

About Suicide in Washington State, 6 units

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Contact hours: 6

Course price: \$59

Instructions

1. To print everything you need, including the test, evaluation, and registration, click Print This Page at the top right. Study the course, pass the test, and fill out the forms.
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Questions? Call 707 459-1315 (Pacific Time) or email (contact-us@atrainceu.com).

This course is approved by the Washington State Department of Health. These 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. Approval #TRNG.TG.60817428-SUIC.

Course Summary

The purpose of this course is to 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.

COI Support

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Commercial Support

No commercial support was received for this activity.

Criteria for Successful Completions

80% or higher on the post test, a completed evaluation form, and payment where required. No partial credit will be awarded.

Course Objectives

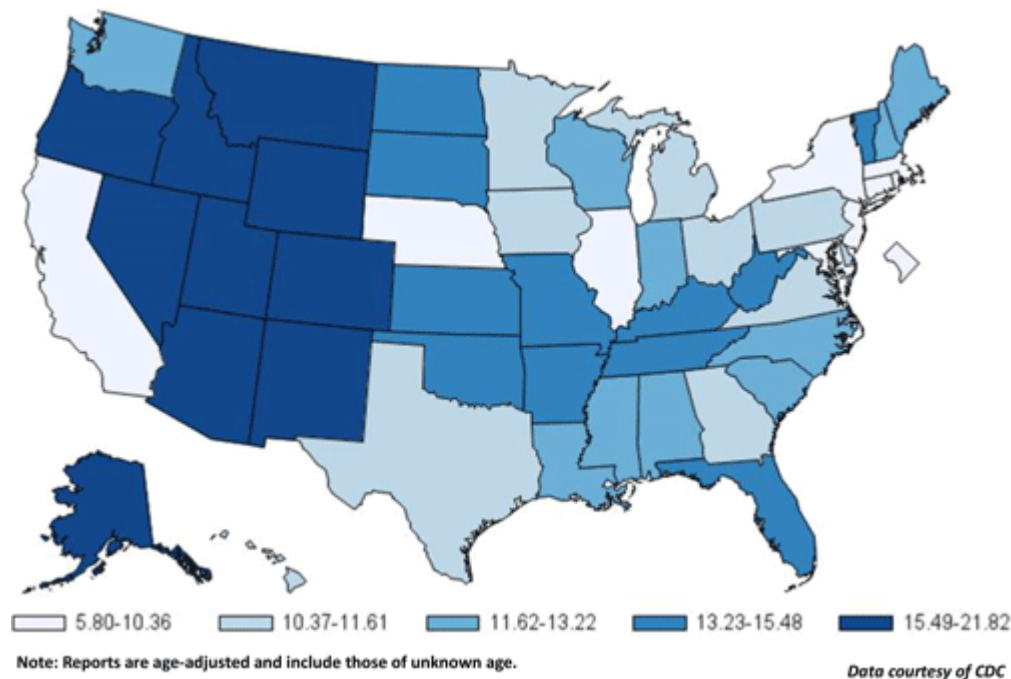
When you finish this course you will be able to:

1. Describe the scope of suicide in Washington State and nationally.
2. Explain the 4 main components of suicide risk screening and assessment.
3. State 5 groups that are disproportionately impacted by suicide.
4. Relate 3 differences between high risk of suicide and low risk.
5. Describe 3 commonly used psychosocial techniques that have been shown to reduce the risk of suicidal ideation and behaviors.
6. Explain 3 reasons why psychiatric medications may reduce suicidal ideations and behaviors.
7. Relate 3 reasons why supportive third parties can help reduce suicidal ideation and behaviors in their communities.
8. Explain 3 aspects of military culture that may affect the incidence of suicide in active-duty military and veterans.
9. Describe 3 protective factors against suicidal ideation and suicidal behaviors for veteran populations.
10. Define *lethal* means.

Suicide in Washington State and the Nation

In the United States and throughout the world, suicide is a major public health concern. In 2015, 44,000 Americans died from suicide, making it the tenth leading cause of death overall. And suicide is not limited to any gender, age, socioeconomic, or ethnic group. Among children (age 10 to 14), suicide is the **third** leading cause of death, while among older teenagers and young adults (age 15 to 34), suicide is the **second** leading cause of death. Remarkably, in 2015 there were many more suicides (44,193) in the United States than homicides (17,793) (CDC, 2017).

Suicide Rates in the United States (by state; per 100,000; average 2004–2010)

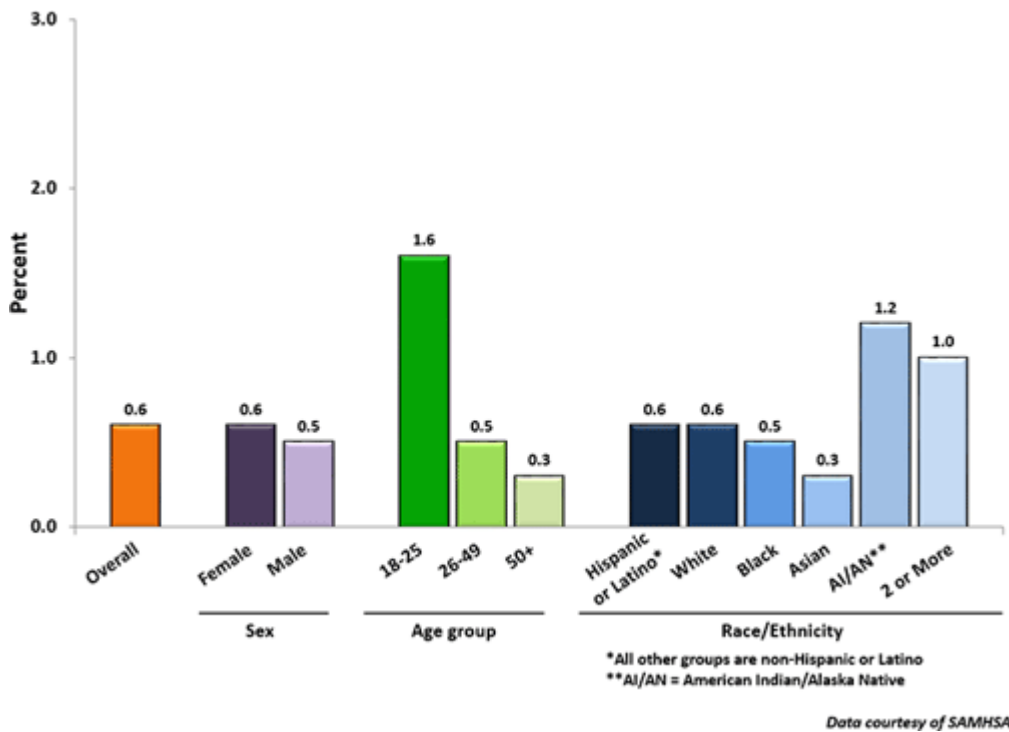


Suicide rates vary from state to state. Washington State, as well as other Western states (excluding California), have some of the highest rates of suicide in the country. Source: CDC.

A web of biological, psychological, social, environmental, and situational concerns influence suicidal ideation and behaviors. Risk factors, including childhood trauma, substance abuse, poverty, and untreated mental health problems, are common. Unfortunately, many people cannot get help because of provider shortages, stigma associated with mental illness, and the cost of care (WSDOH, 2016).

Although men have a higher rate of **completed** suicides, suicide **attempts** are two- to three-fold more frequent among women. Methods are also different: men often use lethal methods such as firearms, hanging, or suffocation, while women attempt suicide by poisoning, wrist cutting, or falling from heights (Mendez-Bustos et al., 2013).

Prevalence of Suicide Attempts Among U.S. Adults (2015)



Defining Terms

- **Suicide** is defined as death caused by self-directed injurious behavior with intent to die as a result of the behavior.
- A **suicide attempt** is a non-fatal, self-directed, potentially injurious behavior with intent to die as a result of the behavior. A suicide attempt might not result in injury.
- A **suicidal ideation** refers to thinking about, considering, or planning suicide.

Source: CDC, 2016.

In Washington State the suicide rate is 11% higher than the national average; from 2010 to 2014, over 5,000 people died as a result of suicide. Three Washingtonians die by suicide every day and in an average week there are 65 hospitalizations from self-inflicted injury. More than 4% of adults and 20% of 10th graders in Washington seriously considered suicide in the past year (WSDOH, 2016).

Suicide rates vary in different parts of Washington. But because of the way rates are compared, a small difference may be statistically significant while a larger one is not. Statistical significance means the difference is very **unlikely** to be due to chance. From 2010 to 2014, suicide rates were higher than the state rate in six counties:

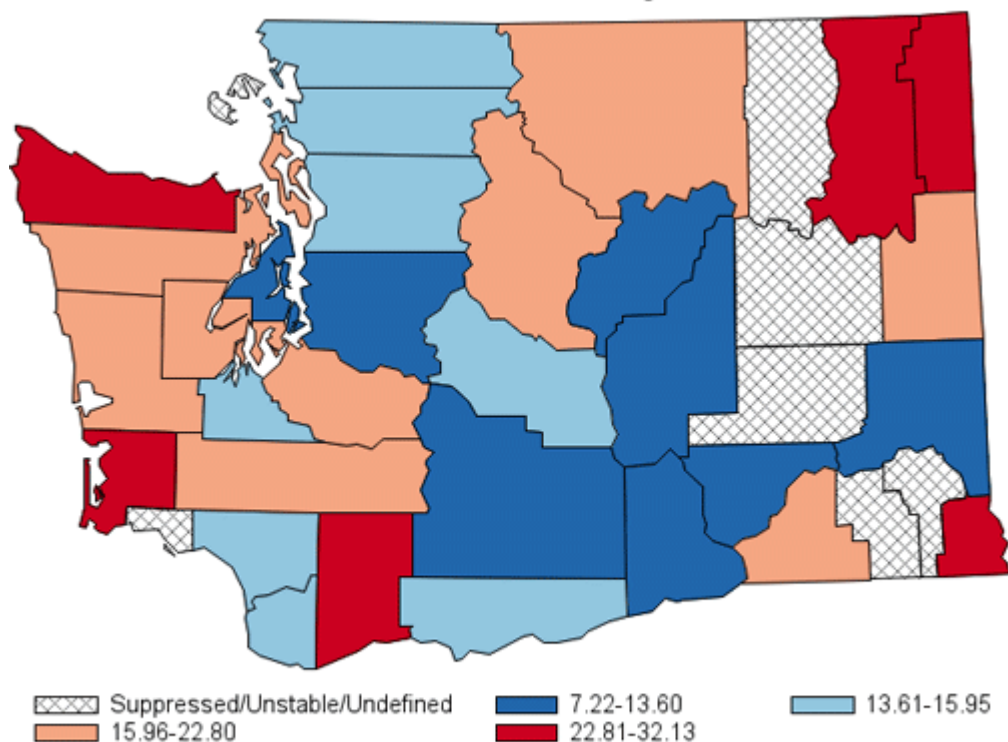
1. Clallam

2. Grays Harbor
3. Okanogan,
4. Pierce
5. Skamania
6. 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 not 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. Clark County's *Battle Ground School District*, located in a town of fewer than 18,000 residents, lost seven students to suicide between 2011 and 2013. Neither pattern of loss was clear from a glance at county data. In Washington and nationally, suicide rates are higher outside urban areas and highest in small-town rural areas (WSDOH, 2016). 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).

2008–2014, Washington Death Rates per 100,000 Population

All Injury, Suicide, All Races, All Ethnicities, Both Sexes, All Ages
Annualized Crude Rate for Washington: 14.61



Reports for All Ages include those of unknown age.

* Rates based on 20 or fewer deaths may be unstable.

These rates are suppressed for counties (see legend above); such rates in the title have an asterisk.

Produced by: the Statistics, Programming & Economics Branch, National Center for Injury Prevention & Control, CDC.

Data sources: NCES National Vital Statistics System for numbers of deaths; US Census Bureau for population estimates.

Key Points about Suicide

- Suicide is a preventable public health problem, not a personal weakness or family failure.
- Everyone in Washington has a role in suicide prevention; suicide prevention is not the responsibility of the health system alone.
- Many people avoid discussing suicide; silence and stigma harm individuals, families, and communities.
- To prevent suicide in Washington, we must change the factors that contribute to suicide risk, such as childhood trauma, isolation in our communities, access to lethal means, and lack of access to appropriate behavioral healthcare.
- Suicide does not affect all communities equally or in the same way; suicide prevention programs should be based on the best available research and practices, while reflecting community needs and local cultures.
- People experiencing mental illness, substance use disorders (SUDs), trauma, loss, and suicidal thinking and behavior deserve dignity, respect, and the right to make decisions about their care.

Source: Washington State Department of Health, 2016.

Suicide, Race, and Ethnicity

Suicide rates in Washington are highest among American Indian, Alaska Native, and white populations, consistent with national rates. But these broad demographic groups are diverse with regard to national origin and ethnicity, which 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.

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. Among American Indian and Alaska Native youth aged 15 to 24 years, the suicide rate is 3 to 4 times higher than other American youth and is the second leading cause of death for American Indian and Alaska Natives in this age group (WSDOH, 2016). The risk for co-occurrence of substance abuse, depression, and diabetes is over 12 times higher for AI/ANs than for whites (Cwik et al., 2016). The suicide rate for American Indian juveniles is more than double the white non-Hispanic rate and more than triple the rates for the other racial/ethnic groups (CSAT, 2015).

Very little research focuses on why suicide rates are high among white populations. Centers for Disease Control and Prevention (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).

