2012 National Strategy for Suicide Prevention:
GOALS AND OBJECTIVES FOR ACTION

A report of the U.S. Surgeon General
and of the National Action Alliance for Suicide Prevention

Appendix D: Groups With Increased Suicide Risk

As noted in the Introduction, many factors make it difficult to identify the subgroups of the population that may have an increased risk for suicidal behaviors. Risk and protective factors are varied, interact in different ways, and may change over time. Some risk and protective factors may be more important to one group than to another. The types of suicidal behaviors that are most common also vary across groups. For example, suicide rates may be particularly high in some groups, but suicide attempts may be more common in others. In addition, limitations associated with the collection of suicide-related data can also make it difficult to obtain prevalence estimates for specific groups.

This appendix provides information on suicide risk among the following groups, which have been identified as being at a higher risk for suicidal behaviors than the general population:

- American Indians/Alaska Natives;
- Individuals bereaved by suicide;
- Individuals in justice and child welfare settings;
- Individuals who engage in nonsuicidal self-injury (NSSI);
- Individuals who have attempted suicide;
- Individuals with medical conditions;
- Individuals with mental and/or substance use disorders;
- Lesbian, gay, bisexual, and transgender (LGBT) populations;
- Members of the Armed Forces and veterans;
- Men in midlife; and
- Older men.

Additional information on these groups is available from the Suicide Prevention Resource Center's (SPRC) online library (www.sprc.org/search/library). For evidence-based and best practices programs and guidelines, please visit the National Registry of Evidence-Based Programs and Practices (www.nrepp.samhsa.gov), and the Best Practices Registry for Suicide Prevention (www.sprc.org/bpr). General resources on suicide prevention are listed in Appendix E.

American Indians/Alaska Natives

In 2009, the suicide rate among American Indians/Alaska Natives (AI/AN) was 11.91 per 100,000, which is similar to the overall U.S. rate of 11.77.[1] However, suicide rates are much higher among AI/AN youth than among youth overall. In 2009, the rate of suicide among AI/AN youth aged 10 to 18 years was 10.37 per 100,000, compared with an overall rate of 3.95 per 100,000.[1] Suicide is the second leading cause of death among AI/AN youth aged 10 to 34 years, with young Native men aged 20 to 24 having the highest rate of

suicide in the AI/AN population: 40.79 deaths per 100,000.[1] Although suicide rates vary widely among individual tribes, it is estimated that 14 to 27 percent of AI/AN adolescents have attempted suicide.[21-23]

Research indicates that cultural continuity,[116] high levels of cultural spiritual orientation,[117] and connectedness to family and friends[21] are protective factors for suicidal behaviors among AI/AN populations. Specific risk factors particular to this group include alcohol and other substance use,[118] discrimination,[119, 120] limited mental health services access and use,[121, 122] and historical trauma.[123, 124] Findings from the Adverse Childhood Experiences (ACE) study suggest that there is a strong and positive correlation between the number of adverse events in a child's life and the probability for negative outcomes during adulthood.[125] In reservation settings, AI/AN youth have considerable exposure to suicide and may be at particular risk for contagion.[126] Much of the research available on AI/AN racial and ethnic disparities does not include urban (non-reservation) areas, where a majority (78 percent) of Native people in the United States live.[127] Compared with other racial and ethnic groups, few resources are devoted to the health needs of the urban AI/AN population,[128] and many have experienced losses of community, language, and ethnic identity.[129]

Several federal initiatives, such as the Substance Abuse and Mental Health Services Administration (SAMHSA) Garrett Lee Smith and Native Aspirations programs and the Indian Health Service (IHS) Methamphetamine and Suicide Prevention Initiative, support suicide prevention efforts among AI/AN populations. AI/AN communities have implemented a range of culturally specific prevention and intervention approaches to address the holistic needs of families and individuals affected by suicide and other health disparities. These efforts include reducing risk behaviors (e.g., substance use, bullying, violence) and promoting protective factors (e.g., cultural practices, community connectedness and healing, improved access to appropriate services, skills enhancement). Recent efforts have included the development of crisis response protocols aimed at ensuring that available services and traditional supports are interconnected. Many tribes have also adapted mainstream suicide prevention programs, including trainings, crisis lines, mentoring, and school-based programs, for use in local AI/AN communities.

Many efforts are underway to better document the effectiveness of these holistic approaches in Native communities. A comprehensive, public health-based prevention program in a southwestern tribal community showed significant reduction in suicidal acts among youth.[64] The American Indian Life Skills Development program, a school-based curriculum for AI/AN youth aged 14 to 19, showed reductions in feelings of hopelessness and increases in problem-solving skills.[130] Positive youth development programs, such as Project Venture, while recognized as an evidence-based approach for substance use prevention, also showed positive results in terms of suicide prevention. Many of the specific tactics that suicide prevention research points to as effective (e.g., increased social integration, connection building) have been a part of Project Venture for 20 years.[131]

Community-based surveillance systems, such as the one developed by the White Mountain Apache, demonstrate that tribal-specific surveillance can identify unique risk and protective factors for particular

populations to guide local suicide prevention programs.[132, 133] Practice-based evidence also plays an important role and complements evidence-based practices in addressing suicide and other health issues among AI/AN populations.

