for instance) and dependent rates (state rate versus county rate) at the alpha equals 0.05 level.
16. Significance was not tested for trend data.

Age-adjustment groupings and weights

Age-group	Population Weight
<1 year	0.013818
1–4	0.055317
5–14	0.145565
15–24	0.138646
25–34	0.135573
35–44	0.162613
45–54	0.134834
55–64	0.087247
65–74	0.066037
75–84	0.044842
85+ years	0.015508

Appendix 5

Data Tables

Table 1. County data, years specified in table.

Legend
 <10 count counties (rate not calculated)
 Significantly lower than state rate (statistically significant)
 Lower than state rate (but not statistically significant)
 Higher than state rate (but not statistically significant)
 Significantly higher than state rate (statistically significant)

Analytic notes: Please make note of the difference in years of data for suicide (2013–2017) versus hospitalizations and emergency department visits (2016–2017). Also, because of the way rates are compared, a small difference may be statistically significant while a larger one is not. A statistically significant difference means that the difference in rate between the county and state was very unlikely to be due to chance. For counties shown as higher or lower than the state rate, but not statistically significant, the difference in rate could be due to chance.

Additionally, rates were not calculated for counties with less than 10 events because low counts can produce unstable rates. A confidence interval is a range around a rate within which there is a 95% probability of containing the “true” value. Learn more by going to the following webpage: <https://www.dhs.wisconsin.gov/wish/injury/interpretation.htm>. Email questions related to the data presented in the following tables to: DHSDPHDataResourceCenter@dhs.wisconsin.gov.

County	Suicide data, 2013–2017			Self-harm injury data, 2016–2017 (ED=Emergency Department)					
	Number of suicides	Age-adjusted suicide rate per 100,000	95% Confidence interval	Number of hospitalizations with self-harm	Age-adjusted hospitalization self-harm rate per 100,000	95% Confidence interval	Number of ED visits with self-harm	Age-adjusted ED self-harm rate per 100,000	95% Confidence interval
Wisconsin	4282	14.4	14.0–14.9	9398	85.3	83.6–87.0	7482	69.6	68.0–71.2
ADAMS	21	18.4	10.5–26.2	15	44.5	22.0–67.0	11	35.4	14.5–56.3
ASHLAND	14	18.3	8.7–27.9	79	285.0	222.2–347.9	20	70.6	39.7–101.6
BARRON	34	14.0	9.3–18.7	61	79.6	59.6–99.6	75	99.5	77.0–122.0
BAYFIELD	23	35.8	21.2–50.5	47	228.0	162.8–293.2	11	61.4	25.1–97.7
BROWN	224	17.0	14.8–19.3	362	73.0	65.5–80.5	488	99.6	90.7–108.4
BUFFALO	<10	N/A	N/A	18	77.7	41.8–113.6	10	42.5	16.2–68.9
BURNETT	12	13.9	6.0–21.8	22	86.6	50.4–122.8	36	170.7	114.9–226.4

