

About Suicide in Washington State, 6 units

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Contact hours: 6

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Price: \$49

The following professions must take a six-hour course on suicide assessment, treatment, and management: nurses, social workers, licensed mental health professionals, marriage and family therapists, naturopaths, osteopathic physicians/surgeons/physician assistants, physicians and physician assistants, psychologists, and retired active licensees.

Course Summary

This course will educate healthcare professionals and others in Washington State about the scope and seriousness of suicide. It includes information about suicide risk screening and assessment, identifies groups who are disproportionately affected by suicide, discusses psychosocial and pharmacological treatment methods, describes the role of supportive third parties in reducing suicide ideation and behaviors, relates aspects of military culture that may affect the incidence of suicide in active-duty military and veterans, explains protective factors, and spells out practical guidelines that can reduce access to lethal means.

Course approved by the Washington States Department of Health, approval #TRNG.TG.60824032-SUIC.

Course Objectives

When you finish this course, you will be able to:

1. Describe the scope of suicide in Washington State and nationally.
2. State 5 groups that are disproportionately at risk for suicide.
3. Explain the 4 main components of suicide risk screening and assessment.
4. State 5 common warning signs for suicide.
5. Relate 3 commonly stated risk factors for suicide.
6. Define "means restriction."
7. Relate 3 actions and referrals for various levels of suicide risk.
8. Describe 3 commonly used psychosocial techniques that have been shown to reduce the risk of suicidal ideation and behaviors.
9. Explain 3 reasons why pharmacologic interventions may reduce suicidal ideations and behaviors.
10. State the primary goal for every client with a substance use disorder and suicidal thoughts or behaviors.
11. State 4 reasons why a safety plan is critical in the treatment of patients with suicidal ideation.
12. Relate 3 reasons why supportive third parties can help reduce suicidal ideation and behaviors in their communities.
13. Explain 3 aspects of military culture that may affect the incidence of suicide in active-duty military and veterans.

1. Suicide in Washington State and the Nation

The loss of any individual to suicide cannot typically be explained by individual factors alone. A web of biological, psychological, social, environmental, and situational concerns influences suicidal ideation and behaviors. Childhood trauma, substance abuse, poverty, and untreated mental health problems are common risk factors. Unfortunately, many people cannot get help because of provider shortages, stigma, and the cost of care.

Preventing suicide requires culture change, access to care, research, and community engagement. It also requires ongoing coordination with all sectors, institutions, and stakeholders. Because suicide is a national tragedy that affects all of us, to be successful, everyone must be engaged (HHS, 2021, January 19).

In the United States

U.S. suicide rates are not limited to any gender, age, socioeconomic, or ethnic group. Among children, teenagers, and young adults, suicide is the **second** leading cause of death, while among middle-aged adults, suicide is the **fifth** leading cause of death (NCHS, 2022, March 3). In 2020, nearly 46,000 Americans died from suicide, making it the twelfth leading cause of death overall. Remarkably, in 2020 there were nearly twice as many suicides in the United States as homicides (NCHS, 2022, January 6).



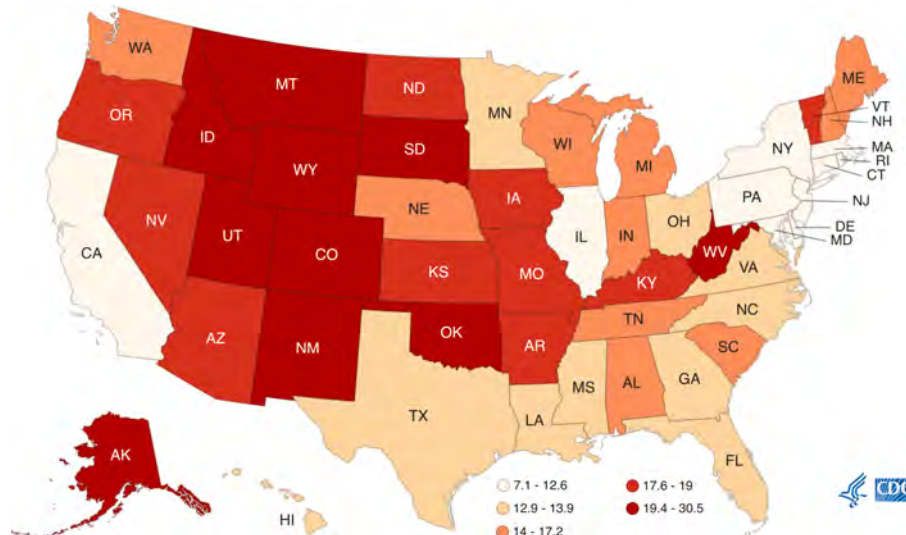
Source: CDC, 2022, July 25.

Since the *National Strategy for Suicide Prevention* was updated in 2012, prevention efforts have expanded and multiplied, increasing our understanding of suicide prevention practices in healthcare systems and communities. New partners have become engaged, including organizations and businesses that had not previously viewed suicide prevention as part of their mission (HHS, 2021, January 19).

Although funding still may not reflect the impact of suicide in the U.S., more resources are being dedicated than ever before. For example, the *President’s Roadmap to Empower Veterans and End a National Tragedy of Suicide* (PREVENTS) was launched in 2019. In July of 2022 the Federal Communications Commission designated 988 as the national number for mental health crises (HHS, 2021, January 19).

During the COVID pandemic, there was a record increase in the homicide rate and a spike in the number of drug overdose deaths. It was thought that the number and rate of suicides would follow that pattern—particularly after suicides had risen every year between 2004 and 2019. However, between 2018 and 2019, there was a minor decline in suicide, which continued into the pandemic year of 2020 (CDC, 2021, November 5).

Suicide Rates in the United States (by state; per 100,000; 2020)



Suicide rates vary from state to state. Washington State, as well as other Western states (excluding California), have some of the highest rates of suicide in the country. Source: CDC.

Definitions

Suicide is defined as death caused by self-directed injurious behavior with intent to die.

A suicide attempt is when someone harms themselves with any intent to end their life but does not die as a result.

Suicidal ideation refers to thinking about, considering, or planning suicide.

Source: CDC, 2022, May 24.

In Washington State

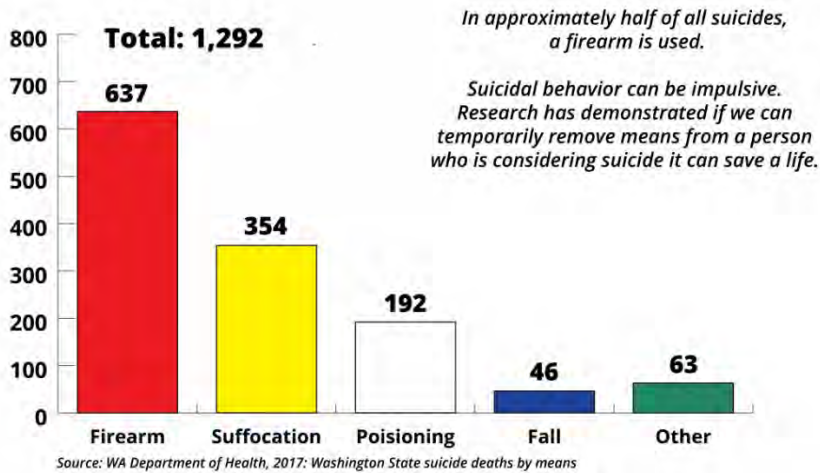
Washington State has a coordinated approach to suicide prevention, with multiple partners and state agencies utilizing guidance from the *Action Alliance for Suicide Prevention (AASP)*. Formed in 2016, AASP is now the coordinated body that informs policy and programmatic change and makes recommendations for the *Washington State Suicide Prevention Plan (WSDOH, 2021)*.

Even before the pandemic, Washington’s rate of deaths by suicide was about 14% higher than the national rate (WSDOH, 2021). It has been higher than the national average for more than 10 years. During the last decade, over 11,000 people died as a result of suicide, most commonly by firearms (48%), followed by suffocation and poisoning (deGrauw, 2021).

In Washington State (2018 suicide data, latest available):

- 75% were male
- 65% happened at home
- 41% had a history of suicidal thoughts
- 35% left a suicide note
- 19% served in the military (WSDOH, 2020, November)

Washington State Suicide Deaths by Means, 2017



Suicide rates vary in different parts of Washington. From 2013 to 2017, suicide rates were higher than the state rate in six counties:

- Clallam
- Grays Harbor
- Okanogan,
- Pierce
- Skamania
- Stevens (WSDOH, 2016)

Seven counties in Washington have small populations and had too few suicides to calculate a suicide rate. This does not mean that there are no suicides in these counties; county-level data do not always accurately reflect suicide losses in communities. For example, in 2013 both the Spokane Tribe of Indians and the Colville Confederated Tribes declared a suicide state of emergency because of high numbers of suicide deaths (WSDOH, 2016).

In Washington and nationally, suicide rates are higher outside urban areas and highest in small-town rural areas. The suicide rate in King County is lower than the state rate, but it has the largest population and the highest number of suicides in the state (WSDOH, 2016).

Additional resources are needed to meet increasing workloads that have grown beyond current funded capacity. The state needs to invest in the AASP's recommendations for a system with services in suicide prevention, intervention, treatment, and postvention (resources provided in the aftermath of suicide) to support individuals and families and prevent future deaths by suicide (WSDOH, 2021).

Key Points about Suicide

- Suicide is a preventable public health problem, not a personal weakness or family failure.
- People in Washington have a role in suicide prevention—it is not the responsibility of the health system alone.
- People generally avoid discussing suicide.
- Suicide prevention involves changing risk factors, such as childhood trauma, isolation, access to lethal means, and lack of access to appropriate behavioral healthcare.
- Suicide does not affect all communities equally or in the same way.
- People experiencing mental illness, substance use disorders, trauma, loss, and suicidal thinking and behaviors deserve dignity, respect, and the right to make decisions about their care.

Source: Washington State Department of Health, 2016.

2. Suicide, Race, and Ethnicity

In the U.S., there is an increase in suicides from age 15 to 54, a decrease until age 74, then an increase from age 75 to 85+ (SPRC, 2020). In Washington, suicide rates are highest among American Indian, Alaska Native, and White populations, consistent with national rates. But these broad demographic groupings can mask the impact of suicide in different subgroups. For example, the broad Asian population's overall low suicide rate may hide the high impact of suicide in some Asian ethnic groups.

Most research studies are conducted in English and do not cover non-English speakers, so the viewpoints of non-English speakers are not captured. Lack of knowledge among mental health professionals on an ethnic group's values, cultural traditions, and religious beliefs have been identified (Srinivasa et al., 2021).

American Indian and Alaska Natives

American Indian and Alaska Native (AI/AN) people are descendants of the original peoples of North, Central, and South America. The term AI/AN encompasses many ethnic and cultural groups, tribes, and traditions. In 2018, AI/AN populations comprised an estimated 1.3% of the U.S. population (SPRC, 2020).

American Indians and Alaska Natives face severe historical trauma, high rates of poverty and isolation, cultural taboos around death and suicide, and lack of access to mental healthcare (OMH, 2021, May 19). Among these populations, suicide rates peak during adolescence and young adulthood, and then decline through age 85+ (SPRC, 2020).

The suicide death rate for American Indian and Alaska Native populations is higher than that of the overall U.S. population for both males and females (SPRC, 2020). As in the U.S. overall, the suicide death rate for Native men is more than three times the rate for Native women (SPRC, 2020).

For youth aged 10 to 34 years, suicide is the **second** leading cause of death. The risk for co-occurrence of substance abuse, depression, and diabetes is over 12 times higher for American Indian and Alaska Natives than for Whites (Cwik et al., 2016).

Did You Know. . .

Suicide and suicide attempts are a significant problem in many American Indian and Alaska Native communities, especially among young men ages 15–24, who account for nearly 40% of all suicide deaths among natives (SAMSHA Tip 61, 2018).

While rates vary widely among tribes, some of the variables that seem to affect this elevated suicide rate include high rates of substance abuse, major psychiatric illnesses, and cultural alienation that can increase risk factors and lower protective factors for suicide. Geographically isolated reservations have limited educational and employment opportunities, as well as no easy access to mental health or substance abuse services (CSAT, 2017, latest available).

Suicide prevention and intervention efforts need to be tribe specific, emphasizing the cultural beliefs and practices unique to the tribe and recognizing the specific helping resources that are available and acceptable to that particular group. The involvement of the community in suicide prevention efforts is critical (CSAT, 2017, latest available).

White Populations

The age-adjusted suicide rate for White populations is higher than the overall U.S. suicide rate for both males and females. The pattern of suicide death rates among White populations increases from age 15 to 54, then declines. An increase occurs again from age 75 to 85+ (SPRC, 2020).

As in the overall U.S. population, the suicide death rate for White men is more than three to four times the rate for White women. Compared to the overall U.S. population, similar percentages of White adults reported past-year serious thoughts of suicide, a past-year suicide plan, or a past-year suicide attempt (SPRC, 2020).

Among White high school youth, the percentage of those who seriously considered attempting suicide and making a suicide plan is similar to the overall U.S. population. The percentages of White youth who attempt suicide requiring treatment is slightly less than the overall U.S. population (SPRC, 2020).

CDC data from 16 states show the most common circumstances around suicide for White men include mental and physical health problems, trouble in intimate relationships, alcohol dependence, and problems at work. Cultural taboos about seeking help and appearing vulnerable can isolate White men from both support systems and resources that could help (WSDOH, 2016).

Hispanic Populations

At 7.5 per 100,000, the 2020 age-adjusted suicide rate for Hispanic populations was significantly less than the overall U.S. suicide rate of 13.5 per 100,000. When Hispanic adults are compared to the overall U.S. population, similar percentages report past-year serious thoughts of suicide, a past-year suicide plan, or a past-year suicide attempt (SPRC, 2020).

Suicide rates remain somewhat steady starting at age 15 through the lifespan. This is a different pattern than is seen in the overall U.S. population, where suicide rates increase starting at in young and middle-aged adults, decline until age 74, and begin to increase at age 75. The suicide death rate for Hispanic men is more than four times the rate for Hispanic women (SPRC, 2020).

Among high school youth, a smaller percentage of Hispanic youth report seriously considering attempting suicide or making a suicide plan in the past year than the overall U.S. population. The percentage of youth who *attempt* suicide is similar to the overall U.S. population and a slightly higher percentage of Hispanic youth require treatment after attempting suicide (SPRC, 2020). Among youth and young adults, the prevalence of suicidal thoughts and behavior increases among Hispanics/Latinos who are more acculturated to mainstream American culture, particularly among females (CSAT, 2017, latest available).

Black Populations

In 2018 (latest available data), the suicide rate for Black/African Americans was 60% lower than that of the non-Hispanic White population. As in the overall U.S. population, the suicide rate for Black men was more than three times greater than for Black women (OMH, 2021, May 18).

Among Black/African American youth, suicide risk peaks in early twenties for males and late twenties for females. These patterns are very different from the age patterns of the White population and the whole population. In a study looking at suicide rates from 1983 to 2012 for African Americans, the risk of suicide in both genders showed a similar trend: the risk in males increased with age peaking at ages 20 to 24 years and then declined except for slight increases in older adults. For females, the risk increased with age until peaking at ages 25 to 29 years and then declined except for slight increases at middle age (Wang et al., 2016).

Asian Americans

The data classification for Asian Americans is very broad, creating huge gaps in the literature. There is lack of available data on risk factors, suicidal attempts, or incidence of suicides (Srinivasa et al., 2021).

Asians now make up about 7% of the U.S. population, and their numbers are projected to increase significantly over the next decades. The six *largest* Asian American subgroups in the U.S. are Chinese Americans, Indian Americans, Filipinos, and those who have roots in Vietnam, Korea, and Japan. These subgroups account for 85% of all Asian Americans in the United States (Pew Research Center, 2021).

Overall, the suicide rate for Asian Americans is about half that of the national rate (APA, 2022). However, most national suicide mortality data combine people of Asian, Native Hawaiian, and other Pacific Islander descent into one group that is usually called Asian or Pacific Islander (SPRC, 2020).

Among Asian subgroups, Korean males had more than twice the frequency of death due to suicide (5%) compared to non-Hispanic Whites (2%), and suicide was ranked as the fifth leading cause of death, higher than every other Asian subgroup and non-Hispanic Whites. Mortality rates for suicide among Korean males were twice that of any other Asian subgroup (Hastings et al., 2015).

Depression is four times more likely to prompt suicidal behavior among Asian youths compared to other ethnic groups. Parental conflict is a major factor for suicidal attempts and suicide in Asian origin adolescents. In a study of Indian immigrants, it was reported that children 15 or older had higher incidences of suicide after they migrated to other countries than when they lived in India (Srinivasa et al., 2021).

Native Hawaiian/Pacific Islanders

People who are descended from any of the original peoples of Hawaii, Guam, Samoa, or other Pacific Islands are referred to as Native Hawaiian or Other Pacific Islander (SPRC, 2020). In 2019, suicide was the leading cause of death for Native Hawaiians/Pacific Islander young adults. Native Hawaiians/Pacific Islanders are less likely to receive mental health services or to receive prescription medications for mental health treatment as compared to non-Hispanic whites (OMH, 2021, May 20).

The Pacific Islands have some of the highest rates of suicide in the broader Western Pacific Region. These areas are experiencing complex and rapid societal change, including loss of culture and spiritual connectedness due to the impacts of climate change and Westernization. These external factors have been linked to helplessness, poor wellbeing, and suicidal behaviors (Mathieu et al., 2021).

The World Health Organization's recent global health estimates for 2000-2019 include age-standardized suicide rates for eight Pacific Islands, with Kiribati, Federated States of Micronesia, and Vanuatu having the highest rates, and several exceeding the current global age-standardized rate of 9.0 per 100,000 (Mathieu et al., 2021).

Overall, the most common methods for both suicide and suicide attempts were self-poisoning and suffocation/hanging. The higher prevalence of self-poisoning in suicides and suicide attempts in the Pacific Islands has been linked to access. Specifically, limited access to other means such as firearms may influence higher rates of hanging, and easy access to lethal pesticides in rural areas of the islands or prescription medications may influence the selection of these methods (Mathieu et al., 2021).

Young people are a vulnerable group across the Pacific Islands. This has been linked to social change, rapid urbanization and Westernization, and a rise in social disintegration. This disintegration has forced young people to navigate the complex divide between traditional roles and social structures. While other countries have higher suicide rates in older ages, the current findings are comparable with Indigenous peoples worldwide (Mathieu et al., 2021).

Suicide vs. Homicide

Suicides continue to outnumber homicides in America. For youth in the U.S. between the ages of 10 and 17, the number of suicide victims changed little in 2020 while the number of homicide victims increased 47%. The suicide rate increased for Black and Hispanic youth in 2020 but decreased for White youth (OJJDP, 2020).

In the U.S., firearms are involved in almost 80% of all homicides and more than half of all suicides. The increases in firearm homicide rates and persistently high firearm suicide rates in 2020, with increases among populations that were already at high risk, have widened disparities and heightened the urgency of actions that can have immediate and lasting benefits (Kegler et al., 2022).

Gender and Age Differences

Worldwide, about 80% of the nearly one-million suicide deaths recorded each year are among men (Seidler et al., 2021). Male deaths by suicide outnumber those by women in every country in the world. Although women make twice the number of suicide attempts, men are more likely to die by suicide (Richardson et al., 2021).

Men are more likely to use deadlier methods, such as firearms or suffocation while women are more likely than men to attempt suicide by poisoning (WSDOH, 2016). Unfortunately, among women, the rate for firearm-related suicide has increased since 2007. Firearm-related suicide became the leading means for women in 2020 (NCHS, 2022, March 3).

In men, signs of suicidal ideation include social withdrawal, anger, and reduced problem-solving capacity. Signs of suicide attempt include statements of suicidal intent, calmness, anger, apathy, hopelessness, risk-taking, and appearing "at peace." Signs preceding death by suicide include desperation and frustration in the face of unsolvable problems, helplessness, worthlessness, statements of suicidal intent, and emergence of a positive mood state (Hunt et al., 2017).

Men 75 and older had the highest *rate*, while men 45 to 64 had the highest total *number* of suicides. External economic factors were involved in more than a third of suicides. For elderly men, contributing factors include economic insecurity, loss of significant relationships, loneliness, fear of being a burden, and the physical and mental stresses of aging (WSDOH, 2016).

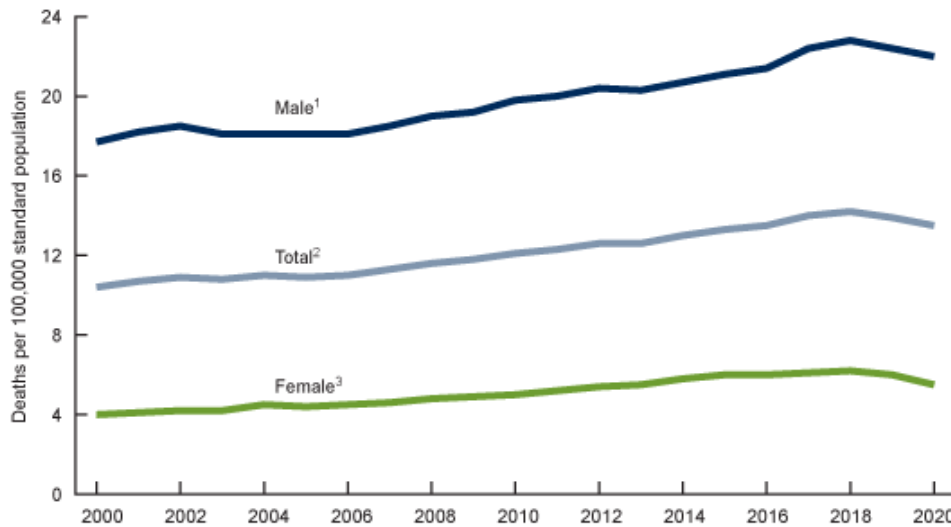
Among young people in Washington, suicides have received a great deal of media and community attention, though suicide rates for adults are higher (Srinivasa et al., 2021). A 2021 Healthy Youth Survey in Washington that included 31,000 students in grades 6, 8, 10, and 12, indicated that a significant percentage of students reported feeling anxious, nervous, on edge, and unable to stop worrying (HYS, 2021).

Among 10th graders, 20% reported they seriously considered attempting suicide, 16% reported they made a suicide plan, and 8% reported they attempted suicide in the past 12 months. Suicide is the second leading cause of death for Washington teens 15-19 years old (HYS, 2021).

Non-suicidal self-injurious behavior such as cutting, burning, hitting oneself, scratching oneself to the point of bleeding, or interfering with healing is a relatively frequent behavior in young people. The concern is that it these behaviors can become chronic and evolve into other forms of self-injurious behavior, such as suicide attempts (Grandclerc et al., 2016).

Because non-suicidal self-injurious behavior and suicidal behavior often occur together, it is important to consider the nature of the link between these two types of behavior. Some specialists see non-suicidal self-injurious behavior as a means of regulating negative emotions, while others argue that it is a factor in the emergence of suicidal ideation and attempts (Grandclerc et al., 2016).

Suicide Rates by Sex in the United States (2000–2020)



¹Stable trend from 2000 through 2006, significant increasing trend from 2006 to 2018, stable trend from 2018 through 2020, $p < 0.05$. The rate in 2020 was significantly lower than the rate in 2018, $p < 0.05$.

²Significant increasing trend from 2000 through 2018, with different rates of change over time; significant decreasing trend from 2018 through 2020, $p < 0.05$.

³Significant increasing trend from 2000 through 2015, with different rates of change over time; stable trend from 2015 through 2018; significant decreasing trend from 2018 through 2020, $p < 0.05$.