Resources

Adolescent Suicide Prevention Program Manual: A Public Health Model for Native American Communities, 2011
SPRC

www.sprc.org/library/AdolescentSP_ProgramManuaPH_ModelNA_Communities.pdf

The Adolescent Suicide Prevention Program (1989–2005) significantly lowered youth suicide rates in a Native community in the Southwest United States. This manual outlines methods for community involvement, culturally framed public health approaches, outreach efforts, behavioral health programs, program evaluation, and sustainability.

AI/AN National Suicide Prevention Strategic Plan (2011–2015), August 2011
IHS, U.S. Department of Health and Human Services (HHS)

www.ihs.gov/MedicalPrograms/Behavioral/documents/AIANNationalSPStrategicPlan.pdf

This strategic plan provides a comprehensive and integrated approach to reducing the loss and suffering that result from suicidal behaviors among the AI/AN population.

Ensuring the Seventh Generation: A Youth Suicide Prevention Toolkit for Tribal Child Welfare Programs, 2009
National Indian Child Welfare Association (NICWA)

www.nicwa.org/YouthSuicidePreventionToolkit/YSPToolkit.pdf

This toolkit for tribal child welfare workers and care providers discusses risk factors, warning signs, prevention and intervention strategies that can be applied in child welfare agencies, and mobilization of support networks for particular children.

Indian Health Service American Indian/Alaska Native Suicide Prevention Website
www.ihs.gov/NonMedicalPrograms/nspn

This website provides AI/AN communities with culturally appropriate information about best and promising practices, training opportunities, tools for adapting mainstream programs to tribal needs, ongoing activities, potential partnerships, and other information regarding suicide prevention and intervention.

SPRC American Indian/Alaska Native Suicide Prevention Pages
www.sprc.org/aian

These web pages offer information on suicide prevention in AI/AN communities, including local and promising practices, sustaining efforts, resources, publications, and data sources.

To Live To See the Great Day That Dawns: Preventing Suicide by American Indian and Alaska Native Youth and Young Adults, 2010
SAMHSA, HHS

www.sprc.org/library/Suicide_Prevention_Guide.pdf

This guide supports AI/AN communities in developing effective, culturally appropriate, and comprehensive suicide prevention planning and postvention responses for youth and young adults.

Individuals Bereaved by Suicide

The impact of suicide can be profound and sometimes devastating for those who are left behind. Each year, more than 13 million people in the United States report that they have known someone who died by suicide that year.[134] Conservative estimates suggest that there are typically at least five or six family members who are affected when a family member takes his or her life, and perhaps as many as 30 to 60 people in the larger social network who also may be affected.[135] Moreover, exposure to suicide carries risks for elevated rates of guilt, depression, and other psychiatric symptoms, complicated grief, and social isolation. Alarmingly, there is also compelling evidence that individuals bereaved by suicide (also referred to as "survivors of suicide loss") may have an increased risk for suicide completion themselves.[39] Therefore, to paraphrase Edwin Shneidman, helping those who have been bereaved by suicide is a direct form of suicide prevention with a population known to be at risk.

In the years since the National Strategy was released, the movement to support individuals bereaved by suicide has intensified significantly. Innovative grassroots community programs have formed outreach teams who visit the newly bereaved at home, face-to-face, and through online support groups, annual memorial services, survivor conferences, and other types of innovative support services. National organizations such as the American Foundation for Suicide Prevention (AFSP), Suicide Awareness Voices of Education (SAVE), and the American Association of Suicidology (AAS) have also increased their efforts to provide help and comfort to those bereaved by suicide. Examples include AFSP's International Survivors of Suicide Day gatherings around the country and the Survivor Conference within the AAS annual meeting.

Despite these commendable efforts, research suggests that many individuals who have been bereaved by suicide experience difficulty mobilizing themselves to seek help, knowing where to find services in their communities, and knowing how to cope when the services are inadequate to meet their diverse and complicated needs.[136] The lack of services may include an absence of information about where to find resources, a scarcity of peer-to-peer opportunities to interact with other survivors in a safe and facilitated setting, and a dearth of mental health professionals who have the training and experience to work effectively with the special needs of this population.

As has happened in other nations, coordinated leadership at the national, state/territorial, tribal, and local levels will be needed to build a support infrastructure for people bereaved by suicide. Several goals for services can be identified. Every person bereaved by suicide should receive compassionate care from first

responders (e.g., police, emergency medical professionals, clergy, funeral professionals) and should receive information about where to get additional help if and when he or she is ready to seek it. As different people will use different types of resources, often at different points in their grieving process, a second goal should encompass the development of a variety of support services within local communities. These include, but are not limited to, educational and self-help literature about grief after suicide, survivor outreach teams, face-to-face and online support groups, and referral assistance in finding clinicians who understand grief, trauma, and the special problems of those who have been bereaved by suicide. Increased education about the impact of suicide and the needs of the bereaved by suicide should be included in the training of first responders and mental health and substance use professionals. And lastly, the national suicide research agenda should include studies that will expand knowledge of the impact of suicide on those left behind, and of interventions that will be effective in helping a diverse range of people who are exposed to the sometimes overwhelming impact of suicide.[39]

Resources

American Association of Suicidology (AAS)
www.suicidology.org/web/guest/suicide-loss-survivors

The survivor pages on the AAS website include the e-newsletter *Surviving Suicide*, a directory of survivor support groups, a resource list, and materials for clinicians who have lost a patient and/or family member to suicide. AAS has also produced the *SOS Handbook*, a quick reference booklet for suicide survivors.