County	Suicide data, 2013–2017			Self-harm injury data, 2016–2017 (ED=Emergency Department)					
	Number of suicides	Age-adjusted suicide rate per 100,000	95% Confidence interval	Number of hospitalizations with self-harm	Age-adjusted hospitalization self-harm rate per 100,000	95% Confidence interval	Number of ED visits with self-harm	Age-adjusted ED self-harm rate per 100,000	95% Confidence interval
CALUMET	24	9.3	5.6–13.1	31	31.9	20.7–43.1	24	25.8	15.5–36.1
CHIPPEWA	62	20.0	15.0–25.0	133	114.9	95.4–134.5	82	74.4	58.3–90.5
CLARK	19	11.6	6.4–16.8	40	70.8	48.8–92.7	20	31.8	17.9–45.8
COLUMBIA	62	22.3	16.8–27.9	114	109.4	89.3–129.5	182	185.5	158.5–212.4
CRAWFORD	14	16.9	8.1–25.8	23	85.3	50.4–120.1	10	40.4	15.4–65.5
DANE	338	12.6	11.2–13.9	1065	99.6	93.6–105.6	826	77.0	71.7–82.2
DODGE	71	15.2	11.7–18.8	130	79.0	65.4–92.6	168	109.0	92.5–125.5
DOOR	25	17.8	10.9–24.8	28	74.2	46.7–101.6	43	119.4	83.7–155.1
DOUGLAS	35	15.4	10.3–20.5	129	160.2	132.6–187.9	75	95.5	73.9–117.1
DUNN	22	9.0	5.3–12.8	74	81.7	63.1–100.3	69	72.4	55.3–89.5
EAU CLAIRE	92	17.7	14.1–21.4	300	143.3	127.1–159.5	145	65.9	55.1–76.6
FLORENCE	<10	N/A	N/A	<10	N/A	N/A	<10	N/A	N/A
FOND DU LAC	85	16.4	12.9–19.9	153	80.0	67.3–92.7	108	59.3	48.1–70.4
FOREST	<10	N/A	N/A	16	104.1	53.1–155.1	<10	N/A	N/A
GRANT	29	11.3	7.2–15.4	54	55.4	40.6–70.2	150	150.4	126.3–174.5
GREEN	19	10.1	5.6–14.7	43	64.5	45.2–83.7	25	39.0	23.7–54.4
GREEN LAKE	13	12.5	5.7–19.4	26	76.6	47.2–106.1	23	78.2	46.2–110.1
IOWA	18	15.8	8.5–23.1	28	68.7	43.3–94.2	33	85.7	56.5–115.0
IRON	<10	N/A	N/A	14	191.4	91.2–291.7	<10	N/A	N/A
JACKSON	21	20.9	11.9–29.8	33	101.4	66.8–135.9	28	83.2	52.4–114.0
JEFFERSON	59	14.0	10.5–17.6	92	54.8	43.6–66.0	93	58.2	46.3–70.0
JUNEAU	34	22.6	15.0–30.2	48	104.6	75.0–134.2	56	135.1	99.7–170.5
KENOSHA	126	14.3	11.8–16.8	167	49.5	42.0–57.0	127	39.0	32.2–45.8
KEWAUNEE	13	12.6	5.7–19.4	19	52.4	28.9–76.0	14	40.7	19.4–62.0
LA CROSSE	115	19.8	16.2–23.4	327	147.4	131.4–163.3	216	92.7	80.3–105.0
LAFAYETTE	13	17.3	7.9–26.7	15	52.8	26.1–79.5	11	35.4	14.5–56.2
LANGLADE	26	28.0	17.2–38.8	42	122.0	85.1–158.9	25	84.7	51.5–118.0

County	Suicide data, 2013–2017			Self-harm injury data, 2016–2017 (ED=Emergency Department)					
	Number of suicides	Age-adjusted suicide rate per 100,000	95% Confidence interval	Number of hospitalizations with self-harm	Age-adjusted hospitalization self-harm rate per 100,000	95% Confidence interval	Number of ED visits with self-harm	Age-adjusted ED self-harm rate per 100,000	95% Confidence interval
LINCOLN	15	11.2	5.6–16.9	46	93.2	66.2–120.1	65	141.9	107.4–176.4
MANITOWOC	84	19.6	15.4–23.8	128	94.0	77.7–110.3	63	49.7	37.4–61.9
MARATHON	96	14.7	11.7–17.6	195	78.2	67.3–89.2	202	83.0	71.6–94.5
MARINETTE	36	16.0	10.7–21.2	40	60.0	41.4–78.7	53	86.5	63.2–109.8
MARQUETTE	20	27.8	15.6–40.0	26	107.7	66.3–149.1	29	138.8	88.3–189.3
MENOMINEE	<10	N/A	N/A	19	239.3	131.7–346.8	<10	N/A	N/A
MILWAUKEE	560	11.6	10.6–12.5	1473	76.9	73.0–80.8	1314	68.3	64.6–72.0
MONROE	26	12.2	7.5–16.9	94	114.9	91.7–138.2	49	63.4	45.6–81.1
OCONTO	29	14.5	9.2–19.7	46	67.9	48.3–87.5	38	62.8	42.8–82.8
ONEIDA	27	13.8	8.6–19.0	69	125.5	95.9–155.1	50	98.1	70.9–125.3
OUTAGAMIE	147	16.1	13.5–18.7	373	107.4	96.5–118.3	167	49.0	41.6–56.4
OZAUKEE	50	11.3	8.2–14.4	87	54.7	43.2–66.2	59	39.0	29.0–48.9
PEPIN	<10	N/A	N/A	11	92.7	37.9–147.4	<10	N/A	N/A
PIERCE	20	10.3	5.8–14.8	50	63.2	45.7–80.7	56	63.7	47.0–80.4
POLK	44	20.0	14.1–25.9	76	100.5	77.9–123.1	74	104.7	80.9–128.6
PORTAGE	54	14.3	10.5–18.2	178	122.4	104.4–140.4	40	27.2	18.7–35.6
PRICE	17	20.3	10.6–29.9	11	53.0	21.7–84.3	15	82.6	40.8–124.5
RACINE	156	15.2	12.9–17.6	383	106.0	95.4–116.6	312	89.1	79.2–99.0
RICHLAND	<10	N/A	N/A	29	101.7	64.7–138.8	21	75.0	42.9–107.1
ROCK	134	16.3	13.6–19.1	349	114.0	102.0–125.9	231	76.8	66.9–86.7
RUSK	14	15.4	7.3–23.5	16	55.6	28.4–82.9	18	85.1	45.8–124.5
SAINT CROIX	57	13.3	9.9–16.8	90	53.5	42.4–64.5	108	67.3	54.6–80.0
SAUK	41	13.4	9.3–17.5	79	66.7	52.0–81.4	109	101.6	82.5–120.7
SAWYER	24	34.4	20.7–48.2	37	163.5	110.8–216.1	35	151.8	101.5–202.1
SHAWANO	31	14.3	9.3–19.3	42	58.8	41.0–76.5	43	62.9	44.1–81.7
SHEBOYGAN	95	16.4	13.1–19.7	304	149.9	133.0–167.7	103	51.6	41.7–61.6