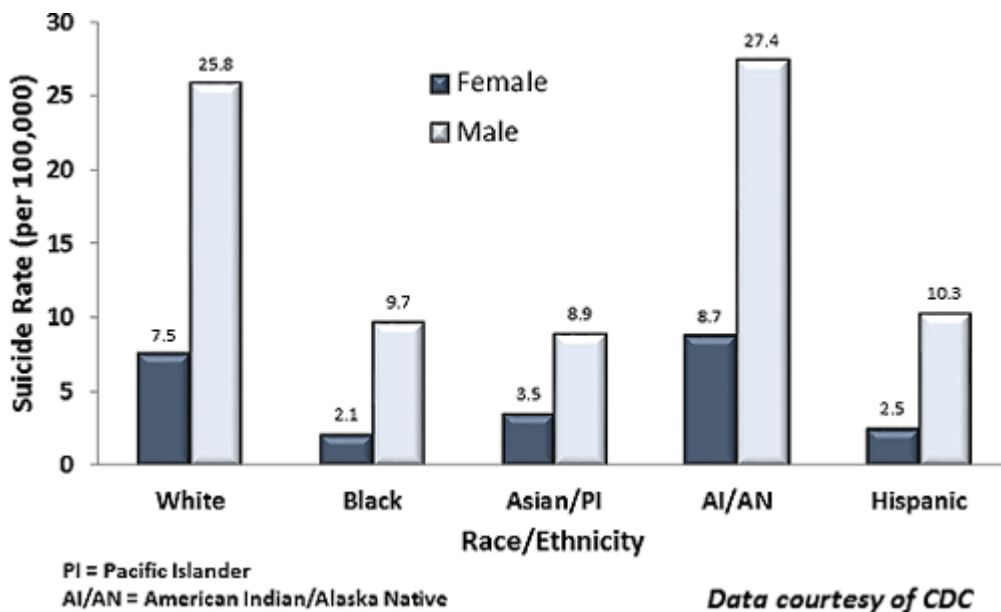
Hispanics/Latinos have fairly similar rates of suicidal thoughts and behaviors compared with white, non-Hispanic individuals. Among youth and young adults, the prevalence of suicidal thoughts and behavior increases among Hispanics/Latinos who are more acculturated to mainstream American culture, particularly among females (CSAT, 2015).

The suicide rate for African Americans is 70% lower than that of the non-Hispanic white population. However, in 2014 the suicide death rate for African Americans men was more than four times greater than for African American women (OMH, 2017).

Among 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 at older ages (60–74 years). For females, the risk increased with age until peaking at ages 25 to 29 years and then declined except for slight increases at middle ages (35–44 years) (Wang et al., 2016).

Among Asian American the six largest subgroups in the United States are Asian Indians, Chinese, Filipinos, Japanese, Koreans, and Vietnamese; these subgroups account for 84% of all Asian Americans in the United States. Among these 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).

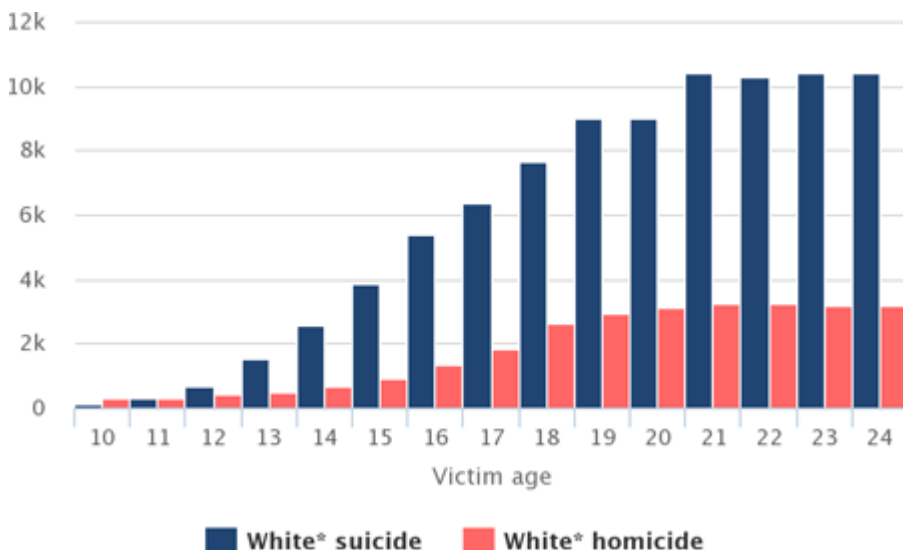
Suicide Rates by Race/Ethnicity in the United States (2014)



Suicide vs. Homicide

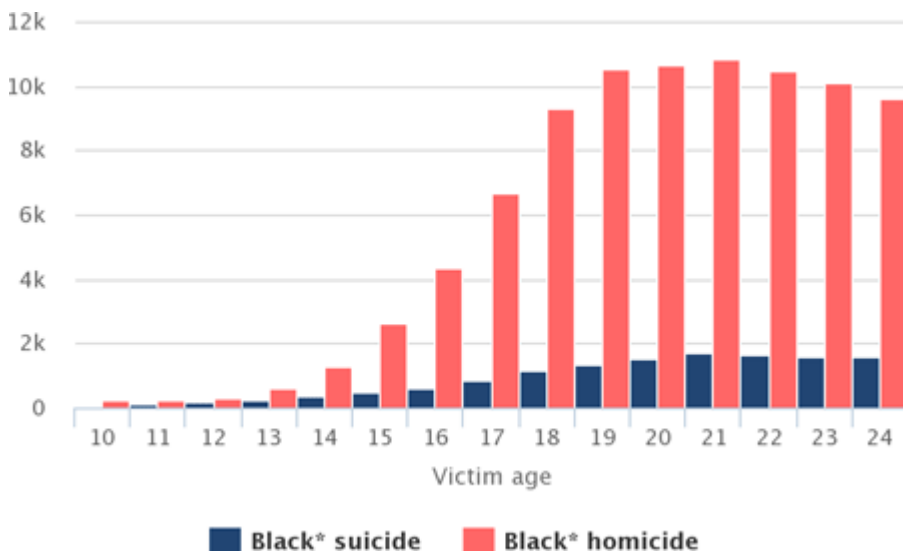
For white youth and young adults between the ages of 12 and 24, between 1990 and 2015 suicide was much more common than murder. This was in sharp contrast to patterns for Hispanics and non-Hispanic blacks. For white youth between the ages of 7 and 17, for every 10 homicide victims there were 29 suicide victims. For black youth, for every 10 homicide victims there were 2 suicide victims. For Hispanic youth, for every 10 homicide victims, there were 5 suicide victims (OJJDP, 2017).

Whites: Number of Suicide and Homicide Victims by Age, 1990–2015



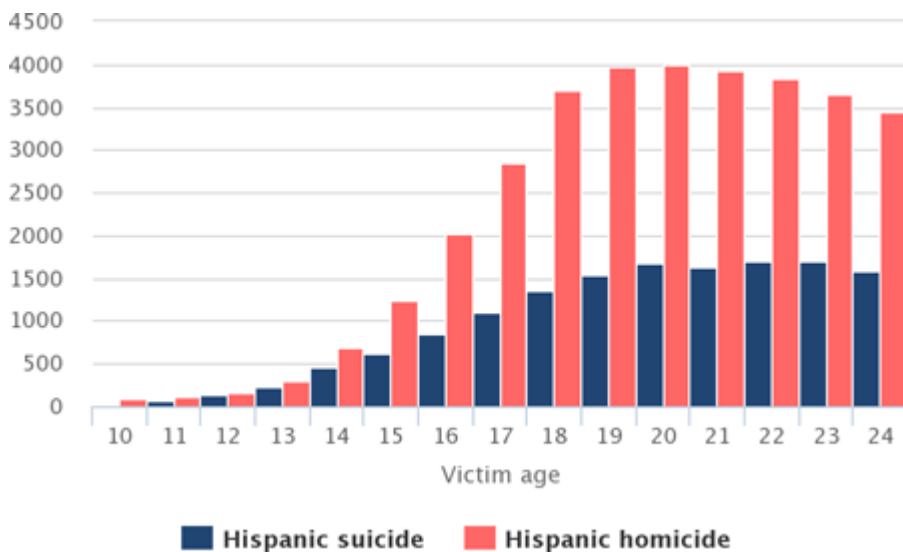
Source: Office of Juvenile Justice and Delinquency Prevention, 2017.

Blacks: Number of Suicide and Homicide Victims by Age, 1990–2015



Source: Office of Juvenile Justice and Delinquency Prevention, 2017.

Hispanics: Number of Suicide and Homicide Victims by Age, 1990–2015



Source: Office of Juvenile Justice and Delinquency Prevention, 2017.

In contrast, the suicide rate for American Indian juveniles (69.8) was more than double the white non-Hispanic rate and more than triple the rates for the other racial/ethnic groups. Hispanics/Latinos have fairly similar rates of suicidal thoughts and behavior compared with white, non-Hispanic individuals. 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, 2015).

Gender and Age Differences

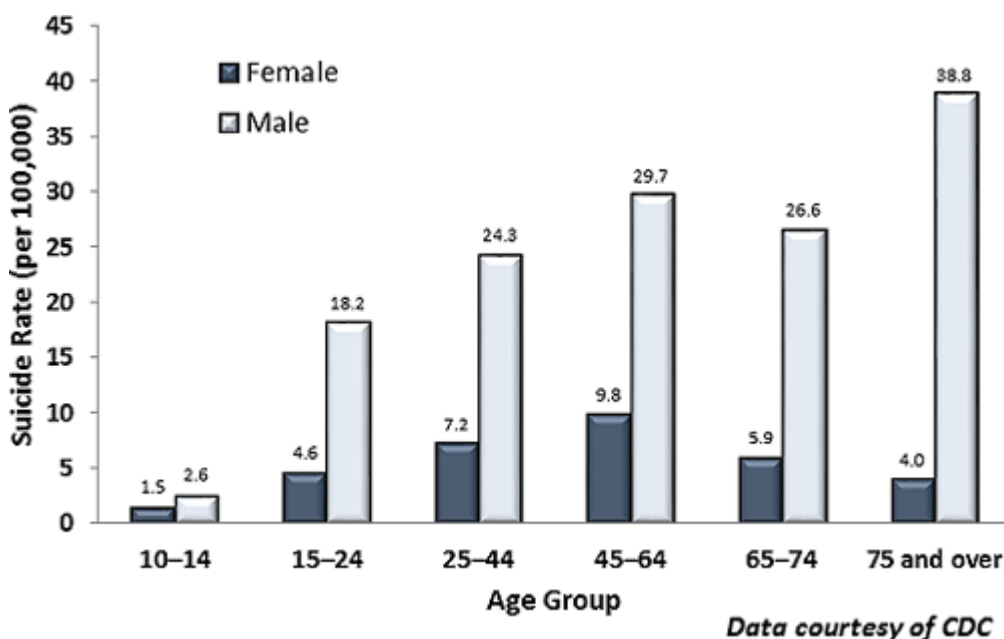
Suicides of young people receive a lot of media and community attention, though Washington's suicide rates for adults are higher. Men are more likely to die by suicide than women, but women are more likely to *attempt* suicide. Men are more likely to use deadlier methods, such as firearms or suffocation. Women are more likely than men to attempt suicide by poisoning (WSDOH, 2016).

During 2012–2014, 77% of suicide deaths in Washington were males. Men 75 and older had the highest *rate*, while men 45 to 64 had the highest total *number* of suicides. National data linked the recent economic recession to increases in middle-aged adult suicides, showing that external economic factors were involved in 37% 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).

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).

Among women in the United States, suicide is concentrated in the 35 to 64 years age group (64.8%), peaking among women aged 45 to 54 years. From 50 years of age, the suicide rates among women tend to diminish progressively, until old age, when rates start increasing again (Mendez-Bustos et al., 2013).

Suicide Rates by Age in the United States (2014)



Case

A 69-year-old Caucasian man—a retired builder with a medical history of chronic depression—was brought to hospital after a failed suicide attempt. The attempt consisted of self-asphyxiation with car exhaust fumes and shooting himself three times with a three-inch nail gun. The initial shot was directed upward through the submental triangle behind the chin. It pierced his tongue, upper denture plate, and hard palate, effectively pinning his mouth shut. The subsequent two shots were fired into the fourth intercostal space immediately left of the sternum.

On admission to the emergency department the patient was distressed but hemodynamically stable. An examination revealed nail gun entry wounds on his left anterior chest wall over the precordial area, and at the submandibular area under his chin, pinning his mouth closed. The nails within the thorax could not be confidently located on chest X-ray; however, transthoracic echocardiography suggested a nail had possibly penetrated into the right ventricle. There was no associated pericardial effusion. In light of the potential for rapid deterioration, the patient was immediately transferred to the operating room where preparations for an exploratory midline sternotomy and thoracotomy were made.

The potential for rapid hemodynamic deterioration due to the intrathoracic penetrating injury required urgent surgical exploration. The uncertainty in the location of the intrathoracic nails meant the exact nature of the surgical repair was not defined and provision for lung separation needed to be planned for. In this case, the chest x-ray failed to allow an adequate view of the nail within the thorax. Although transthoracic echocardiography suggested the nail had penetrated the right ventricle, the exact location of the nail was not clear.

Cardiopulmonary bypass was initiated to facilitate surgical exposure. During cardiopulmonary bypass the endobronchial balloon was deflated, as lung isolation was not required, and cardiac repair was completed uneventfully. Removal of the nail from his mouth required a small incision into the hard palate and extraction using surgical pliers, removing the nail from his hard palate, upper denture, and tongue. The patient made an excellent recovery and was discharged five days later to a psychiatric community hospital for ongoing psychological rehabilitation.

Source: Lim et al., 2013.

<https://jmedicalcasereports.biomedcentral.com/articles/10.1186/1752-1947-7-137>.

Suicide Screening and Assessment

In the United States, about 33% of people who take their life have been in contact with mental health services the year before death and nearly half of people who took their life were seen in primary care the month before death (McCabe et al., 2017). Despite the seriousness and universality of this problem, instruments that evaluate and predict suicide ideation and behavior are lacking (Harris et al., 2015).

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, suicide risk screening and assessment are valuable clinical tools because they can ensure that those requiring more services get the help that they need. In other words, it is not necessary to have a crystal ball if the assessment information shows that a client fits the profile of an individual at significant risk (CSAT, 2015).

Suicide risk measures typically have two goals: (1) to assess current suicide ideation and (2) to assess the potential for future suicidal behaviors (Harris et al., 2015). A good clinical assessment can in itself be the start of suicide prevention efforts. However, several recent reviews have examined the predictive validity of suicide assessment instruments, demonstrating poor performance in the prediction of subsequent suicide attempt and suicide. Nevertheless, guidelines have been developed to aid clinicians in this challenging endeavor, and assessment instruments can supplement the clinical evaluation (Runeson et al., 2017).

Although the U.S. Preventive Services Task Force concluded in 2013 that current evidence is insufficient to assess the benefits and harms of screening the general population for suicide risk in a primary care setting, it concluded that screening is appropriate for high-risk individuals with known mental illnesses or substance use disorders (DVA/DOD, 2013).

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. Therefore, to screen for suicide-related behavior, it is essential that all veterans receive screening for substance use, depression, and PTSD, because this will give “red flags” that these veterans need future followup (NREPP, 2015).