American Foundation for Suicide Prevention (AFSP)
www.afsp.org/index.cfm?fuseaction=home.viewPage&page_id=742A015C-D811-979A-AB84379C813F8D93

AFSP reaches out to those who have been bereaved by suicide to offer support and to provide opportunities for them to get involved in educational, outreach, awareness, advocacy, and fundraising programs. It sponsors International Survivors of Suicide Day, a global observance where individual communities host awareness events. It also offers peer support resources, such as an e-network, a support groups directory, and the Survivor Outreach Program.

Lifeline Gallery: Stories of Hope and Recovery
www.lifeline-gallery.org

This website, which is part of the National Suicide Prevention Lifeline (800–273–TALK/8255), includes a section where those who have been bereaved by suicide can share with others their experiences of how the death by suicide of a loved one affected them, their family, and their community.

Suicide Awareness Voices of Education (SAVE)
http://www.save.org/index.cfm?fuseaction=home.viewPage&page_id=EB883CA2-7E90-9BD4-C5E35440BC7761EE

SAVE's website survivor section provides information on coping with suicide loss, talking with children about suicide, and responding to person who has been bereaved by suicide, as well as networking resources such as a survivor groups directory and the Bereavement Caregiver Blog. Its print materials include the booklet *Suicide: Coping With the Loss of a Friend or Loved One* and the book *Suicide Survivors: A Guide For Those Left Behind*.

The Link Counseling Center
www.thelink.org

The Link provides services and support to those who have lost a loved one to suicide, including workshops, resource materials, telephone counseling, information and referrals, and trainings for survivors and professionals on creating and facilitating support groups for survivors.

Individuals in Justice and Child Welfare Settings

Suicide is often the single most common cause of death in secure justice settings.[32] More than 400 suicides occur annually in local jails at a rate three times greater than among the general population, and suicide is the third leading cause of death in prisons.[33-35] Youth involved in the juvenile justice and child welfare systems have a high prevalence of many risk factors for suicide. Although statistics on prevalence are unavailable, juveniles in confinement have life histories that put them at higher suicide risk, including experiences such as mental disorders and substance abuse; physical, sexual, and emotional abuse; and current and prior self-injurious behavior. [137] Youth in foster care share many of these traumatic experiences. In one study, children in foster care were almost three times more likely to have considered suicide and almost four times more likely to have attempted suicide than those who had never been in foster care.[37] Suicide among youth in contact with the juvenile justice system occurs at a rate about four times greater than the rate among youth in the general population.[138-143] Research suggests that youth engage in more than 17,000 incidents each year in juvenile facilities, that more than half of all detained youth reported current suicidal ideation, and that one-third also had a history of suicidal behaviors.[144, 145]

Risk factors for suicide among both juvenile and adult inmates include: a history of or existing mental illness and substance abuse; a history of suicidal behaviors; lack of mental health care; a history of abuse (e.g., emotional, physical, sexual); family discord/abuse; impulsive aggression; a history of interpersonal conflict; prior involvement in special education; legal/disciplinary problems; family history of suicide; poor family support; prior offenses; referral to juvenile court; and coming from a single-parent home.[139-143, 146] Protective factors against suicide among juvenile and adult inmates include: a sense of control over one's own destiny; problem-solving and conflict resolution skills; adaptable temperament; support from and connections to family and community; positive school or employment experience; specific plans for the future; religious/spiritual/cultural beliefs that protect against suicide; housing that is "suicide-resistant" (i.e., free of protruding objects and means/methods for suicide) and that is proximal to staff and peers; and availability of mental health services that are provided consistently by qualified, trained, and supportive staff who provide strong community linkages and referrals and ensure continuity of care.[21, 143, 147]

Experts theorize that jail suicides may have two primary causes: (1) jail environments are conducive to suicidal behaviors; and (2) the inmate faces a crisis situation.[148] Studies conducted by the National Center on Institutions and Alternatives and commissioned by the U.S. Department of Justice (DoJ) recommend that all sites develop and implement comprehensive policies and programming addressing suicide prevention, intervention, and care in the aftermath of a suicide death or attempt. These policies and programs should include: initial and annual training for all direct care, medical, and mental health personnel; initial intake and ongoing assessment of incarcerated persons; enhanced communication along the continuum of justice system; levels of supervision for persons at risk of self-harm and suicide; appropriate suicide-resistant housing; intervention; reporting; mortality/morbidity incident review; and critical incident stress debriefing.[146] Because inmates can be at risk for suicide at any point during confinement, the biggest challenge for those who work in the justice system is to view the issue as requiring a continuum of comprehensive suicide prevention services aimed at the collaborative identification, continued assessment, and safe management of individuals at risk for suicidal behaviors.

A dramatic reduction in the rate of suicide within county jails throughout the United States in the past 20 years has been attributed to increased staff training, better identification of inmates who may be at risk for suicidal behaviors, and the implementation of comprehensive programming.[32] Recent efforts for suicide prevention for youth involved in the juvenile justice system include: targeting state-level juvenile justice agency directors/administrators with training developed to encourage comprehensive policy development; training direct care staff working in juvenile facilities; improving data collection and research within the population; increasing collaboration between mental health and juvenile justice systems; and improving policy and programming.[149]

Resources

Endangered Youth: A Report on Suicide Among Adolescents Involved with the Child Welfare and Juvenile Justice Systems, 2006

Connecticut Center for Effective Practices

www.chdi.org/endangeredyouth

This report offers an interdisciplinary framework that addresses the suicide risk for children, youth, and their families involved in the child welfare and juvenile justice systems. Case studies illustrate the challenges confronting families, communities, and professionals, while offering opportunities for learning and development of effective service delivery.