Notes: Suicide deaths are identified using *International Classification of Diseases, 10th Revision* underlying cause-of-death codes U03, X60–X84, and Y87.0. Age-adjusted death rates are calculated using the direct method and the 2000 U.S. standard population.

Source: CDC, 2022, March 3.

3. Suicide Screening and Assessment

Suicide often begins with suicidal thoughts and a wish to die followed by an intention to act, then a plan to end one's life. These steps can occur over minutes or years. Often, the first opportunity to assess an individual's suicide risk occurs because of warning signs are identified by a caregiver, gatekeeper, or loved one. However, often a patient's risk is identified after a suicide attempt is made.

Mental health has traditionally been within the purview of psychiatrists and specifically trained mental health practitioners. But over the last 2-3 decades, family practice physicians, nurse practitioners, allied health professionals, pharmacists, and other healthcare providers have become increasingly responsible for identifying and managing chronic mental health problems—including suicidal ideation and behaviors.

Now it is not uncommon for a variety of healthcare providers to find themselves at the front lines of identifying serious mental health issues that require screening and referral. Because of these changes, all healthcare providers need to be knowledgeable about suicide risk factors and warning signs, suicide screening tools, and know when, where, and how to refer a client who is at risk for self-harm. A good clinical assessment can be the start of suicide prevention efforts.

Did You Know. . .

Beginning July 1, 2019, healthcare professionals are required by the Joint Commission to use a validated tool to assess suicidal risk for all patients whose primary reason for seeking healthcare is the treatment or evaluation of a behavioral health condition.

Harmer et al., 2022

Determining who is at risk for suicide, using either tests or clinical judgment, is extremely difficult, primarily because suicide is a relatively rare event. Nevertheless, screening and assessment can be valuable because they can ensure that those requiring more services get the help they need (CSAT, 2017).

A suicide risk assessment should first evaluate suicidal thoughts, intent, and behavior (including warning signs that may increase the patient's acuity). Then consider risk and protective factors that may increase or decrease the patient's risk of suicide. Whether a patient has a mental disorder or not, those identified as having suicidal ideation should receive a complete suicide risk assessment (VA/DOD, 2019).

Unfortunately, most screening tools do not accurately predict risk of suicide. These tools tend to yield an unacceptably high false-positive prediction rate—many of those determined to be "at risk" never experience clinically significant suicidal thoughts or behavior. This is coupled with an unacceptably low degree of accuracy when identifying true cases—a substantial portion of those individuals who die by suicide were not identified by the screening tools (VA/DOD, 2019).

Did You Know. . .

Fifty-eight percent of service members who died by suicide in 2016 had contact with the healthcare delivery system in the 90 days prior to their death; roughly a third of those encounters were with outpatient or inpatient behavioral health (VA/DOD, 2019).

Several studies support the use of the Patient Health Questionnaire-9 (PHQ9). Item 9 is a universal screening instrument to identify suicide risk:

Item 9: “Over the past two weeks, how often have you been bothered by thoughts that you would be better off dead or of hurting yourself in some way?”

Possible Responses: “Not at all,” “Several days,” “More than half the days,” or “Nearly every day.” (VA/DOD, 2019).

The U.S. Preventive Services Task Force (USPSTF) concluded in 2014 that screening is appropriate for high-risk individuals with known mental illnesses or substance use disorders. However, there is insufficient evidence to assess the benefits and harms of screening the general population for suicide risk in a primary care setting.

In a 2022 update, the USPSTF found no eligible studies that reported on benefits or harms directly arising from screening when compared with usual care or no screening. The evidence for screening for suicide risk, anxiety, and depression in children and adolescents relied on indirect evidence on the accuracy of screening and the benefits and harms of treatment (USPSTF, 2022).

Some screening instruments are reasonably accurate for anxiety and depression, but the evidence is limited for suicide risk screening instruments. Additionally, both pharmacotherapy and psychotherapy have benefit for depression and anxiety, but the evidence is limited for suicide risk interventions. Evidence gaps persist in children younger than age 11 years for test accuracy, depression, and suicide risk interventions, and for screening and treatment differences by sex, race/ethnicity, sexual orientation, and gender identity (USPSTF, 2022).

Within military organizations, screening for suicide risk is reportedly controversial and has received mixed support. There is no evidence that universal screening in general military populations is beneficial, but it can be useful when combined with screening for substance use, depression, or PTSD (VA/DOD, 2019).

Despite weak evidence for suicide screening, the Veterans Administration has identified screening as a key part of their *Community-Based Intervention for Suicide Prevention* program. Although aimed at service members and veterans, the program can be modified for the civilian populations. The program has 3 components: (1) identifying Service members, veterans, and their families and screening for suicide risk; (2) promoting connectedness and improving care transitions; and (3) increasing lethal means safety and safety planning (USDVA, 2021, September).

Structuring the Interview

Assessing suicide risk in clinical practice depends on the skills and philosophical approach of the individual clinician. Nevertheless, any healthcare provider—in any setting—may be called upon to ask a patient about suicidal ideation and behaviors. Understanding when a referral is needed is a critical part of the assessment; anyone thought to be at risk for suicide should be referred.

Because asking about suicide is not easy, providers are encouraged to practice their interview skills at home or with a co-worker. Develop and practice questions until you are comfortable leading a patient through an assessment. Asking a difficult question does not plant the idea of suicide.

There are guidelines on *what* to assess—life history, previous suicide attempts, and mental state—along with frameworks for how to assess risk. There is less guidance on how to interview patients about *suicidal ideation* (ie, thinking about, considering, or planning suicide). This is important because the way questions are asked—the words and phrasing used by a clinician—can influence the patient’s response (McCabe et al., 2017).

Importance of Secondary Suicide Risk Screening

In a study of more than 1,300 emergency department patients with recent suicide attempts or ideation, an intervention consisting of secondary suicide risk screening by the ED physician, discharge resources, and post-ED telephone calls resulted in a 5% absolute decrease in the proportion of patients subsequently attempting suicide and a 30% decrease in the total number of suicide attempts over a 52-week followup period. Source: Coyne, 2017.

Assessing Safety

When considering a suicidal patient’s experience, safety is related to more than the absence of suicide risk and the need for physical protection. To be safe, patients must feel a connection with healthcare professionals, be protected against their own suicidal impulses, and have a sense of control over their lives (Berg et al., 2017).

Asking About Safety—A Nurse Practitioner’s Perspective

Asking about safety should start with a general, open-ended question such as, “Has something happened recently that has affected your well-being?” A person might respond by saying, for example, “My mother just died—she was my whole life.” If there is no answer or a pause, ask a more direct question. For example, you might ask “Now that your mother has died, what else in your life will bring you joy?” This might be followed by a question of concern such as: “I wonder—has the thought of hurting yourself entered your mind?” If a person is depressed, they may have trouble organizing their thoughts, leading to a delayed response. Note the amount of time needed to respond, be patient, and give time for an answer. Develop a series of questions that help you determine the level of care needed for patient safety to be preserved.

Although yes/no questions are common in healthcare interactions, they can communicate an expectation in favor of either a yes or no response. For example, “Are you feeling low?” invites agreement to “feeling low.” Conversely, “Not feeling low?” invites agreement to “not feeling low.” Specific positive or negative words can reinforce bias. Words such as “any,” “ever,” or “at all” reinforce negative bias (eg, “Any negative thoughts?”) while words such as “some” reinforce positive bias (eg, “Do you have some pain here?”) (McCabe et al., 2017).

If a patient indicates an intention to harm themselves, a healthcare provider’s next act is to refer the patient to someone who is **licensed** to decide about an involuntary hold. In larger healthcare organizations, psychiatric services are directly available. Patients who agree to be hospitalized must be placed in the least restrictive environment. Depending on the level of risk, patients can be held against their wishes. Determining whether a patient is safe (and whether they can be held against their will) is left to providers who are legally licensed to make that determination.

Asking About Safety: Margo

Background

Margo is a 27-year-old woman who presented in your office for treatment following a suicide attempt. She had slit her wrists 2 weeks before and was recently discharged from the hospital psych ward.

Assessment

When Margo is asked if she ever tried to harm herself in the past—how many times and in what ways—she replied: “The first time I thought about suicide, I took a bottle of aspirin. The second time I was 17 and I slit my wrists, but I screamed when I saw the blood. Two weeks ago, I was upset when my boyfriend broke up with me and I slit my wrists in a warm bathtub.”

When assessing a person for suicidal ideation and behaviors, start by asking broad questions and get more specific as the interview proceeds. Avoid yes/no questions, which can communicate an expectation in favor of either a yes or no response.

Discussion

At this point in your assessment, it may be unclear whether Margo has a clear intention of taking her life or if she requires higher levels of protection than someone with less inclination toward dying. An instrument such as the Beck Suicide Intention Scale may be helpful in assessing Margo’s intent.

The key point about Margo is that her attempts have accelerated and become more sophisticated. Keep in mind that the more times a person attempts suicide, the more likely they are to complete the event. In Margo’s case, this should increase your concerns about future risk. Understanding the level of risk will guide your decision about safety, which is the first priority.

What Actions Should You Take?

Margo has just been released from protective custody. What do you think is the most effective care she should receive?

- a. A follow-up phone call every month from her doctor.
- b. Monitoring, outreach, therapy, and case management.
- c. Threatening her with protective custody if she is unable to handle the stresses in her life.
- d. Encouraging her to move back home with her parents so they can closely monitor her behavior.

Correct answer: b

Bottom Line

Because previous suicide attempts are known to be a strong predictor of future attempts and deaths by suicide, continuity of care is critical. For Margo, who has survived a suicide attempt, effective clinical care should focus on community and family support, therapy, and lethal means restriction.

Assessment of Lethality

Once safety has been discussed, ask about lethality, which focuses on the method used, the circumstances surrounding the attempt, and the chance of rescue. Lethality is related to the severity of physical consequences as well as the amount of medical intervention needed following an attempt (Kar et al., 2014).

Safety and Lethality—A Nurse Practitioner’s Perspective

Nonsuicidal self-injury often involves people with borderline personality disorders; self-harm can be an antidote to psychological numbing. This doesn’t let providers off the hook in terms of assessing safety and lethality, but this sort of situation requires a different kind of assessment.

A clinician must decide what direction the self-harm is heading—from superficial and visible self-harm to deeper and less visible self-injury. People with certain types of mental illness are more likely to be associated with escalating self-harm, with an ever-greater likelihood of a completed suicide.

When assessing lethality, try to determine how well thought out the plan is and whether the person has access to the means to complete the plan. Note any additional circumstances and try to evaluate the “risk tipping point.” Determine if it is necessary to take an action that deprives a patient of his or her rights vs. not taking an action that might result in suicide.

The lethality of suicidal behavior can be considered to have five levels: subliminal, low, moderate, high, and extremely high (Kar et al., 2014).

Five Levels of Lethality

1. **Subliminal**—the lowest level. Death is impossible to highly improbable.
2. **Low**. Death is improbable and is not the usual outcome but may be possible as a secondary complication of factors other than the suicidal behavior.
3. **Moderate**. Probability of death is in the middle order.
4. **High**. Chance of death is high and is the usual or likely outcome of the suicidal act.
5. **Extremely high**. Chance of survival is minimal, and death is considered almost certain. (Kar et al., 2014)

There is often a mismatch between the intent of the suicidal act and the lethality of the method chosen. Clients who genuinely want to die (and expect to die) may survive because their method was not foolproof or because they were interrupted or rescued. However potentially lethal the chosen method is, a prior suicide attempt is a highly potent risk factor for eventually dying by suicide. Any suicide attempt must be taken seriously, including those that involve little risk of death, and any suicidal thoughts must be carefully considered in relation to the client's history and current presentation (CSAT, 2017).

Assessing Intent

Intentions are self-instructions that guide engagement in a behavior or lead to an outcome. Measures of intention provide a numerical score that reflect how hard a person is willing to try or the likelihood a person will perform—or try to perform—a particular behavior (Williams, 2016). Patients who have a clear intention of taking their life require higher levels of protection than those with less inclination toward dying.

The ability to perceive intentionality appears to be automatic and by adulthood most individuals share a common understanding of the concept of intentionality. Given the importance of inferring the intentions of others, it is not surprising that most adults are keenly attuned to intentionality cues (Brotherton & French, 2015).

Suicidal behaviors can be predictive of suicide. Assessing a person's *intent to die* during a risk assessment is an important indicator of current and future risk. Many instruments, such as the *Suicidal Behaviors Questionnaire-Revised* and the *Suicide Intent Scale*, include items on communication of suicide ideation and behavior (Harris et al., 2015).

A person's intent may be inferred from how they describe a "wish to live" or a "wish to die." These terms have proven useful in assessing suicide ideation and behavior and are included in *Beck's Scale of Suicidal Ideation* and the *Suicide Status Form*. Overall, there is strong evidence that suicidal affects can be valid indicators of current and future risk (Harris et al., 2015).

Beck Suicide Intention Scale

The Beck Suicide Intention Scale (SIS) examines subjective and objective aspects of the suicide attempt, the circumstances at the time of the attempt, and the patient's thoughts and feelings during the attempt. It is based on a clinical interview using an instrument with 15 items referring to the patient's precautions and beliefs of the act. Each item is scored on a scale from 0 to 2, with a possible total score of 30 indicating the highest intention of suicide and a wish to die.

The Beck SIS questionnaire covers precautions, planning, communication, and expectations regarding medication load, the degree of planning, and wish to die or live. It is divided into two sections: the first eight items constitute the "circumstances" (part 1) and are concerned with the objective circumstances of the act of self-harm; the remaining seven items, the "self-report" (part 2), are based on the patients' own reconstruction of their feelings and thoughts at the time of the act.

Source: Grimholt et al., 2017

Kathleen

In the two-and-a-half years since my son's death I have learned that his story is, sadly, not uncommon. I have become oddly close with other mystified parents of seemingly successful, engaged, social young men and women who took their lives. They are my partners in grief, and in understanding why suicide is the number two killer of youth in Washington State, just behind accidents.

My son retrieved a gun that was unlocked because it had not been fired in many years and we didn't think there was any ammunition in the house. Although we have learned that he was showing some warning signs, I will never know what he was thinking, because that gun left him with no chance of survival.

My son was a trained marksman who had attended gun camp every summer. He had also taken the hunter safety class, and was, as his hunting mentor said, "safer with a gun than any adult I know." I have great respect for the people who trained my son, but not once did any of the safety materials include warnings for parents of youth that 79% of firearm deaths in Washington State are suicides. I had not dreamed that my son was suicidal, much less that he would consider using a gun to take his life. I sincerely hope that other parents safely store firearms and ammunition out of the reach of children.

Kathleen Gilligan, whose son Palmerston Burk died from suicide by firearm in King County in 2012.
Source: WSDOH, 2016.

Talking About Lethal Means

Lethal means assessment is critically important because certain lethal means such as firearms, hanging/suffocation, or jumping from heights provide little opportunity for rescue and have high fatality rates (Stone et al., 2017). Implementing lethal means safety, including firearm restrictions, reducing access to poisons and medications associated with overdose, and barriers to jumping from lethal heights, is a means to reduce population-level suicide rates (DVA, DOD, 2019).

Providers can educate patients and families about safe firearm storage and access, as well as the appropriate storage of alcoholic beverages, prescription drugs, over-the-counter medications, and poisons. Providers should talk to patients and caregivers about reducing the stock of medicine to a nonlethal quantity and locking medicines—such as prescription painkillers and benzodiazepines—that are commonly abused. This approach can be useful in helping to prevent suicide, as well as unintentional overdoses and substance abuse (HHS, 2012, latest available).

Despite the importance of discussing lethal means, a study of 800 emergency department charts of patients who screened positive for suicidal ideation and suicide risk revealed that only 18% had any documentation of an assessment of lethal means. For the small group who were asked about lethal means, only 8% had documentation that a healthcare professional discussed a safety/action plan to reduce access to lethal means. The most common discussion involved changing home storage or moving objects out of the home (Harmer et al., 2022).

A study of 800 emergency department charts of patients who screened positive for suicidal ideation and suicide risk revealed that only 18% had any documented lethal means assessment (Harmer, et al., 2022).

These findings show the need to document lethal means assessments for all individuals who have a positive screen for suicidal ideation, plus the need to have discussions about the removal of lethal means. This may require adding prompts for these assessments to the electronic documentation system (Harmer et al., 2022).

A successful program developed at a large children's hospital called the *Emergency Department Counseling on Access to Lethal Means* (ED CALM) trained psychiatric emergency clinicians to provide lethal means counseling and safe storage boxes to parents of patients under age 18 receiving care for suicidal behavior. In a pre/post quality improvement project, researchers found that, at posttest, 76% reported that all medications in the home were locked up as compared to fewer than 10% at the time of the initial ED visit. Among parents who indicated the presence of guns in the home at pretest (67%), all (100%) reported guns were currently locked up at posttest (Stone et al., 2017).

Talking about Lethal Means—A Nurse Practitioner’s Guidance

If you have identified that your patient is at risk for self-harm, try to identify any lethal means that your patient might be able to access once he or she leaves your office. Ask direct questions: “While you’re in this dangerous period, may I call your partner or family member and ask them to remove the guns or poisons from the house?”

Ask permission and show concern in a non-judgmental manner—this is more likely to elicit accurate information. You can continue by saying “I want to let you know that I appreciate and am honored that you’ve shared your thoughts with me. I’m just concerned that you may go again to a place of despair when you leave and I’m thinking of your safety.”

Try to establish and maintain trust with your patient—if you think the person is at risk, there is no reason to cover your concern or to lie. Make sure you document the results of your discussion.

4. Warning Signs, Self-Injurious Behaviors, Intent, and Stigma

Recognizing Warning Signs

Warning signs are individual factors that indicate an acute increase in risk for suicidal behavior within minutes to days. Recognizing warning signs provides an opportunity for early assessment and intervention.

The vast majority of people who attempt suicide show some warning signs, which can be acute and urgent or simply cause for concern. Widely accepted **general** suicide warning signs include:

- Feeling anxious, agitated, or trapped
- Experiencing sleeplessness, mood swings
- Feeling hopeless
- Experiencing rage, anger, or aggression
- Engaging in reckless behavior
- Increasing alcohol or drug use
- Withdrawing from family and friends

Three **direct** warning signs are particularly indicative of suicide risk:

1. Communicating suicidal thought verbally or in writing.
2. Seeking access to lethal means such as firearms or medications.
3. Demonstrating preparatory behaviors such as putting affairs in order (DVA/DOD, 2019).

Warning signs can be evaluated by asking patients to describe thoughts, feelings, and behaviors they have experienced prior to the most recent exacerbation of suicidal ideation. If patients report they are experiencing any common warning signs, the provider should directly ask the patient if they are experiencing thoughts of suicide (DVA/DOD, 2019).

Identifying Self-Injurious Behaviors

Self-injurious behaviors and intentions are deliberate acts done with the knowledge that they can or will result in some degree of physical or psychological injury. Self-injurious behavior involves direct and intentional self-injury that causes tissue damage, injury to oneself, or injury to health. It also includes suicide attempts (Xin et al., 2016).

Non-suicidal self-harm is included in some suicide risk measures, such as the *Self-Injurious Thoughts and Behaviors Interview*. Overall, there is considerable evidence that past suicidal plans and attempts should be considered for evaluation of current and future risk, but other behaviors, such as non-suicidal self-harm and communications, may not be valid factors for many individuals (Harris et al., 2015).

Prior verbalization of suicidality may have little relationship with a “wish to die” during the attempt. A large study of French university students found higher-risk suicide attempts included less communication of suicidality, while a psychological autopsy study of 200 Chinese suicide victims revealed about 60% had not communicated their intentions, in any way, prior to death (Harris et al., 2015).

Recognizing Imminent Harm

Imminent harm means a person is believed to be at immediate increased risk for suicide or self-harm. Risk is especially elevated during the days and weeks following hospitalization for a suicide attempt, especially for people diagnosed with major depression, bipolar disorder, and schizophrenia (WSDOH, 2016).

When trying to predict the risk of imminent harm or suicide, transitions in care have been shown to be particularly high-risk periods. These transitions include the initial diagnosis with a mental condition, initiation of psychotropic medication, discharge from the hospital, and having a recent life-changing event. Nevertheless, identifying who might be at high risk for self-harm or suicide is challenging; clinicians cannot foresee which patients will act upon suicidal thoughts (Balbuena et al., 2022).

Acknowledging Stigma

Stigma is characterized by labeling, stereotyping, and separation, leading to loss of status and discrimination. Stigma, especially when it occurs in the context of mental illness, can have more harmful effects than the mental illness itself and can be a risk factor for suicide (Roškar et al., 2022).

Stigma can be broadly divided into two types: (1) public stigma—the way a person perceives public attitudes and opinions about mental illness and people with such illnesses, and (2) self-stigma—internalized public stigma, the attitudes and opinions that affected individuals have about themselves and their reference group. Self-stigma is related to low self-esteem and low self-worth and includes mental illness stigma and help-seeking stigma (Roškar et al., 2022).

Suicide-related stigma includes both public stigma and self-stigma. The public stigma of suicide involves labeling suicidal individuals as weak, irresponsible, selfish, and unable to cope with their problems. In contrast, the self-stigma of suicide refers to the concealment of suicidal behavior and feelings of shame among those who have attempted suicide (Roškar et al., 2022).

Stigma has been identified as one of the most significant obstacles to reducing rates of suicide. Stigma deters people from seeking help and may also deter people from acting when confronted by an at-risk person. Improving attitudes towards suicide and increasing awareness of mental illness should be one of the first steps to engaging the community in preventing suicide (Worsteling and Keating, 2022).

Stigma affects not only the general population but also mental health professionals who are vulnerable to burnout, mental illness, such as depression, and suicidal behavior. Professionals' mental health knowledge does not make them immune to such conditions. On the contrary, their prior experiences of adversity, distress, and mental health problems, may be one of the reasons they pursue a career in mental health. According to studies, mental health professionals tend not to seek out the services they provide. They are more likely to disclose in their social circles than in work circles. The reason for this may be that they are trained to help others in distress and therefore tend to have high expectations of themselves (Roškar et al., 2022).

WARNING SIGNS OF SUICIDE:
 The behaviors listed below may be some of the signs that someone is thinking about suicide.

TALKING ABOUT:

- ▷ Wanting to die
- ▷ Great guilt or shame
- ▷ Being a burden to others

FEELING:

- ▷ Empty, hopeless, trapped, or having no reason to live
- ▷ Extremely sad, more anxious, agitated, or full of rage
- ▷ Unbearable emotional or physical pain

CHANGING BEHAVIOR, SUCH AS:

- ▷ Making a plan or researching ways to die
- ▷ Withdrawing from friends, saying good bye, giving away important items, or making a will
- ▷ Taking dangerous risks such as driving extremely fast
- ▷ Displaying extreme mood swings
- ▷ Eating or sleeping more or less
- ▷ Using drugs or alcohol more often

If these warning signs apply to you or someone you know, get help as soon as possible, particularly if the behavior is new or has increased recently.

National Suicide Prevention Lifeline
 1-800-273-TALK

Crisis Text Line
 Text "HELLO" to 741741

 www.nimh.nih.gov/suicideprevention

5 Action Steps for Helping Someone in Emotional Pain

ASK
 "Are you thinking about killing yourself?"

KEEP THEM SAFE
 Reduce access to lethal items or places.

BE THERE
 Listen carefully and acknowledge their feelings.

HELP THEM CONNECT
 Save the National Suicide Prevention Lifeline number 1-800-273-8255.