Structuring the Interview

Any healthcare provider in any setting may be called upon to ask a patient about suicidal ideation and behavior. Because this is not easy, providers are encouraged to practice their interview skills at home by developing and practicing questions until they are comfortable leading a patient through an assessment. Understanding when a referral is needed is a critical part of the assessment; anyone thought to be at risk for suicide should be referred.

Assessing risk in clinical practice depends on the skills and philosophical approach of the individual clinician. 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—influences the patient’s response (McCabe et al., 2017).

Asking About Safety

Begin your interview by asking about your patient’s safety. This should start with a general, open-ended question. An example of a general question might be “Has something happened recently that has affected your well-being?” A person might respond by saying, for example, “My dog 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 dog 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 someone is depressed, they may have trouble organizing their thoughts, causing a delayed response. Be patient and give time for an answer. Note the amount of time needed to respond. Develop a series of questions you are comfortable with in order to make a determination about the level of care needed for patient safety to be preserved.

Healthcare providers must take responsibility for asking uncomfortable questions. If you don’t practice and are not fluent with questions about suicide ideation and behaviors, things can get awkward. Asking a difficult question does not plant the idea of suicide.

Although yes/no questions are prevalent in medical 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 words with positive or negative polarity further 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).

Three Components of Safety

Safety can be thought of as having three components: connection, protection, and control. 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.

Source: Berg et al., 2017.

If a patient's response indicates an intention to harm the self, 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 followup 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 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.

Understanding the level of risk for suicide guides your decision about safety, which is the first priority. Patients who have a clear intention of taking their life require higher levels of protection than those with less inclination toward dying. 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, 2013).

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).

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, remember that a prior suicide attempt is a highly potent risk factor for eventually dying by suicide. Also remember that 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, 2015).

Understanding Warning Signs

Warning signs are indications of suicidal ideation and behavior that are observed by or reported to another, and indicate risk for suicide within minutes, hours, or days. About 80% of people who attempt suicide show some sort of warning sign. Knowing and recognizing these signs can help family and friends take action before suicidal thinking turns into action (WSDOH, 2016).

Warning signs can be acute and urgent or simply red flags for concern. Widely accepted general suicide signs include:

- Anxiety, agitation, sleeplessness, or mood swings
- Feeling that there is no reason to live; purposelessness
- Rage, anger, or aggression
- Recklessness, engaging in risky activities without thinking
- Increasing alcohol or drug abuse
- Withdrawing from family and friends

- Hopelessness
- Feeling trapped (USDVA, 2016a)

Recognizing warning signs, knowing how and where to get help, and making timely referrals can save a life. In one study, researchers tested the ability of common signs of suicide to differentiate between suicidal ideation, non-ideation, and suicide attempts. Although all signs of suicide differentiated suicidal ideation and non-ideation, only anger/aggression was predictive of suicide attempts (Hunt 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.

Recognition of warning signs is the key to creating an opportunity for early assessment and intervention. Three warning signs require immediate attention. Presence of one or more of these behaviors is a strong indication that further assessment is needed:

- Communicating suicidal thought verbally or in writing, especially if this is unusual or related to a personal crisis or loss
- Seeking access to lethal means such as firearms or medications

- Demonstrating preparatory behaviors such as putting affairs in order (USDVA, 2016a)

Substance Abuse and Suicide Risk

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, 2015).

According to the Drug Abuse Warning Network (DAWN), from 2005 to 2011, drug-related emergency department visits involving suicide attempts:

- Increased 51% in among individuals aged 12 or older
- Increased 58% among patients aged 18 to 29
- More than doubled for patients aged 45 to 64 doubled (104% increase)

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 United States include:

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

Source: SAMSHA, 2015.

Even when someone with a substance use disorder is in treatment, the prevalence of suicidal ideation and suicide attempts remains high. There is also a significant prevalence of suicide among those who have at one time been in substance abuse treatment. Because of this, substance abuse treatment providers must routinely assess and refer clients at risk for suicidal behavior. Suicidal thoughts and behaviors are also a significant indicator of other co-occurring disorders (eg, major depression, bipolar disorder, PTSD, schizophrenia, and some personality disorders) that must be explored, diagnosed, and addressed (CSAT, 2015).

Clients in substance abuse treatment should be screened for suicidal thoughts and behaviors routinely during intake and at specific points during the course of treatment. For this approach to be effective, providers must:

- Implement a treatment plan and coordinate the plan with other providers
- Check that referral appointments are kept

- Monitor clients by coordinating with mental health providers, other practitioners, and family members
- Understand suicide warning signs, risk factors, and protective factors.
- Be empathic and nonjudgmental
- Understand how their own attitudes and experiences impact their clients
- Understand ethical and legal principles as well as potential areas of conflict (CSAT, 2015)

Abstinence should be a primary goal of any 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 with independent depression (does not resolve with abstinence or is not substance induced)
- Clients with unresolved difficulties that promote suicidal thoughts
- Clients who have a marked personality disturbance such as borderline personality disorder
- Those with trauma histories such as sexual abuse history
- Individuals with a major psychiatric illness (CSAT, 2015)

Suicide 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 (WSDOH, 2016).

Increased risk is also 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).

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. Nevertheless, certain groups have higher suicide attempt or completion rates than the general population:

- Men over 45 years old for suicide death
- Women and girls for self-inflicted injury
- American Indians and Alaska Natives
- People from areas with higher poverty and lower education levels
- People who are institutionalized
- People who have been victims of violence, or are homeless
- Veterans, members of the armed forces, and their families
- People living in small, rural communities
- People who have had contact with criminal justice and child welfare systems
- People with mental illness and substance abuse disorders
- People who have previously attempted suicide
- Members of certain racial and ethnic minority groups, for example, Latina youth
- Lesbian, gay, bisexual, transgender, queer, and questioning populations, particularly youth who have been rejected by their families (WSDOH, 2016)

Although a large proportion of suicides could be avoided with effective treatment of mental disorders, 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, 2013).

Risk Factors for Suicide			
Individual	Relationship	Community	Societal
<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 	<ul style="list-style-type: none"> ▪ Family history of suicide ▪ Family history of child maltreatment ▪ Isolation or feelings of isolation 	<ul style="list-style-type: none"> ▪ Local epidemics of suicide ▪ Barriers to accessing mental health services 	<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 and Suicide Risk

Suicide is overrepresented in people with mental illness (Fosse et al., 2017); over 90% of suicide victims have a diagnosable mental health and/or substance use disorder (DVA/DOD, 2013). 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 and disinhibition are overarching issues related to suicidal ideation and behaviors. In fact, angry impulsivity has been repeatedly identified as a risk factor for suicidal behavior. Although impulsivity is found in a wide range of diagnoses, it is highly associated with bipolar disorder, substance abuse, and certain personality disorders as well as a history of early child abuse (Fawcett, 2012).

Preventing Suicide in All the Wrong Ways

Despite the increased risk of suicidal ideation and behaviors in people with mental health disorders, mental health advocates regularly overstate the prevalence of suicide and suicide attempts among persons with mental illness. At the high end, the *National Alliance on Mental Illness* claims, "More than 90% of youth suicide victims have at least one major psychiatric disorder." *Mental Health America*, a trade association for providers of mental "health" services, estimates "30% to 70% of suicide victims suffer from major depression or bipolar (manic-depressive) disorder."

Suicide is not always the irrational act of a sick mind. Mental illness in people who commit suicide is often diagnosed after the fact. After someone takes his or her own life, we look for a cause. If they take their life after losing their spouse or job, received a bad grade in school, or received a new medical diagnosis, we chalk it up to depression and put the suicide in the mental illness column.

In spite of being overstated, it is clear that suicide does disproportionately affect people with mental illness. Studies looking at the prevalence of suicide among the seriously mentally ill, as well as studies of the prevalence of serious mental illness among those who attempt suicide, found about 5,000 of the 38,000 suicides (about 14%) were in people with serious mental illness. This is three times as high as the general population.

Source: DJ Jaffe, *Preventing Suicide in All the Wrong Ways*, 2014.

Medical Issues and Suicide Risk

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).

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 (SAMHSA, 2011).

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.

Immigrants and Suicide Risk

Immigrants might have higher rates of psychopathology and suicidal behavior than the host populations, due to exposure to the stress of the migrating to an unfamiliar country. 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 affect a person's desire to enter into a relationships with others, and cause a variety of psychiatric disorders such as depression, anxiety, post-traumatic stress disorder, addiction to alcohol and drugs, and lead to loneliness and hopelessness, and suicidal behaviors (Ratkowska & De Leo, 2013).

Social isolation can cause a person to live a condition similar to bereavement, caused by the loss of their previous social structure and culture. The most missed aspects are the language (especially colloquial language and dialect), attitudes, values and social support networks. The pain for these losses is a natural consequence of emigration. However, if the suffering causes significant distress or impairment and lasts for a long period of time, professional support may be necessary (Ratkowska & De Leo, 2013).

Migration poses a risk not only for immigrants but also for the families who remain in the country of origin. For example, it has been observed that the next of kin of Mexican immigrants in the United States were at greater risk of suicidal ideation and suicide attempts than Mexicans without a family history of emigration. Emigration can weaken family ties, lead to feelings of loneliness and insecurity, and increase the risk of suicide among family members who remain at home (Ratkowska & De Leo, 2013).

Immigrants from predominantly collectivist societies may face serious problems of adaptation. This could result in a real or perceived lack of adequate social support system, disparity between expectations and reality, and low self-esteem. Many immigrants undergo radical changes in their social status and may also be subject to discrimination. This could be an additional risk factor for suicide, as evidenced by one of the U.S. studies where immigrant's suicide rates were positively correlated with the negative words used by the majority to describe their ethnic group (Ratkowska & De Leo, 2013).

In most studies conducted in Europe, America, and Australia, the highest risk of suicide was found in immigrants from northern Europe (including the United Kingdom, Ireland, and Finland), and Eastern Europe (especially from Russia and Hungary). The lowest risk was found in immigrants from southern Europe and the Middle East (Ratkowska & De Leo, 2013).

With regard to immigrants from Asian countries, the risk of suicide seems generally low for men but appreciably higher for women. The rates vary, therefore, not only in relation to the country of origin but also for sex of the immigrant. For example, in a study conducted in the United States, Asian, black, and Hispanic men had the lowest risk of suicide, while non-Hispanic white and Asian women had higher risk than the host population (Ratkowska & De Leo, 2013).

The high suicide rates among immigrants from Northern and Eastern Europe might be partly explained by the high alcohol consumption typical of these countries. For example, there is a significant correlation between alcohol consumption and suicide in Finland; Finnish immigrants who died by undetermined causes of death in Sweden also tend to have high alcohol levels in their blood. A similar trend was found in Russia, where suicide rates related to alcohol abuse are very high, and among Russian immigrants who died by suicide in Estonia (Ratkowska & De Leo, 2013).

The low rates of suicide among immigrants from southern Europe, the Middle East, and Asia may be due to some protective factors, such as the strong influence of traditional values, family, and religious beliefs. These countries are more collectivist, have strong family ties and a strong group identity outside their country of origin. Both in Catholic and Muslim countries, religion may be a strong deterrent to suicide, which is considered a sin in the Catholic religion and is forbidden by Islamic law. The protective role of religion could also depend on the ties with the religious community, which might represent a strong source of social support (Ratkowska & De Leo, 2013).

Among asylum seekers, those at higher risk for suicide are young, male, low income, with past traumatic experiences, and lack of social support. Refugees and asylum seekers often have several of these risk factors. 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).

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) is a typical antipsychotic primarily used to treat schizophrenia. It is part of a class of drugs called phenothiazines.

Source: Coentre & Power, 2016.

Actions and Referrals for Various Levels of Risk

Because risk occurs on a continuum, assessment, management, and referrals will be 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).

The suicide continuum begins with suicidal thoughts, evolving into a wish to die, consolidated into an intention to act, and resulting in a plan to end one's life. The evolution of these steps can occur over minutes or years. Each step along the continuum presents an opportunity to intervene and prevent the act of self-directed violence. Often, the first opportunity to assess an individual's suicide risk occurs because of warning signs that are identified by a caregiver, gatekeeper, or loved one. However, all too often a patient's risk is identified after a suicide attempt is made (VA/DOD, 2013).

For people who survive a suicide attempt, the period after an emergency department (ED) visit is a time of high risk. Reductions in subsequent suicide deaths have occurred by engaging patients in timely treatment and providing followup services after discharge from the ED. 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. The ED provides an important opportunity to assess the patient's mental health needs and provide followup resources at a particularly critical juncture (Crane, 2016).

Importance of Secondary Suicide Risk Screening

In a multicenter study of 1,376 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.

Levels of Risk

High acute risk for suicidal ideation and behavior includes patients with warning signs, serious thoughts of suicide, a plan or intent to engage in lethal self-directed violence, a recent suicide attempt, or those with prominent agitation, impulsivity, or psychosis. In such cases, clinicians should ensure constant observation and monitoring before arranging for immediate transfer for psychiatric evaluation or hospitalization (DVA/DOD, 2013).

A person with high risk may be in danger of crossing a threshold and 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 thinking, external controls may be needed to prevent a suicidal act. Some intervention may become necessary to interfere with the trajectory toward death, such as restriction of 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, 2013).

Intermediate acute risk includes patients with suicidal ideation and a plan but with no intent or preparatory behavior. A combination of warning signs and risk factors might include a history of self-directed violence or previous suicide attempt (DVA/DOD, 2013).

Patients at this level of risk should be evaluated by a behavioral health provider. The decision whether to urgently refer a patient to a mental health professional or ED depends on the patient's presentation. If closer evaluation reveals that the level of illness or other clinical findings warrant a higher level of care, the patient may be hospitalized. If, in conjunction with the provider, a patient feels he or she is capable of maintaining safety using non-injurious coping methods and a safety plan, the patient may be managed in outpatient care (DVA/DOD, 2013).

Low acute risk patients include those with recent suicidal ideation who have no specific plans or intent to engage in lethal self-directed violence and have no history of active suicidal behavior. Consider consultation with a behavioral health specialist to determine the need for referral to treatment that will address symptoms and safety issues. These patients should be followed up for reassessment (DVA/DOD, 2013).

Those **not at an elevated risk** for suicide include patients that at some point in the past had reported thoughts about death or suicide, but currently don't have any of these symptoms. There is no indication to consult with behavioral health specialists in these cases, and the patients should be followed in routine care, continue to receive treatment for their disorder, and be re-evaluated periodically for thoughts and ideation (DVA/DOD, 2013).