County	Suicide data, 2013–2017			Self-harm injury data, 2016–2017 (ED=Emergency Department)					
	Number of suicides	Age-adjusted suicide rate per 100,000	95% Confidence interval	Number of hospitalizations with self-harm	Age-adjusted hospitalization self-harm rate per 100,000	95% Confidence interval	Number of ED visits with self-harm	Age-adjusted ED self-harm rate per 100,000	95% Confidence interval
TAYLOR	10	10.5	4.0–17.0	14	41.0	19.5–62.4	24	76.7	46.0–107.4
TREMPEALEAU	25	17.7	10.7–24.6	54	106.1	77.8–134.4	35	69.9	46.8–93.1
VERNON	18	11.2	6.0–16.4	35	65.7	43.9–87.4	12	23.5	10.2–36.7
VILAS	27	25.3	15.7–34.8	32	111.1	72.6–149.6	33	124.3	81.9–166.7
WALWORTH	74	14.8	11.4–18.2	80	40.4	31.6–49.3	119	59.7	48.9–70.4
WASHBURN	21	28.5	16.3–40.7	21	88.8	50.8–126.7	22	87.4	50.9–123.9
WASHINGTON	95	14.1	11.2–16.9	148	61.4	51.5–71.3	78	34.9	27.1–42.6
WAUKESHA	280	13.1	11.5–14.6	434	57.1	51.7–62.5	286	42.1	37.3–47.0
WAUPACA	50	18.8	13.6–24.0	62	74.0	55.6–92.5	73	89.3	68.8–109.7
WAUSHARA	12	7.4	3.2–11.6	17	38.6	20.3–57.0	17	40.5	21.2–59.7
WINNEBAGO	124	14.6	12.1–17.2	385	115.4	103.8–126.9	202	62.1	53.5–70.6
WOOD	62	15.7	11.8–19.6	115	89.3	73.0–105.6	96	78.0	62.4–93.6

Table 2. DHS regions data, years specified in table.

Legend
■ <10 count counties (rate not calculated)
■ Significantly lower than state rate (statistically significant)
■ Lower than state rate (but not statistically significant)
■ Higher than state rate (but not statistically significant)
■ Significantly higher than state rate (statistically significant)

DHS region	Suicide data, 2013–2017			Self-harm injury data, 2016–2017 (ED=Emergency Department)					
	Number of suicides	Age-adjusted suicide rate per 100,000	95% Confidence interval	Number of hospitalizations with self-harm	Age-adjusted hospitalization self-harm rate per 100,000	95% Confidence interval	Number of ED visits with self-harm	Age-adjusted ED self-harm rate per 100,000	95% Confidence interval
Wisconsin	4282	14.4	14.0–14.9	9398	85.3	83.6–87.0	7482	69.6	68.0–71.2
Southern	819	14.1	13.1–15.0	2027	91.8	87.8–95.8	1845	85.4	81.5–89.3
Southeastern	1400	12.7	12.1–13.4	2864	68.6	66.1–71.1	2388	59.0	56.6–61.3
Northeastern	1016	16.0	15.1–17.0	2061	90.2	86.3–94.1	1495	67.7	64.2–71.1
Western	635	16.1	14.8–17.3	1549	105.4	100.1–110.6	1125	75.3	70.9–79.7
Northern	412	16.6	15.0–18.2	897	105.8	98.8–112.7	629	76.3	70.3–82.2