STAY CONNECTED
 Follow up and stay in touch after a crisis.

 www.nimh.nih.gov/suicideprevention

5. Suicide Risk and Protective Factors

A **protective factor** is anything that makes it *less likely* for a person to develop a disorder. A **risk factor** is anything that makes it *more likely* for a person to develop a disorder or predisposes a person to high risk for self-injurious behaviors. Both protective and risk factors can include biologic, psychological, or social factors in the individual, family, and environment.

Protective Factors

Protective factors, or those influences that buffer against the risk for suicide, can be found across different levels of society. Protective factors include effective coping and problem-solving skills, moral objections to suicide, strong and supportive relationships with partners, friends, and family; connectedness to school, community, and other social institutions; availability of quality and ongoing physical and mental healthcare, and reduced access to lethal means. Protective factors can either counter a specific risk factor or buffer against a number of risks associated with suicide (Stone, 2017).

Protective **social factors** include strong interpersonal bonds and friendships and good community support. A safe and stable home environment is critically important, including a strong marriage or other intimate relationship. Being responsible to others, employment, and child-rearing responsibilities can also be protective factors.

Personal factors are also protective. A sense of belonging, a sense of identity, and good self-esteem, along with an optimistic outlook are important. Good problem-solving skills, the ability to resolve conflicts, and good impulse control are strong protective factors. Other personal protective factors include:

- Seeking help when needed
- Being involved with cultural, spiritual, or religious practices
- Engaging in constructive and enjoyable leisure activities
- Understanding the importance of health and wellness

Access to healthcare (including mental health services) is also a protective factor, including care for substance use disorders.

| Protective Factors | |
|--------------------------------|-----------------------------------------------------------------------|
| Economic supports | Household financial security; Stable housing |
| Access and delivery of care | Mental health coverage; Providers available in underserved areas |
| Protective environments | Reduce access to lethal means; Reduce excessive alcohol use |
| Connectedness | Peer norm programs; Engagement in community activities |
| Coping, problem-solving skills | Social-emotional learning; Parenting and family relationship programs |
| Support people at risk | Gatekeeper training and crisis intervention; Prevent re-attempts |

Source: Stone et al., 2017.

Risk Factors

Although it is difficult to predict who will attempt suicide, increased risk is associated with suicidal ideation or plans, non-suicidal self-injurious behaviors, and suicide attempts (Fosse et al., 2017). Two of the strongest predictors of suicide risk are mental illness and substance abuse.

Attempts to explain, predict, and prevent suicide are limited due to its statistical rarity—suicide is exceedingly rare in comparison to associated risk factors. There are a great many people who abuse alcohol, the majority of whom do not commit suicide; hence the positive predictive value of these risk factors is low.

Increased risk has been associated with gender, lack of support systems, genetic liability, childhood experiences, and the availability of lethal means. Individuals at a greater risk for *completed* suicide have been found to be male, older, and impulsive, have multiple physical ailments, a history of prior suicide attempts, psychiatric illness, violence, or a family history of suicide (Hassamal et al., 2015).

Certain groups have higher suicide attempt or completion rates than the general population. This can include veterans, members of the armed forces, and their families; people living in small, rural communities, especially people from areas with higher poverty and lower education levels; members of certain racial and ethnic minority groups such as Latina youth and American Indians and Alaska Natives; and LGBTQ populations, particularly youth who have been rejected by their families (WSDOH, 2016).

Other groups thought to be at higher risk for suicidal ideation and completed suicides include:

- People who are (or have been) institutionalized
- Those who have been victims of violence, or are homeless
- People who have had contact with criminal justice and child welfare systems
- People with substance abuse disorders (WSDOH, 2016)

Post-mortem forensic reviews suggest that most suicide decedents have identifiable mental illness, though only about one-half of the decedents had received a mental health diagnosis in the year prior to their death. A large proportion of suicides could be avoided with effective treatment of mental disorders, although 50% to 75% of those in need receive inadequate treatment. The under-recognition of mental conditions seriously limits the potential to identify and appropriately treat individuals at risk for suicide (DVA/DOD, 2019).

| Risk Factors for Suicide | |
|---------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Individual | <ul style="list-style-type: none"> • Previous attempt(s) • History of mental disorders, esp. clinical depression • History of alcohol and substance abuse • Feelings of hopelessness • Impulsive or aggressive tendencies • Losses • Illness and disability |
| Relationship | <ul style="list-style-type: none"> • Family history of suicide • Family history of child maltreatment • Isolation or feelings of isolation |
| Community | <ul style="list-style-type: none"> • Local epidemics of suicide • Barriers to accessing mental health services |
| Societal | <ul style="list-style-type: none"> • Easy access to lethal means • Cultural and religious beliefs • Unwillingness to seek help because of stigma |

Source: WSDOH, 2016.

Mental Illness

Suicide is overrepresented in people with mental illness. The odds for suicide in severe depression, schizophrenia, and bipolar disorder are approximately 3 to 10 times that of the general population, with a higher increased risk in males than females. Despite this, mental illness is a poor predictor of suicidal ideation and behavior since suicide does not occur in 95% to 97% of all cases (Fosse et al., 2017).

In psychiatric inpatients, an array of risk factors for suicide has been identified. A person admitted for inpatient treatment in a specialized mental health facility has a 50- to 200-times increased suicide risk compared to the population at large. In two meta-analyses that included 42 studies and close to 3,500 suicide completers, central suicide risk factors were:

- Prior suicide attempts and deliberate self-harm
- Family history of suicide
- Suicidal ideation
- Depression, hopelessness
- Agitation
- Social or relationship problems (Fosse et al., 2017)

In addition to the risk associated with alcohol and substance abuse, a poor social network and social withdrawal, command hallucinations, delusions, diagnosis of mental disorders other than depression are thought to increase risk. This can include bipolar disorder and schizophrenia, coexisting significant physical illness, family history of mental illness, multiple admissions to inpatient treatment, unplanned discharge, and prescription of antidepressants (Fosse et al., 2017).

Impulsivity (especially angry impulsivity) and disinhibition are strongly related to suicidal ideation and behaviors. Impulsivity is highly associated with bipolar disorder, substance abuse, and certain personality disorders as well as a history of early child abuse.

Medical Issues

Illness, stressful life events, and certain medical conditions increase vulnerability and are associated with an increased risk for suicidal ideation and behavior. This can include chronic pain, cognitive changes that make it difficult to make decisions and solve problems, and the challenge related to long-term conditions and limitations (HHS, 2012, latest available).

Trauma can also be a risk factor for suicide. Although some individuals who experience trauma move on with few symptoms, many—especially those who experience repeated or multiple traumas—suffer a variety of negative physical and psychological effects. Trauma exposure has been linked to later substance abuse, mental illness, increased risk of suicide, obesity, heart disease, and early death.

Co-morbid conditions may increase the likelihood that a suicide attempt becomes a completed suicide. For example, if a person with a chronic condition such as hepatitis C swallows a bottle of acetaminophen, they are likely to suffer severe liver damage. By the same token, a person with severe anemia may not survive a suicide attempt involving a significant loss of blood.

Substance Abuse

Suicide is a leading cause of death among people who abuse alcohol and drugs. Compared with the general population, individuals treated for alcohol abuse or dependence are at about 10 times greater risk for suicide; people who inject drugs are at about 14 times greater risk for suicide. Depression—a common co-occurring diagnosis among people who abuse substances—also confers risk for suicidal behavior. People with substance use disorders often seek treatment at times when their substance use difficulties are at their peak—a vulnerable period that may be accompanied by suicidal thoughts and behaviors (CSAT, 2017).

Substance Use Disorders

The *Diagnostic and Statistical Manual of Mental Disorders*, Fifth Edition (DSM-5), no longer uses the terms substance abuse and substance dependence, rather it refers to substance use disorders, which are defined as mild, moderate, or severe to indicate the level of severity, which is determined by the number of diagnostic criteria met by an individual.

Substance use disorders occur when the recurrent use of alcohol and/or drugs causes clinically and functionally significant impairment, such as health problems, disability, and failure to meet major responsibilities at work, school, or home. According to the DSM-5, a diagnosis of substance use disorder is based on evidence of impaired control, social impairment, risky use, and pharmacologic criteria.

The most common substance use disorders in the U.S. include:

- Alcohol Use Disorder (AUD)
- Tobacco Use Disorder
- Cannabis Use Disorder
- Stimulant Use Disorder
- Hallucinogen Use Disorder
- Opioid Use Disorder

Even when someone with a substance use disorder is in treatment, the prevalence of suicidal ideation and suicide attempts remains high; there is a significant prevalence of suicide among those who have at one time been in substance abuse treatment. Suicidal thoughts and behaviors are also a significant indicator of other co-occurring disorders (CSAT, 2017).

The disinhibition that occurs when a person is intoxicated with alcohol or drugs significantly affects suicide rates. The number of substances used seems to be more predictive of suicide than the types of substances used (SAMHSA, 2016).

Immigrants, Asylum Seekers, Refugees, and ICE Detainees

Immigrants who migrating to an unfamiliar country lose links with their country of origin and often experience a loss of status and social network and a sense of inadequacy because of language barriers. Unemployment, financial problems, a sense of not belonging, and feelings of exclusion affect a person's desire and ability to enter into relationships with others. This can lead to a variety of psychiatric disorders such as depression, anxiety, post-traumatic stress disorder, and abuse of alcohol or drugs. Feelings of isolation, loneliness, and hopelessness can increase the risk of suicidal behaviors (Ratkowska & De Leo, 2013).

Migration poses a risk not only for immigrants but also for their families who remain in the country of origin. For example, the next of kin of Mexican immigrants in the U.S. were at greater risk of suicidal ideation and suicide attempts than Mexicans without a family history of emigration. Emigration of a close family member can weaken family ties, cause feelings of loneliness and insecurity, and increase the risk of suicide among family members who remain at home. Immigrants from predominantly collectivist societies may have difficulty adapting to a non-collectivist culture. Many undergo radical changes in their social status and may also be subject to discrimination, which can be an additional risk factor for suicide (Ratkowska & De Leo, 2013).

A study of Chinese immigrants in the U.S. found that older adults experience linguistic and cultural barriers and rely heavily on their adult children to have access to healthcare and social services. Their social networks predominantly consist of family members, and they are isolated from the community. Their perceived burdensomeness to children and their social isolation may lead to suicidal ideation (Li et al., 2022).

For asylum seekers and refugees, suicide is largely unpredictable and arises from a complex interaction between many vulnerabilities and risk factors in a person's life. Factors found to contribute to suicide risk among refugees and asylum seekers include temporary visa status, exposure to trauma, exposure to detention settings, and social isolation. The term "lethal hopelessness" has been used to describe the increased suicide risk in asylum seekers due to the combination of limited access to mainstream services, financial support, culturally safe healthcare, and working rights (Ingram et al., 2022).

Refugees are perhaps the most vulnerable group of all immigrants: they are often fleeing war, torture, and persecution, and suffering with PTSD, depression, and anxiety. Lack of adequate preparation, the way in which they are received in the destination country, poor living conditions, and lack of social support and isolation usually add to these vulnerabilities. Refugees may also feel guilty for leaving the loved ones at home or for their death. The sense of guilt, together with isolation and pathologic symptoms due to trauma, may be a strong risk factor for suicide (Ratkowska & De Leo, 2013).

For migrants in U.S. Immigration and Customs Enforcement (ICE) detention, mental healthcare has historically been substandard. ICE detainees suffer from higher rates of anxiety, depression, and post-traumatic stress disorder and are especially susceptible to stressors. Time spent in immigration detention is a particular post-migration stressor that may exacerbate underlying mental health conditions. Widespread failures to provide necessary mental healthcare to detainees and critical medical staff shortages put ICE detainees at an increased risk for suicide. A recent study reported that between 2018 and 2020, the proportion of deaths in ICE detention attributed to suicide approximately doubled since cause of deaths were last described in 2015 (Erfani et al., 2021).

Diagnostic Dilemma: Psychosis or Post Traumatic Stress Disorder

A 32-year-old Black African, Muslim woman with a history of both PTSD and psychosis presented to mental health services for the first time with a history of auditory and visual hallucinations, persecutory delusions, suicidal ideation, recurring nightmares, hyper-arousal, and insomnia. She reported seeing blood on the walls, men in white following her, and hearing voices saying that some men were coming to get her. These symptoms were worse at night. She became very distressed and troubled to the point of wanting to end her life.

Her background history suggested co-morbid PTSD. Twelve years ago, she saw her family (parents, sisters, and brother) being killed during the civil war in her birth country in Africa. Her clinical PTSD symptoms, such as the recurring nightmares, hyper-arousal, and insomnia, began shortly afterwards. Eight years later, she came to the United Kingdom as an asylum seeker. During her first few years in the UK, she had no social support, was unable to speak English, experienced homelessness and was unsuccessful in gaining asylum. Her auditory and visual hallucinations and persecutory delusions started at this time. A few months before her first contact with mental health services, her psychotic symptoms and PTSD features became more frequent and intense. With no stable relationship she became pregnant and visited her general practitioner who referred her to our first-episode psychosis unit.

Upon admission, she presented as well-kempt, yet she appeared distressed. She was withdrawn and quiet and there was some delay in her responses to questions. She was tearful and her mood was low but reactive. She described vivid and clear auditory and visual hallucinations and persecutory delusions. Her medical psychiatric, personal, and family histories were unremarkable. A physical examination, neurological examination and brain magnetic resonance imaging (MRI) scan were normal. The results of our routine blood investigations were in the normal range, and a pregnancy test was positive. At our clinical interview, she clearly fulfilled the criteria for PTSD and psychotic disorder not otherwise specified.

Because of the intensity of her symptoms, her distress and suicidal ideation, our mental health team recommended ongoing hospitalization. She was started on trifluoperazine* (5 mg/day) and cognitive-behavioral therapy for psychosis. She also started a prenatal follow-up. She self-reported a partial improvement in her clinical picture and her psychotic symptoms gradually resolved over a three-week period, although they occasionally resurfaced when she was under stress or whenever her medication compliance lapsed. She was discharged from hospital and is now living in temporary accommodation funded by local services and waiting for her asylum re-application to be processed. She continues to have ongoing PTSD symptoms associated with the initial tragic event as persistent remembering of the stressor event with recurring and vivid memories, nightmares, hyper-arousal and initial insomnia. She also avoids circumstances resembling the initial stressor event, such as wars and violence.

***Trifluoperazine (Stelazine):** a typical antipsychotic primarily used to treat schizophrenia. It is part of a class of drugs called phenothiazines.

Source: Coentre & Power, 2011.

Documenting Risk

Good documentation promotes safety, coordinates care, and establishes a solid medical and legal record. Documentation includes providing a written summary of any steps taken, along with a statement of conclusions that shows the rationale for the plan. The plan should make good sense in light of the seriousness of risk (CSAT, 2017).

Gathering information involves collecting relevant facts. Screening questions should be asked of all new clients when you note warning signs and any time you have a concern about suicide, whether or not you can pinpoint the reason. Inquiries about suicidal ideation and attempts should start with an open-ended question that invites the client to provide more information. Followup questions are then asked to gather additional, critical information. Routine monitoring of suicide risk should be a basic standard in all substance abuse treatment programs (CSAT, 2017).

Consultation is a formal process whereby information and advice are obtained from (1) a professional with clear supervisory responsibilities, (2) a multidisciplinary team that includes such people, and/or (3) a consultant experienced in managing suicidal clients who has been vetted by your agency for this purpose. Do not judge the seriousness of suicide risk or try to manage it on your own unless you have an advanced mental health degree, specialized training in suicide risk managements, and it is understood by your agency that you are qualified to manage such risk independently (CSAT, 2017).

A useful guiding principle in taking responsible action is that your actions should make good sense in light of the seriousness of suicide risk. Seriousness is defined as the likelihood that a suicide attempt will occur and the potential consequences of an attempt. Judgments about the degree of seriousness of risk should be made in consultation with a supervisor or a treatment team, not by a healthcare provider acting alone (CSAT, 2017).

Suicide prevention efforts are not one-time actions. They should be ongoing because suicidal clients are vulnerable to a recurrence of risk. A team approach is essential, as it requires you to follow up on referrals and coordinate with other providers in an ongoing manner. Effective suicide prevention is comprehensive: it requires a combination of efforts that work together to address different aspects of the problem (CSAT, 2017).

Documenting Fernando, Iraqi War Veteran

The following is from a progress note for Fernando, a 22-year-old Hispanic male and Iraq war veteran who was doing well in treatment for dependence on alcohol and opiates but had missed his group therapy sessions and not returned phone calls for the past 10 days. This situation occurred in a substance abuse clinic within a hospital and required immediate supervision and interventions of high intensity.

Step One: Gather Information

Fernando came in, unannounced, at 10:30 a.m. today and reported that he relapsed on alcohol and opiates 10 days ago and has been using daily and heavily since. Breathalyzer was 0.08, and he reported using two bags of heroin earlier this morning. He reported that he held his loaded rifle in his lap last night while high and drunk, contemplating suicide.

Step Two: Access Supervision or Consultation

Upon consultation with a supervisor, it was determined that emergency intervention was needed because of Fernando's intense substance use, suicidal thoughts with a lethal plan, and access to a weapon. Immediate supervision and consultation were obtained because Fernando exhibited direct suicide warning signs. His reported substance abuse relapse during treatment was also an indication for supervisory involvement.

Step Three: Take Responsible Action

At 11:00 a.m., a hospital security guard and a clinician escorted Fernando to the ED, where he was checked in. He was cooperative throughout the process.

Step Four: Follow Up

Dr. McIntyre, the ED physician, determined that Fernando required hospitalization. He is currently awaiting admission. The person who did the initial evaluation agreed to follow up with the hospital unit after he is admitted and will raise the issue of his access to a gun.

Source: CSAT, 2017.

6. Lethal Means

The first time I heard the term “lethal means,” I had no idea what it meant. Now I realize how important it is to understand the various ways people attempt suicide.

Nurse Practitioner, California

Lethal means are objects, substances or actions that might be used in a suicide attempt. This can include firearms, poisons, alcohol or drugs, and actions such as jumping from a bridge or building. Limiting access to lethal means (lethal means safety) has been found to be one of the most effective approaches to reducing suicide (DSPO, 2020).

Throughout the U.S., most people who die by suicide use a firearm. In Washington, about half of suicides involve firearms. Less common, but still of concern, are suicide deaths by jumping, falling, or cutting (WSDOH, 2016).

Age, gender, intent, mental health status, and timing play a role in the method used. A study conducted in New York found that although the most common method of suicide was firearms, fall from height was a common method by elder residents. A study in Japan found that men were more likely to use lethal methods than women, with similar findings in European populations. The method used in an **unsuccessful** suicide attempt may predict later completed suicide (Sun and Jia, 2014).

Suicide methods can be divided into violent or nonviolent methods. *Violent methods* can include firearms, hanging, cutting or piercing with sharp objects, jumping from high places, and getting run over by train or other vehicles. *Nonviolent methods* can include ingestion of pesticides, poison by gases, suffocation, and overdose. Access, availability, social acceptability of certain methods and some location-specific factors such as access to firearms or tall buildings are important factors to consider (Sun and Jia, 2014).

Objects, Substances, and Actions Common in Suicide Attempts

Household gun ownership rates at the state level are a significant positive predictor of both homicides and suicides. A substantial proportion of Americans—over 50%, in some states—live in households with guns and may not need to purchase a new firearm to carry out a violent act (Swanson et al., 2015). In 2019, 50% of the more than 47,000 suicides in the U.S. were by firearm and 60% of all firearm deaths were attributed to suicide (Kivisto, 2022).

Although individuals who own firearms are **not** more likely than others to have a mental disorder or to have attempted suicide, the risk of a death is higher among this population because **individuals who attempt suicide by using firearms are more likely to die** in their attempts than those who use less lethal methods (HHS, 2012, latest available).

Among non-veterans overall, there were increases from 2001 to 2019 in the percentage of suicides involving suffocation and “other means” and decreases in the percentage involving firearms and poisoning. Among veterans, there were increases in the percentage involving firearms and suffocation and decreases for those involving poisoning and other means (USDVA, 2021, September).

Firearms accounted for over 70% of male veteran suicides in 2019 and nearly half of female veteran suicides in 2019. The proportion of firearm-related veteran suicide deaths increased in 2019 compared to 2001 (USDVA, 2021, September).

Overdose deaths in the U.S. involving prescription opioids increased in 2020, reversing a two-year downward trend from a peak in 2017, and that one quarter of all opioid overdose deaths involved prescription opioids. Despite a decline in the overall opioid prescribing rate in the U.S. over the last 8 years, prescribing rates continue to remain very high in certain areas of the country (Luo et al., 2022).

One of the largest and most comprehensive investigations of the association between prescription opioids and suicide to date found a significant increase in the risk of suicidal behavior among patients with frequent opioid use, particularly at higher doses. Patients prescribed opioid medications for at least 6 months in the past year had approximately five to seven times the risk of attempted suicide compared to those not prescribed opioid medications. Coupled with the effects of psychiatric conditions such as depression/bipolar disorders and psychosis, frequent use of moderate to high strength prescription opioids placed such patients at substantially elevated risk of suicidal behavior (Luo et al., 2022).

Current suicide prevention strategies are primarily targeted towards teenagers, young adults, and elders despite the fact that poisoning (predominantly drug overdose) is the leading mechanism for suicide death among middle-aged females and the third leading mechanism for middle-aged males. This increase in suicide attempts (and suicide death) among middle-aged adults underscores the importance of understanding risk factors for suicide in this age group to ensure that targeted preventive interventions are implemented (Tsfazion, 2014).

Nearly all drug-related ED visits involving suicide attempts among middle-aged adults involve prescription drugs and over-the-counter medications. About half of visits involved anti-anxiety and insomnia medications, 29% involved pain relievers, and 22% involved antidepressants. Within this age group, more than a third of all drug-related ED visits involving a suicide attempt also involved alcohol, and 11% involved illicit drugs (Tsfazion, 2014).

Inert gas asphyxiations such as those from helium have also increased in the United States. The increasing familiarity and lethality with helium is partly the reason for the rise in suicide by helium. There are many internet websites that provide details on helium asphyxiations. Helium suicides have also been publicized as simple and painless. More formal recommendations regarding suicides with inert gas asphyxiations such as helium need to be developed. Besides physically restricting access to helium, one way to curb helium suicides would be to have professionals assess if at-risk patients have read materials on helium suicides (Hassamal et al., 2015).

The most frequent "other" suicide methods are falls, drowning, cutting or piercing, and suffocation. Although falling from buildings or bridges is a relatively small percentage of suicide attempts, it is a particularly lethal method of suicide (Hemmer et al., 2017). For both females and males, suicide by suffocation or asphyxiation has increased significantly since 2000, especially in rural areas (NCHS, 2020, August 19).

The high prevalence of asphyxiations can be attributed to easy accessibility of rope and widespread availability of other means for hanging. Currently, there are no specific formal proposals on how to reduce asphyxiation suicides. The easy availability of ligature materials makes prevention of hanging suicides a difficult task. Research indicates that those who attempted suicide by hanging viewed it as a quick, simple, and painless death. Therefore, one way to reduce hanging suicides would be to challenge perceptions of hanging as a quick, simple, and painless suicide method (Hassamal et al., 2015).

| Number of Suicide Deaths by Method (2022) | |
|-------------------------------------------|------------------|
| Suicide Method | Number of Deaths |
| All Methods | 45,979 |
| Firearm | 24,292 |
| Suffocation | 12,495 |
| Poisoning | 5,528 |

Source: CDC, 2022, July 13.