Level of Risk and Appropriate Action in Primary Care			
Risk of suicide attempt	Indicators of suicide risk	Contributing factors [†]	Initial action based on level of risk
High acute risk	<ul style="list-style-type: none"> ▪ Persistent suicidal ideation or thoughts ▪ Strong intention to act or plan ▪ Not able to control impulse or ▪ Recent suicide attempt or preparatory behavior^{††} 	<p>Acute state of mental disorder or acute psychiatric symptoms</p> <ul style="list-style-type: none"> ▪ Acute precipitating event(s) ▪ Inadequate protective factors 	<ul style="list-style-type: none"> ▪ Maintain direct observational control of the patient ▪ Limit access to lethal means ▪ Immediately transfer with escort to Urgent/ED care setting for hospitalization
Intermediate acute risk	<ul style="list-style-type: none"> ▪ Current suicidal ideation or thoughts ▪ No intention to act ▪ Able to control the impulse ▪ No recent attempt or preparatory behavior or rehearsal of act 	<ul style="list-style-type: none"> ▪ Existence of warning signs or risk factors^{††} and ▪ Limited protective factors 	<ul style="list-style-type: none"> ▪ Refer to Behavioral Health provider for complete evaluation and interventions ▪ Contact Behavioral Health provider to determine acuity of referral ▪ Limit access to lethal means

Level of Risk and Appropriate Action in Primary Care			
Risk of suicide attempt	Indicators of suicide risk	Contributing factors†	Initial action based on level of risk
Low acute risk	<ul style="list-style-type: none"> Recent suicidal ideation or thoughts No intention to act or plan Able to control the impulse No planning or rehearsing a suicide act No previous attempt 	<ul style="list-style-type: none"> Existence of protective factors and Limited risk factors 	<ul style="list-style-type: none"> Consider consultation with Behavioral Health to determine: <ul style="list-style-type: none"> Need for referral Treatment Treat presenting problems Address safety issues Document care and rationale for action

†Modifiers that increase the level of risk for suicide of any defined level:

- Acute state of substance use: Alcohol or substance abuse history is associated with impaired judgment and may increase the severity of the suicidality and risk for suicide act
- Access to means: (firearms, medications) may increase the risk for suicide act
- Existence of multiple risk factors or warning signs or lack of protective fact

††Evidence of suicidal behavior warning signs in the context of denial of ideation should call for concern (e.g., contemplation of plan with denial of thoughts or ideation).

Source: (VA/DOD, 2013).

Documenting Risk

Documentation is critical to promoting safety, coordinating care, and establishing 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, 2015).

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.

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.

Step Two: Access Supervision or Consultation

Upon consultation with a supervisor, it was determined that emergency intervention was needed because of intense substance use, suicidal thoughts with a lethal plan, and access to a weapon.

Consultation is a formal process whereby information and advice are obtained from (a) a professional with clear supervisory responsibilities, (b) a multidisciplinary team that includes such people, and/or (c) a consultant experienced in managing suicidal clients who has been vetted by your agency for this purpose.

Immediate supervision or consultation should be obtained when clients exhibit direct suicide warning signs or when, at intake, they report having made a recent suicide attempt. Substance abuse relapse during treatment is also an indication for supervisory involvement for clients who have a history of suicidal behavior or attempts.

You should not make a judgment about the seriousness of suicide risk or try to manage suicide risk on your own unless you have an advanced mental health degree and specialized training in suicide risk management and it is understood by your agency that you are qualified to manage such risk independently.

Step Three: Take Responsible Action

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

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.

In some instances, an immediate response is required. Examples of immediate actions include arranging transportation to a hospital ED for evaluation, contacting a spouse to have him or her arrange to remove a gun from the home and arrange safe storage, and arranging on the spot to have a mental health specialist further evaluate a client. Examples of non-immediate, but important, actions include making a referral for a client to an outpatient mental health facility for evaluation, scheduling the client to see a psychiatrist for possible medication management, and ordering past mental health records from another provider.

Step Four: Follow Up

Dr. McIntyre, the ED physician, determined that Fernando requires hospitalization. He is currently awaiting admission. This writer will follow up with the hospital unit after he is admitted and will raise the issue of his access to a gun.

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 also essential, as it requires you to follow up on referrals and coordinate with other providers in an ongoing manner.

Source: CSAT, 2015.

Management of Suicide Risk

Effective management of mental health conditions (particularly major depression) can reduce the risk of suicide and may decrease suicide rates. This includes improving access to mental health services, counseling and other psychosocial services, encouraging use of crisis lines, and pharmaceutical treatments (discussed in Module 6). It is important that intervention and treatment be direct and specific to address potential risk factors (DVA/DOD, 2013).

Because suicide attempts are known to be a strong predictor of future attempts and deaths by suicide, continuity of care is critical. Effective clinical care should include monitoring patients for a suicide attempt after an ED visit or hospitalization and providing outreach, mental health followup, therapy, and case management.

In response to the high incidence of suicides, recent attention has focused on prevention. In the United States, suicide prevention strategies include physician education, lethal means restriction, pharmacotherapy, gatekeeper education, and psychotherapy. The success of these strategies has varied considerably. Physician education, lethal means restriction, and gatekeeper education have had the greatest impact on decreasing suicide rates (Hassamal et al., 2015).

Improving Access to Mental Health Services

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 and must be taken into account.

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 by 2020. Chemical dependency services have been available under managed care since 2016 (WSDOH, 2016).

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 (NIH, 2017).

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 may be at increased risk for self-harm.

What Actions Should You Take?

Because suicide attempts are known to be a strong predictor of future attempts and deaths by suicide, continuity of care is critical. Once Terry is ready to be released from the ICU, what will help her the most?

- a. Encouraging her to start dating again.
- b. Admitting her to a psychiatric hospital for a short time against her will.
- c. Making sure she doesn't have access to a gun.
- d. 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 her 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 SAMSHA, 2015b.

Cognitive Behavioral Therapy for Suicide Prevention (CBT-SP)

Cognitive Behavior Therapy for Suicide Prevention (CBT-SP) is a therapeutic approach aimed at preventing re-attempts. It uses a risk-reduction, relapse prevention approach that includes an analysis of risk factors and stressors (eg, relationship problems, school or work-related difficulties) leading up to and following the suicide attempt; safety plan development; skill building; and psycho-education (Stone et al., 2017).

CBT-SP also has family skill modules focused on family support and communication patterns as well as on improving the family's problem-solving skills. A randomized controlled trial utilizing CBT-SP found that 10-session outpatient cognitive therapy designed to prevent repeat suicide attempts resulted in a 50% reduction in the likelihood of a suicide re-attempt relative to treatment as usual among adults who had been admitted to an emergency department for a suicide attempt (Stone et al., 2017).

Dialectical Behavioral Therapy (DBT)

Dialectical Behavioral Therapy (DBT) is a multi-component therapy 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. In a randomized controlled trial of women with recent suicidal or self-injurious behavior, those receiving DBT were half as likely to make a suicide attempt at the two-year followup than women receiving community treatment. The women also required less hospitalization for suicide ideation, and had lower medical risk across all suicide attempts and self-injurious acts combined (Stone et al., 2017).

DBT has 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 (NIH, 2017).

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 therapeutic approach for suicide-specific assessment and treatment. The program's flexible approach involves the clinician and patient working together to develop patient-specific treatment plans. Sessions involve constant patient input about what is (and is not) working with the goal of enhancing the therapeutic alliance and increasing treatment motivation in the suicidal patient (Stone et al., 2017).

CAMS has been tested and supported in six correlational studies, in a variety of inpatient and outpatient settings, and in one randomized controlled trial (RCT) with several additional RCTs under way. 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 dispositional anxiety. An RCT using ABFT found that 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. It 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.

One closely studied gatekeeper program, Applied Suicide Intervention Skills Training (ASIST), helps hotline counselors, emergency workers, and other gatekeepers identify and connect with suicidal individuals and direct them to available resources. In an RCT, researchers evaluated the training across the National Suicide Prevention Lifeline network of hotlines during 2008–2009. Using data from 1,410 suicidal individuals who called 17 Lifeline centers, researchers 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, with the trajectory observed in similar counties that did not implement these trainings. Counties that implemented GLS trainings had significantly lower youth suicide rates one year following the training implementation. This finding equates to a decrease of 1 suicide death per 100,000 youth ages 10 to 24, or the prevention of approximately 237 deaths in the age group, between 2007 and 2010 (Stone et al., 2017).

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).

Crisis Lines

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. Crisis intervention approaches impact key risk factors for suicide, including feelings of depression, hopelessness, and subsequent mental healthcare utilization. Crisis interventions can put space or time between an individual who may be considering suicide and harmful behavior (Stone et al., 2017).

In an evaluation of the effectiveness of the *National Suicide Prevention Lifeline* to prevent suicide, 1,085 suicidal individuals who called the hotline completed a standard risk assessment for suicide, and 380 of those completed a followup assessment between 1 and 52 days after the initial assessment.

Researchers found that over half of the initial sample had a plan for their suicide when they called. Researchers also found that among 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).

Crisis lines provide immediate access, often 24 hours a day, to crisis intervention. They are an access point for emergency care, clinical assessment, referral, and treatment. When other providers are closed and personal support networks are unavailable, crisis lines can be a lifeline for people at risk of suicide. Crisis lines are heavily used. From October 1, 2014 to September 30, 2015, almost 50,000 calls to the National Suicide Prevention Lifeline originated in Washington. Close to half of those calls were from people who selected the Veterans Crisis Line for help (WSDOH, 2016).



Source: CDC.

Preventing suicide: Protective factors

Strengthen economic supports	<ul style="list-style-type: none">▪ Strengthen household financial security▪ Housing stabilization policies
Strengthen access and delivery of suicide care	<ul style="list-style-type: none">▪ Coverage of mental health conditions in health insurance policies▪ Reduce provider shortages in underserved areas▪ Safer suicide care through systems change
Create protective environments	<ul style="list-style-type: none">▪ Reduce access to lethal means among persons at risk of suicide▪ Organizational policies and culture▪ Community-based policies to reduce excessive alcohol use
Promote connectedness	<ul style="list-style-type: none">▪ Peer norm programs▪ Community engagement activities
Teach coping and problem-solving skills	<ul style="list-style-type: none">▪ Social-emotional learning programs▪ Parenting skill and family relationship programs
Identify and support people at risk	<ul style="list-style-type: none">▪ Gatekeeper training▪ Crisis intervention▪ Treatment for people at risk of suicide▪ Treatment to prevent re-attempts
Lessen harms and prevent future risk	<ul style="list-style-type: none">▪ Postvention▪ Safe reporting and messaging about suicide

Source: Stone et al., 2017.

Medical Treatment of Suicide Risk

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 that 45% do so within one month of their death. In contrast, only 20% of these patients saw a mental health professional in the preceding month (HHS, 2012).

Improving clinician skills to recognize and manage risk factors for suicide has been shown to reduce rates of suicidal ideations in patients. The Prevention of Suicide in Primary Care Elderly: Collaborative Trial (PROSPECT) found that primary care intervention reduced suicidal ideations. Studies have found that 70% of the elderly who committed suicide saw a primary care physician within a month of their death. These data underscore the potential impact of primary care-based screening and intervention strategies (Hassamal et al., 2015).

Psychiatric Medications

Pharmacologic intervention may be markedly 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 to ensure effective and safe treatment without adverse drug interactions. When prescribing drugs to people who self-harm, consider the toxicity of prescribed drugs in overdose and limit the quantity dispensed or available, and/or identify another person to be responsible for securing access to medications. The need for followup and monitoring for adverse events should be addressed (DVA/DOD, 2013).

Although there is limited evidence that psychiatric medications reduce suicidal thoughts and behaviors, a decrease in the long-term suicide rate for patients with mood disorders treated with lithium, neuroleptics, and antidepressants has been reported (Pompili & Goldblatt, 2012). 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. A number of cohort studies have described the anti-suicide benefits of lithium for individuals on long-term maintenance. 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 (NIMH, 2016).

A possible explanation for its anti-suicidal effects of lithium is that it reduces the relapse of mood disorders. However, lithium is not as potent in acute phase therapy as other antidepressants, which do not seem to have similar anti-suicidal efficacy. Possible mechanisms include an effect on aggression or impulsivity, both of which are associated with an increased risk of suicide. People treated for an affective disorder have a 30 times greater risk of suicide than the general population, and the evidence that lithium reduces the risk of suicide and possibly deliberate self-harm in people with bipolar disorder and recurrent unipolar depression indicates that lithium should continue to have an important clinical role (Cipriani et al., 2013).

Lithium Used to Treat Suicidal Ideation and Behavior

- Lithium should be considered for patients diagnosed with **unipolar depressive disorder** who have had a partial response to an antidepressant and for those with recurrent episodes who are at high risk for suicidal behavior, provided they do not have a contraindication to lithium use and the potential benefits outweigh the risks.
- Lithium should be considered for patients diagnosed with **bipolar disorder** who do not have contraindications to its use.
- Lithium should be avoided or used in caution in patients with impaired renal function, those taking concurrent medications that increase or decrease lithium concentrations or those with other risk factors for lithium toxicity.
- When prescribing lithium to patients at risk for suicide, it is important to pay attention to the risk of overdose by limiting the amount of lithium dispensed and the form in which it is provided.

Source: DVA/DOD, 2013.

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. There is a consensus as to the importance of primary care doctors' education programs for improving the management of depression with antidepressants in order to reduce the risk of suicide. Furthermore, a number of multi-component suicide prevention programs emphasize the crucial importance of primary care education programs to facilitate optimal antidepressant prescribing (Gusmão et al., 2013).

However, there are concerns about the efficacy and safety of antidepressants, with some authors suggesting that these medications are at best no better than placebo and others that antidepressants may actually increase the risk of suicidal behavior, particularly in young people. In contrast, still other authors contend that there is a bias in these findings and that the benefits are in fact greater than the risk. For instance, one meta-analysis of 27 RCTs examined antidepressant prescribing in children and adolescents to age 18 with a diagnosis of major depressive disorder and showed that benefits appeared to far outweigh a small increased risk of suicidal behavior (Gusmão et al., 2013).

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 CSF 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. However, 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, 2013.

Clozapine

Clozapine is an atypical antipsychotic medication used primarily to treat individuals with schizophrenia. However, it is the only medication with a specific U.S. Food and Drug Administration (FDA) indication for reducing the risk of recurrent suicidal behavior in patients with schizophrenia or schizoaffective disorder who are at risk for ongoing suicidal behavior (NIH, 2017).

While clozapine is beneficial for some patients, there are risks associated with this drug. Specifically, clozapine can decrease 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 (FDA, 2016).