Ensuring the Seventh Generation: A Youth Suicide Prevention Toolkit for Tribal Child Welfare Programs, 2009

NICWA

www.nicwa.org/YouthSuicidePreventionToolkit/YSPToolkit.pdf

Intended for tribal child welfare workers and care providers, this toolkit discusses suicide risk factors associated with children in child welfare; warning signs caseworkers and care providers should watch for; suicide prevention and intervention strategies that can be applied in child welfare agencies; and mobilization of support networks around particular children.

Juvenile Suicide in Confinement: A National Survey, 2009
National Center on Institutions and Alternatives
Office of Juvenile Justice and Delinquency Prevention

www.ncjrs.gov/pdffiles1/ojjdp/213691.pdf

This report presents findings from the first national survey of juvenile suicides in confinement and offers recommendations for preventing suicide in juvenile facilities.

National Study of Jail Suicide: 20 Years Later, 2010
National Center on Institutions and Alternatives and the National Institute of Corrections, DoJ

static.nicic.gov/Library/024308.pdf

This study presents the most comprehensive information on inmate suicides throughout the United States. It challenges jail and health care officials and their staffs to remain diligent in identifying and managing people at highest risk.

Preventing Suicide in Jails and Prisons, 2007
World Health Organization (WHO) and International Association for Suicide Prevention

www.who.int/mental_health/prevention/suicide/resource_jails_prisons.pdf

This article is aimed at correctional administrators who develop or implement mental health programs and correctional officers responsible for the safety and custody of suicidal inmates. It provides general background on suicide and identifies a number of key prevention components.

Suicide Prevention in Custody
National Center on Institutions and Alternatives (NCIA)

www.ncianet.org/services/suicide-prevention-in-custody

This section of NCIA's website contains links to a number of resources on suicide prevention in jails and prisons, including *Guiding Principles to Suicide Prevention in Correctional Facilities,* 2011.

Suicide Prevention in Juvenile Correctional Facilities
SPRC

www.sprc.org/training-institute/juvenile-correctional-curriculum

This section of SPRC's website contains links to resources on suicide prevention among youth in contact with the juvenile justice system, a two-part webinar, and a packet of handouts on suicide prevention in juvenile correctional facilities.

Individuals Who Engage in Nonsuicidal Self-Injury

NSSI has been defined as the direct and intentional destruction of one's own body tissue in the absence of any intent to die.[150] NSSI includes behaviors such as cutting the skin with a sharp instrument and can also involve hitting, scratching, or burning the skin. These acts can lead to serious injury requiring medical treatment, infection, permanent scarring, and accidental death. They also have been linked to an increased risk of future suicidal thoughts, attempts, or death by suicide.[30]

Research studies have often combined individuals who engage in self-injury with or without suicidal intent. Intentional self-injury, regardless of motivation or degree of suicidal intent, is often referred to as deliberate self-harm (DSH).[151] This definition thus includes both suicide attempts and acts with other motives or intentions.

Research of NSSI and DSH populations shows a relatively strong relationship between self-injury and suicidal behaviors. An Australian study found that approximately 30 percent of patients presenting with self-poisoning to an emergency department (ED) reported previous episodes of self-harm.[152] Of patients who presented to the ED on more than one occasion, 3 percent died by suicide within 5 years and 4 percent within 10 years. In a followup study of deliberate self-harm conducted in the United Kingdom, death by suicide was 17 times more frequent than expected in those who had previously presented to a general hospital with deliberate self-harm.[31] In another U.K. followup study of deliberate self-harm, there was an approximately 30-fold increase in risk of suicide compared with the general population. Suicide rates were highest within the first 6 months after the first self-harm episode. A systematic review of the international literature on fatal and nonfatal repetition of self-harm found that after 1 year, nonfatal repetition of self-harm behaviors was approximately 15 percent.[153] The review found that suicide risk was hundreds of times higher among self-harm patients than in the general population.

Researchers see NSSI as falling along a continuum of self-harmful behavior that has suicide at the endpoint. Self-injuring adolescents who attempt suicide have greater suicidal ideation and depressive symptoms than adolescents who only engage in self-injury.[154] Regardless of whether an individual who engaged in self-injury reports having suicidal intent (DSH) or not (NSSI), research indicates that these individuals are at increased risk for repetition of these behaviors as well as of dying by suicide within 10 years.[31]

Resources

Cornell Research Program on Self-Injurious Behavior in Adolescents and Young Adults
www.crpsib.com

This program conducts research on self-injury in adolescents and young adults and translates the knowledge gained into resources and tools for understanding and treating self-injury. The website summarizes the program's work and provides links and resources with information on preventing, detecting, and treating self-injurious behavior.

Self-Injury Outreach & Support (SiOS)
www.sioutreach.org

SiOS is an international nonprofit outreach organization that provides resources and guides for both people who self-injure and those who can help them recover, including families and friends and school, mental health, and medical professionals. It offers research-informed coping strategies and a page where individuals can share their stories of recovery.