Restricting Access to Lethal Means

Means restrictions are the techniques, policies, and procedures designed to reduce access or availability to means and methods of deliberate self-harm. Among suicide prevention interventions, reducing access to highly lethal means is now considered a key strategy to reduce suicide death rates (Betz et al., 2016).

Various strategies to reduce access to lethal means have been developed and implemented in several countries. Means restriction is considered a key component in a comprehensive suicide prevention strategy and has been shown to be effective in reducing suicide rates (DVA/DOD, 2019).

Means safety counseling (MSC)—also referred to as “lethal means counseling”—approaches have been developed in an effort to reduce deaths by firearms and other means. Examples of MSC recommendations include storing firearms in locked cabinets, using gunlocks, giving keys to these locks to family, caregivers, or friends, temporarily transferring firearms to someone legally authorized to receive them, removing firing pins, or otherwise disabling the weapon (DVA/DOD, 2019).

Restricting access to firearms is a key part of home safety planning that should be addressed with a patient is being discharged. Safe storage of firearms and other lethal means has been associated with less risk for suicide among adults and youth (Betz et al., 2016).

Reducing access to potentially toxic medications can be a challenge, given that many of the medications used to treat mental illness can be toxic in an overdose. In one sample, 60% of patients reported taking at least one medication for an emotional or psychological problem, and medication overdose was the suicide method most commonly reported as having been considered (Betz et al., 2016).

Access to other lethal means of suicide—such as sharp objects or supplies for hanging—is also difficult to control given their widespread availability for other purposes. Installing bridge barriers or otherwise restricting access to popular jump sites may prevent deaths, depending on specific local conditions.

People tend **not** to substitute a different method when a highly lethal method is unavailable or difficult to access. Increasing the time interval between deciding to act and the suicide attempt by making it more difficult to access lethal means, can be lifesaving (Stone et al., 2017).

A suicide attempt using a gun leads to death in 85% to 90% of cases; an attempt by medication overdose or a sharp instrument, leads to death about 1 to 2% of the time. It is important to understand that most people who attempt suicide once, and survive, never attempt again. Putting time, distance, and other barriers between a person at risk and the most lethal means can make the difference between life and death (WSDOH, 2016).

Intervening at Suicide Hotspots

Suicide hotspots include tall structures such as bridges, cliffs, balconies, rooftops, railway tracks, and isolated locations such as parks. Efforts to prevent suicide at these locations include erecting barriers or limiting access to prevent jumping and installing signs and telephones to encourage individuals who are considering suicide to seek help (Stone et al., 2017).

An examination of the impact of suicide hotspot interventions implemented both in the U.S. and abroad, found associated reduced rates of suicide. For example, after erecting a barrier on the Jacques-Cartier Bridge in Canada, the suicide rate for jumping from the bridge decreased from about 10 suicide deaths per year to about 3 deaths per year. The reduction in suicides by jumping was sustained even when all bridges and nearby jumping sites were considered, suggesting little to no displacement of suicides to other jumping sites. Further evidence for the effectiveness of bridge barriers was demonstrated by a study examining the impact of the removal of safety barriers from the Grafton Bridge in Auckland, New Zealand (see box) (Stone et al., 2017).

A great number of suicides are often limited to a few structures. At these hotspots, substantial suicide preventive effects can be achieved by a few prevention efforts. Most interventions for suicide prevention on bridges are of a structural nature (Hemmer et al., 2017).

An Australian study of looked at the cost effectiveness of installing barriers at 7 bridges and 19 cliff sites. Researchers found that the cost of installing barriers was both cost-effective and an effective strategy for suicide prevention. Barriers at bridge sites were associated with an 84% decrease in suicides, while a reduction in suicides was noted at several of the cliff sites (Bandara et al., 2022).

Unintended Consequences—The Grafton Bridge, Auckland, New Zealand

Safety barriers to prevent suicide by jumping were removed from Grafton Bridge in Auckland, New Zealand, in 1996 after having been in place for 60 years. The barriers were reinstalled in 2003. A study compared mortality data for suicide deaths for three time periods:

- 1991–1995 (old barrier in place)
- 1997–2002 (no barriers in place)
- 2003–2006 (new barriers in place)

Removal of barriers was followed by a **fivefold increase** in the number and rate of suicides from the bridge. Since the reinstallation of barriers, there have been no suicides from the bridge. This natural experiment shows that safety barriers are effective in preventing suicide: their removal increases suicides; their reinstatement prevents suicides.

Source: Harvard School of Public Health, 2017.

Did You Know. . .

The Aurora Bridge in Seattle had the second highest suicide death toll in the United States (behind the Golden Gate Bridge). In 2006 emergency call boxes and signs with a suicide hotline number were installed on the bridge. Suicides continued to occur at an average of about five per year until a fence was installed in 2011. In the 18 months afterward, only one suicide occurred (Draper, 2017).



Outside view visualization of the Aurora Bridge Fence suicide barrier in Seattle prior to its construction in 2010. Source: Washington State Department of Transportation.

Although blocking access roads to hotspots can deter suicide jumps, this is not a practical measure for most bridges. Although there is evidence that the number of suicides by carbon monoxide poisoning in public parking lots has been reduced by installing aid signs, no studies exist that evaluate the effectiveness of aid signs as the sole intervention when used on bridges or other jumping sites, although they are widely installed. However, when emergency helpline phones are directly available on bridges, they are used on a regular basis (Hemmer et al., 2017).

Promoting Safe Storage Practices

Safe storage of medications, firearms, and other household products can reduce the risk for suicide by separating vulnerable individuals from easy access to lethal means. Such practices may include education and counseling around storing firearms locked in a secure place (eg, a gun safe, lock box), unloaded and separate from the ammunition; and keeping medicines in a locked cabinet or other secure location away from people who may be at risk or who have made prior attempts (Stone et al., 2017).

In a case-control study of firearm-related events identified from 37 counties in Washington, Oregon, and Missouri, and from five trauma centers, researchers found that storing firearms unloaded, separate from ammunition, in a locked place or secured with a safety device was protective of suicide attempts among adolescents. Further, a recent systematic review of clinic and community-based education and counseling interventions suggested that the provision of safety devices significantly increased safe firearm storage practices compared to counseling alone or compared to the provision of economic incentives to acquire safety devices on one's own (Stone et al., 2017).

Locking Devices for Handguns and Other Firearms



Source: Kingcounty.gov.

Policy-Based Strategies to Reduce Suicide

Like most public health problems, suicide is preventable. Progress continues to be made and evidence for numerous programs, practices, and policies exists. Just as suicide is not caused by a single factor, reductions in suicide will not be prevented by any single strategy or approach. Rather, suicide prevention is best achieved by a focus across the individual, relationship, family, community, and societal-levels and across all sectors, private and public (Stone et al., 2017).

National suicide prevention programs (NSPP) were initiated in the 1990s aiming to take a holistic approach to combat suicide. Prevention programs are designed to identify vulnerable groups, reduce stigma, improve the assessment and care of people with suicidal behavior, and improve surveillance and research. They also aim to raise awareness by improving public education (Lewitzka et al., 2019).

Policy-based strategies that restrict access to lethal means have led to positive results. There is strong evidence that restricting the availability of methods (e.g., firearms) can reduce suicides (Lewitzka et al., 2019). Limiting access to suicide methods such as carbon monoxide has resulted in decreases in suicide by carbon monoxide. Restriction of other suicide methods has also shown positive results. The implementation of enhanced restrictions to purchase firearms in the District of Columbia led to reductions in firearm-related suicides (Hassamal et al., 2015).

Policy measures to restrict access to lethal means can include (1) complete removal of a lethal method, (2) reducing the toxicity of a lethal method, for example, reducing carbon monoxide content emissions from vehicles, (3) interfering with physical access, (4) enhancing safety by encouraging at-risk families to remove lethal suicide means from the home, or (5) reducing the appeal of a lethal method by, for example, changing the perception of hanging as a quick and painless death (Hassamal et al., 2015).

Evidence for means restriction has come from situations in which a universal approach was applied to the entire population. For example, the detoxification of domestic gas in the United Kingdom and discontinuation of highly toxic pesticides in Sri Lanka were universal measures associated with 30% and 50% reductions in suicide, respectively (HHS, 2012, latest available).

7. Management of Suicide Risk

Because risk occurs on a continuum, assessment, management, and referrals are different for each situation. Identifying at-risk individuals, accessing services, and relying on evidence-based care remain key challenges. Simply improving or expanding services does not guarantee that services will be used, nor will it necessarily increase the number of people who follow recommended referrals or treatment (Stone et al., 2017).

For people who survive a suicide attempt, the period after an emergency department visit is a time of high risk. Subsequent suicide attempts can be reduced by engaging patients in treatment and providing followup services. Adults who receive medical care immediately after a suicide attempt are more likely to receive mental health treatment compared to those who did not receive medical care (Crane, 2016).

Actions and Referrals for Various Levels of Risk

A person with high risk may be in danger of acting on suicidal impulses when they experience some “last straw,” some unbearable insult or burden that seems to make life unlivable. When in this state of mind, external controls may be needed to prevent a suicidal act. Some intervention may become necessary, such as restricting access to the means of completing a suicidal act. This may prevent a fatal act but does not necessarily resolve the suicidal impulse or crisis (DVA/DOD, 2019).

- **High acute risk** for suicidal ideation and behavior includes patients with serious thoughts of suicide, a plan, a recent suicide attempt, preparatory behaviors, acute major mental illness, or exacerbation of a personality disorder. In such cases, direct observation and monitoring is critical before arranging immediate transfer for psychiatric evaluation or hospitalization (DVA/DOD, 2019).

High-risk patients may require inpatient care, which offers an increased level of supervision and higher intensity of care. Those at intermediate and low acute risk may be referred to an outpatient care setting. With appropriate support and safety plans, lower risk patients may be able to be followed up in the community (DVA/DOD, 2019).

- **Intermediate acute risk** includes patients with suicidal ideation and a plan but with no intent. These individuals may present similarly to those at high acute risk, sharing many of the features. The only difference may be lack of intent, based upon an identified reason for living (e.g., children), and ability to abide by a safety plan and maintain their own safety. Preparatory behaviors are likely to be absent (DVA/DOD, 2019).

Patients at this level of risk should be evaluated by a behavioral health provider, which includes treatment of co-occurring mental health conditions. Psychiatric hospitalization may be needed if related risk factors are responsive to inpatient treatment (e.g., acute psychosis). Outpatient management of suicidal thoughts or behaviors should be intensive and include frequent contact, regular re-assessment of risk, and a well-designed safety plan (DVA/DOD, 2019).

- **Low acute risk** patients are those with recent suicidal ideation who have no current suicidal intent, no current or specific suicidal plan, no recent preparatory behaviors, and high confidence that the patient and family can maintain safety. Individuals may have suicidal ideation, but it will be with little or no intent or specific current plan (DVA/DOD, 2019).

If a plan is present, the plan is general or vague, and without any associated preparatory behaviors (e.g., “I’d shoot myself if things got bad enough, but I don’t have a gun”). These patients are capable of using appropriate coping strategies and are willing and able to utilize a safety plan in a crisis situation (DVA/DOD, 2019).

Low acute risk patients can be managed in primary care. Outpatient mental health treatment may also be indicated, particularly if suicidal ideation and co-occurring conditions exist (DVA/DOD, 2019).

| Essential Features of Acute Risk | | |
|-----------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Risk of suicide attempt | Essential Features | Action |
| High acute risk | <ul style="list-style-type: none"> • Suicidal ideation with intent to die by suicide • Inability to maintain safety, independent of external support/help • Common warning signs: <ul style="list-style-type: none"> ○ A plan for suicide ○ Recent attempt and/or ongoing preparatory behaviors ○ Acute major mental illness (e.g., major depressive episode, acute mania, acute psychosis, recent/current drug relapse) ○ Exacerbation of personality disorder (e.g., increased borderline symptomatology) | <ul style="list-style-type: none"> • Typically requires psychiatric hospitalization to maintain safety and aggressively target modifiable factors • These individuals may need to be directly observed until they are transferred to a secure unit and kept in an environment with limited access to lethal means (e.g., keep away from sharps, cords or tubing, toxic substances) • During hospitalization co-occurring conditions should also be addressed |
| Intermediate acute risk | <ul style="list-style-type: none"> • Suicidal ideation to die by suicide • Ability to maintain safety, independent of external support/help <p>These individuals may present similarly to those at high acute risk, sharing many of the features. The only difference may be lack of intent, based upon an identified reason for living (e.g., children), and ability to abide by a safety plan and maintain their own safety. Preparatory behaviors are likely to be absent.</p> | <ul style="list-style-type: none"> • Consider psychiatric hospitalization, if related factors driving risk are responsive to inpatient treatment (e.g., acute psychosis) • Outpatient management of suicidal thoughts and/or behaviors should be intensive and include: frequent contact, regular re-assessment of risk, and a well-articulated safety plan • Mental health treatment should also address co-occurring conditions |

| Essential Features of Acute Risk | | |
|----------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Risk of suicide attempt | Essential Features | Action |
| Low acute risk | <ul style="list-style-type: none"> • No current suicidal intent AND • No specific and current suicidal plan AND • No recent preparatory behaviors AND • Collective high confidence (e.g., patient, care provider, family member) in the ability of the patient to independently maintain safety <p>Individuals may have suicidal ideation, but it will be with little or no intent or specific current plan. If a plan is present, the plan is general and/or vague, and without any associated preparatory behaviors (e.g., "I'd shoot myself if things got bad enough, but I don't have a gun").</p> <p>These patients will be capable of engaging appropriate coping strategies, and willing and able to utilize a safety plan in a crisis situation.</p> | <ul style="list-style-type: none"> • Can be managed in primary care • Outpatient mental health treatment may also be indicated, particularly if suicidal ideation and co-occurring conditions exist |

Source: DVA/DOD, 2019

Although suicidal ideation with serious intent to die is a clinical emergency, there is little or no evidence-based treatment on how to manage it. Interprofessional clinical practice guidelines for suicide prevention, assessment, and management of suicidal thoughts and behaviors show tremendous variations from one guideline to the next (Harmer et al., 2022).

A gap in all the guidelines—except the DOD/DVA guideline—is the lack of inclusion of patient-driven safety plans to identify supports, resources, and coping strategies. Another gap in most guidelines is the omission of outpatient intervention safety strategies such as restricting access to lethal means (Harmer et al., 2022).

Continuity of care is a critical part of management and is often lacking. Effective clinical care includes monitoring patients for a suicide attempt after an ED visit or hospitalization and providing outreach, mental health follow-up, therapy, and case management.

Improving Access to Mental Health Services

Effective management of mental health conditions (particularly major depression) can reduce the risk of suicide. Intervention and treatment should be direct and specific and include improving access to mental health services, counseling, and other psychosocial services, encouraging use of crisis lines, and pharmacologic interventions. (DVA/DOD, 2019).

Unfortunately, although most Washingtonians have some form of health insurance, nearly half of the population faces barriers to healthcare services because of geography and income challenges. Limited access to transportation as well as difficulty accessing physical and behavioral healthcare services increases risk and reduces community integration and wellbeing (WSDOH, 2016).

Mental Health Professional Shortage Areas

About 75% of Washington State is considered a Mental Health Professional Shortage Area by federal standards. More than 90% of the state is eligible for federal funding to recruit and retain primary care providers.

Affordable and accessible mental and general healthcare is critical to reducing suicide.

Source: WSDOH, 2016.

The way behavioral healthcare is provided in Washington is changing rapidly under the *Healthier Washington Initiative*. Legislation has been passed directing the state to integrate the payment and delivery of physical and behavioral health services under Medicaid. Chemical dependency services have been available under managed care since 2016 (WSDOH, 2016).

In Washington State, Apple Health offers managed care plans in all regions statewide. The plan coordinates physical health, mental health, and substance use disorder treatment services to provide whole-person care under one health plan (WSHCA, 2022).

Apple Health offers Behavioral Health Services Only (BHSO) plans in all regions with integrated managed care. In addition to integrated managed care plans, clients in integrated regions have access to a regional Behavioral Health—Administrative Services Organization (BH-ASO). These organizations administer services such as:

- 24/7 regional crisis hotline for mental health and substance use disorder crises
- Mobile crisis outreach teams
- Short-term substance use disorder crisis services for individuals who are intoxicated or incapacitated in public
- Application of behavioral health involuntary commitment statutes, available 24/7 to conduct Involuntary Treatment Act (ITA) assessments and file detention petitions
- Regional Ombuds services (WSHCA, 2022)

Within available funding, a Behavioral Health/Administrative Services Organization also has the discretion to provide outpatient behavioral health services or voluntary psychiatric inpatient hospitalizations for individuals who are not eligible for or enrolled in Apple Health (WSHCA, 2022).

Continuity of Care

Because a variety of healthcare providers, friends, and family members may be associated with the care of a person at risk for suicide, continuity of care is critical. Maintaining continuity across facilities and providers may be helped by electronic medical records; however, not everyone has access to this information. A confounding factor is that mental health information has higher levels of consent for accessing records.

Continuity of care is often interrupted when patients who are or have been at risk for suicide transition between care facilities or between other health systems or provider organizations. Patients have reported frustration with seeing multiple providers, both within a treatment facility due to provider availability and across locations due to frequent travel, resulting in decreased continuity of care (DVA/DOD, 2019).

Potential discontinuities can occur when a patient transitions from:

- Primary care to behavioral health
- Emergency department to ambulatory care
- Inpatient units to other settings such as nursing homes, rehabilitation, or other residential treatment settings
- Nursing homes and residential care units to ambulatory services

Continuity of care is improved during transitions when providers directly contact other providers and schedule followup appointments. Transition support services (such as telephone or telehealth contact with behavioral health providers) can improve continuity of care and prevent delays in followup services (DVA/DOD, 2019).

Continuity of care following a suicide attempt should leave the patient with a feeling of connectedness. Strategies may include telephone reminders of appointments, providing a “crisis card” with emergency phone numbers and safety measures, and sending a letter of support. Motivational counseling and case management can also be used to promote adherence to the recommended treatment (HHS, 2012, latest available).

8. Psychosocial Interventions

Many types of psychosocial interventions are beneficial for individuals who are experiencing suicidal ideation or behaviors. Psychotherapy is one type of psychosocial intervention that has been shown to reduce suicide risk. It can help people learn new ways of dealing with stressful experiences, recognize patterns of thinking, and identify alternative actions when thoughts of suicide arise.

Psychotherapy usually takes place in a one-on-one or group format and can vary in duration from several weeks to ongoing therapy, as needed. Treatment that employs collaborative and integrated care can engage and motivate patients, increasing retention in therapy and decreasing suicide risk (Stone et al., 2017). Other psychosocial interventions are described in the following case.

The Importance of Therapy: Terry

Background

On the morning of December 25, 2000, Terry Wise tried to kill herself by taking an overdose of Tylenol. She awoke two days later in the intensive care unit.

Assessment in the ICU

In the ICU, Terry received an evaluation from a social worker. Terry reported that the death of her husband from Lou Gehrig's disease was a trigger for her suicide attempt. She said she felt lost, didn't know what to do, and found no joy in living.

During this initial assessment, Terry admitted that her attempt was the culmination of years of depression and other problems that started in her childhood. She said she was overwhelmed by an intense emotional pain that had been building for years, and when her husband died the pain became unbearable.

Discussion

Certain groups have higher suicide attempt or completion rates than the general population. Terry has likely been living with clinical depression most of her adult life. Along with this suicide attempt, the death of her husband and her stated history of depression, Terry was at increased risk for self-harm.

What Actions Should You Take?

A previous suicide attempt is known to be a strong predictor of future attempts and deaths by suicide. Once Terry is ready to be released from the ICU, what will help her the most?

- Encouraging her to start dating again.
- Admitting her to a psychiatric hospital for a short time against her will.
- Making sure she doesn't have access to a gun.
- Referral to mental health services, counseling, and pharmaceutical treatments.

Correct answer: d

Mental Health Services

Terry agreed to start therapy, and ultimately it changed her life. By working with a counselor, Terry realized that the trauma she experienced when she was younger still affected her emotions as an adult. Her counselor helped her find ways to cope with her feelings.

Therapy also allowed her to see how others would have reacted to her death by suicide. Most important, Terry's therapist trusted and respected her, and for Terry, her therapist's compassion made a huge difference.

Bottom Line

It is important that Terry's intervention and treatment be direct and specific to address potential risk factors. Effective management of mental health conditions (particularly major depression) can reduce the risk of suicide and may decrease suicide rates.

Terry's recovery was a process. It took time and hard work. She recalls: "And that is really the first step, to go from feeling that life is an endurance test to being able to tolerate being alive. And then you hope that the unendurable becomes bearable. Then you hope the bearable becomes manageable. Then you hope the manageable becomes pleasurable. And so, it's a process. It evolved over time."

Source: Adapted from the National Suicide Prevention Lifeline

Cognitive Behavioral Therapy for Suicide Prevention (CBT-SP)

Cognitive Behavior Therapy for Suicide Prevention (CBT-SP) is aimed at preventing suicide re-attempts. It uses a “risk-reduction, relapse prevention” approach, which includes an analysis of risk factors and stressors leading up to and following the suicide attempt. This approach also includes development of a safety plan, skill building, and education. CBT-SP supports families, focusing on communication patterns as well as on improving the family’s problem-solving skills (Stone et al., 2017).

The early phase of treatment focuses on treatment engagement, risk assessment, and crisis management. During the intermediate phase, behavioral strategies are implemented to help the patient develop cognitive, behavioral, and affective copings skills. This can include relaxation training, activity monitoring, and increasing social resources. Cognitive strategies modify unhelpful beliefs associated with the risk of triggering a suicidal crisis (USU, Nd).

The final phase includes relapse prevention exercises that consolidate skills learned during therapy. These exercises use guided imagery, in which the patient is directed to implement skills learned during therapy. Once the patient is able to generalize these skills, a debriefing and summary is completed. At this time, the provider conducts a risk assessment and offers additional treatment session or referrals as indicated (USU, Nd).

Dialectical Behavioral Therapy (DBT)

Dialectical Behavioral Therapy (DBT) is for individuals at high risk for suicide and who may struggle with impulsivity and emotional regulation issues. DBT includes individual therapy, group skills training, between-session telephone coaching, and a therapist consultation team (Stone et al., 2017).

DBT has also been shown to reduce the rate of suicide among people with borderline personality disorder, a mental illness characterized by unstable moods, relationships, self-image, and behavior. A therapist trained in DBT can help a person recognize when his or her feelings or actions are disruptive or unhealthy, and teach the skills needed to deal better with upsetting situations.

Improving Mood—Promoting Access to Collaborative Treatment (IMPACT)

The *Improving Mood—Promoting Access to Collaborative Treatment (IMPACT)* program aims to prevent suicide among older primary care patients by reducing suicide ideation and depression. IMPACT facilitates the development of a therapeutic alliance, a personalized treatment plan that includes patient preferences, as well as proactive followup (biweekly during an acute phase and monthly during continuation phase) by a depression care manager. The program has been shown to significantly improve quality of life, and to reduce functional impairment, depression, and suicidal ideation over 24 months of followup relative to patients who received care as usual (Stone et al., 2017).

Collaborative Assessment and Management of Suicidality (CAMS)

Collaborative Assessment and Management of Suicidality (CAMS) is a flexible therapeutic approach for suicide-specific assessment and treatment. The program involves the clinician and patient working together to develop a patient-specific treatment plan. Sessions involve constant patient input about what is (and is not) working with the goal of enhancing the therapeutic alliance and increasing treatment motivation (Stone et al., 2017).