Key Point about Clozapine

Clozapine should be considered for patients diagnosed with schizophrenia at high risk for suicide, who do not have contraindications to clozapine, and *will be compliant with all required monitoring*.

Source: DVA/DOD, 2013.

Antipsychotics

Atypical antipsychotics may be used as treatment augmentation in the management of major depressive disorder and treatment of bipolar depressive disorders. Aripiprazole, quetiapine, and olanzapine in combination with fluoxetine include depressive disorders in their label indications. Their labels also include the same box warning as antidepressants for an increased risk of suicidal thinking and behaviors. There is no evidence to support this increased risk in adults, albeit atypical antipsychotics have not been as extensively studied as antidepressants (DVA/DOD, 2013).

Key Points About Antipsychotics

- There is no evidence that antipsychotics provide additional benefits in reducing the risk of suicidal thinking or behavior in patients with co-occurring psychiatric disorders. Treatment for the psychiatric disorder should be optimized according to evidence-based guidelines for the respective disorder.
- Patients who are treated with antipsychotics should be monitored for changes in behavior and emergence of suicidal thoughts during the initiation phase of treatment or after any change in dosage.
- When prescribing antipsychotics in patients at risk for suicide pay attention to the risk of overdose and limit the amount of medication dispensed and refilled.

Source: DVA/DOD, 2013.

Antiepileptic Drugs

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, 2013).

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. Any one of several rapidly acting, anti-anxiety agents (eg, clonazepam, a benzodiazepine) are candidate pharmaceuticals for use in emergency psychopharmacology for anxiety reduction in patients who exhibit suicidal behaviors. The use of any medications for this purpose must consider the risk of death from suicide versus the risk of serious adverse effects from psychopharmacology (to include disinhibition that could lead to suicide) versus the utility of various psychosocial interventions versus doing nothing (DVA/DOD, 2013).

Benzodiazepines can be effective in treating symptoms of anxiety, insomnia, hypervigilance, and other anxiety symptoms. In general, benzodiazepines are not recommended for long-term use in chronic aggression because of the potential for dependence and tolerance, resulting in an increase in impulsivity aggression. Benzodiazepines can occasionally disinhibit aggressive and dangerous behaviors and enhance impulsivity. Benzodiazepines taken in excessive amounts can cause dangerous deep unconsciousness. In combination with other central nervous system depressants, such as alcohol and opiates, the potential for toxicity increases exponentially (DVA/DOD, 2013).

Care of Patients with Substance Use Disorders

Every year about 650,000 people receive treatment in emergency departments following a suicide attempt. In 2011 approximately 230,000 ED visits resulted from drug-related suicide attempts, and almost all involved a prescription drug or over-the-counter medication (SAMHSA, 2016).

Did You Know. . .

The number of ED visits for drug-related suicide attempts increased 51% overall from 2005 to 2011 and more than doubled among people age 45 to 64 (SAMHSA, 2016).

Substance use disorders are a prevalent and strong risk factor for suicide attempts and suicide. Three key issues to bear in mind in working with this population are assessing intoxicated patients, differentiating unintentional and intentional overdose events, and special assessment considerations (DVA/DOD, 2013).

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 in order 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 in the near future (DVA/DOD, 2013).

Individuals with substance use disorders are particularly susceptible to suicide ideation and suicide attempts. Indeed, suicide is a leading cause of death among people who misuse alcohol and drugs. A significant percentage of deaths by suicide involve alcohol intoxication or opiates (SAMHSA, 2016).

Number of Substances Used

The *number* of substances used seems to be more predictive of suicide than the *types* of substances used.

Alcohol misuse or dependence is associated with a suicide risk that is *10 times greater* than the suicide risk in the general population, and individuals who inject drugs are at about *14 times greater* risk for suicide. Acute alcohol intoxication is present in about 30% to 40% of suicide attempts (SAMHSA, 2016).

One of the reasons alcohol and drug misuse significantly affects suicide rates is the disinhibition that occurs when a person is intoxicated. Although less is known about the relationship between suicide risk and other drug use, as noted above, the number of substances used seems to be more predictive of suicide than the types of substances used. More research is needed on the association between different drugs, drug combinations, and self-medication on suicidal behavior (SAMHSA, 2016).

Coordinating Services

For suicide prevention to be effective, providers of mental health and substance abuse services must coordinate services with each other and with other service providers in the community. It is generally recognized that mental health and substance abuse services can have a greater impact when community gatekeepers refer at-risk patients to these specialized providers. The effects of mental and substance use services can also be enhanced when specialized providers refer patients to community programs that can augment care (HHS, 2012).

Cooperation, collaboration, and communication between mental health and substance use providers, as well as community support, are critical components of patient safety and recovery. Mental health and substance abuse providers should link with community agencies for suicide prevention, mental health advocacy organizations, aging services organizations, veterans support organizations, and programs providing peer support services. These programs foster a sense of connection and belonging and provide critically needed services, including employment and vocational help, housing assistance, peer support, and social interactions that are not focused on illness (HHS, 2012).

All patients at acute risk for suicide who are under the influence (intoxicated by drugs or alcohol) should be evaluated in an urgent care setting and be kept under observation until they are sober. Patients who are under the influence should be reassessed for risk for suicide when the patient is no longer acutely intoxicated, demonstrating signs or symptoms of intoxication, or acute withdrawal (DVA/DOD, 2013).

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. 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 considered (DVA/DOD, 2013).

Intoxication with drugs or alcohol impairs judgment and increases the risk of suicide attempt. 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. Also take into account social risk factors such as disruptions in relationships and legal and financial difficulties, which are important in individuals with substance use disorders (DVA/DOD, 2013).

Discerning Unintentional vs. Intentional Overdose

Intentional overdose is the most common method of attempted suicide and the possibility that an overdose was an *intentional* act of suicide 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, and the differentiation is especially challenging in patients with a history of substance abuse (DVA/DOD, 2013).

Unfortunately, there is limited data on the differentiation between unintentional overdose and suicidal behavior in substance abusers. Available data indicate that 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 (DVA/DOD, 2013).

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 (eg, intoxicants sold in head shops as "bath salts") were more likely to experience unintentional overdose (DVA/DOD, 2013).

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 when she 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 suicide (DVA/DOD, 2013).

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. The safety planning process produces a written plan that restricts access to means for completing suicide, encourages problem-solving and coping strategies, enhances social supports, 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, 2013).

Developing the Plan

Although no universally accepted safety planning method exists, the **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 with 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 (Boudreaux et al., 2017)

The Safety Planning Intervention has a strong empirical foundation supporting each of its six steps, as well as evidence that it 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 it 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, 2013).

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, 2015).

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 continual coordinating with providers who are addressing the patient's suicidal thoughts and behaviors (CSAT, 2015).

Monitoring can include following up with the ED when a patient has been referred for acute assessment as well as continual 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. Other monitoring actions include:

- Confirming that the client still has a safety plan in effect.
- Monitoring and updating the treatment plan.
- Confirming that a client has kept referral appointments.
- Following up if a recurrence of suicidal thoughts or attempts is observed.
- 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, 2015)

These approaches typically include followup contact and use diverse modalities (home visits, mail, telephone, e-mail) to engage recent suicide attempt survivors in continued treatment to prevent re-attempts. Treatment may focus on improved coping skills, mindfulness, and other emotional regulation skills, and may include case management home visits to increase adherence to treatment and continuity of care; and one-on-one interpersonal therapy and/or group therapy. 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).

Supportive Third Parties

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.

In my worst moments the thought lingers, but now I know I could never go through with suicide. My faith gets me through those times—knowing that something bigger is out there and I shouldn't rob myself of what is yet to come. My kids give me a sense of purpose. I'm able to say to myself, "No, that's not an option, you can't do that." And I was really lucky to have that connection with my dad.

Annie Ost, Spokane
Source: WSDOH, 2016

Certain protective factors, such as having robust social supports or having strong problem solving skills, diminish the risk of suicide. A person's support network can be a source of 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 (WSDOH, 2016).

Some believe the health of a society is reflected in its incidence of suicide and that a society sustains itself through well-defined norms and customs that govern interactions; when a person is immersed in the life of the community there are shared ideas of what is inappropriate and appropriate. If regulation or integration is too high or low, then suicides and other social ills will occur (WSDOH, 2016).

A care network can offer general support (positive contact, transportation and childcare during appointments, messages of love and concern), crisis support (getting a person to a hospital or crisis center and visiting them while there, arranging for care of the home, children, or pets during crisis care or recovery) 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).

Laypeople with appropriate training can also be critical in helping to prevent suicides. Gatekeepers (individuals who are in a position to recognize someone at increased suicide risk) may include clergy, first responders, and those employed in institutional settings such as the military. Review of programs providing education and training in suicide prevention strategies to gatekeepers has demonstrated positive effects. For example, implementation of the U.S. Air Force suicide prevention program was associated with significant declines in suicide (Hassamal et al., 2015).

Peer Support Programs

Promoting connectedness among individuals and within communities through modeling peer norms and enhancing community engagement may protect against suicide. **Peer norm programs** seek to normalize protective factors for suicide by encouraging help-seeking, talking to trusted adults, and promoting peer connectedness. By leveraging the leadership qualities and social influence of peers, these approaches can be used to shift group-level beliefs and promote positive social and behavioral change. These approaches typically target youth and are delivered in school settings but can also be implemented in community settings (Stone et al., 2017).

Programs such as **Sources of Strength** can improve school norms and beliefs about suicide that are created and disseminated by student peers. In an RCT of Sources of Strength conducted with 18 high schools (6 metropolitan, 12 rural), researchers found that the program improved adaptive norms regarding suicide, connectedness to adults, and school engagement. Peer leaders were also 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)

What is Sources of Strength?



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

Community Engagement Activities

Community engagement is an aspect of social capital. Community engagement approaches may involve residents participating in a range of activities, including religious activities, community clean-up and greening activities, and group physical exercise. These activities provide opportunities for residents to become more involved in the community and to connect with other community members, organizations, and resources, resulting in enhanced overall physical health, reduced stress, and decreased depressive symptoms, thereby reducing risk of suicide (Stone et al., 2017).

Among the groups disproportionately affected by suicidal ideation and behaviors, a one-size-fits-all approach to suicide prevention does not work. These guidelines can help tailor messages, interventions, and programs to a specific community:

- Involve community members and leaders from the beginning and respect them as experts on their own experience.
- Become familiar with the community's history, risk and protective factors, cultural norms around language and communication, beliefs about death, and definition of the problem.
- Avoid viewing one or a few members of a community as representative of an entire demographic group.
- Put values of inclusion and equity front and center in decision making and program design.
- Include accessibility concerns such as transportation, cost, language translation, location, space, and materials for people with disabilities. (WSDOH, 2016)

A recent workshop held in Iqaluit, Nunavut (Arctic Canada) provided guidance on ways to prevent suicide among Indigenous peoples—much of which can be applied to any community engagement effort. Key themes included:

- Acknowledge the impact of colonization.
- Recognize the effects of rapid social and environmental changes on mental wellness and suicide that have taken place in the past two decades.
- Be aware of the great variation of suicide rates across communities, even within a single jurisdiction, and the importance of understanding the role of resilience in this variation.
- Understand that successful prevention strategies must be community-based and should integrate Indigenous ways of knowing.
- Recognize the importance of involving youth in developing solutions, tightening their relation to the land, and creating strong linkages with Elders and culture.
- Acknowledge the need to move from intention to action and from action to impact. (NIMH, 2017)

Healing of the Canoe

The *Healing of the Canoe Project* is a collaborative project 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, 2017).

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

What is Healing of the Canoe?



<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, coordinated by the Sustainable Development Working Group, and designed as a follow-on activity to the mental wellness project of 2013–2015, led by Canada and collaborating countries. Rising Sun is designed to identify a toolkit of common outcomes to be used in evaluating suicide prevention efforts to assess the key correlates associated with suicide prevention interventions across Arctic states. Common outcomes and their measures, developed through engagement with Indigenous peoples' organizations and community leaders, as well as mental health experts, will facilitate data sharing, assessments, and interpretation of interventions across service systems in the Arctic region (NIMH, 2017).

The ultimate goal is to generate shared knowledge that will aid health 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, through their measures and reporting systems, 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 (NIMH, 2017).

Reducing Access to Lethal Means

Lethal means are the instruments or objects used to carry out a self-destructive act (ie, firearm, poison, medication). Although it is difficult to predict who will attempt suicide, the availability of lethal means may increase the risk for suicidal ideation and behavior. **Lethal means assessment** is necessary for both overall risk assessment and for safety planning for patients being discharged (Betz et al., 2016). This 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).

Reducing access to lethal means can reduce suicide rates, especially in times of crisis or during stressful transitions. Research indicates that:

- The interval between deciding to act and attempting suicide can be as short as 5 or 10 minutes.
- 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)

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, 2013).

If a lethal method is not immediately available, the crisis will often pass, and the person may never attempt suicide. Others may still make an attempt but use a less deadly method. 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).

Though limiting access to materials used for hanging is difficult, even in restrictive places such as jails and hospitals, limiting or reducing access to other lethal means is possible at both the individual and community levels. Safe storage of firearms and medications, reduced access to common poisons, and placement of suicide barriers at the edges of tall buildings and bridges are proven strategies (WSDOH, 2016).

Model for Reducing Access to Highly Lethal Suicide Methods

Conceptual model of how reducing access to a highly lethal and commonly used suicide method saves lives at the population level. Drop in overall suicide rate is driven by decline in rate of suicide by the restricted method.

Means restriction	Substitution	Fewer attempts prove fatal	Suicidal crisis passes for many
Highly lethal, commonly used suicide method is made less accessible or less lethal	Attempter substitutes another method; on average, substituted methods are less lethal		<ul style="list-style-type: none">▪ The acute period in which a person will attempt is often short▪ Delays can save time but not all lives▪ 89-95% of attempters do not go on to die by suicide
	Delay Attempt is temporarily or permanently delayed		

Source: WSDOH, 2016.

Healthcare providers should routinely assess the presence and availability of lethal means in a patient's home and provide education about how to reduce risks and limit access to lethal means. For patients at *highest risk*, make sure firearms are made inaccessible to the patient. For patients at *intermediate to high acute risk* of suicide, discuss the possibility of safe storage of firearms with the patient, command, and family. This can include locking up firearms, using trigger locks, or storing firearms at the military armory, at a friend's home, or local police station. Ammunition should be stored separately (DVA/DOD, 2013).