Signs of Self-Injury Prevention Program
Screening for Mental Health

www.mentalhealthscreening.org/programs/youth-prevention-programs/sosi

This education program is for high school students in a classroom setting. It teaches students about the signs and symptoms of self-injury, appropriate peer responses to a friend who self-injures, and the importance of adult intervention. Students determine their personal risk for self-injurious behaviors and develop coping skills for overcoming thoughts of self-injury.

Understanding Nonsuicidal Self-Injury in Suicide Prevention
SPRC

www.sprc.org/training-institute/r2p-webinars/understanding-nonsuicidal-self-injury-suicide-prevention

This webinar reviews a NSSI high school prevention program that has been shown to be effective. It uses this program as an example in demonstrating how to differentiate NSSI from suicide, understand how NSSI is a risk factor for suicide, learn the components of a self-injury prevention program for high schools, and understand outcome data related to an evaluation of the program.

Individuals Who Have Attempted Suicide

A previous suicide attempt is a known predictor of suicide death.[11] A study of individuals who had survived a serious suicide attempt, conducted in New Zealand, found that almost half made another attempt or subsequently died by suicide within 5 years.[155] Many individuals do not receive ongoing treatment or mental health care after an attempt, although they may continue to experience suicidal thoughts.[156] In addition, a study conducted in the United Kingdom found that many people who die by suicide do so within 30 days of having been discharged from a hospital for a previous attempt, often before an appointment for services.[98]

The vast majority of these deaths are preventable. A developing literature base on the role of protective and social factors and landmark projects designed to learn from the experience of individuals who have attempted suicide provide insight regarding new strategies for reducing reattempts, including approaches focused on challenging the prejudice, shame, and silence that surround suicide attempts.

Even after a positive experience in a primary care or psychiatric program, recent attempt survivors can struggle with reintegrating into their homes, schools, and workplaces.[157] Feelings of shame and self-doubt and fear of biased reactions are just some of the experiences they describe. Within many communities,

silence, prejudice, and misunderstanding about the subject of suicide create barriers to open discussion. This culture of "don't ask, don't tell" can foster rejection, social isolation, and even discrimination if the suicide attempt is known. Spouses, parents, and others need help adjusting, as well as tools, evidence-based information, and programs for supporting people who survive an attempt.

Research suggests that even simple efforts to challenge isolation and provide follow-up support to people living in the community after an attempt can have a powerful impact and reduce future attempts.[158] A program that used hand-written postcards with brief personal messages showed remarkable results in reducing reattempt hospital admissions, revealing that a small amount of effort in the area of social support may be very powerful.[159] In addition, a growing number of programs that provide suicide attempt survivors with self-help tools and social support show great promise in reducing isolation and empowering people to manage their own suicide risk and mental health.

In the last 15 years, several organized efforts have emerged to learn from and serve the needs of people who have attempted suicide outside the traditional clinical services sector. In October 2005, the first National Conference for Survivors of Suicide Attempts, Health care Professionals, Clergy, and Laity was held in Memphis, Tennessee. The summary report of that conference is one of the first documents to articulate the perspectives of individuals who have attempted suicide.[160] Two years later, in July 2007, the National Suicide Prevention Lifeline (800–273–TALK/8255) sponsored a project that provided even more specific and rich information to better serve the needs of this population.[161]

Simultaneously, across the nation and internationally, there has been a significant increase in the number and variety of mental health consumer peer support and peer specialist services that may provide meaningful ongoing supports for people who have survived suicide attempts. These programs, which have been recognized as evidence-based practices by SAMHSA, provide social support that is not framed in terms of crisis and that can be an important resource for personal mental health maintenance and recovery.[162] Such initiatives can empower and motivate people after an attempt, while at the same time challenge prejudice and shame in the area of suicide. These efforts can also increase social support for suicide reduction and contribute to increased funding and resources for preventing recurring attempts.

Although many communities are initiating programs and supports that can prevent people from reattempting, more and better strategies are needed. Technical assistance efforts, combined with the broad dissemination of resources and information to communities across America, have great potential to reduce suicide death. Resources for attempt survivors, such as *Stories of Hope and Recovery*, developed by SAMHSA and the National Suicide Prevention Lifeline (800–273–TALK/8255), hold promise for reducing prejudice and for promoting collaborative approaches for treatment engagement with attempt survivors. The *After an Attempt* brochure, distributed by SAMHSA, provides basic information for attempt survivors, family, and providers in English and Spanish for distribution in hospitals. Increased resources, peer support groups, web-based supports, informational DVDs, and trainings for health care providers are needed to ensure that individuals who have attempted suicide, along with their families and friends, receive the support, advice, and information they need to find the most direct path to recovery.

Resources

American Association of Suicidology
www.suicidology.org/web/guest/suicide-attempt-survivors

AAS has a collection of resources for those who have survived a suicide attempt and are looking for support and information. They include pamphlets, stories of others who have attempted suicide, and links to research about attempt survivors.

Continuity of Care for Suicide Prevention and Research: Suicide Attempts and Suicide Deaths Subsequent to Discharge from the Emergency Department or Psychiatry Inpatient Unit, 2010
SPRC

www.sprc.org/library/continuityofcare.pdf

This is a comprehensive report offering recommendations for the ongoing care of patients at risk for suicide who have been treated in EDs and hospitals. It discusses 10 principles for improved continuity of care and provides examples of seven integrated systems of care in the United States and Europe.