CAMS has been tested and supported in six correlational studies, in a variety of inpatient and outpatient settings. A feasibility trial with a community-based sample of suicidal outpatients randomly assigned to CAMS or enhanced care as usual (intake with a psychiatrist or psychiatric nurse practitioner followed by 1 to 11 visits with a case manager and medication as needed) found better treatment retention among the CAMS group and significant improvements in suicidal ideation, overall symptom distress, and feelings of hopelessness at the 12-month followup (Stone et al., 2017).

Attachment-Based Family Therapy (ABFT)

Attachment-Based Family Therapy (ABFT) is a program for adolescents aged 12 to 18 designed to treat clinically diagnosed major depressive disorder, eliminate suicidal ideation, and reduce anxiety. In one study, suicidal adolescents receiving ABFT experienced significantly greater improvement in suicidal ideation over 24 weeks of followup than did adolescents assigned to enhanced usual care. Additionally, a significantly higher percentage of ABFT participants reported no suicidal ideation in the week prior to assessment at 12 weeks and again at 24 weeks than did adolescents receiving enhanced usual care (Stone et al., 2017).

Gatekeeper Training

Gatekeeper training—also called “recognition and referral training”—helps people without formal psychosocial training play a critical role in suicide prevention. It teaches educators, coaches, clergy, emergency responders, primary and urgent care providers, and others in the community to identify people who may be at risk of suicide (WSDOH, 2016).

Gatekeeper training provides information on how to respond, including encouraging the at-risk person to seek treatment and support services. Research shows that many at-risk people turn to family or friends for help. They often show warning signs that family and friends may notice first. An at-risk person benefits from an informed support network ready to connect them to the right help (WSDOH, 2016).

A Note on Language

Training on recognizing a person at risk and connecting them to an appropriate resource is often called *gatekeeper training*. In some communities, the word *gatekeeper* is a reminder of people and systems that create barriers to getting help. Instead, the Washington State Department of Health recommends the term **Recognition and Referral (R&R)** training.

Source: WSDOH, 2016.

The *Applied Suicide Intervention Skills Training* (ASIST) program helps hotline counselors, emergency workers, and other gatekeepers identify and connect with suicidal individuals and direct them to available resources. Researchers have found that callers who spoke with ASIST-trained counselors were significantly more likely to feel less depressed, less suicidal, less overwhelmed, and more hopeful by the end of their call, compared to callers who spoke to non-ASIST trained counselors. Counselors trained in ASIST were also more skilled at keeping callers on the phone longer and establishing a connection with them (Stone et al., 2017).

Gatekeeper training has been a primary component of the *Garret Lee Smith (GLS) Suicide Prevention Program*, which has been implemented in 50 states and 50 tribes. A multi-site evaluation assessed the impact of community gatekeeper training on suicide attempts and deaths by comparing the change in suicide rates and nonfatal suicidal behavior among young people aged 10 to 24 in counties implementing GLS trainings. This was compared to similar counties that did not implement these trainings (Stone et al., 2017).

Counties that implemented GLS trainings had significantly lower youth suicide rates one year following the training implementation. Counties implementing GLS program activities also had significantly lower suicide attempt rates among youth ages 16 to 23 in the year following implementation of the GLS program than did similar counties that did not implement GLS activities. More than 79,000 suicide attempts may have been prevented during the period examined (Stone et al., 2017).

988 Crisis Line

Crisis intervention programs provide support and referral services, typically by directing a person in crisis (or a friend or family member of someone at risk) to trained volunteers or professional staff via telephone hotline, online chat, text messaging, or in person. The *National Suicide Prevention Lifeline* (now known as the *988 Suicide & Crisis Lifeline*) and is now active across the United States.

The *988 Suicide & Crisis Lifeline* is made up of an expansive network of over 200 local and state funded crisis centers located across the United States. The counselors at these local crisis centers answer calls and chats from people in distress every day. The Lifeline's crisis centers provide the specialized care of a local community with the support of a national network.



Source: SAMHSA, 2022.

In an evaluation of the effectiveness of the *National Suicide Prevention Lifeline* to prevent suicide, more than 1,000 suicidal individuals who called the hotline completed a standard risk assessment for suicide. Researchers found that over half of the initial sample had a plan for their suicide when they called (Stone et al., 2017).

Among 380 followup participants, there was a significant decrease in psychological pain, hopelessness, and intent to die between initiation of the call (time 1) to followup (time 3). Between time 2 (end of the call) to time 3, the effect remained for psychological pain and hopelessness, but was not significant for intent to die, suggesting that greater effort at outreach during and following the call is needed for callers with high levels of suicide intent (Stone et al., 2017).

9. Pharmacological Treatments

Primary care physicians, nurse practitioners, and other healthcare providers play an important role in the assessment and management of suicide risk. It is estimated that 75% of individuals who die by suicide are in contact with a primary care physician in the year before their death, and nearly half within one month of their death. Only 20% of these patients saw a mental health professional in the preceding month (HHS, 2012, latest available).

Treatment can include medications, addressing substance use disorders, and developing and monitoring a safety plan. Pharmacologic treatment may be helpful in managing underlying mental disorders and the danger of repeated or more dangerous self-directed violence.

All medications (prescription drugs, over-the-counter medications, and supplements) used by patients at risk for suicide should be reviewed. When prescribing drugs to people who are at risk for self-harm, consider the toxicity of prescribed drugs, limit the quantity dispensed or available, and identify another person who is willing to be responsible for securing access to medications (DVA/DOD, 2019).

Proper treatment of depression, bipolar disorder, and borderline personality disorder is essential. This can include selective serotonin uptake inhibitors, serotonin-norepinephrine reuptake inhibitors, tricyclic antidepressants, lithium, or antipsychotics (Harmer et al., 2022). Individuals who have psychiatric and substance use problems should receive psychosocial interventions along with medication.

The only two evidence-based medications that have been shown to lower suicidal behaviors are lithium and clozapine. However, these medications do not reach therapeutic levels immediately. Anxiolytics, sedative/hypnotics, and short-acting antipsychotic medications may be used to directly address agitation, irritability, psychic anxiety, insomnia, and acute psychosis, until such time as a behavioral health assessment can be made. The amount and type of medication must be carefully chosen and titrated when the individual is deemed to be under the influence of alcohol, illicit substances, or other medication in prescribed or overdose amounts.

Lithium

Lithium, which is an effective mood stabilizer, is approved for the treatment of mania and the maintenance treatment of bipolar disorder. Mood stabilizers are used primarily to treat bipolar disorder, mood swings associated with other mental disorders, and, in some cases, to augment the effect of other medications used to treat depression. Several cohort studies have described the anti-suicide benefits of lithium for individuals on long-term maintenance. (NIMH, 2022, June).

A large systematic review sought to determine the efficacy of lithium versus other active treatments or placebo in preventing suicide in patients with unipolar or bipolar mood disorders over a range of 4 to 48 months. Rates of suicide were statistically significantly lower with lithium than with placebo (D'Anci et al., 2019).

The life expectancy of patients with bipolar disorder is reduced by about 10 years compared to the general population and the mortality gap seems to be increasing rather than decreasing over the years. A major cause of death is suicide, which is around 20–30-fold more frequent than in the general population. Around 25–50% of patients with bipolar disorder attempt suicide at some point in their life and around 15% of patients die of suicide. The prevention of suicides is therefore a pivotal goal in the treatment of bipolar disorder (Volkman et al., 2020).

Lithium has been associated with a reduced suicide risk in patients with affective disorders including bipolar disorder. Long-term studies suggest a strong suicide-preventing effect with suicides being 82% less frequent during lithium treatment. The studies supporting this suicide-preventing effect often include observational data, however, which are prone to bias (Volkman et al., 2020).

Lithium treatment is likely to be introduced when patients are at their worst, followed by a period of improvement. The increase in suicide risk after discontinuation of lithium treatment may be due to rebound depression or withdrawal effects. Additionally, patients may stop their lithium medication because their health is deteriorating, while continuously adhering to their medication when they are doing well (Volkman et al., 2020).

Antidepressants

Suicide is strongly associated with poor mental health, especially mood disorders. Antidepressants are the most common treatment for mood disorders, but effective use of these medications requires administration to patients who have been properly diagnosed and then adequately followed up. The importance of improving primary care management of patients experiencing depression cannot be overemphasized.

The use of antidepressants has been shown to reduce the risk of suicide among patients with mood disorders. However, for many years the potential for antidepressants to increase the risk of suicide in certain groups of depressed patients has been debated. Younger patients (< 25 years) who have borderline personality disorder or do not respond to treatment with antidepressants may have an increased potential risk for suicidal ideation, and careful monitoring and close follow-up is necessary when prescribing these drugs (Cato et al., 2019).

Although depressive symptoms are often associated with risk for suicide, no antidepressant medication has yet to be shown to lower suicide risk in depressed patients. However, because of the relationship between low cerebral spinal fluid serotonin levels and the emergence of aggression and impulsivity, the selective serotonin reuptake inhibitors (SSRIs) have been recommended for the treatment of depressive disorders when suicidal risk is present. Treatment with SSRIs must be carefully monitored and managed during the initial treatment phase because of the potential for the possible emergence of suicidal ideation and behaviors during this time. The FDA has recently created a black box warning when prescribing SSRIs for persons under the age of 25.

Antidepressants Used to Treat Suicidal Ideation and Behavior

- Antidepressants may benefit suicidal behavior in patients with mood disorders. Treatment for the underlying cause should be optimized according to evidence-based guidelines for the respective disorder.
- Young adults (18–24) started on an antidepressant for treatment of depression or another psychiatric disorder should be monitored and observed closely for emergence or worsening of suicidal thoughts or behaviors during the initiation phase of treatment.
- Patients of all age groups who are managed with antidepressants should be monitored for emergence or worsening of suicidal thoughts or behaviors after any change in dosage.
- When prescribing antidepressants for patients at risk for suicide, pay attention to the risk of overdose and limit the amount of medication dispensed and refilled.

Source: DVA/DOD, 2019.

Antipsychotics

Clozapine

Clozapine (marketed as Clozaril, Fazacllo ODT, Versacloz and generics) is an atypical antipsychotic medicine used to treat schizophrenia in patients whose symptoms are not controlled with standard antipsychotic drugs. Clozapine is also used in patients with recurrent suicidal behavior associated with schizophrenia or schizoaffective disorder (FDA, 2021, November 26).

While clozapine is beneficial for some patients, there are risks associated with this drug. Specifically, clozapine can lead to agranulocytosis, which decreases the number of neutrophils, a type of white blood cell, that function in the body to fight off infections. When neutrophils are significantly decreased, severe neutropenia may result, and the body may become prone to infections. For this reason, patients taking clozapine need to have their absolute neutrophil count (ANC) monitored on a regular basis. This monitoring requirement serves as the basis for the Clozapine Risk Evaluation and Mitigation Strategy (REMS)* (FDA, 2021, November 26).

* The Clozapine REMS Program ensures optimal patient monitoring for and management of clozapine-induced severe neutropenia, providing a centralized system for prescribers and pharmacists in managing patient risk, regardless of which clozapine product is being used.

The REMS program requires frequent visits to healthcare providers for monitoring laboratory results before dispensing medication refills. Because of significant risks associated with clozapine, it is most often used as the antipsychotic of last resort. Repeated blood draws on a weekly basis are inconvenient and may also cause pain and discomfort. Some patients may be unwilling to commit to the level of monitoring and blood draws required for the program. Other significant adverse effects of the medication include weight gain, lipid abnormalities, sialorrhea*, somnolence, and the rarely occurring but serious adverse events of myocarditis and cardiomyopathy (DVA/DOD, 2019).

***Sialorrhea:** excessive salivation, drooling.

Key Point about Clozapine

To date, clozapine is the only medication with a specific U.S. Food and Drug Administration indication for reducing the risk of recurrent suicidal behavior in patients with schizophrenia or schizoaffective disorder.

Source: NIH, 2021, August

Long-Acting Injectable Antipsychotics (LAI)

For patients with schizophrenia, findings suggest that LAI use in patients with newly diagnosed schizophrenia is associated with decreased all-cause mortality and suicide risk. Early treatment with LAIs within the first 2 years of oral antipsychotic initiation was associated with a decrease in suicide mortality risk. LAI use in the early stage of treatment should be actively considered for patients with newly diagnosed schizophrenia (Huang et al., 2021).

Antiepileptics

Patients started or who are managed with antiepileptics should be *monitored for changes in behavior* and the emergence of suicidal thoughts. There is no evidence that antiepileptics are effective in reducing the risk of suicide in patients with a mental disorder (DVA/DOD, 2019).

Antianxiety Agents

Anxiety is a significant and modifiable risk factor for suicide and the use of anti-anxiety agents may have the potential to decrease this risk. Suicidal ideation can be triggered by painful or chronic conditions, anxiety, insomnia, or adverse reactions to medications (Harmer et al., 2022).

Benzodiazepines are indicated for use in patients with sleep disorders, anxiety and affective disorders, delirium, alcohol withdrawal, and aggressive and violent behaviors during psychosis. However, there is a lack of agreement on how sedatives such as benzodiazepine should be used and the role they should play in the treatment of psychiatric disorders (Cato et al., 2019).

Another problem, particularly with regard to the use of benzodiazepines, is that patients may exceed the recommended duration of use. Short-term use (not exceeding 4 weeks) has shown a largely positive risk/benefit ratio, and some studies have shown that benzodiazepine may even have a suicide preventative effect if taken under the right circumstances (Cato et al., 2019).

Benzodiazepines can lower anxiety and reduce insomnia. However, other studies suggest that benzodiazepines are associated with an increased risk of suicidal behavior. Therefore, previous studies have shown mixed results, with symptom relief and a decrease in suicide risk being evident in some cases, but an increase in the risk of suicide in other cases (Cato et al., 2019).

Factors associated with fatal outcomes appear to vary and may be both patient-related and prescriber-related. The impact of benzodiazepines on suicide risk remains uncertain, and further research is required (Cato et al., 2019).

10. Patients with Substance Use Disorders (SUD)

Clients in substance abuse treatment should be screened for suicidal thoughts and behaviors *routinely* during intake and at specific points during treatment. For this approach to be effective, providers must implement a treatment plan and coordinate the plan with other providers and with their clients and family members. For this to be effective:

- Make sure referral appointments are kept
- Be empathic and nonjudgmental
- Understand how your own attitudes and experiences impact your clients
- Understand ethical and legal principles as well as potential areas of conflict (CSAT, 2017)

Abstinence should be a primary goal for every client with a substance use disorder and suicidal thoughts or behaviors. For most clients, abstinence reduces risk, although some individuals remain at risk even after achieving this goal. These can include clients experiencing independent depression or unresolved difficulties that promote suicidal thoughts. It can also include:

- Clients with a personality disturbance such as borderline personality disorder
- People with trauma histories such as sexual abuse history
- Individuals with a major psychiatric illness (CSAT, 2017)

In a review of men and women who received care in 8 large integrated healthcare systems spanning a variety of regions across the U.S., results suggested that SUDs are associated with significantly increased risk of suicide even after adjusting for other factors that are known to increase risk of suicide, such as psychiatric conditions or physical health comorbidity (Lynch et al., 2020).

Researchers also examined the association of SUDs with risk of suicide for males and females separately. The results indicated that all categories of SUD are associated with significantly increased risk of suicide for both males and females although men were more likely than women to have died from suicide. Having multiple SUDs was associated with significantly greater risk of suicide mortality than any of the other SUD categories (Lynch et al., 2020).

To improve outcomes, co-occurring mental disorders associated with suicidal thoughts and behaviors should be assessed and treated. The most common risk factors are:

1. Depression
2. Anxiety disorders
3. Severe mental illness
4. Personality disorders
5. Anorexia nervosa (SAMSHA, 2021)

Individuals at acute risk for suicidal behavior who appear to be under the influence of alcohol or other drugs, either based on clinical presentation or objective data (breath or laboratory tests), should be maintained in a secure setting until intoxication has resolved. Risk assessment needs to be repeated once the patient is sober to determine appropriate next steps. Risk management options include, but are not limited to, admitting the patient for inpatient hospital care, making a referral for residential care, detoxification, ambulatory care, or scheduling outpatient followup (DVA/DOD, 2019).

Unintentional vs. Intentional Overdose

The continuum of suicidal behavior includes death wishes, suicidal ideation, suicidal attempt, and suicide. Suicidal ideation is the best predictor of an attempt and subsequently attempt is a predictor of suicide. Attempters who show persistent suicidal ideation with high intent to die are at high risk of re-attempting suicide (Rezapur-Shahkolai et al., 2020).

Suicidal intent is an important factor contributing to suicide and defined as the desire for death and suicide attempt. The degree of suicide intention can predict the method used and the lethality of suicide attempts. The level of suicidal intent is a powerful predictor of death from attempted suicide (Rezapur-Shahkolai et al., 2020).

The possibility that an overdose was *intentional* should always be considered. Differentiating between unintentional and intentional overdose is generally straightforward in patients who are forthcoming. However, many patients will insist an overdose was **not** intentional even if it was.

Risk factors for suicide attempt (compared to unintentional overdose) include female sex, comorbid depression, interpersonal distress or disruption, and use of substances other than one's drug of choice. Prior suicide attempts also increase the likelihood that a recent overdose event was intentional.

A risk factor for *unintentional* overdose is a recent loss of tolerance, for example due to incarceration or detoxification. Individuals using recreational drugs with high potential for miscalculation are more likely to experience unintentional overdose. Obtaining additional information from sources such as family members, treatment providers, and medical records, can be invaluable in making the determination between intentional and unintentional overdose (DVA/DOD, 2019).

Although not typical, there are instances when intentionality is unclear or ambiguous even among substance abusers who are forthcoming, for example a case where the individual was experiencing suicidal ideation and overdosed but appeared not to have intended to attempt suicide, or when a distressed person knowingly pushed the limits of dosage and stated “I didn’t care if I lived or died” but seemed to have no clear agenda for suicides.

Coordinating Services for Patients with SUDs

All patients at acute risk for suicide who are under the influence of drugs or alcohol should be evaluated in an urgent care setting and be kept under observation until they are sober. They should be reassessed for risk for suicide when no longer acutely intoxicated, demonstrating signs or symptoms of intoxication, or experiencing acute withdrawal (DVA/DOD, 2019).

Intoxicated or psychotic patients who are unknown to the clinician and who are suspected to be at acute risk for suicide should be transported securely to the nearest crisis center or ED for evaluation and management. These patients can be dangerous and impulsive; assistance in transfer from law enforcement may be necessary (DVA/DOD, 2019).

Use of drugs or alcohol should routinely be assessed with all persons at any risk for suicide. Psychiatric and behavioral comorbidities (mood, anxiety disorder, aggression) should be assessed in patients with substance use disorder at risk for suicide. Social risk factors such as disruptions in relationships and legal and financial difficulties should also be considered (DVA/DOD, 2019).

11. Developing and Monitoring a Safety Plan

Safety planning is a provider-patient collaborative process—a prevention tool designed to help an individual manage suicidal thoughts. Safety planning produces a written plan that restricts access to means for completing suicide, encourages problem-solving and coping strategies, enhances social support, and identifies a network of emergency contacts. Safety plans should be tailored to the individual, identifying specific warning signs as well as coping strategies that have been effective in the past (DVA/DOD, 2019).

Developing the Plan

Safety Planning Intervention has gained widespread acceptance in the suicide prevention community and has been incorporated into numerous treatment guidelines and interventions. The plan is collaboratively built by a clinician and a patient and encourages individuals to engage in six sequential steps when feeling suicidal:

1. Identify early warning signs
2. Employ internal coping strategies
3. Distract with social engagement or change of environment
4. Access suicide-protective social support
5. Seek help through crisis resources
6. Restrict access to lethal means (Harmer et al., 2022)

Safety Planning Intervention has a strong empirical foundation supporting each of its six steps. It also improves the average number of outpatient mental health visits for suicidal patients during the 6 months following the index ED visit, when compared with treatment as usual (Boudreaux et al., 2017).

The plan and the process of developing a safety plan should be included in the medical record, and the patient should receive a copy. The safety plan should be specific and should list situations, stressors, thoughts, feelings, behaviors, and symptoms that suggest periods of increased risk, as well as a step-by-step description of coping strategies and help seeking behaviors (DVA/DOD, 2019).

Monitoring the Plan

A common misconception is that suicide risk is an acute problem that, once dealt with, ends. Unfortunately, individuals who are suicidal commonly experience a return of suicide risk following any number of setbacks, including relapse to substance use, a distressing life event, increased depression, or any number of other situations. Sometimes suicidal behavior even occurs in the context of substantial improvement in mood and energy. Therefore, monitoring for signs of a return of suicidal thoughts or behavior is essential (CSAT, 2017).

There is a tendency to refer a patient experiencing suicidal thoughts and behaviors to another provider and then assume that the issue has been taken care of. This is a mistake. It is essential to follow up with the provider to determine that the person kept the appointment. It is also critical to coordinate ongoing care and to alert other providers when a patient has relapsed and may be vulnerable to suicidal thoughts. Monitoring emphasizes the importance of watching for a return of suicidal thoughts and behaviors, following up with referrals, and continually coordinating with providers who are addressing the patient's suicidal thoughts and behaviors (CSAT, 2017).

Monitoring can include following up with the ED when a patient has been referred for acute assessment as well as coordinating with mental health providers, case managers, or other professionals. The client's condition and your responses should be documented, including referrals and the outcomes of the referrals.

It is important to determine if the client still has a safety plan in place that is monitored and updated, especially if a recurrence of suicidal thoughts or attempts is observed. Additional followup should include:

- Keeping family members engaged in the treatment process.
- Confirming that the client and the family have an emergency phone number to call.
- Confirming that the client does not have access to a method of suicide.
- Completing a formal treatment termination summary when this stage of care is reached. (CSAT, 2017)

Followup contact can include home visits and mail, telephone, e-mail contact to engage recent survivors in continued treatment. Approaches that engage and connect people to peers and providers are especially important because many attempters do not present to aftercare; 12% to 25% re-attempt within a year, and 3% to 9% of attempt survivors die by suicide within 1 to 5 years of their initial attempt (Stone et al., 2017).

The *Diagnostic and Statistical Manual, Fifth Edition* has been revised to include new ICD-10-CM codes to flag and monitor suicidal behavior and nonsuicidal self-injury. The codes can be used without the requirement of another diagnosis. Because suicidal behavior may be helpful to track or flag for clinical attention and care of individuals, ICD-10-CM codes are now available for use by any clinician and do not require a mental disorder diagnosis. The suicidal behavior ICD-10-CM codes can be used for individuals who have engaged in potentially self-injurious behavior with at least some intent to die because of the act. Evidence of intent to end their life can be explicit or inferred from the behavior or circumstances. A suicide attempt may or may not result in self-injury (Psychiatry Online, 2022).

12. Supportive Third Parties and Communities

I attempted to take my life because of a breakup when I was 16. I woke up and I was fine, but I was really mad. I just didn't want to live! I'd been trying to get a gun, and word got around. The school called my mom, and a social worker came to talk to me. But what really changed my mind was my dad. I could feel his love, and it felt like he would lay down his life for me. Thinking about that would snap me out of it—suicide would hurt my family more than I'm hurting now.

Annie Ost, Spokane
Source: WSDOH, 2016

Supportive third parties, good social support, and strong problem-solving skills can diminish the risk of suicide. A person's support network provides strength in times of crisis and during recovery. Strong social ties can decrease stress and increase a person's ability to cope with the stressful event or situation. A care network can offer general support, crisis support, and ongoing attentiveness to signs of a new crisis. Supports such as these are a key part of care for people at risk of suicide (WSDOH, 2016).