When clinically possible, limit access to medications that carry risk for suicide, at least during the periods when patient is at acute risk. This may include prescribing limited quantities, supplying the medication in blister packaging, providing printed warnings about the dangers of overdose, or ensuring that currently prescribed medications are actively controlled by a responsible party. Also provide information on how to secure chemical poisons, especially agricultural and household chemicals, to prevent accidental or intentional ingestions. Many of these chemicals are highly toxic (DVA/DOD, 2013).

Continuity of Care

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

Continuity of care should be maintained when patients who are or have been at risk for suicide, in transition between care facilities or between other health systems or provider organizations. Providers must pay attention to several potential risks for discontinuities during transitions between care settings. These may include transitions:

- From primary care to behavioral health
- From the emergency department to ambulatory care
- From inpatient units to other settings such as nursing homes, rehabilitation, or other residential treatment settings
- From nursing homes and residential care units to ambulatory services (DVA/DOD, 2013)

A multidisciplinary approach to the treatment of suicidal patients maximizes providers' ability to provide optimal management and services to their patients. Mechanisms for bridging transitions and for providing information to new providers must be developed on a system-by-system basis. Continuity of care is enhanced during transitions when providers directly contact other providers and followup appointments are scheduled. Transition support services (such as telephone contact with behavioral health providers) may improve continuity of care should there be a delay in followup services (DVA/DOD, 2013).

All patients who present to the ED for a suicide attempt or who are at risk for suicide require mental health evaluations. However, these patients may receive only limited mental health services, may not receive adequate treatment for underlying mental health or substance use disorders, and frequently do not receive any followup care. If patients do not require inpatient care, they should be informed about risks and be referred for mental health services before discharge. However, although a simple referral is important, it may not be sufficient (HHS, 2012).

Patients leaving the ED or hospital inpatient unit after a suicide attempt, or otherwise at a high risk for suicide, require rapid proactive outreach and followup. Having survived a suicide attempt is one of the most significant risk factors for later death by suicide. The risk is particularly high in the weeks and months following the attempt, including the period after discharge from acute care settings such as EDs and inpatient psychiatric units (HHS, 2012).

For patients who are transferred from the ED to medical-surgical services for the treatment of injuries related to a suicide attempt, followup mental health evaluations should be conducted before discharge to decide between transfer to a mental health inpatient unit or referral to outpatient care. These evaluations should consider the support available from family and friends and the patient's clinical status. Before a decision to discharge is made, followup appointments for mental health care should be made and patients (and families or friends) should be coached about the importance of continuity in care (HHS, 2012).

All patients who are admitted to an inpatient mental health unit require followup mental health services after discharge, as well as connections to community-based supports. Healthcare systems should seek to dramatically shorten the time between inpatient discharge and followup outpatient treatment. For example, EDs and others providing services to these patients could set a goal of ensuring that followup occurs within 48 hours or, at most, within a week of discharge (HHS, 2012).

Continuity of care following a suicide attempt should represent a collaborative approach between patient and provider that gives the patient 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).

Suicide in Veteran Populations

Historically, suicide rates have been lower in the military than those rates found in the general population. However, with the wars in Iraq and Afghanistan, military suicide rates have been increasing and surpassing 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 (USU, 2016).

In a recent survey, veterans identified suicide as the most formidable challenge they face. Sadly, approximately 22 veterans die by suicide every day. Contributing to this problem, one of the most common mental health diagnoses among veterans returning from the current war theatres is posttraumatic stress disorder (PTSD), which is a known risk factor for both suicidal ideation and behavior (DeBeer et al., 2016).

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, 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 unique 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.

Source: WSDOH, 2016.

Veterans: Population-Specific Data

About 13% of Washington's population has participated in the armed forces. In 2010, the age-adjusted suicide rate among Washington's veteran or active-duty military members was 55 per 100,000, compared to 15 per 100,000 for those not in the military. From 2000 to 2010, 16% of males and 26% of females in the military who died by suicide were under 35 (WSDOH, 2016).

Information from the Office of Mental Health Operations on causes of death for all veterans who use VHA healthcare services since 2000 shows that rates among VHA users are higher than those of the general population. Users of VHA services account for 1,600 to 1,900 suicides per year, or about 5 per day. Among the deaths from suicide, approximately half had a diagnosis of a mental health condition recorded in their medical records in the year prior to their death, and approximately three-fourths, within the past five years (DVA/DOD, 2013).

The Department of Veterans Affairs reported that in 2014:

- About 67% of all veteran deaths by suicide were the result of firearm injuries.
- About 65% of all veterans who died by suicide were age 50 or older.
- Risk for suicide was 21% higher among veterans when compared with U.S. civilian adults.
- Risk for suicide was 18% higher among male veterans when compared with U.S. civilian adult males.
- Risk for suicide was 2.4 times higher among female veterans when compared with U.S. civilian adult females. (USDVA, 2016b)

Among deployed and non-deployed active-duty veterans who served during the Iraq or Afghanistan wars between 2001 and 2007, the rate of suicide was greatest in the first three years after leaving service. Compared to the U.S. population, both deployed and non-deployed veterans had a higher risk of suicide, but a lower risk of death from all other causes combined (USDVA, 2015).

Contrary to popular belief, while ground services have experienced the stress of repetitive and extended deployments, the 2009 *Department of Defense Suicide Event Report (DODSER)* identifies only 7% of military suicides occurred among service members with multiple deployments. The report also stated that while half of those who were military suicides had been deployed at some time to Iraq or Afghanistan, only 17% experienced combat. Another finding is that although senior noncommissioned officers typically experience repetitive deployments, most suicides occur among the junior enlisted (WSDOH, 2016).

Washington's *Healthy Youth Survey* data show 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 in the past year compared to tenth graders from civilian families. They 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).

Among male veterans, suicide rates are highest in the younger and older years, and among female veterans, suicide rates are highest in the younger years. However, because the age distribution of the living veteran population is heavily weighted toward middle-aged adults, the resulting burden of suicide, in terms of the number of lives lost, is highest among middle-aged veterans, despite the lower *rates* of suicide observed for this sub-population. Analysis of suicide risk within the veteran population indicates that it is important to develop and direct veteran suicide prevention initiatives that are tailored to reach veterans of all ages (USDVA, 2016b).

Military Culture

But I fear they do not know us. I fear they do not comprehend the full weight of the burden we carry or the price we pay when we return from battle. This is important, because a people uninformed about what they are asking the military to endure is a people inevitably unable to fully grasp the scope of the responsibilities our Constitution levies upon them. . . . We must help them understand, our fellow citizens who so desperately want to help us.

ADM Michael Mullen, Chairman, Joint Chiefs of Staff
United States Military Academy, West Point, 2011

The ability to understand and appreciate military culture and to tailor clinical practices based on that understanding is imperative for clinicians working with service members (USU, 2016). The military is controlled by civilian leaders who involve service members in conflicts not necessarily supported by the majority of civilians, who may not fully understand the impact military service has on individuals and families. There are few opportunities for honest, open, and thoughtful dialogue between civilians and military personnel. Political, cultural, and social differences between civilian and military life can complicate our understanding of the complex issue of suicide (WSDOH, 2016).

The military changes and builds one's identity and espouses values, beliefs, and norms that are quite contrary to civilian life. Close relationships are formed within units, and these become disrupted when soldiers are transferred or moved to other units or when deployment ends. The intensity of such relationships is seldom found in civilian life. Service members can return home with decreased opportunity to participate as intensely in military culture. The transition to civilian life can leave them feeling less integrated and less regulated (WSDOH, 2016).

The warrior ideal is deeply embedded in the psyche of service members. To be unable to live up to this ideal can have significant consequences. Missing one's battle buddies/team, not having a mission, and failing to live up to values and ideals can cause a service member or veteran to feel isolated and inadequate. Many believe that for a warrior to develop symptoms of stress of any kind is a failure to live up to the warrior ideal (Schmidt, 2012).

No matter what branch of service, service members are taught that service comes before self and the mission comes first. Strength, valor, courage, fortitude, honor, *esprit de corps*, respect, and integrity are considered to be the noble traits of a warrior (Schmidt, 2012).

When a service member leaves the military, they may feel rules begin to disintegrate, leaving feelings of unrest, alienation, anxiety, and lack of purpose. During deployment, family members often become more independent and self-reliant, causing the soldier to feel less needed and believing the family can survive just fine without her or him (WSDOH, 2016).



Source: United States Department of Veteran Affairs.

Military Stress: PFC Wilson

Background

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.

Whhat 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.

The Veterans Administration [has a website](#) for healthcare providers who treat veterans. Healthcare providers can learn about military culture, find links to assessment tools, access information about how to connect with the VA, and learn why they should consider the VA an important member of the treatment team. Mini-clinics on the topics of mental and behavioral health for veterans offer clinicians easy access to useful veteran-focused treatment tools. The mini-clinics provide information on assessment, training, and educational handouts. [Click here](#) for mini-clinics for providers.

Veterans: 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.

Historically, the suicide rate has been lower in the military than among civilians. This *protective effect* has been thought to be related to a selection bias for healthy recruits, employment, purposefulness, access to healthcare, and a strong sense of belonging (DVA/DOD, 2013).

Protective Factors

Within a social support system such as the military, protective factors include:

- Strong interpersonal bonds
- Community support
- Employment
- Intact marriage
- Child-rearing responsibilities
- Responsibilities or duties to others
- A reasonably safe and stable environment

Personal traits that are protective factors include:

- Help-seeking
- Good impulse control
- Good skills in problem solving, coping, and conflict resolution
- Sense of belonging, sense of identity, and good self-esteem
- Cultural, spiritual, and religious beliefs about the meaning and value of life
- Optimistic outlook—identification of future goals
- Constructive use of leisure time (enjoyable activities)
- Resilience

Access to healthcare is also a protective factor and includes:

- Medical support
- Mental health care

- Clinical care for substance use disorders
- Participating in treatment
- A sense of the importance of health and wellness (VA/DoD, 2013)

A study published in 2015 looked at changes in suicide mortality of veterans and non-veterans by gender and history of VHA service use. It found that suicides among women veterans increased by 40% from 2000 to 2010, compared to a 13% increase in women non-veterans. The study also showed that among women veterans, those who use VHA care have suicide rates as much as 75% lower than those who do not. Male veterans also saw reduction in suicide rates, about 20%, for those who used VHA services (Hoffmire et al., 2015).

Risk Factors

Suicide prevention is a serious issue for service members and their loved ones. Stress that never seems to let up can affect anyone, and some service members may be at greater risk for suicide than others. Risk factors may include:

- Being a young, unmarried male of low rank
- A recent return from deployment, especially when experiencing health problems
- Adverse deployment experience
- Lack of advancement or reduction in rank
- A sense of a loss of honor or a perceived sense of injustice or betrayal
- Heavy drinking or other substance use problems
- Disciplinary actions
- Mental health problems
- Career-threatening change in fitness for duty
- Command/leadership stress, isolation from unit
- Transferring duty station
- Deployment to a combat theater (WSDOH, 2016)

National Guard members and reservists are of special concern because they often live in areas with limited access to healthcare services. Knowing when a person is at risk and recognizing the warning signs can help you take action to possibly prevent a suicide and make sure the person gets help.

Seek Help Immediately

If you are:
Thinking about hurting or killing yourself
or
Looking for ways to kill yourself
or
Talking about death, dying, or suicide
or
Self-destructive behavior such as drug abuse,
weapons, etc.

Suicide rates are higher in the Army than in other branches. A 2010 offering, *Health Promotion, Risk Reduction, Suicide Prevention Report*, suggested potential causes for these higher rates:

Source: Defense Suicide Prevention Office.

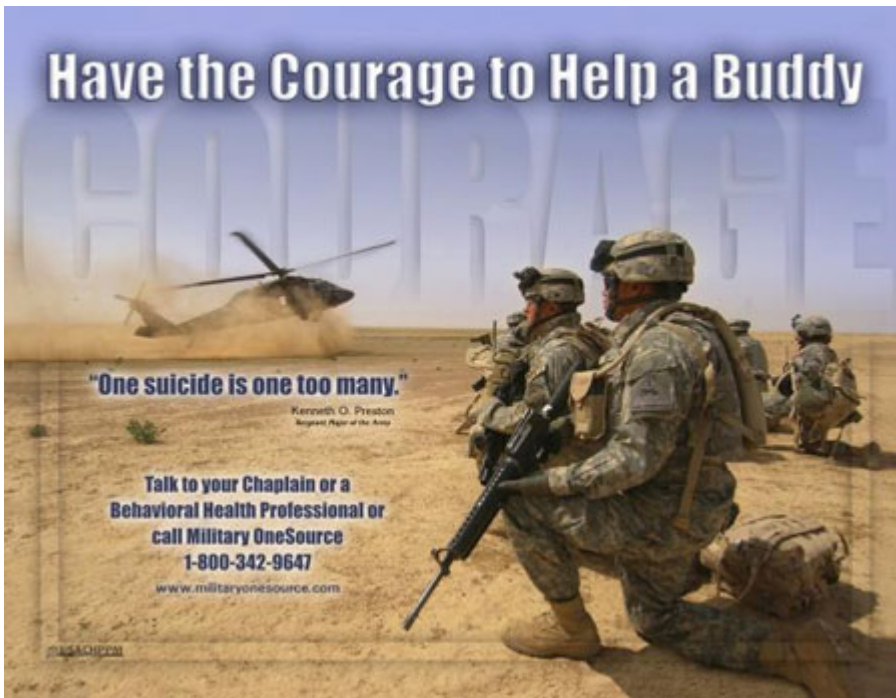
- Lapses in garrison leadership supervision and control
- Lowering recruitment standards through increased use of waivers
- Admittance of recruits who engage in high-risk behavior (WSDOH, 2016)

Veterans: Intervention Strategies

Training on resilience, stress, and preparation have done little to curb rising suicide rates. The emphasis must go deeper to explore issues such as regulation, integration, belongingness, burden, and habituation and allow service members to reflect meaningfully upon their military experience (WSDOH, 2016).

The *United States Air Force Suicide Prevention Program* includes 11 policy and education initiatives that are 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 (education and training), 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).



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

Health-Promoting Behaviors

Several health-promoting behaviors, including physical activity, stress management, and interpersonal relationships, have been demonstrated 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. In the realm of spiritual growth, individuals who feel they have a purpose in life reported 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).

Of particular interest, researchers have found that suicide attempters tended to have diets lower in dietary fiber and polyunsaturated fat compared to individuals who had no history of suicide attempts. Further, men and women who had prior suicide attempts were more likely to have insufficient intake of vegetables and fruits respectively compared to non-attempters (DeBeer et al., 2016).