Individuals With Medical Conditions

Several physical illnesses are associated with an increased risk for suicidal behaviors.[29] The factors that may help explain this increased risk vary by medical condition but can include chronic pain, cognitive changes that make it difficult to make decisions and solve problems, and the challenges and emotional toll that can be associated with long-term conditions and limitations.

Cancers

Cancer is one of the most common physical illnesses associated with elevated suicide risk. The National Cancer Institute has identified cancers of the mouth, throat, and lung as risk factors for suicidal behaviors.[163] While suicide risk tends to be highest in the first few months after diagnosis, risk remains elevated in the first 5 years.[164] Fear associated with how the disease is perceived and managed, rather than the fear of death itself, is a frequent precipitator of suicidal behaviors.[165] The consequences or side effects of treatment can also result in psychological problems.[166] Fatigue and/or exhaustion, some of the most frequently reported side effects of cancer treatments, can be a risk factor for suicidal behaviors.[167] In addition, depression and anxiety are common in cancer patients. About 63 to 85 percent of individuals with cancer who die by suicide meet criteria for severe depression, anxiety, and thought disorder.[168] It is not always clear whether these types of mental disorders are triggered by the disease, occur as a consequence of the disease, or are an adverse effect of the treatment itself.[165]

Degenerative Diseases of the Central Nervous System

Huntington Disease: The prevalence of suicide is believed to be two to four times greater in individuals with Huntington disease than among the general population.[169] The lifetime history of suicide attempts ranges from 4.8 to 17.7 percent.[170] Major depressive disorder may be present in up to half of patients with

Huntington's disease and is thought to be a consequence of the disease itself, rather than a psychological reaction to having a serious illness.[170] In addition, anxiety disorders, obsessive-compulsive disorders, psychosis, mania, aggression, irritability, impulsivity, and personality changes have all been reported in patients with the disease.

Multiple Sclerosis: Studies confirm an increased risk of suicide among patients with multiple sclerosis.[171] Lifetime prevalence rates of depression range from 37 to 54 percent, and the prevalence rate of depression is almost three times the lifetime prevalence reported in the general population.[172] Generalized anxiety disorder, panic disorder, and bipolar affective disorder (manic episodes) are also present more frequently in these patients.

Parkinson's Disease: Parkinson's disease is often associated with one or more psychiatric or cognitive disorders, such as depression, psychosis, and dementia.[173] Most of the observations support the hypothesis that depression is a primary consequence of brain dysfunction, although situational factors may contribute to mood changes to some extent.[174] Suicide and suicide attempts are uncommon despite the fact that the rates of suicidal ideation are elevated. Depression seems to be the most important predictor of suicide ideation.

Traumatic Injuries of the Central Nervous System

Spinal Cord Injury: Suicide and suicide attempts occur more frequently in those with spinal cord injuries (SCI) than in the general population.[175, 176] People with SCI are five times as likely to experience depression compared with the general population, and the rates of depression following a traumatic spinal cord injury may be as high as 45 percent. Others have found that 10 to 13 percent of SCI patients suffer from anxiety[239] and high levels of post-traumatic stress disorder.[177]

Traumatic Brain Injury: People with moderate to severe traumatic brain injury (TBI) may have widespread cognitive impairment that can affect attention, memory, executive functioning, language and communication, visual-spatial skills, and processing speed.[178] TBI survivors may also have perceptual deficits and motor deficits. Executive brain dysfunction is a contributing factor related to suicidal behaviors.[179] A review of the literature found that on the whole, there is an increased risk of death by suicide (three to four times greater for those with severe TBI), a higher frequency of attempts, and clinically significant suicidal ideation in 21 to 22 percent of the TBI population.[180]

Other Disorders of the Central Nervous System

Epilepsy: Suicide rates in patients with epilepsy vary from 0 to 25 percent.[181] Factors that can affect the rate of suicide include psychological stressors associated with epilepsy, seizure type and frequency, psychic auras, and the presence of associated psychopathology.[182] Some studies suggest that suppression of seizures in longstanding epilepsy may be associated with suicide risk,[183] and that suicide does not occur among patients with severe epilepsy.[184] The WHO states that increased suicidal behavior in epilepsy is linked to increased impulsivity, aggression, and chronic disability often seen in persons with the illness, and that alcohol and drug abuse also contribute to a greater risk of suicide among these patients.[185]

Migraine: In general, patients with migraine are two to four times more likely to develop depression, two to six times more likely to develop general anxiety disorder, five times more likely to develop obsessive-compulsive disorder, and up to seven times more likely to develop panic disorder than the general population. Furthermore, depressed patients are about three times more likely to develop migraine in their lifetime. Migraine with an aura is believed to have a stronger association with psychiatric conditions than migraine without an aura. The relationship between migraine and depression and anxiety appears to be bidirectional, with each increasing the risk of the other condition. The risk of suicide ideation and attempts is higher among migraine patients, especially in those who have migraine with aura.[186]

HIV/AIDS

Most studies among individuals living with HIV report lifetime prevalence of suicide attempts that range from 22 to 50 percent.[187] Individuals with AIDS were 44 times more likely to attempt suicide than those without AIDS.[188]