Peer support, community engagement and intervention programs, and tribal programs have had success in addressing and reducing the impact of suicide in our communities. Within these programs, as well as the larger medical community, continuity of care has proven to be a critical component of suicide prevention programs.

Peer Support Programs

To address steadily increasing suicide deaths, the U.S. national suicide prevention strategy and other guidelines have included recommendations that peer support be integrated into the care of individuals at high risk for suicide. Mutual peer support groups have a long tradition of providing support to individuals in recovery from mental health crises, and historically, these groups grew out of a desire for alternatives to psychiatric hospitalization (Bowersox et al., 2021).

Within mutual peer support groups, receiving emotional support, sharing experiences, and building connections outside of meetings are key components of effective support. Peer support has been increasingly integrated into community mental health treatment services with the development and growth of the peer support specialist workforce. Peer specialists are individuals trained to utilize their lived experiences of mental health challenges and recovery to support others. Peer specialists report that their work often includes discussions of suicide, though there are not well-established professional standards among peer specialists for suicide prevention training (Bowersox et al., 2021).

Peer support has the potential to address suicide risk through multiple mechanisms. Peers providing emotional support and sharing their experience of recovery could increase perceived connectedness and reduce hopelessness among support recipients, two key factors for preventing suicidal ideation. Peer support may also reduce suicide risk by decreasing stigma, increasing orientation to personal growth and recovery, and encouraging active care engagement (Bowersox et al., 2021).

Despite guidelines recommending greater incorporation of peers into suicide prevention, the recent growth of peer services in community mental health care, and a theoretical rationale for peer support in suicide prevention, there has been little synthesis of the evidence on how peer support has been applied to suicide prevention (Bowersox et al., 2021).

Sources of Strength is an example of a peer support program for youth. The program seeks to normalize protective factors for suicide by encouraging help-seeking, talking to trusted adults, and promoting peer connectedness. These approaches typically target youth and are delivered in school settings but can also be implemented in community settings (Stone et al., 2017).

In a study of the *Sources of Strength* program conducted in 18 high schools, researchers found that the program improved adaptive norms regarding suicide, connectedness to adults, and school engagement. Peer leaders were more likely than controls to refer a suicidal friend to an adult. For students, the program resulted in increased perceptions of adult support for suicidal youths, particularly among those with a history of suicidal ideation, and the acceptability of help-seeking behaviors. Finally, trained peer leaders also reported a greater decrease in maladaptive coping attitudes compared with untrained leaders (Stone et al., 2017).

Video: What is Sources of Strength? (3:10)

<https://www.youtube.com/watch?v=Rgi9GjhW3Ss>

Community Engagement and Intervention Programs

Community engagement encourages involvement in a range of social activities. The goal is to improve physical health, reduce stress, and decrease depressive symptoms. Involving community members from the beginning and respecting them as experts on their own experience is critically important. Becoming familiar with the community's history, risk and protective factors, cultural norms around language and communication, and beliefs about death are important for program organizers.

Community intervention programs aim to increase awareness of warning signs, increase knowledge of how to intervene, and improve attitudes towards suicide. Certain types of interventions have been shown to increase community engagement in suicide prevention. Besides educating the community about suicide warning signs and reducing stigma, community organizers and healthcare providers can work to:

- Increase *knowledge* of interventions (e.g., alerting emergency services)
- Increase the *intention* to intervene
- Increase *confidence* to intervene (Worsteling and Keating, 2022).

Successful Programs in Tribal Communities

Although Native Americans are at higher risk for suicide than the general population, suicide rates vary widely across tribal communities. Each Native community has different mental health challenges and ways of coping with them. Healthcare providers must understand these differences, as well as the specific cultural context of each tribal group, such as their views on illness and death. Involving Native people in prevention efforts can help ensure programs leverage local resources to meet the needs of the community (SAMSHA, 2019, November 15).

A successful community program designed by a community in Iqaluit, Nunavut (Arctic Canada) aimed at preventing suicide among Indigenous peoples can be applied to other community engagement efforts. The program considers differences in suicide rates across communities and recognizes the effects of rapid social and environmental changes that have taken place in the past two decades. Key themes include:

- Acknowledging the impact of colonization.
- Understanding that prevention strategies must be community-based and should integrate Indigenous ways of knowing.
- Involving youth in developing solutions, tightening their relation to the land, and creating strong linkages with Elders and culture.
- Moving from intention to action and from action to impact. (NIMH, 2017)

Healing of the Canoe

Another successful program based in Washington State is the *Healing of the Canoe Project*—a collaboration between the Suquamish Tribe, the Port Gamble S’Klallam Tribe, and the Alcohol and Drug Abuse Institute, University of Washington. It is a curriculum for Native youth focused on suicide and substance abuse prevention. The program uses the *Canoe Journey* as a metaphor—providing youth the skills needed to navigate their journey through life without being pulled off course by alcohol or drugs—with tribal culture, tradition, and values as compass to guide them and anchor to ground them (Healing of the Canoe, 2022).

Video: What is the Healing of the Canoe? (3:34)

<https://www.youtube.com/watch?v=waQ4eK7wfb8>

Rising Sun

Rising Sun (Reducing the Incidence of Suicide in Indigenous Groups—Strengths United through Networks) is an initiative of the Arctic Council led by Canada and collaborating countries. Rising Sun is a toolkit of common outcomes that can be used to evaluate suicide prevention efforts across Arctic states. Common outcomes and their measures, developed through engagement with Indigenous peoples' organizations, community leaders, and mental health experts, will encourage data sharing, assessments, and interventions across service systems in the Arctic region (MHIN, 2018).

The goal is to generate shared knowledge that will aid healthcare workers in better serving their communities, and help policy-makers measure progress, evaluate interventions, and identify regional and cultural challenges to implementation. Arriving at common outcomes is especially important in the Arctic, where the vast geography, high number of remote communities, and breadth of cultural diversity pose challenges for systematic approaches to suicide prevention (MHIN, 2018).

Did You Know . . .

American Indians and Alaska Natives are more likely than White Americans or Latinos to abstain from alcohol and drugs (SAMSHA TIP 61, 2018).

13. Suicide: Service Members and Veterans

During the wars in Iraq and Afghanistan, military suicide rates increased and surpassed the rates for society at large. The Army has had the highest proportional number of suicides compared to the other services; however, the rates in all the services have been increasing in recent years (USDVA, 2021, September).

Why U.S. military personnel and veterans are at increased risk for suicide compared to civilians is the focus of ongoing research. Military personnel and veterans experience both military- and non-military-related trauma, such as combat-related experiences, military sexual assault, difficulty reintegrating into civilian life, and continued access to guns. Some also have a history of childhood abuse and intimate partner violence. Military personnel and veterans also experience high rates of posttraumatic stress disorder, a known risk factor for both suicidal ideation and behaviors (Holliday et al., 2020).

Elevated suicide risk can endure well beyond military service, with veterans carrying a much greater risk for suicide than their civilian counterparts. Veterans have identified suicide as the most formidable challenge they face. Sadly, approximately 17 veterans die by suicide every day (USDVA, 2021, September).

Veteran-Specific Data

In Washington, over 63,000 active duty, reserve forces, and civilian men and women serve in the military (Governing.com, 2022). More than 560,000 veterans reside in the state. Although the suicide rate for veterans in Washington is higher than the rate for non-military residents, it is **not** significantly different from the national veteran suicide rate.

Nationwide, more than 30,000 active-duty service members and veterans of the post 9/11 wars have died by suicide, significantly more than the 7,057 killed in combat. A disproportionate number of service members who die by suicide are young males (in their twenties), White, non-Hispanic in the Army or Marine Corps (Suitt, 2021).

In 2019, 67% of **veteran** deaths in Washington were the result of firearm injuries (51% nationally). Approximately 37% of Washington veterans who died by suicide were 35 or older (55% nationally) (USDVA, 2021, August). Compared to U.S. civilian adults, the risk for suicide in Washington was:

- 21% higher among veterans
- 18% higher among male veterans
- 2.4 times higher among female veterans (USDVA, 2021, August).

Among Washington's military families with children, data from Washington's *Healthy Youth Survey* indicates that children of military families are at higher risk of suicide. A higher percentage of tenth graders with parents in the military reported symptoms of depression compared to tenth graders from civilian families. The children also answered yes more frequently to questions about serious consideration of suicide, making a suicide plan, and attempting suicide, and fewer than half answered yes when asked if there were adults to whom they could turn for help when feeling sad or hopeless (WSDOH, 2016).

Military Culture

The military is controlled by civilian leaders who may not fully understand the impact military service has on individuals and families. Military service changes and builds a service member's identity and introduces them to values and beliefs that may be contrary to what they have experienced in civilian life (WSDOH, 2016).

Intense training and reinforcement of military culture habituates traits within service members that can ultimately be at odds with an individual's well-being. The military reconfigures civilian practices and ways of speaking. It takes language, symbols, and systems of culture—like religion or national pride—and infuses them with new meaning aimed at military superiority. The military manages and organizes service members' bodies and minds, cares for them, makes them disciplined tools of the state, empowers them to kill, and deliberately exposes them to harm (Suitt, 2021).

The military's reliance on guiding principles can overburden individuals with moral responsibility, or blameworthiness for actions or consequences, over which they have little control. Exposure to mental, physical, moral, and sexual trauma, stress and burnout, and continued access to guns can contribute to suicidal ideation (Suitt, 2021).

Masculine military culture can contribute to avoidance of help-seeking behaviors. The dominant masculine identity that pervades the military is one that overwhelmingly favors machismo and toughness; asking for help is at odds with military culture. Acknowledging mental illness is likely to be viewed as a sign of weakness and a potential threat to a person's career. Service members may be less likely to reflect on their experiences or to seek help for their trauma for fear of looking weak or unmanly in the eyes of their subordinates, peers, and commanding officers (Suitt, 2021).

When soldiers are transferred or moved to other units or when a deployment ends, close, intense relationships formed within units are disrupted. When they leave the military, they may experience feelings of unrest, alienation, anxiety, and lack of purpose. During deployment, family members often become more independent and self-reliant, causing a soldier to feel less needed, believing the family can survive just fine without her or him (WSDOH, 2016).



Source: United States Department of Veteran Affairs.

Risk Factors for Service Members and Veterans

Several risk factors for suicidal ideation and behaviors have been identified in service members and veterans. Being a young, unmarried male of low rank, a lack of advancement, and reduction in rank can be risk factors. Stress that doesn't seem to let up, a recent return from deployment, isolation from one's unit, transferring duty stations, or an adverse deployment experience may contribute to increased risk.

Mental health problems, difficulty returning to civilian life, heavy drinking, and substance use can increase a servicemember's risk for suicide. Other risk factors for suicidal ideation or suicide include:

- Traumatic experiences and PTSD
- Moral injury
- Military sexual trauma
- Individual moral responsibility
- Access to lethal means (Suitt, 2021)

Modern medical advances have allowed service members to survive increasingly severe physical trauma. However, a person's quality of life following severe physical trauma can put them at a greater risk of suicidal behaviors. Veterans with severe, prolonged pain stemming from physical trauma are 33% more likely to attempt suicide than those with no, mild, or moderate pain (Suitt, 2021).

Rates were also 24% higher for those who were divorced or separated from their romantic partners or experiencing financial hardship. The Department of Defense points out that these trends follow those of the general population. It is significant that the typical military suicide looks a lot like a typical American civilian suicide (Suitt, 2021).

Reducing risk through safe firearm storage is particularly important for military personnel and veterans because they are more likely to own firearms. Research indicates that the majority of military personnel do not use safe storage practices. *Acutely suicidal* military personnel are prone to unsafely storing firearms, underreporting suicidal thoughts to military or civilian sources, and failing to disclose access to a firearm (Anestis et al. 2021).

Intervention

A number of intervention strategies have been successful in reducing suicidal ideation and behaviors. This can include resilience training, stress reduction, and education. Addressing depression and PTSD, encouraging health-promoting behaviors, and the development of programs and crisis lines have had a positive impact.

PREVENTS

In 2019, *The President's Roadmap to Empower Veterans and End a National Tragedy of Suicide* (PREVENTS), was signed into law. The program's goal is to improve existing suicide prevention initiatives and to address gaps in the efforts and services outlined in the first (2001) and updated (2012) *National Strategy for Suicide Prevention*. A comprehensive plan was developed and released in June 2020 (HHS, 2021, January 19).

The program includes a *website*, a nationwide public health campaign, and involvement of individuals and organizations from federal, state, local, and tribal governments, faith-based communities, nonprofit organizations, academia, veteran and military service organizations, and other private industry partners (HHS, 2021, January 19).

For further information, see the VA PREVENTS web page (<https://www.va.gov/prevents/>).

Defense Suicide Prevention Office

The Defense Suicide Prevention Office (DSPO) provides advocacy, program oversight, and policy for Department of Defense suicide prevention, intervention, and postvention efforts to reduce suicidal behaviors in service members, civilians, and their families.

The DSPO was established in 2011 and is part of the Department of Defense. Its mission is to examine efforts to prevent military suicide. The Department of Defense has developed a holistic approach to suicide prevention, intervention, and postvention using a range of medical and non-medical resources. Grounded in a collaborative approach, DSPO works with the Military Services and other Governmental Agencies, Non-Governmental Agencies, non-profit organizations, and the community to reduce the risk for suicide.

U.S. Air Force Suicide Prevention

The *United States Air Force Suicide Prevention Program* includes 11 policy and education initiatives designed to change the culture surrounding suicide. The program uses leaders as role models and agents of change, establishes expectations for behavior related to awareness of suicide risk, develops population skills and knowledge, and investigates every suicide. The program represents a fundamental shift from viewing suicide and mental illness solely as medical problems and instead sees them as larger service-wide problems impacting the whole community (Stone et al., 2017).

The program has been associated with a 33% relative risk reduction in suicide. It was also associated with relative risk reductions in related outcomes, including moderate and severe family violence, homicide, and accidental death. An assessment comparing suicide rates before and after the launch of the program found significantly lower rates of suicide after the program was launched. These effects were sustained over time, except in 2004, during which there was less rigorous implementation of program components than in the other years (Stone et al., 2017).

Addressing Depression

Major depressive disorder, which is highly comorbid with PTSD, independently increases risk for suicidal ideation and attempts. The *Veterans Affairs Translating Initiatives for Depression into Effective Solutions* (TIDES) project uses a depression care liaison to link primary care and mental health services. The depression care liaison assesses and educates patients and follows up with both patients and providers to optimize treatment between primary care visits (Stone et al., 2017).

This collaborative care supports mental health services by bringing mental health care to the primary care setting, where most patients are first detected and subsequently treated for many mental health conditions. An evaluation of TIDES found significant decreases in depression severity scores among 70% of primary care patients. TIDES patients also demonstrated 85% and 95% compliance with medication and followup visits, respectively (Stone et al., 2017).

Addressing PTSD

Posttraumatic Stress Disorder (PTSD) can occur after someone goes through a traumatic event like combat, assault, or disaster. When you have PTSD, the world feels unsafe. You may have upsetting memories, feel on edge, or have trouble sleeping. You may also try to avoid things that remind you of your trauma—even things you used to enjoy.

Research looking specifically at combat-related PTSD in Vietnam era veterans suggests that the most significant predictor of both suicide attempts and preoccupation with suicide is combat-related guilt. Many veterans experience highly intrusive thoughts and extreme guilt about acts committed during times of war. These thoughts can often overpower the emotional coping capacities of veterans (Hudenko, Homaifar, and Wortzel, 2022).

With respect to veterans of the wars in Afghanistan and Iraq, PTSD has been found to be a risk factor for suicidal ideation. Subthreshold PTSD also carries risk. Among these veterans, those with subthreshold PTSD were 3 times more likely to report hopelessness or suicidal ideation than those without PTSD (Hudenko, Homaifar, and Wortzel, 2022).

Veterans with PTSD who felt they have purpose and meaning in life have better outcomes than those who do not. Social support is associated with lower PTSD symptom severity in trauma-exposed individuals. Disrupted sleep is a core symptom of PTSD, and research demonstrates that cognitive-behavioral treatments that reduce insomnia and nightmares can reduce other symptoms of PTSD (DeBeer et al., 2016).

Video: Veterans and PTSD: Challenging the Misconceptions (2:13)

<https://www.youtube.com/watch?v=Rih3A5vr08M>

Health-Promoting Behaviors



Good health is critical to military and family readiness, allowing service members to perform their responsibilities at work and at home to the best of their abilities. Source: Military OneSource.

Health-promoting behaviors, including physical activity and stress management have been shown to decrease suicidal ideation. Those who engage in physical activity or participate in sports are at lower risk for suicidal ideation than those who do not. Individuals who feel they have a purpose in life report lower suicidal ideation than those who did not. In terms of social relationships, there is a significant body of literature identifying social support as a protective factor for suicidal ideation (DeBeer et al., 2016).



Practicing good nutrition boosts personal performance. Source: Military OneSource.

Military Stress: PFC Wilson

Private First Class Shania Wilson serves in Alpha Company, 181st Brigade Support Battalion, 81st Brigade Combat Team, Washington Army National Guard. A mother of three, she was stationed at Joint Base Balad for eight months, providing security for the hospital and Iraqi business on base, escorting local nationals working on base, and providing Personal Security Detail services.

A second deployment sent Private Wilson to Afghanistan with the 96th Troop Command based out of Yakima. "I wasn't supposed to be on that deployment, but I was called to duty and had to go," she reported. She pulled security duty in a variety of places and on several occasions experienced firefights, witnessed the death of three members of her unit, applied first aid to the severely wounded, and on two occasions experienced two separate blasts from an improvised explosive device.

After her deployments, Private Wilson enrolled in college. Several students in one of her classes surmised she was in the military, and she overheard them refer to her one day as a "baby killer." Recently, a video was shown in her science course that made her feel uncomfortable and since that time she's had more difficulty concentrating on her studies. She has not sought any medical or behavioral health assistance for fear that it could interfere with her career in the National Guard and also remove her from the chance to support her unit on another upcoming deployment. In fact, the 81st Brigade Combat Team and 506th Military Police Company received notices of sourcing from the Pentagon, meaning they could be tapped for an upcoming deployment.

Assessment

During a routine medical appointment with a nurse practitioner, the NP noted that Private Wilson kept her eyes down and fidgeted with her cell phone during the initial part of the appointment. When asked how she was feeling, Private Wilson said she was fine except that since returning from her second deployment, she has felt lightheaded with ringing in her ears, has had problems thinking and remembering, and has become more irritable.

"I wasn't supposed to be on that [second] deployment, but I was called to duty and had to go," she reported. At school, she reported feeling isolated and uncomfortable and said she wasn't doing well. She said she wasn't sleeping well and feels hopeless, like there was no reason to live other than her children and unit. She admitted she had begun to drink heavily. She mentioned that she was worried about a possible deployment and had mixed feelings about returning to duty.

Discussion

Private Wilson experienced significant trauma during her deployments, including the death of her fellow service members. She also appears to be experiencing physical and psychological after-effects of being in close proximity to 2 IED blasts. Although she has expressed mixed feelings about a third deployment, she also expressed a sense of duty and a desire to protect her National Guard career.

What Actions Can You Take?

Private Wilson is clearly having difficulty dealing with her experiences in the war. During the patient assessment, what should you do first?

- a. Tell Private Wilson that it takes time to recover from a military deployment and she will be fine.
- b. Report Private Wilson to her supervisor at the Washington Army National Guard.
- c. Determine Private Wilson's level of risk for suicidal ideation and behavior by asking open-ended, general questions about safety.
- d. To safeguard Private Wilson's safety, have her admitted to a psych ward.

Answer: c

Bottom Line

Any healthcare provider may come in contact with someone who may be at risk for self-harm. Don't be afraid to ask your patients if they've ever tried to harm themselves—as well as how many times and in what ways. Have you practiced questions ahead of time that allow you to assess risk, safety, and lethality? Take a moment to ask those questions right now.

Source: Adapted from Schmidt, 2012.

Veterans Crisis Line

The Veterans Crisis Line encourages veterans and their families and friends to call when a veteran is experiencing a crisis. Those who know a veteran may be the first to recognize emotional distress and reach out for support when issues reach a crisis point—and well before a veteran is at risk of suicide. The Veterans Crisis Line has specially trained responders who can help veterans of all ages and circumstances. Some of the responders are veterans themselves and they understand what veterans and their families and friends have been through and the challenges they face (USDVA, 2022, May).

Since its launch in 2007, the Veterans Crisis Line has answered nearly 6.2 million calls and initiated the dispatch of emergency services to callers in crisis nearly 233,000 times. The Veterans Crisis Line anonymous online chat service, added in 2009, has been used more than 739,000 times (USDVA, 2022, May).

In November 2011, the Veterans Crisis Line introduced a text-messaging service to provide another way for veterans to connect with confidential, round-the-clock support. Since then, it has responded to more than 253,000 texts. Text the Veterans Crisis line at 838255 (USDVA, 2022, May).



Source: VeteransCrisisLine.net

In 2020, the *Caring Letters* program was added. It focuses on mailing letters to veterans during the year after their initial documented call to the Veterans Crisis Line. This initiative has been found to reduce the rate of suicide death, attempts, and ideation and provides a unique opportunity to help save veteran lives beyond the call (USDVA, 2022, May).

A *Peer Support Outreach Call Center* was opened in 2021, staffed by trained Veterans who proactively reach out to Veterans Crisis Line callers who might benefit from additional intervention. Studies show that veterans who have peer mentors are more likely to keep their VA appointments, access additional treatment methods, and meet other important health benchmarks. With this in mind, peer specialists give veterans a sense of empowerment, reduce stigma, and provide guidance on self-help and goal setting (USDVA, 2022, May).



U.S. Army suicide prevention poster. Source: United States Army.

A Soldier's Story

A soldier who had joined the Washington National Guard after returning from deployment came into the Joint Services Support (JSS)* office at Camp Murray in Tacoma Washington, asking for help finding a job. While talking with the Employment Transition Team, the soldier revealed financial struggles, fear of returning home because of domestic violence, overwhelming depression, and suicidal thoughts.

The JSS multidisciplinary team sprang into action. Five weeks later the soldier had a regular therapy schedule, gift cards for food and gas, an electronic benefits card, a refreshed résumé, a suicide prevention mentor, an order of protection against the abusive partner, and safe transitional housing. Outstanding disability claims were resolved, and, as the soldier was about to move into an apartment, a job offer came through from a prominent Washington company. The soldier's life moved from a place of desperation to a place of stability.

It is not unusual for a person seeking help to have multiple needs spanning many systems. What is unique is that this soldier had the ability to get all of these needs met in one place by a collaborative, supportive team of professionals, each of whom was well-trained and attuned to depression and suicide risk.

The JSS states that its purpose is to "enhance the quality of life for all Guard members, their families, and the communities in which they live and contribute to readiness and retention in the Washington National Guard." The JSS at Camp Murray combines strong and supportive leadership, cross-system teamwork, and attention to soldiers' emotional needs and ability to thrive at work—a program model that improves job performance and saves lives.

* **Joint Services Support (JSS) Directorate:** a centralized support center for all Washington Guardsmen and women, reserve, veterans, and family members offering family readiness programs and services. Call 1-800-364-7492 (Available 24 hours).

Source: WSDOH, 2016.

14. Concluding Remarks

Suicide and suicide attempts are serious public health problems and issues of societal concern. Rates of suicide have been on the rise for more than a decade and the costs stretch well into the billions of dollars each year. While suicide is a rare outcome statistically, it has a far-reaching effect. Each of us likely interacts with suicide survivors and with those who think of suicide on a daily basis—at home, at work, and in our communities.

Suicide rates are highest among American Indian, Alaska Native, and White populations, consistent with national rates. However, these broad categorizations can mask lower or higher rates in certain subgroups.