Addressing PTSD



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.



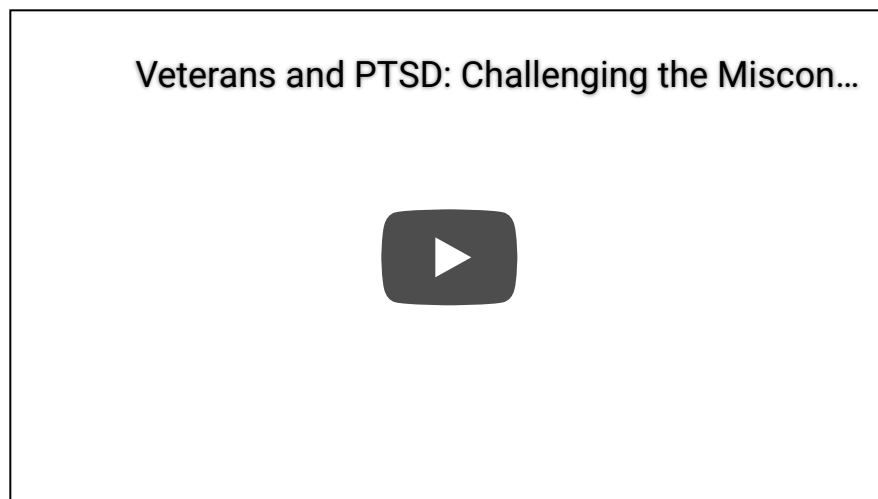
There is evidence to support a similar relationship between health-promoting behaviors and PTSD

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

symptoms. Adults who participated in an exercise intervention showed decreased levels of PTSD symptoms compared to baseline, and this reduction lasted after the intervention was completed (DeBeer et al., 2016).

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.mentalhealth.va.gov>

Addressing Depression

Major depressive disorder, which is highly comorbid with PTSD, independently increases risk for suicidal ideation and attempts. Thus, identifying modifiable factors that could reduce the association between PTSD symptoms and suicidal ideation is a high research priority (DeBeer et al., 2016).

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. 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).

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 Defense Suicide Prevention Office (DSPO) is collaborating with the Star Behavioral Health Providers (SBHP)* program on a pilot project in Indiana and California to offer military cultural training to community healthcare providers and other support personnel. The goal of the program is to improve military cultural competency through education and outreach so civilian providers can better support Service members in every county in the two states.

Together with the Purdue University Military Family Research Institute, the UCLA Nathanson Family Resilience Center, and the Center for Deployment Psychology, DSPO is gathering insights into the challenges these individuals face when seeking care, especially in rural and remote locations, and how to better address these gaps in services in order to prevent suicide. Upon completion of a successful pilot program, SBHP and DSPO plan on expanding efforts into other participating states (DSPO, 2017).

*Star Behavioral Health Providers: a resource for veterans, Service members, and their families to locate behavioral health professionals with specialized training for understanding and treating members of the military community. SBHP has a registry at www.starproviders.org that informs Service members, particularly National Guard and Reservists and their families, about providers available in their communities. Seven States—California, Georgia, Indiana, Michigan, Ohio, New York, and South Carolina—currently offer SBHP programs (DSPO, 2017).

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 (DVA, nd).

Since its launch in 2007, the Veterans Crisis Line has answered nearly 2.8 million calls and initiated the dispatch of emergency services to callers in crisis nearly 74,000 times. The Veterans Crisis Line anonymous online chat service, added in 2009, has been used more than 332,000 times. 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, and since then has responded to more than 67,000 texts (DVA, nd).



Source: VeteransCrisisLine.net

Risk of Imminent Harm

The potential for suicide exists when there is no longer a sense of belonging, when a person feels he is a burden, and when there is habituation to self-injury. This can lead a person to gradually overcome the desire for self-preservation and lower resistance to self-injury through rehearsal or observed self-harm actions (WSDOH, 2016).

Imminent harm is a situation in which a person's risk status is believed to indicate actions that could lead to his or her suicide. Healthcare providers working in EDs, acute care, and medical offices must be able to identify, treat, and follow up with those at risk for harming themselves. Risk of imminent harm 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. Followup and referral are critical components of effective care (WSDOH, 2016).

Recognizing 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. However, recent research found that including nonsuicidal self-harm did not provide additional predictive ability to a model including suicidal cognition and behaviors. 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 nonsuicidal self-harm and communications, may not be valid factors for many individuals (Harris et al., 2015).

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. Several theories incorporate intentions as a primary determinant of behavior. These theories argue that intention is an important underlying driver of behavior and that other influencing factors are either mediated by intention or serve as moderators (Williams, 2016).

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. The fast and automatic operation of these cognitive processes allows us to make inferences quickly about the mental states of those around us (Brotherton & French, 2015).

A great deal of evidence demonstrates that suicidal behaviors (plans and attempts) can be predictive of suicide. Including an individual's *intent to die* in a risk assessment improves the validity of past suicidal behaviors as indicators 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). However, measures of intention that only capture a person's general desire to perform a behavior are significantly less robust predictors of subsequent behavior than measures of intention that assess the **intensity** and **level of effort** the person is prepared to exert to perform the behavior (Williams, 2016).

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 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" section (part 1) and are concerned with the objective circumstances of the act of self-harm; the remaining seven items, the "self-report" section (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.

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).

Paradoxically, an examination of U.S. suicide attempters indicated that prior verbalization of suicidality had 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).

Self-Injurious Behaviors in Young People

Nonsuicidal 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. Because nonsuicidal 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 nonsuicidal self-injurious behavior as a way to regulate negative emotions, while others argue that it is a factor in the emergence of suicidal ideation and attempts (Grandclerc et al., 2016).

Stigma

There is a misconception—even among some healthcare providers—that individuals who self-harm choose to suffer. This creates stigma regarding self-harm. Similar experiences with stigma have been reported by people diagnosed with borderline personality disorder. General psychiatric admission is of uncertain therapeutic value for self-harming and suicidal individuals and may even be harmful for those with borderline personality disorder, especially if admissions are lengthy and unstructured. Although often lacking, specialized services are essential—particularly in situations of unique vulnerability, such as suicidal crises. When the risks of suicide and severe self-harm are acute, it is essential that services are offered in a compassionate manner that honors the human dignity of the person who is suffering (Liljedahl et al., 2017).

About Self-Harm—A Nurse Practitioner’s Perspective

Nonsuicidal self-injury often involves people with borderline personality disorders; self-harm is 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.

Objects, Substances, and Actions Common in Suicide Attempts

Lethal means are things people might use in a suicide attempt that are likely to result in death (eg, firearms, medications, poisons). This can include objects such as firearms, substances such as alcohol or drugs, and actions such as jumping from a building.

In Washington State, most people who die by suicide use a firearm, suffocation (frequently hanging), or poisoning (drug or medication overdose or swallowing harmful substances). About half of suicides in Washington involve firearms. Less common, but still of concern, are suicide deaths by jumping/falling or cutting. Limiting or reducing an at-risk person’s access to lethal means effectively prevents suicides (WSDOH, 2016).

Possible determinants for different methods of suicide such as age, gender, suicide intent, mental health status, and timing have been identified by researchers. 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, suggesting the study of suicide methods may be of significance in suicide prevention (Sun and Jia, 2014).

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

Objects Commonly used in Suicide Attempts

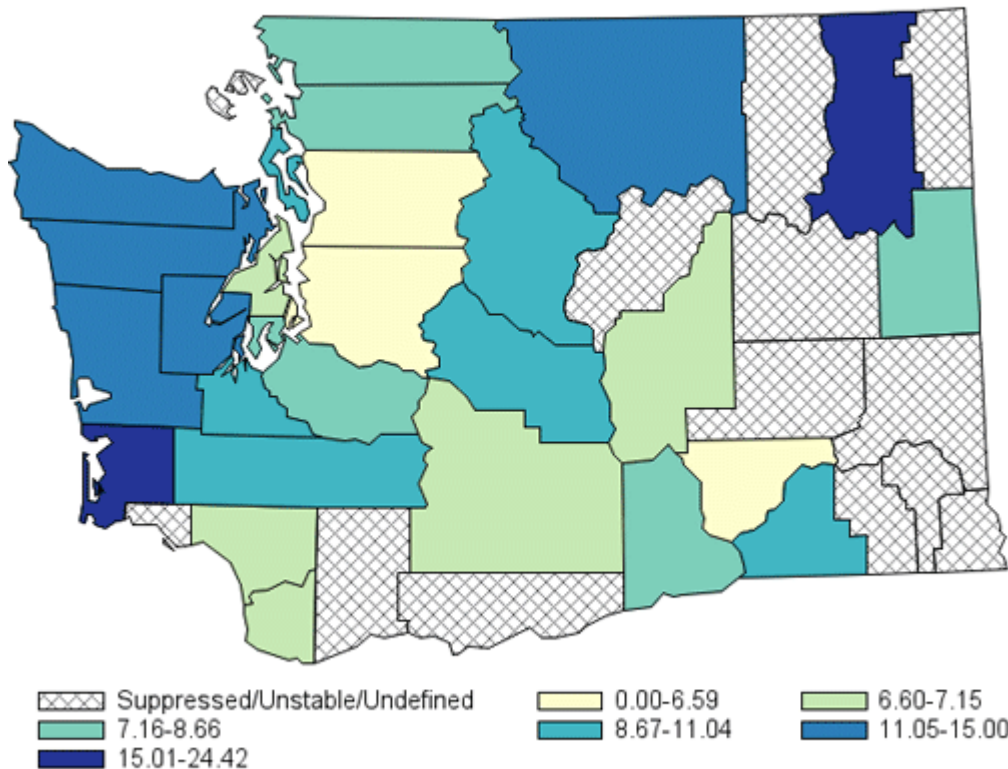
Household gun ownership rates at the state level are a significant positive predictor of both homicides and suicides. A substantial proportion of Americans—over 50%, in some states—live in households with guns and may not need to purchase a new firearm to carry out a violent act (Swanson et al., 2015).

More than half of male suicides (55.4%) in 2014 were firearm-related (NCHS, 2016). 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).

Among veterans, the most common means for suicide is firearms, with approximately 41% of female and 68% of male suicide deaths resulting from a firearm in 2014. The use of firearms as the mechanism for suicide death decreased among civilians from 2001 to 2014, but remained stable among veterans. These results strongly suggest that firearms safety initiatives are likely an important component of an effective suicide prevention strategy for male and female veterans (USDVA, 2016b).

Suicide Deaths in Washington by Firearm (2008–2014)

2008-2014, Washington
Death Rates per 100,000 Population
 Firearm, Suicide, All Races, All Ethnicities, Both Sexes, All Ages
 Annualized Crude Rate for Washington: 7.19



Reports for All Ages include those of unknown age.

* Rates based on 20 or fewer deaths may be unstable.

These rates are suppressed for counties (see legend above); such rates in the title have an asterisk.

Produced by: the Statistics, Programming & Economics Branch, National Center for Injury Prevention & Control, CDC.

Data Sources: NCES National Vital Statistics System for numbers of deaths; US Census Bureau for population estimates.

Substances Commonly Used in Suicide Attempts

Poisoning (predominantly drug overdose) is the leading mechanism for suicide death among females and the third leading mechanism for males aged 35 to 64. Despite this, current suicide prevention strategies are primarily targeted towards teenagers, young adults, and elders. 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 (Tesfazion, 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 (Tesfazion, 2014).

Among female veterans, poison is the second-most common means of suicide—32% who die by suicide use poison. Among male suicide victims, suffocation is the second-most common cause of death (17%, 2014) (USDVA, 2016b).

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 a 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).

Actions Common in Suicide Attempts

The most frequent “other” suicide methods in 2014 for females were falls (2.8%) and drowning (1.4%). For males, the most frequent “other” methods were falls (2.2%) and cutting or piercing (1.9%) (NCHS, 2016). 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, about 25% of suicides in 2014 were attributable to suffocation (includes hanging, strangulation, and suffocation), an increase over previous years (NCHS, 2016).

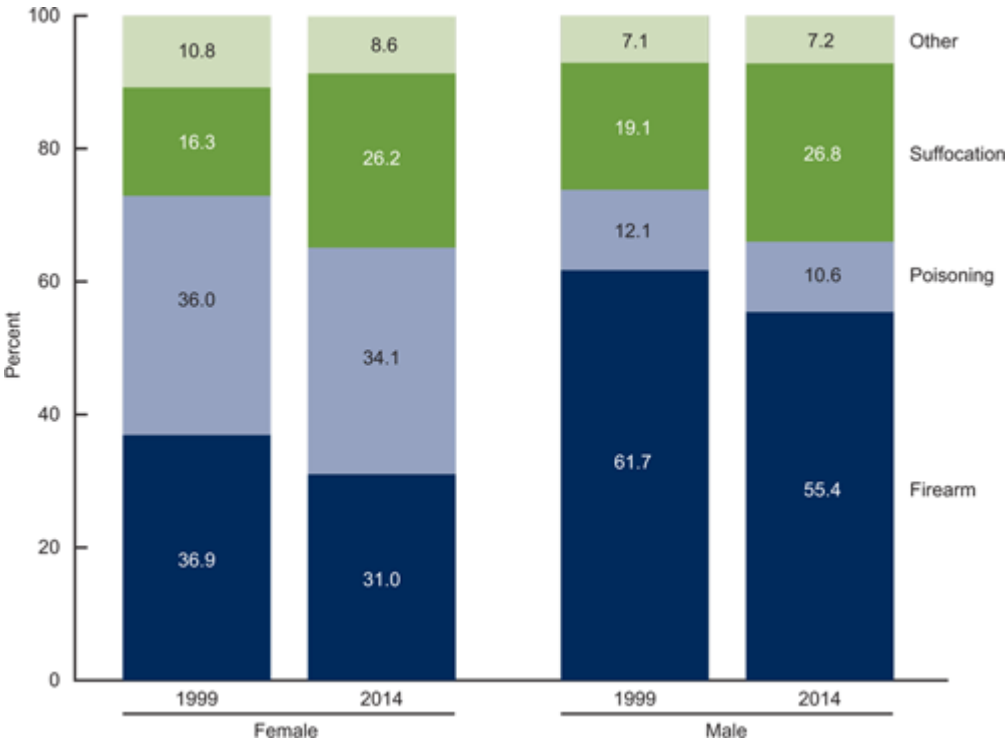
In the United States, from 2000 to 2010, asphyxiations increased by 52%. The high prevalence of asphyxiations can be attributed to easy accessibility of rope and widespread availability of other means for hanging. Currently, there are no specific formal proposals on how to reduce asphyxiation suicides. 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 (2015)	
Suicide Method	Number of Deaths (2015)

Total	44,193
Firearm	22,018
Suffocation	11,855
Poisoning	6,816
Other	3,504

Source: CDC.