While most studies report that persons living with HIV/AIDS have much higher suicide rates than the general population or those with other life-threatening illnesses, studies have reported no significant differences in suicide rates between HIV-infected individuals and other groups at risk for suicide, such as injection drug users and psychiatric patients.[189, 190] Hence, HIV status may not be the most relevant factor related to suicide, but rather that other suicide risk factors that are common among HIV-infected individuals play a more important role.[191] Studies have shown that suicide attempts and suicide ideation among people with HIV occur most often in those who have a previous psychiatric history and other social and environmental risk factors for suicide.[192] Mood, anxiety, substance abuse, and personality disorders are prevalent among those with HIV.[187]

Chronic Kidney Disease

The following psychiatric disorders have been frequently observed in patients with severe end-stage kidney disease who require hemodialysis: affective disorders, dementia and delirium, drug-related disorders (e.g., alcohol dependence), schizophrenia and other psychoses, and personality disorders.[193] The prevalence of depressive disorders in hemodialysis patients is estimated at 20 to 30 percent, with a rate of 10 percent for major depression.[194] Hemodialysis patients with major depressive disorder commonly demonstrate a sense of hopelessness, as well as lack of pleasure and energy, and other depressive symptoms. This subset of patients has been noted to be the most likely to request withdrawal from hemodialysis.

Arthritis

Arthritic disorders often co-occur with other physical conditions, especially chronic pain conditions including back pain, migraine, and other chronic headaches.[195] The association between arthritis and problems such as anxiety, substance use, and personality disorders has been demonstrated in large, population-based studies.[196, 197] The relationship between arthritis and suicidal behavior may be largely

explained by comorbid mental health disorders alone or in combination with other factors such as level of pain and/or disability that are associated with a lower quality of life.[198]

Asthma

Adolescents with asthma are more likely to report depressive symptoms, panic attacks, suicide ideation and behavior, and substance abuse when compared with those without asthma.[199-201] It is not clear whether the association between asthma and depressive and anxiety disorders, as well as with suicidal ideation and behavior, results from a shared underlying process or from shared risk factors.

Resources

Medical Conditions Associated With Suicide Risk, Edited by A.L. Berman & M. Pompili, 2011
American Association of Suicidology

www.suicidology.org/web/guest/store

This book summarizes research on 25 medical conditions that are associated with suicide risk, such as cancer, TBI, and HIV and AIDS. It outlines risk factors to assess patients and provides recommendations for clinicians.

Individuals With Mental and/or Substance Use Disorders

Mental and substance use disorders are widely recognized as important risk factors for suicidal behaviors in all age groups. Having a substance use disorder along with as a mood disorder may be particularly likely to increase suicide risk.[28] Information on suicide risk and specific mental and substance use disorders is provided next, along with appropriate resources.

Mental Disorders

MOOD DISORDERS

Mood disorders are among the most common and may be the most life-threatening psychiatric illnesses.[202]

Major depressive disorder, also called *major depression* or *unipolar disorder*, is characterized by a combination of symptoms, such as sadness and loss of interest or pleasure in once-pleasurable activities, which interfere with everyday life. It has been estimated that 12 to 17 percent of individuals will experience a major depressive episode within their lifetime.[203] Although a person may experience only a single episode, more often he or she may have several episodes throughout his or her life.

Bipolar disorders, also called *manic-depressive illn*ess, is characterized by dramatic mood swings, going from an overly energetic "high" (mania) to sadness and hopelessness (depression). People with bipolar disorders type I have had at least one manic episode along with periods of major depression. Those with bipolar disorders type II have periods of high energy levels and impulsiveness that are not as extreme as mania and also alternate with episodes of major depression. The estimated lifetime prevalence of bipolar disorders is 1.3 to 5 percent.[203]

More than 60 percent of suicidal deaths occur among individuals with mood disorders. Suicide risk is particularly high among individuals with bipolar disorders, which is strongly associated with suicide thoughts and behaviors. Over their lifetime, the vast majority (80 percent) of patients with bipolar disorders have either suicidal ideation or ideation plus suicide attempts.[24] In clinical samples, 14 to 59 percent of the patients have suicide ideation, and 25 to 56 percent attempt suicide at least once in their lifetime.[204] Approximately 15 to 19 percent of patients with bipolar disorders die from suicide. The suicide rate among patients with bipolar disorders is estimated to be more than 25 times higher than the rate in the general population.[25]

Several factors can increase the risk for suicide among patients who have mood disorders. These factors include a recent suicide attempt and a severe major depressive episode, often accompanied by feelings of hopelessness and guilt, a belief that that are few reasons for living, thoughts of suicide, agitation, insomnia, appetite and weight loss, and psychotic features.[205] Suicidal behaviors among mood disorder patients occur almost exclusively during an acute, severe, major depressive episode.[205]

Among patients with major depressive disorder, risk factors for suicide include other comorbid psychiatric conditions, such as post-traumatic stress disorder (PTSD), dependent personality disorder, borderline personality disorder, and substance use disorders.[206] Among those with bipolar disorders, risk factors include a family history of suicide, early onset of bipolar disorders, increasing severity of affective disorders, presence of mixed affective states, and abuse of alcohol or drugs.[207]

Major depressive disorder often fails to be recognized, diagnosed, or treated.[203] It is believed that many men in midlife who have the disorder do not seek treatment for their symptoms, and even when they do, they often drop out of treatment before they reach remission.[208] Evidence is mounting that individuals who have had a stroke or heart attack and/or have chronic diabetes are likely to develop depression related to their physical illnesses. Older individuals are particularly likely to do so.