As a healthcare professional, it isn't easy to ask a patient about suicide. How you structure the interview and how you assess safety, lethality, and intent is important. Asking about and reducing a person's access to lethal means can prevent a suicide.

Healthcare providers can be more effective understanding suicide warning signs and recognizing when a person is at imminent risk for self-harm. Understand that your patient may feel ashamed and stigmatized and may be reluctant to ask for help. Educating yourself about risk factors and the lethal objects that are commonly used in suicide attempts can help you identify when someone is at risk.

Because risk occurs on a continuum, assessment, management, and referrals are different for each situation. A number of barriers have affected our ability to reduce suicide in the U.S., including stigma, lack of access to mental illness treatment, and fear of discussing suicidal thoughts. Fortunately, suicide is preventable, and there has been some success with prevention programs, education, community support programs, and mental health management.

Pharmacologic treatment can include medications, addressing substance use disorders, and developing and monitoring a safety plan. Pharmacologic treatment may be helpful in managing underlying mental disorders and the danger of repeated or more dangerous self-directed violence.

Peer support, community engagement and intervention programs, and tribal programs have had success in addressing and reducing the impact of suicide in our communities. Within these programs, as well as the larger medical community, continuity of care has proven to be a critical component of suicide prevention programs.

Military personnel and veterans are at higher risk than the general population for suicidal ideation and suicide. Research has indicated that safe storage of guns, addressing depression and PTSD, and encouraging participation in health-promoting behaviors can reduce suicide in this populations.

Finally, the Veterans Crisis Line and the newly launched 988 Crisis Line provide critical support for people experiencing a psychological crisis that might lead to suicide.

References

- American Psychological Association (APA). (2022). Suicide Among Asian Americans. Retrieved June 14, 2022 from <https://www.apa.org/pi/oema/resources/ethnicity-health/asian-american/suicide#>.
- Anestis MD, Bryan CJ, Capron DW, Bryan AO. (2021). Lethal Means Counseling, Distribution of Cable Locks, and Safe Firearm Storage Practices Among the Mississippi National Guard: A Factorial Randomized Controlled Trial, 2018-2020. *Am J Public Health*. 111(2):309-317. Doi: 10.2105/AJPH.2020.306019. Retrieved September 12, 2022 from <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7811068/>.
- Balbuena LD, Baetz M, Sexton JA, et al. (2022). Identifying long-term and imminent suicide predictors in a general population and a clinical sample with machine learning. *BMC Psychiatry* 22: 120. Doi: 10.1186/s12888-022-03702-y. Retrieved August 23, 2022 from <https://bmcp psychiatry.biomedcentral.com/track/pdf/10.1186/s12888-022-03702-y.pdf>.
- Bandara P, Pirkis J, Clapperton A, et al. (2022). Cost-effectiveness of Installing Barriers at Bridge and Cliff Sites for Suicide Prevention in Australia. *JAMA Netw Open*. 2022;5(4):e226019. Doi: 10.1001/jamanetworkopen.2022.6019. Retrieved June 25, 2022 from <https://jamanetwork.com/journals/jamanetworkopen/fullarticle/2790701>.
- Berg SH, Rørtveit K, Aase K. (2017). Suicidal patients' experiences regarding their safety during psychiatric in-patient care: A systematic review of qualitative studies. *BMC Health Services Research* 2017 17: 73. Doi: 10.1186/s12913-017-2023-8. Retrieved June 12, 2022 from <https://bmchealthservres.biomedcentral.com/articles/10.1186/s12913-017-2023-8>.
- Betz ME, Miller M, Barber C, et al. (2016). Lethal means access and assessment among suicidal emergency department patients. *Depress Anxiety* 2016 Jun; 33(6): 502–511. Doi: 10.1002/da.22486. Retrieved June 12, 2022 from <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4800489/>.
- Boudreaux ED, Brown GK, Stanley B, et al. (2017). Computer administered safety planning for individuals at risk for suicide: Development and usability testing. *J Med Internet Res* 2017; 19(5):e149. Doi: 10.2196/jmir.6816. Retrieved June 12, 2022 from <https://www.jmir.org/2017/5/e149/#Introduction>.
- Bowersox NW, Jagusch J, Garlick J, Chen JI, and Pfeiffer PN. (2021). Peer-based interventions targeting suicide prevention: A scoping review. *Am J Community Psychol* 0: 1–17. Doi: 10.1002/ajcp.12510. Retrieved August 11, 2022 from https://cectresource.library.info/wp-content/uploads/2021/07/Bowersox-et-al_peer-based-interventions-targeting-suicide-1.pdf.
- Brotherton R, French CC. (2015). Intention seekers: Conspiracist ideation and biased attributions of intentionality. *PLoS ONE* 10(5): e0124125. Doi: 10.1371/journal.pone.0124125. Retrieved June 12, 2022 from <http://journals.plos.org/plosone/article?id=10.1371/journal.pone.0124125>.
- Cato V, Holländare F, Nordenskjöld A, et al. (2019). Association between benzodiazepines and suicide risk: a matched case-control study. *BMC Psychiatry* 19, 317 (2019). Doi: 10.1186/s12888-019-2312-3. Retrieved July 12, 2022 from <https://bmcp psychiatry.biomedcentral.com/articles/10.1186/s12888-019-2312-3>.
- Centers for Disease Control and Prevention (CDC). (2022, July 13). Suicide and Self-Harm Injury. Retrieved August 8, 2022 from <https://www.cdc.gov/nchs/fastats/suicide.htm>.
- Centers for Disease Control and Prevention (CDC). (2022, July). Preventing Suicide. Retrieved August 4, 2022 from https://www.cdc.gov/suicide/pdf/NCIPC-Suicide-FactSheet-508_FINAL.pdf.

Centers for Disease Control and Prevention (CDC). (2022, May 24). Facts About Suicide. Retrieved June 12, 2022 from <https://www.cdc.gov/violenceprevention/suicide/definitions.html>.

Centers for Disease Control and Prevention (CDC). (2022, March 3). Suicide Mortality in the United States, 2000–2020. Retrieved June 24, 2022 from <https://www.cdc.gov/nchs/products/databriefs/db433.htm>.

Centers for Disease Control and Prevention (CDC). (2021, November 5). Suicide in the U.S. Declined During the Pandemic. National Center for Health Statistics. Retrieved June 13, 2022 from <https://www.cdc.gov/nchs/pressroom/podcasts/2021/20211105/20211105.htm>.

Center for Substance Abuse Treatment (CSAT). (2015). (Change to 2017). Addressing Suicidal Thoughts and Behaviors in Substance Abuse Treatment. A Treatment Improvement Protocol (TIP) Series, No. 50. HHS Publication No. (SMA) 154381. Rockville, MD: Substance Abuse and Mental Health Services Administration. Retrieved June 12, 2022 from <https://store.samhsa.gov/sites/default/files/d7/priv/sma15-4381.pdf>.

Coentre R, Power P. (2011). A diagnostic dilemma between psychosis and post-traumatic stress disorder: A case report and review of the literature. *Journal of Medical Case Reports* 2011 5:97. Doi: 10.1186/1752-1947-5-97. Retrieved September 4, 2017 from <https://jmedicalcasereports.biomedcentral.com/articles/10.1186/1752-1947-5-97>.

Coyne J. (2017). Results of largest trial of suicide intervention in emergency departments ever conducted in U.S. *PLOS Blogs: Mind the Brain*. Retrieved June 12, 2022 from <http://blogs.plos.org/mindthebrain/2017/05/17/results-of-largest-trial-of-suicide-intervention-in-emergency-departments-ever-conducted-in-us/>.

Crane EH. (2016). Patients with emergency department visits involving drug-related suicide attempts who left against medical advice. *The CBHSQ Report: September 13, 2016*. Center for Behavioral Health Statistics and Quality, Substance Abuse and Mental Health Services Administration, Rockville, MD. Retrieved June 12, 2022 from <https://www.ncbi.nlm.nih.gov/books/NBK396153/>.

Cwik MF, Tingey L, Lee A, et al. (2016). Development and piloting of a brief intervention for suicidal American Indian adolescents. *American Indian and Alaska Native Mental Health Research* 23(1). Centers for American Indian and Alaska Native Health, Colorado School of Public Health. Retrieved June 10, 2022 from https://coloradosph.cuanschutz.edu/docs/librariesprovider205/journal_files/vol23/23_1_2016_105_cwik.pdf?sfvrsn=7bd1e0b9_2.

D'Anci KE, Uhl S, Giradi G, Martin C. (2019). Treatments for the Prevention and Management of Suicide, A Systematic Review. *Annals of Internal Medicine*. 2019;171:334-342. Doi:10.7326/M19-0869. Retrieved June 12, 2022 from <https://www.healthquality.va.gov/documents/SuicideCPGEvidenceReviewInAnnals2019.pdf>.

DeBeer BB, Kittel JA, Cook A, et al. (2016). Predicting suicide risk in trauma exposed veterans: The role of health promoting behaviors. *PLoS ONE* 11(12): e0167464. Doi: 10.1371/journal.pone.0167464. Retrieved June 20, 2022 from <http://journals.plos.org/plosone/article?id=10.1371/journal.pone.0167464>.

Defense Suicide Prevention Office (DSPO). (2020). Lethal Means Safety for Military Service Members and Their Families. Retrieved August 4, 2022 from https://www.dspo.mil/Portals/113/Documents/DSPO%20Lethal%20Means%20Safety%20Guide%20for%20Military%20Service%20Members%20and%20Their%20Families_v34_FINAL.pdf?ver=AF6RRG7pGAlcAqjtQQDyVg%3D%3D.

Defense Suicide Prevention Office (DSPO). (2017). Retrieved June 25, 2022 from <http://www.dspo.mil/>.

deGrauw X. (2021). Suicide in WA. Washington State Department of Health. Retrieved June 13, 2022 from <https://doh.wa.gov/sites/default/files/legacy/Documents/Pubs//140-254-SuicideInWA.pdf?uid=62a768fa2b8da>.

Department of Veterans Affairs/Department of Defense (**DVA/DoD**, 2019). VA/DOD Clinical Practice Guideline for Assessment and Management of Patients at Risk for Suicide. Version 2.0–2019. Retrieved June 12, 2022 from <https://www.healthquality.va.gov/guidelines/MH/srb/VADoDSuicideRiskFullCPGFinal5088212019.pdf>

Draper J. (2017). Suicide Prevention on Bridges: The National Suicide Prevention Lifeline Position. National Suicide Prevention Lifeline. Retrieved June 25, 2022 from <https://suicidepreventionlifeline.org/wp-content/uploads/2017/04/Suicide-Bridges-National-Suicide-Prevention-Lifeline-Position-2017-FINAL.pdf>.

Erfani P, Chin ET, Lee CH, Uppal N, Peeler KR. (2021). Suicide rates of migrants in United States immigration detention (2010–2020). *AIMS Public Health*, Volume 8, Issue 3: 416-420. Doi: 10.3934/publichealth.2021031. Retrieved July 7, 2022 from <https://www.aimspress.com/article/doi/10.3934/publichealth.2021031#b5>.

Fosse R, Ryberg W, Carlsson MK, Hammer J. (2017). Predictors of suicide in the patient population admitted to a locked-door psychiatric acute ward. *PLoS ONE* 12(3): e0173958. Doi: 10.1371/journal.pone.0173958. Retrieved June 12, 2022 from <http://journals.plos.org/plosone/article?id=10.1371/journal.pone.0173958>.

Food and Drug Administration (**FDA**). (2021, November 26). Information on Clozapine. Retrieved June 26, 2022 from <https://www.fda.gov/drugs/postmarket-drug-safety-information-patients-and-providers/information-clozapine>.

Governing.com. (2022). 2021 Military Active-Duty Personnel, Civilians by State. Retrieved August 19, 2022 from <https://www.governing.com/now/2021-military-active-duty-personnel-civilians-by-state>.

Grandclerc S, De Labrouhe D, Spodenkiewicz M, et al. (2016). Relations between nonsuicidal self-injury and suicidal behavior in adolescence: A systematic review. *PLoS ONE* 11(4): e0153760. Doi: 10.1371/journal.pone.0153760. Retrieved June 27, 2022 from <http://journals.plos.org/plosone/article?id=10.1371/journal.pone.0153760>.

Grimholt TK, Jacobsen D, Haavet OR, Ekeberg Ø. (2017). Lower suicide intention in patients with personality disorders admitted for deliberate self-poisoning than in patients with other diagnoses. *Annals of General Psychiatry* 16:21. Doi: 10.1186/s12991-017-0145-3. Retrieved June 28, 2022 from <https://annals-general-psychiatry.biomedcentral.com/articles/10.1186/s12991-017-0145-3>.

Gusmão R, Quintão S, McDaid D, et al. (2013). Antidepressant utilization and suicide in Europe: An ecological multi-national study. *PLoS ONE* 8(6): e66455. Doi: 10.1371/journal.pone.0066455. Retrieved July 8, 2022 from <http://journals.plos.org/plosone/article?id=10.1371/journal.pone.0066455>.

Harmer B, Lee S, Duong TVH, Saadabadi A. (2022). Suicidal Ideation. In: *StatPearls*. Treasure Island (FL): StatPearls Publishing; 2022 Jan–. PMID: 33351435. Retrieved August 8, 2022 from <https://pubmed.ncbi.nlm.nih.gov/33351435/>.

Hastings KG, Jose PO, Kappahn KI, Frank ATH, Goldstein BA, Thompson CA, et al. (2015). Leading Causes of Death among Asian American Subgroups (2003–2011). *PLoS ONE* 10(4): e0124341. Doi: 10.1371/journal.pone.0124341. Retrieved June 14, 2022 from <https://journals.plos.org/plosone/article?id=10.1371/journal.pone.0124341>.

Harris KM, Syu J-J, Lello OD, et al. (2015). The ABC's of suicide risk assessment: Applying a tripartite approach to individual evaluations. *PLoS ONE* 10(6): e0127442. Doi:10.1371/journal.pone.0127442. Retrieved July 28, 2022 from <http://journals.plos.org/plosone/article?id=10.1371/journal.pone.0127442>.

Harvard School of Public Health. (2017). Bridge Bibliography. Retrieved July 28, 2022 from <https://www.hsph.harvard.edu/means-matter/useful-links/bibliography/bridge-bibliography/>.

Hassamal S, Keyser-Marcus L, Crouse Breden E, et al. (2015). A brief analysis of suicide methods and trends in Virginia from 2003 to 2012. *BioMed Research International*, vol. 2015, Article ID 104036. Doi:10.1155/2015/104036. Retrieved June 21, 2022 from <https://www.hindawi.com/journals/bmri/2015/104036/>.

Healing of the Canoe. (2022). What is the Healing of the Canoe? Healing of the Canoe Training Center. Retrieved June 21, 2022 from <http://healingofthecanoe.org/>.

Health and Human Services (HHS). (2021, January 19). The Surgeon General's Call to Action to Implement the National Strategy. Retrieved June 28, 2022 from <https://www.hhs.gov/sites/default/files/sprc-call-to-action.pdf>.

Health and Human Services (HHS). (2012, latest available). Office of the Surgeon General and National Action Alliance for Suicide Prevention. 2012 National Strategy for Suicide Prevention: Goals and Objectives for Action. Washington, DC: HHS, September 2012. Retrieved June 12, 2022 from https://www.ncbi.nlm.nih.gov/books/NBK109917/pdf/Bookshelf_NBK109917.pdf.

Healthy Youth Survey (HYS). (2021). The Washington State Healthy Youth Survey. Retrieved June 28, 2022 from <https://www.askhys.net/>.

Hemmer A, Meier P, Reisch T. (2017). Comparing different suicide prevention measures at bridges and buildings: Lessons we have learned from a national survey in Switzerland. *PLoS ONE* 12(1): e0169625. Doi:10.1371/journal.pone.0169625. Retrieved June 25, 2022 from <http://journals.plos.org/plosone/article?id=10.1371/journal.pone.0169625>.

Holliday R, Borges LM, Stearns-Yoder KA, Hoffberg AS, Brenner LA and Monteith LL. (2020). Posttraumatic Stress Disorder, Suicidal Ideation, and Suicidal Self-Directed Violence Among U.S. Military Personnel and Veterans: A Systematic Review of the Literature From 2010 to 2018. *Front. Psychol.* 11:1998. Doi:10.3389/fpsyg.2020.01998. Retrieved August 18, 2022 from <https://www.frontiersin.org/articles/10.3389/fpsyg.2020.01998/full>.

Huang C, Fang S, Shao YJ. (2021). Comparison of Long-Acting Injectable Antipsychotics With Oral Antipsychotics and Suicide and All-Cause Mortality in Patients With Newly Diagnosed Schizophrenia. *JAMA Netw Open.* 2021;4(5):e218810. Doi:10.1001/jamanetworkopen.2021.8810. Retrieved July 8, 2022 from <https://jamanetwork.com/journals/jamanetworkopen/fullarticle/2779762>.

Hudenko W, Homaifar B, and Wortzel H. (2022). The Relationship Between PTSD and Suicide. National Center for PTSD. Retrieved August 29, 2022 from https://www.ptsd.va.gov/professional/treat/cooccurring/suicide_ptsd.asp.

Hunt T, Wilson CJ, Caputi P, et al. (2017). Signs of current suicidality in men: A systematic review. *PLoS ONE* 12(3): e0174675. Doi:10.1371/journal.pone.0174675. Retrieved June 24, 2022 from <http://journals.plos.org/plosone/article/file?id=10.1371/journal.pone.0174675&type=printable>.

Ingram J, Lyford B, McAtamney A, et al. (2022). Preventing suicide in refugees and asylum seekers: a rapid literature review examining the role of suicide prevention training for health and support staff. *Int J Ment Health Syst* 16, 24. Doi:10.1186/s13033-022-00534-x. Retrieved July 7, 2022 from <https://ijmhs.biomedcentral.com/articles/10.1186/s13033-022-00534-x>.

- Kar N, Arun M, Mohanty MK, Bastia BK. (2014). Scale for assessment of lethality of suicide attempt. *Indian J Psychiatry*. 2014 Oct-Dec; 56(4): 337–43. Doi: 10.4103/0019-5545.146512. Retrieved June 21, 2022 from <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4279290/#ref1>.
- Kegler SR, Simon TR, Zwald ML, et al. (2022). Vital Signs: Changes in Firearm Homicide and Suicide Rates—United States, 2019–2020. *MMWR Morb Mortal Wkly Rep*. 2022 May 13;71(19):656–663. Doi: 10.15585/mmwr.mm7119e1. Retrieved July 12, 2022 from <https://pubmed.ncbi.nlm.nih.gov/35550497/>.
- Kivisto AJ. (2022). Beyond Legislative Lethal Means Restriction Approaches to Suicide Prevention. *Journal of the American Academy of Psychiatry and the Law Online*, 50 (2) 170–176; Doi: 10.29158/JAAPL.210140-21. Retrieved June 21, 2022 from <http://jaapl.org/content/50/2/170>.
- Lewitzka U, Sauer C, Bauer M., et al. (2019). Are national suicide prevention programs effective? A comparison of 4 verum and 4 control countries over 30 years. *BMC Psychiatry* 19, 158. Doi.org/10.1186/s12888-019-2147-y. Retrieved August 29, 2022 from <https://bmcp psychiatry.biomedcentral.com/articles/10.1186/s12888-019-2147-y>.
- Li M, Bergren S, Simon M, et al. (2022). Cultural attributes of suicidal ideation among older immigrants: a qualitative study. *BMC Geriatr* 22, 678. Doi: 10.1186/s12877-021-02628-6. Retrieved July 7, 2022 from <https://bmgeriatr.biomedcentral.com/articles/10.1186/s12877-021-02628-6#Sec1>.
- Liljedahl SI, Helleman M, Daukantaitė D, et al. (2017). A standardized crisis management model for self-harming and suicidal individuals with three or more diagnostic criteria of borderline personality disorder: The Brief Admission Skåne randomized controlled trial protocol (BASRCT). *BMC Psychiatry* 17:220. Doi: 10.1186/s12888-017-1371-6. Retrieved June 27, 2022 from <https://bmcp psychiatry.biomedcentral.com/articles/10.1186/s12888-017-1371-6>.
- Lim H, Weinberg L, Tan CO, et al. (2013). Airway strategies for lung isolation in a patient with high-velocity nail gun injuries to the right cardiac ventricle and floor of the mouth: A case report. *Journal of Medical Case Reports* 7:137. Doi: 10.1186/1752-1947-7-137. Retrieved July 12, 2022 from <https://jmedicalcasereports.biomedcentral.com/articles/10.1186/1752-1947-7-137>.
- Luo C, Chen K, Doshi R, et al. (2022). The association of prescription opioid use with suicide attempts: An analysis of statewide medical claims data. *PLoS One*. Doi: 10.1371/journal.pone.0269809. Retrieved August 8, 2022 from <https://journals.plos.org/plosone/article?id=10.1371/journal.pone.0269809#sec004>.
- Lynch FL, Peterson EL, Lu CY, et al. (2020). Substance use disorders and risk of suicide in a general US population: a case control study. *Addict Sci Clin Pract* 15, 14. Doi: 10.1186/s13722-020-0181-1. Retrieved July 12, 2022 from <https://ascpjournals.biomedcentral.com/articles/10.1186/s13722-020-0181-1>.
- Mathieu S, de Leo D, Koo YW, Leske S, Goodfellow B, Kólves K. (2021). Suicide and suicide attempts in the Pacific Islands: A Systematic Literature Review. *The Lancet*, Volume 17, 100283. Doi: 10.1016/j.lanwpc.2021.100283. Retrieved June 17, 2022 from [https://www.thelancet.com/journals/lanwpc/article/PIIS2666-6065\(21\)00192-9/fulltext#%20](https://www.thelancet.com/journals/lanwpc/article/PIIS2666-6065(21)00192-9/fulltext#%20).
- McCabe R, Sterno I, Priebe S, et al. (2017). How do healthcare professionals interview patients to assess suicide risk? *BMC Psychiatry* 17:122. Doi: 10.1186/s12888-017-1212-7. Retrieved June 21, 2022 from <https://bmcp psychiatry.biomedcentral.com/articles/10.1186/s12888-017-1212-7>.
- Mental Health Innovation Network (MHIN). (2018). Rising Sun Toolkit. Retrieved June 21, 2022 from <https://www.mhinnovation.net/collaborations/rising-sun/rising-sun-toolkit>.
- National Center for Health Statistics (NCHS). (2022, March 3). Suicide Mortality in the United States, 2000–2020. NCHS Data Brief No. 433. Retrieved June 10, 2022 from <https://www.cdc.gov/nchs/products/databriefs/db433.htm>.

National Center for Health Statistics (**NCHS**). (2022, January 6). Suicide and Self-Harm Injury. Retrieved February 22, 2022 from <https://www.cdc.gov/nchs/fastats/suicide.htm>.

National Center for Health Statistics (**NCHS**). (2020, August 19). Urban–rural Differences in Suicide Rates, by Sex and Three Leading Methods: United States, 2000–2018. Retrieved August 9, 2022 from <https://www.cdc.gov/nchs/products/databriefs/db373.htm>.

National Center for Injury Prevention and Control (**NCIPC**). (2020). 10 Leading Causes of Death, United States 1999–2020, All Races, Both Sexes. Retrieved February 22, 2022 from <https://wisqars.cdc.gov/cgi-bin/broker.exe>

National Institute of Mental Health (**NIMH**). (2022, June). Mental Health Medications. Retrieved June 28, 2022 from <https://www.nimh.nih.gov/health/topics/mental-health-medications/index.shtml>.