Suicide Deaths, by Method and Sex: United States, 1999 and 2014



Source: NCHS, National Vital Statistics System, Mortality.

Talking About Lethal Means

Professionals who provide healthcare services to patients at risk for suicide are in a unique position to ask about lethal means and work with these individuals and their support networks to reduce access. 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. However, many may fail to do so, or do so only when a patient is identified as being at a very high risk for suicide (HHS, 2012).

Individuals experiencing significant distress or who have a recent history of suicidal behavior should not have easy access to means that may be used in a suicide attempt, including firearms, other weapons, medications, illicit drugs, chemicals used in the household, other poisons, or materials used for hanging or suffocation.

Providers should talk to patients and caregivers about reducing the stock of medicine in the medicine cabinet to a nonlethal quantity, and locking medicines that are commonly abused (eg, prescription painkillers and benzodiazepines). This approach can be useful in helping to prevent suicide, as well as unintentional overdoses and substance abuse (HHS, 2012).

Talking about Lethal Means—A Nurse Practitioner’s Guidance

Once 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 information from your patient. 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.

Restricting Access to Lethal Means

Means restriction is 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 of suicide has a strong evidence base and is now considered a key strategy to reduce suicide death rates (Betz et al., 2016).

Reducing access to firearms is particularly important, since firearm suicide attempts have a high case-fatality rate and firearms account for 51% of all suicide deaths in the United States. Patients with firearm access at home might be considered at particularly high risk for discharge to their home, given that firearm access is a risk factor for suicide, the actual act of a suicide attempt often occurs within only minutes of the decision to attempt, and approximately 90% of firearm suicide attempts are fatal (compared to as few as 2% of medication overdoses) (Betz et al., 2016).

While access to firearms and other lethal means in a patient with suicidal ideation and behavior by itself does not mandate psychiatric admission, restricting access to firearms is a key component of home safety planning that should be addressed with all patients being discharged. Safe storage of firearms and other lethal means has been associated with less risk for suicide among adults and youth, and lethal means counseling in EDs might affect storage behavior (Betz et al., 2016).

Reducing access to potentially toxic medications is also important but 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 currently 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.

Intervening at Suicide Hotspots

Suicide hotspots, or places where suicides may take place relatively easily, include tall structures such as bridges, cliffs, balconies, and 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).

A meta-analysis examining the impact of suicide hotspot interventions implemented in combination or in isolation, both in the United States 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. Moreover, 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).

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)

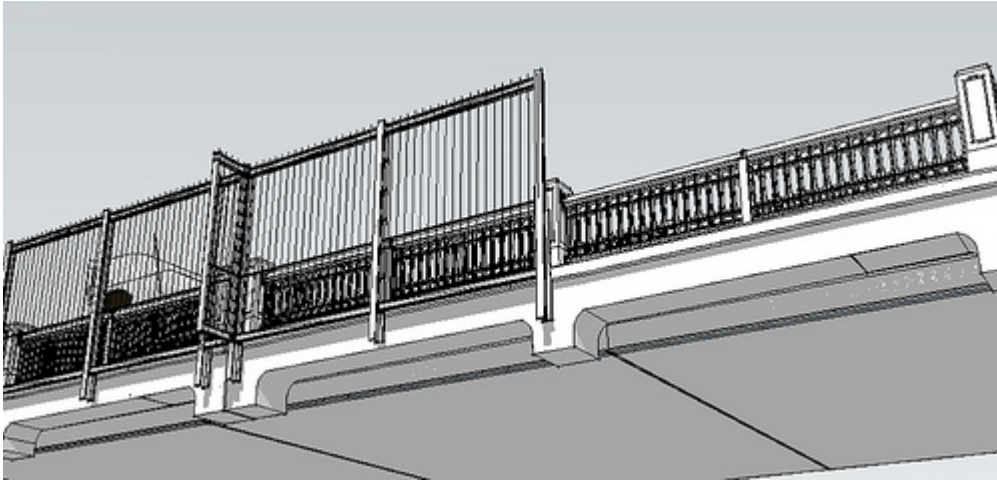
Removal of barriers was followed by a **fivefold increase** in the number and rate of suicides from the bridge. Since the reinstallation of barriers, there have been no suicides from the bridge. This natural experiment shows that safety barriers are effective in preventing suicide: their removal increases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

Source: Harvard School of Public Health, 2017.

Public jump sites are well-suited for suicide prevention, given that 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).

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.

Some interventions to prevent jumps from hotspots or other methods of suicide are not feasible for bridges. Although blocking access roads to hotspots have been shown to deter suicide jumps, this is not a viable measure for most bridges. There is evidence that the number of suicides by carbon monoxide poisoning in public parking lots has been reduced by installing aid signs. However, 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 (Hemmer et al., 2017).

Some research has shown that, if in addition to aid signs, emergency helpline phones are directly available on bridges, the phones are used on a regular basis. Other research has shown that, in combination with increased police presence, emergency helplines led to a decrease in the number of suicides at the Sunshine Skyway Bridge in Florida (Hemmer et al., 2017).

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).



San Francisco VA Health Care System providers are helping prevent Veteran suicide through lethal means safety. Source: U.S. Department of Veteran's Affairs.

Locking Devices for Handguns and Other Firearms



gun vault



lock box



cable lock



personalized lock



trigger lock

Source: Kingcounty.gov.

Counseling on Access to Lethal Means (ED CALM)

The Emergency Department Counseling on Access to Lethal Means (ED CALM) has trained psychiatric emergency clinicians in a large children's hospital 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 post test 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 pre test (67%), all (100%) reported guns were currently locked up at post test (Stone et al., 2017).

Policy-Based Strategies

Policy-based strategies that restrict access to lethal means have led to positive results. For example, 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).

Implementation of means restriction is broad and 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, for example, using gun locks, (4) enhancing safety, for example, encouraging at-risk families to remove lethal suicide means from the home, or (5) reducing the appeal of a more lethal method, for example, changing the perception of hanging as a quick and painless death. The majority of suicide attempts are transient and the time between contemplating suicide and the attempt is less than 5 minutes for many attempters. The method depends on what is readily available (Hassamal et al., 2015).

Although this goal focuses on reducing access to lethal means among individuals at risk, 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).

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.

A number of barriers that have impeded progress in reducing suicide in the United States, including stigma, mental illness, being a survivor, and fear of discussing suicidal thoughts. Fortunately, like many public health problems, suicide is preventable and more is being done to prevent suicide than ever before, as evidenced by the work of the National Action Alliance for Suicide Prevention, the release of the first world report on suicide, and more timely surveillance data (Stone et al., 2017).

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Post Test

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

1. Suicide is a major public health concern. In the United States. In 2015:
 - a. There were fewer suicides than homicides.
 - b. There were more than twice as many suicides as homicides.
 - c. Suicide was the leading cause of death among most age groups.
 - d. Suicide rates were highest in the Northeast.
2. In Washington State, suicide rates:
 - a. Are much lower than the national average.
 - b. Reach a peak for African-American adults during their late 70s.
 - c. Are highest among American Indian, Alaska Native, and white populations, consistent with national rates.
 - d. Are about the same as the national average.
3. When comparing death from suicide and death by homicide:
 - a. For white youth, homicide is much more common than suicide.
 - b. Suicide is virtually unknown among Hispanic youth.
 - c. Suicide is much less common among American Indian youth when compared to white youth.
 - d. For black youth, homicide is much more prevalent than suicide.
4. 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.
5. When interviewing a person you suspect may be at risk for suicide:
 - a. Ask about safety then assess lethality.
 - b. Remember that asking people about suicide may plant the idea in their head.
 - c. Ask yes/no questions to keep things simple.

d. Avoid questions about previous suicide attempts.

6. Warning signs of suicide:

- a. Are not evident in most people who are considering suicide.
- b. Do not generally include common emotions such as anger or rage.
- c. Are present in about 80% of people who attempt suicide.
- d. Are poor indicators of suicidal ideation and behavior.

7. 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.

8. 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

9. 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.

10. 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.

11. 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

12. One particularly effective psychosocial intervention that has been shown to significantly 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 and answer.
- d. Sending at risk youth to military academies.

13. Psychiatric medications:

- a. May 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.

14. Although there is limited evidence that psychiatric medications reduce suicidal thoughts and behaviors:

- a. Clozapine increases the risk of recurrent suicidal behavior in patients with schizophrenia or schizoaffective disorder.
- b. Lithium increases the risk of relapse of mood disorders.
- c. There is strong evidence that antipsychotics reduce the risk of suicidal thinking or behavior in patients with co-occurring psychiatric disorders.
- d. A decrease in the long-term suicide rate for patients with mood disorders treated with lithium, neuroleptics, and antidepressants has been reported.

15. 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.

16. 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 to home.
- d. Typically does not need followup once a patient is discharged from the hospital.

17. Peer norm 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.

18. Reducing access to lethal means:

- a. Reduces access to the instruments or objects used to carry out a self-destructive act.
- b. Tells a patient to stay away from 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.

19. 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 involve both the patient and the provider.
- d. Has not been shown to help people at risk for suicide.

20. Among female veterans, suicide rates:

- a. Are highest in the older years.
- b. Are highest in the younger years.
- c. Are the same as for male veterans.
- d. Are highest for female veterans with children.

21. For clinicians working with active duty military or veterans:

- a. The ability to understand and appreciate military culture and to tailor clinical practices based on that understanding is imperative.
- b. They should understand that service members are taught that service comes before self and the mission comes first.
- c. Keep in mind that when a service members leaves the military, he or she may experience feelings of unrest, alienation, anxiety, and lack of purpose.
- d. All of the above.

22. In veterans, protective factors against suicide include:

- a. Responsibilities or duties to others.
- b. Good skills in problem solving, coping, and conflict resolution.
- c. Mental health care.
- d. All of the above.

23. 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.

24. 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.

25. 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.

26. 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.

27. 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.

28. 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.

Answer Sheet

About Suicide in Washington State, 6 units

Name (Please print your name): _____

Date: _____

Passing score is 80%

1. _____
2. _____
3. _____
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24. _____

25. _____

26. _____

27. _____

28. _____

Course Evaluation

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

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

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

a. Describe the scope of suicide in Washington State and nationally.

☐ 5 ☐ 4 ☐ 3 ☐ 2 ☐ 1

b. Explain the 4 main components of suicide risk screening and assessment.

☐ 5 ☐ 4 ☐ 3 ☐ 2 ☐ 1

c. State 5 groups that are disproportionately impacted by suicide.

☐ 5 ☐ 4 ☐ 3 ☐ 2 ☐ 1

d. Relate 3 differences between high risk of suicide and low risk.

☐ 5 ☐ 4 ☐ 3 ☐ 2 ☐ 1

e. Describe 3 commonly used psychosocial techniques that have been shown to reduce the risk of suicidal ideation and behaviors.

☐ 5 ☐ 4 ☐ 3 ☐ 2 ☐ 1

f. Explain 3 reasons why psychiatric medications may reduce suicidal ideations and behaviors.

☐ 5 ☐ 4 ☐ 3 ☐ 2 ☐ 1

g. Relate 3 reasons why supportive third parties can help reduce suicidal ideation and behaviors in their communities.

☐ 5 ☐ 4 ☐ 3 ☐ 2 ☐ 1

h. Explain 3 aspects of military culture that may affect the incidence of suicide in active-duty military and veterans.

☐ 5 ☐ 4 ☐ 3 ☐ 2 ☐ 1

i. Describe 3 protective factors against suicidal ideation and suicidal behaviors for veteran populations.

☐ 5 ☐ 4 ☐ 3 ☐ 2 ☐ 1

j. Define *lethal* means.

☐ 5 ☐ 4 ☐ 3 ☐ 2 ☐ 1

* The author(s) are knowledgeable about the subject matter.

☐ 5 ☐ 4 ☐ 3 ☐ 2 ☐ 1

* The author(s) cited evidence that supported the material presented.

☐ 5 ☐ 4 ☐ 3 ☐ 2 ☐ 1

* This course contained no discriminatory or prejudicial language.

☐ Yes ☐ No

* The course was free of commercial bias and product promotion.

☐ Yes ☐ No

* As a result of what you have learned, do you intend to 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.

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

☐ Yes, definitely.

☐ Possibly.

☐ No, not at this time.

* What is your overall satisfaction with this learning activity?

☐ 5 ☐ 4 ☐ 3 ☐ 2 ☐ 1

* Navigating the ATrain Education website was:

☐ Easy.

☐ Somewhat easy.

☐ Not at all easy.

* How long did it take you to complete this course, posttest, and course evaluation?

☐ 60 minutes (or more) per contact hour

☐ 50-59 minutes per contact hour

☐ 40-49 minutes per contact hour

☐ 30-39 minutes per contact hour

☐ Less than 30 minutes per contact hour

I heard about ATrain Education from:

☐ Government or Department of Health website.

☐ State board or professional association.

☐ Searching the Internet.

- ☐ A friend.
- ☐ An advertisement.
- ☐ I am a returning customer.
- ☐ My employer.
- ☐ Other
- ☐ Social Media (FB, Twitter, LinkedIn, etc)

Please let us know your age group to help us meet your professional needs.

- ☐ 18 to 30
- ☐ 31 to 45
- ☐ 46+

I completed this course on:

- ☐ My own or a friend's computer.
- ☐ A computer at work.
- ☐ A library computer.
- ☐ A tablet.
- ☐ A cellphone.
- ☐ A paper copy of the course.

Please enter your comments or suggestions here: _____

Registration Form

Please print and answer all of the following questions (* required).

* Name: _____

* Email: _____

* Address: _____

* City: _____ * State: _____ * Zip: _____

* Country: _____

* Phone: _____

* Professional Credentials/Designations:

Your name and credentials/designations will appear on your certificate.

* License Number and State: _____

* Please email my certificate:

☐ Yes ☐ No

(If you request an email certificate we will not send a copy of the certificate by US Mail.)

Payment Options

You may pay by credit card or by check.

Fill out this section only if you are **paying by credit card**.

6 contact hours: \$59

Credit card information

* Name: _____

Address (if different from above): _____

* City: _____ * State: _____ * Zip: _____

* Card type:

☐ Visa ☐ Master Card ☐ American Express ☐ Discover

* Card number: _____

* CVS#: _____

* Expiration date: _____