National Institute of Mental Health (**NIMH**). (2021, August). Suicide Prevention. Retrieved July 8, 2022 from <https://www.nimh.nih.gov/health/topics/suicide-prevention>.

National Institute of Mental Health (**NIMH**). (2017). Reducing the Incidence of Suicide in Indigenous Groups—Strengths United through Networks (RISING SUN): Workshop 3. Retrieved June 21, 2022 from <https://www.nimh.nih.gov/about/organization/od/odwd/risingsun>.

National Center for Veterans Analysis and Statistics (**NCVAS**). (2019). State Summaries: Washington. Retrieved August 19, 2022 from https://www.va.gov/vetdata/docs/SpecialReports/State_Summaries_Washington.pdf.

Office of Juvenile Justice and Delinquency Prevention (**OJJDP**). (2020). Characteristics and Trends of Youth Victims of Suicide and Homicide, 2020. Retrieved July 7, 2022 from https://www.ojjdp.gov/ojstatbb/snapshots/DataSnapshot_Violence2020.pdf.

Office of Minority Health (**OMH**). (2021, May 20). Mental and Behavioral Health—Native Hawaiians/Pacific Islanders. Retrieved June 14, 2022 from <https://minorityhealth.hhs.gov/omh/browse.aspx?lvl=4&lvlid=172>.

Office of Minority Health (**OMH**). (2021, May 19). Mental and Behavioral Health—American Indians/Alaska Natives. Retrieved June 10, 2022 from <https://minorityhealth.hhs.gov/omh/browse.aspx?lvl=4&lvlid=39>.

Office of Minority Health (**OMH**). (2021, May 18). Mental and Behavioral Health—African Americans. Retrieved June 14, 2022 from <https://minorityhealth.hhs.gov/omh/browse.aspx?lvl=4&lvlid=24>.

Pew Research Center. (2021). Key facts about Asian Americans, a diverse and growing population. Retrieved June 16, 2022 from <https://www.pewresearch.org/fact-tank/2021/04/29/key-facts-about-asian-americans/>.

Pompili M, Goldblatt MJ. (2012). Psychopharmacological treatment to reduce suicide risk. *Psychiatric Times* April 02, 2012. Retrieved July 12, 2022 from <http://www.psychiatrictimes.com/suicide/psychopharmacological-treatment-reduce-suicide-risk>.

Psychiatry Online. (2022). Facts About DSM-5-TR. *Psychiatric News*. Doi: 10.1176/appi.pn.2022.03.3.28. Retrieved June 27, 2022 from <https://psychnews.psychiatryonline.org/doi/10.1176/appi.pn.2022.03.3.28>.

Ratkowska K, De Leo D. (2013), Suicide in immigrants: An overview. *Open Journal of Medical Psychology* 2(3): 124-33. Doi: 10.4236/ojmp.2013.23019. Retrieved July 7, 2022 from https://file.scirp.org/Html/7-2250046_34019.htm.

Rezapur-Shahkolai F, Khezeli M, Hazavehei SMM, et al. (2020). The effects of suicidal ideation and constructs of theory of planned behavior on suicidal intention in women: a structural equation modeling approach. *BMC Psychiatry* 20, 217. Doi:10.1186/s12888-020-02625-w. Retrieved July 12, 2022 from <https://bmcp psychiatry.biomedcentral.com/articles/10.1186/s12888-020-02625-w>.

Richardson C, Dickson A, Robb KA, O'Connor RC. (2021). The Male Experience of Suicide Attempts and Recovery: An Interpretative Phenomenological Analysis. *Int. J. Environ. Res. Public Health* 2021, 18(10), 5209. Doi: 10.3390/ijerph18105209. Retrieved June 24, 2022 from <https://www.mdpi.com/1660-4601/18/10/5209/htm>.

Roškar S, Kralj D, Andriessen K, Krysinska K, Vinko M and Podlesek A. (2022). Anticipated Self and Public Stigma in Suicide Prevention Professionals. *Front. Psychiatry* 13:931245. Doi: 10.3389/fpsy.2022.931245. Retrieved August 11, 2022 from <https://www.frontiersin.org/articles/10.3389/fpsy.2022.931245/full>.

Runeson B, Odeberg J, Pettersson A, et al. (2017). Instruments for the assessment of suicide risk: A systematic review evaluating the certainty of the evidence. *PLoS ONE* 12(7): e0180292. Doi: 10.1371/journal.pone.0180292. Retrieved June 24, 2022 from <http://journals.plos.org/plosone/article?id=10.1371/journal.pone.0180292>.

Schmidt PG. (2012). Suicide Prevention—Veterans Module. Washington Department of Veterans Affairs. Retrieved July 28, 2022 from <http://www.doh.wa.gov/Portals/1/Documents/2300/2016/689NonDOH.pdf>.

Seidler ZE, Wilson MJ, Oliffe JL, Kealy D, Toogood N, Ogradniczuk JS and Rice SM. (2021) "Eventually, I Admitted, 'I Cannot Do This Alone'": Exploring Experiences of Suicidality and Help-Seeking Drivers Among Australian Men. *Front. Sociol.* 6:727069. Doi: 10.3389/fsoc.2021.727069. Retrieved June 24, 2022 from <https://www.frontiersin.org/articles/10.3389/fsoc.2021.727069/full#h6>.

Srinivasa, S. R., Pasupuleti, S., Dronamraju, R., & Longoria, D. (2021). Suicide among South Asians in the United States: Perspectives, Causes, and Implications for Prevention and Treatment. *J Ment Health Soc Behav* 3(2): 150. Doi: 10.33790/jmhsb1100150. Retrieved June 17, 2022 from https://scholarworks.utrgv.edu/cgi/viewcontent.cgi?article=1009&context=sw_fac.

Stone DM, Holland KM, Bartholow B, et al. (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. Retrieved August 29, 2022 from <https://www.cdc.gov/suicide/pdf/suicideTechnicalPackage.pdf>.

Substance Abuse and Mental Health Services Administration (**SAMHSA**). (2021). Addressing Suicidal Thoughts and Behaviors in Substance Use Treatment. SAMHSA Advisory. Retrieved July 8, 2022 from https://store.samhsa.gov/sites/default/files/SAMHSA_Digital_Download/PEP20-06-04-005.pdf.

Substance Abuse and Mental Health Services Administration (**SAMHSA**). (2019, November 15). What People Get Wrong About Suicides on Tribal Lands. Weekly Spark News. Retrieved July 21, 2022 from <https://sprc.org/news/what-people-get-wrong-about-suicides-tribal-lands-0>.

Substance Abuse and Mental Health Services Administration (**SAMHSA**). (2018). Behavioral Health Services for American Indians and Alaska Natives, TIP 61. Retrieved July 21, 2022 from https://store.samhsa.gov/sites/default/files/d7/priv/tip_61_aian_full_document_020419_0.pdf.

Substance Abuse and Mental Health Services Administration (**SAMHSA**). (2016). Substance use and suicide: A nexus requiring a public health approach. HHS Publication No. SMA-16-4935. Retrieved July 8, 2022 from <https://store.samhsa.gov/sites/default/files/d7/priv/sma16-4935.pdf>.

Suicide Prevention Resource Center (**SPRC**). (2020). Racial and Ethnic Disparities: Hispanic Populations. Retrieved September 9, 2022 from <https://www.sprc.org/scope/racial-ethnic-disparities>.

Suitt TH. (2021). High Suicide Rates among United States Service Members and Veterans of the Post 9/11 Wars. 20 Years of War: A Cost of War Research Series. Retrieved July 28, 2022 from https://watson.brown.edu/costsofwar/files/cow/imce/papers/2021/Suitt_Suicides_Costs%20of%20War_June%2021%202021.pdf.

Sun S-H, Jia C-X. (2014). Completed suicide with violent and non-violent methods in rural Shandong, China: A psychological autopsy study. *PLoS ONE* 9(8): e104333. Doi: 10.1371/journal.pone.0104333. Retrieved August 8, 2022 from <http://journals.plos.org/plosone/article?id=10.1371/journal.pone.0104333>.

Swanson JW, McGinty EE, Fazel S, Mays VM. (2015). Mental illness and reduction of gun violence and suicide: Bringing epidemiologic research to policy. *Ann Epidemiol* 25(5): 366–76. Doi: 10.1016/j.annepidem.2014.03.004. Retrieved August 8, 2022 from <https://www.ncbi.nlm.nih.gov/pmc/articles/pmc4211925/>.

Tesfazion AA. (2014). Emergency Department Visits for Drug-Related Suicide Attempts among Middle-Aged Adults Aged 45 to 64. *The CBHSQ Report*. Center for Behavioral Health Statistics and Quality, Substance Abuse and Mental Health Services Administration. Retrieved August 8, 2022 from https://www.ncbi.nlm.nih.gov/books/NBK384674/#SR-154_SR-2396.s1.

U.S. Department of Veterans Affairs. (**USDVA**, 2022, May). About the Veterans Crisis Line. Retrieved June 25, 2022 from <https://www.veteranscrisisline.net/About/AboutveteransCrisisLine.aspx>.

U.S. Department of Veteran Affairs (**USDVA**, 2021, September). National Veteran Suicide Prevention Annual Report. Retrieved July 7, 2022 from <https://www.mentalhealth.va.gov/docs/data-sheets/2021/2021-National-Veteran-Suicide-Prevention-Annual-Report-FINAL-9-8-21.pdf>.

U.S. Department of Veterans Affairs (**USDVA**, 2021, August). Washington Veteran Suicide Data Sheet, 2019. Retrieved June 20, 2022 from <https://www.mentalhealth.va.gov/docs/data-sheets/2019/2019-State-Data-Sheet-Washington-508.pdf>.

United States Preventative Services Task Force (**USPSTF**). Screening for Depression, Anxiety, and Suicide Risk in Children and Adolescents: An Evidence Review for the U.S. Preventive Services Task Force. Evidence Synthesis 221. Retrieved June 12, 2022 from <file:///C:/Users/laure/Downloads/screening-depression-anxiety-suicide-risk-children-adolescents-draft-evidence-review.pdf>.

Volkman C, Bschor T, and Köhler S. (2020). Lithium Treatment Over the Lifespan in Bipolar Disorders. *Front. Psychiatry* 11: 377. Doi: 10.3389/fpsyt.2020.00377. Retrieved June 12, 2022 from <https://www.frontiersin.org/articles/10.3389/fpsyt.2020.00377/full>.

Wang Z, Yu C, Wang J, Bao J, Gao X, Xiang H. (2016). Age-period-cohort analysis of suicide mortality by gender among white and black Americans, 1983-2012. *Int J Equity Health*. 2016; 15(1):107. Doi: 10.1186/s12939-016-0400-2. Retrieved June 14, 2022 from <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4944259/>.

Washington State Department of Health (**WSDOH**). (2021). Policy Level–P6–Support Suicide Prevention. Department of Health 2021-23 Regular Budget Session. Retrieved August 15, 2022 from <https://doh.wa.gov/sites/default/files/legacy/Documents/9220//P6-SupportSuicidePrevention.pdf>.

Washington State Department of Health (**WSDOH**). (2020, November). Sharing Suicide Data to Save Lives. Retrieved June 13, 2022 from <https://doh.wa.gov/sites/default/files/legacy/Documents/Pubs/971-037-SuicideDataSharing.pdf>.

Washington State Department of Health (**WSDOH**). (2016). Washington State Suicide Prevention Plan. Retrieved June 12, 2022 from <http://www.doh.wa.gov/Portals/1/Documents/Pubs/631-058-SuicidePrevPlan.pdf>.

Washington State Health Care Authority (**WSHCA**). (2022). Health care services and supports. Retrieved August 15, 2022 from <https://www.hca.wa.gov/health-care-services-supports/apple-health-medicaid-coverage/apple-health-managed-care>.

Williams NJ. (2016). Assessing mental health clinicians' intentions to adopt evidence-based treatments: Reliability and validity testing of the evidence-based treatment intentions scale. *Implementation Science* 2016 11:60. Doi:10.1186/s13012-016-0417-3. Retrieved July 28, 2022 from <https://implementationscience.biomedcentral.com/articles/10.1186/s13012-016-0417-3>.

Worsteling A, Keating BW. (2022). Community and bystander interventions for the prevention of suicide: Protocol for a systematic review. *PLoS ONE* 17(6): e0270375. Doi: 10.1371/journal.pone.0270375. Retrieved July 21, 2022 from <https://journals.plos.org/plosone/article?id=10.1371/journal.pone.0270375>.

Xin X, Ming Q, Zhang J, et al. (2016). Four distinct subgroups of self-injurious behavior among Chinese Adolescents: Findings from a latent class analysis. *PLoS ONE* 11(7): e0158609. Doi:10.1371/journal.pone.0158609. Retrieved July 28, 2022 from <http://journals.plos.org/plosone/article?id=10.1371/journal.pone.0158609>.

Quiz: About Suicide in WA State, 6 units

Use the answer sheet following the test to record your answers.

1. Suicide is a major public health concern. In the United States:

- a. Suicide is the leading cause of death among most age groups.
- b. There were more than twice as many suicides as homicides.
- c. Nearly 46,000 people die from suicide each year.
- d. Suicide rates were highest in the Northeast.

2. In Washington State, the Action Alliance for Suicide Prevention (AASP) is the coordinated body that informs policy and programmatic change and makes recommendations for the *Washington State Suicide Prevention Plan*:

- a. True
- b. False

3. The Pacific Islands have some of the highest rates of suicide in the broader Western Pacific Region due to complex and rapid societal change, including loss of culture and spiritual connectedness due to the impacts of climate change and Westernization.

- a. True
- b. False

4. When comparing death from suicide and death by homicide:

- a. For youth, suicide is much more common than homicide.
- b. Suicide is virtually unknown among Hispanic youth.
- c. Suicide is less common among American Indian youth when compared to White youth.
- d. Suicides continue to outnumber homicides in America.

5. Among males, guns are the most common object used in suicide attempts, while in females:

- a. Inert gas asphyxiation is the leading mechanism for suicide.
- b. Poisoning (predominantly drug overdose) is the leading mechanism for suicide.
- c. Falling from buildings or bridges is the leading mechanism for suicide.
- d. Hanging is the leading mechanism for suicide.

6. Accurately determining who is at risk for suicide using tests or clinical judgment:

- a. Has been proven to be highly effective in predicting suicides.
- b. Can in itself be the start of suicide prevention efforts.
- c. Has been particularly successful within military organizations.
- d. Has no value and should be avoided.

7. When interviewing someone you suspect may be at risk for suicide:

- a. Ask yes/no questions to keep things simple.
- b. Remember that asking people about suicide may plant the idea in their head.
- c. Ask about safety, then assess lethality and intent.
- d. Avoid questions about previous suicide attempts.

8. Warning signs of suicide:

- a. Are individual factors that indicate an acute increase in risk for suicidal behavior within minutes to days.
- b. Provide an opportunity for early assessment and intervention.
- c. Can be evaluated by asking patients to describe thoughts, feelings, and behaviors they have experienced prior to the most recent exacerbation of suicidal ideation.
- d. All of the above.

9. Imminent harm is:

- a. A situation in which a person's actions could lead to harming another person.
- b. The amount of harm or injury that occurs following a suicide attempt.
- c. A situation in which a person's risk status may indicate actions that could lead to his or her suicide.
- d. The potential for self-harm sometime in the future.

10. Intentions are:

- a. Not useful in assessing a person's desire to commit suicide.
- b. Instructions from another person that guide a behavior or lead to an outcome.
- c. Common passing thoughts that rarely lead to an action or outcome.
- d. Self-instructions that guide engagement in a behavior or lead to an outcome.

11. Protective factors include:

- a. Coping and problem-solving skills, moral objections to suicide, strong and supportive relationships with partners, friends, and family.
- b. Connectedness to school, community, and other social institutions.
- c. Availability of physical and mental healthcare.
- d. All of the above.

12. Two of the strongest individual risk factors for suicide are:

- a. Local epidemics and access to medical care.
- b. Cultural and religious beliefs and financial loss.
- c. Willingness to seek help and female gender.
- d. Previous attempt and history of substance abuse.

13. For immigrants, severing links with their country of origin, the loss of status and social network, a sense of inadequacy because of language barriers, unemployment, financial problems, a sense of not belonging, and feelings of exclusion can lead to loneliness and hopelessness, and suicidal behaviors.

- a. True
- b. False

14. Lethal means:

- a. Are not associated with suicide attempts.
- b. Are objects, substances or actions that might be used in a suicide attempt.
- c. Do not include nonviolent means such as poisons.
- d. Are only guns and knives.

15. Reducing access to lethal means:

- a. Restricts access to the instruments or objects used to carry out a self-destructive act.
- b. Tells a patient to be careful around instruments or objects that can be used to carry out a self-destructive act.
- c. Has very little impact on a person's ability to carry out a self-destructive act.
- d. Is important for the first hour after a suicide attempt but not useful in the days and weeks following an attempt.

16. Restricting access to lethal means can be accomplished by:

- a. Reducing access to potentially toxic medications.
- b. Locking guns in lock boxes or gun safes.
- c. Erecting barriers on bridges and buildings or limiting access to prevent jumping.
- d. All of the above.

17. Implementation of means restriction can include:

- a. Reducing the toxicity of a lethal method—for example, reducing carbon monoxide content emissions from vehicles.
- b. Interfering with physical access, for example, using gun locks.
- c. Encouraging at-risk families to remove lethal suicide means from the home.
- d. All of the above.

18. Key challenges in the assessment, management, and referral of people at risk for suicide are:

- a. The lack of psychiatric services in large healthcare organizations.
- b. The lack of police services in rural areas.
- c. The high percentage of suicidal patients admitted to EDs across the country.
- d. Identifying at-risk individuals, accessing services, and relying on evidence-based care.

19. Which of the following actions can reduce the risk of suicide?

- a. Limiting access to mental health services.
- b. Exercise, such as running a marathon.
- c. Management of mental health conditions, particularly major depression.
- d. Entering the military, which provides structure to a person's life.

20. Although effective management of mental health conditions can reduce the risk of suicide and may decrease suicide rates, nearly half of the population of Washington faces barriers to healthcare services because of geography and income challenges:

- a. True
- b. False

21. Continuity of care:

- a. Is most important for patients at low risk for suicide.
- b. For privacy purposes, should **not** involve family or friends.
- c. Should be maintained across facilities and providers.
- d. Has not been shown to help people at risk for suicide.

22. One psychosocial intervention that has been shown to lower youth suicide rates is:

- a. School lunch programs with discussion sessions.
- b. Gatekeeper training—also referred to as recognition and referral training.
- c. Classroom volunteer programs with question an answer.
- d. Sending at risk youth to military academies.

23. Pharmacological medications:

- a. Can be helpful in managing underlying mental disorders.
- b. Are highly successful in reducing suicidal thoughts and behaviors.
- c. Are completely ineffective for managing suicidal thoughts and behaviors.
- d. Should never be used in patients with suicidal thoughts and behaviors.

24. The only two evidence-based medications that have been shown to lower suicidal behaviors are:

- a. Antidepressants and antiepileptics.
- b. Benzodiazepines and antianxiety medications.
- c. Lithium and clozapine.
- b. Antivirals and antidepressants.

25. Alcohol and drug abuse or dependence:

- a. Decreases suicide rates because an intoxicated person tends to fall asleep.
- b. Have very little effect on suicide ideation and suicide attempts.
- c. Significantly increases suicide rates because disinhibition occurs when a person is intoxicated.
- d. Increases the risk of suicide only among heroin users.

26. A safety plan:

- a. Works best if it is **not** shared with family and loved ones.
- b. Is a prevention tool designed to help an individual manage suicidal thoughts.
- c. Should be developed after the patient has been discharged home.
- d. Typically does not need followup once a patient is discharged from the hospital.

27. Peer norm or peer support programs:

- a. Seek to normalize protective factors for suicide by encouraging help-seeking.
- b. Encourage people with suicidal thoughts to talk to a trusted adult or friend.
- c. Encourage and promote peer connectedness.
- d. All of the above.

28. A servicemember's risk for suicide can be related to:

- a. Mental health problems
- b. Difficulty returning to civilian life
- c. Substance abuse
- d. All of the above.

29. For clinicians working with active-duty military or veterans:

- a. Understanding and appreciating military culture and tailoring clinical practices based on that understanding is imperative.
- b. Understand that service members are taught that service comes before self and the mission comes first.
- c. Keep in mind that when a servicemember leaves the military, he or she may experience feelings of unrest, alienation, anxiety, and lack of purpose.
- d. All of the above.

30. In veterans, protective factors against suicide include:

- a. Responsibilities or duties to others.
- b. Problem solving skills, coping, and conflict resolution.
- c. Mental healthcare.
- d. All of the above.

31. Intervention strategies that have been shown to be effective in preventing suicide in veterans are:

- a. Providing training in the safe use of guns.
- b. Engaging in physical activity and stress management and addressing PTSD and depression.
- c. Placing at-risk veterans on a psychiatric hold.
- d. Avoiding physical activity, going to church, and keeping quiet about PTSD.

32. The Veterans Crisis Line encourages veterans and their families and friends to call when a veteran is experiencing a crisis.

- a. True
- b. False

[Continue to next page for answer sheet]

Answer Sheet

Name (Please print) _____

Date _____

Passing score is 80%

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Course Evaluation

Please use this scale for your course evaluation. Items with asterisks * are required.

1 = Strongly agree 2 = Agree 3 = Neutral 4 = Disagree 5 = Strongly disagree

*Upon completion of the course, I was able to:

- 1. Describe the scope of suicide in Washington State and nationally. 1 2 3 4 5
- 2. State 5 groups that are disproportionately at risk for suicide. 1 2 3 4 5
- 3. Explain the 4 main components of suicide risk screening and assessment. 1 2 3 4 5
- 4. State 5 common warning signs for suicide. 1 2 3 4 5
- 5. Relate 3 commonly stated risk factors for suicide. 1 2 3 4 5
- 6. Define "means restriction." 1 2 3 4 5
- 7. Relate 3 actions and referrals for various levels of suicide risk. 1 2 3 4 5
- 8. Describe 3 common psychosocial techniques that have been shown to reduce the risk of suicidal ideation and behaviors. 1 2 3 4 5
- 9. Explain 3 reasons why pharmacologic interventions may reduce suicidal ideations and behaviors. 1 2 3 4 5
- 10. State the primary goal for every client with a substance use disorder and suicidal thoughts or behaviors. 1 2 3 4 5
- 11. State 4 reasons why a safety plan is critical in the treatment of patients with suicidal ideation. 1 2 3 4 5
- 12. Relate 3 reasons why supportive third parties can help reduce suicidal ideation and behaviors in their communities. 1 2 3 4 5
- 13. Explain 3 aspects of military culture that may affect the incidence of suicide in active-duty military and veterans. 1 2 3 4 5

*The author(s) are knowledgeable about the subject matter. 1 2 3 4 5

*The author(s) cited evidence that supported the material presented. 1 2 3 4 5

*Did this course contain discriminatory or prejudicial language? Yes No

*Was this course free of commercial bias and product promotion? Yes No

*As a result of what you have learned, will make any changes in your practice? Yes No

If you answered Yes above, what changes do you intend to make? If you answered No, please explain why.

*Do you intend to return to ATrain for your ongoing CE needs?

Yes, within the next 30 days. Yes, during my next renewal cycle.
 Maybe, not sure. No, I only needed this one course.

* Navigating the ATrain Education website was:

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* Would you recommend ATrain Education to a friend, co-worker, or colleague?

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 40-49 minutes per contact hour 30-39 minutes per contact hour
 Less than 30 minutes per contact hour

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[Continue to next page for registration and payment]

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