Studies have shown that educating primary care providers in the assessment, treatment, and management of depression leads to reductions in suicide. Appropriate acute and long-term treatment of depressive disorders, including both pharmacological and nonpharmacological methods (especially cognitive behavioral therapy), greatly reduces the risk of suicide and attempted suicide in this high-risk population.[205] Large-scale, long-term, European observational studies of former inpatients with bipolar disorders show that long-term use of mood stabilizers reduces the risk of suicide, compared to patients who stop taking medication. There is also some evidence that psychotherapies can improve compliance and increase the effectiveness of pharmacotherapy, thereby possibly providing more protection against suicide risk.[205]

ANXIETY DISORDERS

Anxiety disorders affect about 40 million American adults aged 18 and older (about 18 percent) in a given year.[209] Unlike the relatively mild, brief anxiety caused by a stressful event like speaking in public, anxiety disorders last at least 6 months and can become worse if not treated. These disorders include the following: social phobia, simple phobia, generalized anxiety disorder, panic disorder, agoraphobia, PTSD, and obsessive-compulsive disorder (OCD).

The presence of any anxiety disorder is significantly associated with suicidal ideation and suicide attempts. Anxiety disorders commonly occur along with other mental or physical illnesses, including alcohol or substance abuse, which may mask anxiety symptoms or make them worse. The presence of any anxiety disorder in combination with a mood disorder is associated with a higher likelihood of suicide attempts in comparison with a mood disorder alone.[210] Among adults in the general population (i.e., not in the Armed Forces or veterans), panic disorder and PTSD have been found to be more strongly associated with suicide attempts when there is a co-occurring personality disorder.[211]

BORDERLINE PERSONALITY DISORDER

Borderline personality disorder (BPD) is an emotional disorder characterized by a pervasive pattern of instability in interpersonal relationships, self-image, and emotions. Defining features of this disorder include an unstable mood, serious problems with emotion regulation, a wide range of impulsive behaviors, unstable interpersonal relationships, suicide, and chronic suicidal ideation.[212]

It has been estimated that between 3 and 10 percent of patients with BPD die by suicide.[213] Recurrent suicide attempts, self-injury, and impulsive aggressive acts are often associated with BPD and often result in emergency and inpatient treatment. Suicides in BPD often occur late in the course of the illness and follow long courses of unsuccessful treatment.[214]

The last few years have been marked by new data on the effectiveness of psychotherapies specifically designed for patients with BPD.[215] Research has shown that Dialectical Behavior Therapy (DBT) is effective in reducing the self-injurious behaviors associated with BPD.[41] DBT specifically aims to modify the regulation of negative emotion. The main outcomes of DBT are reduced overdoses, ED visits for suicidal behaviors, frequency of self-directed violence, and hospital admissions. The efficacy of medications for BPD is not firmly established.

SCHIZOPHRENIA

Schizophrenia is a severe, chronic disorder characterized by disturbances in perception, thought, language, and social function. The risk for suicide in individuals suffering from schizophrenia is particularly high in the early stages of the illness (first 3–5 years of onset). A meta-analysis of more than 60 studies found that almost 5 percent of schizophrenic patients will die by suicide during their lifetimes, usually near the onset of the illness.[26] Surviving the initial period of heightened risk results in a lesser, although still considerable, risk of death by suicide.[26]

The greatest indicator of suicide risk among people with schizophrenia is active psychotic illness (e.g., delusions) combined with symptoms of depression. Greater insight into the psychotic illness itself, the need for treatment, and the consequences of the disorder are strongly related to suicide risk.[216] Increased risk for suicide is also associated with higher levels of education and higher socioeconomic status. Alcohol abuse has been reported in studies examining suicide attempts.

Newer nonpharmacological therapies, such as cognitive enhancement therapy, may have great potential for improving the individual's social and occupational functioning.[217] Findings from a recent review suggest

that an integrated psychosocial and pharmacological approach may be useful, and that treating depressive symptoms in patients with schizophrenia is an important component of suicide risk reduction.[87]

Resources

Continuity of Care for Suicide Prevention and Research: Suicide Attempts and Suicide Deaths Subsequent to Discharge From the Emergency Department or Psychiatry Inpatient Unit, 2010
SPRC

www.sprc.org/library/continuityofcare.pdf

This is a comprehensive report offering recommendations for the ongoing care of patients at risk for suicide who have been treated in EDs and hospitals. It discusses 10 principles for improved continuity of care and provides examples of seven integrated systems of care in the United States and Europe.

Mental Health America
www.mentalhealthamerica.net/

Mental Health America (MHA, formerly the National Mental Health Association) is an advocacy organization addressing all mental and substance use conditions nationwide and advocates for quality mental health and substance abuse services. It is a coproducer of *Safeguarding Your Students Against Suicide*, proceedings from an expert panel on preventing suicide on college campuses. Its web page includes suicide warning signs, how individuals can intervene to help, and links to resources. MHA also has local affiliates across the United States.

National Alliance on Mental Illness
www.nami.org

National Alliance on Mental Illness (NAMI) is a membership organization dedicated to building better lives for Americans affected by mental illness. NAMI advocates for access to services, treatment, supports, and research. It sponsors awareness events, provides training about mental illness, and sponsors the NAMI Helpline—a phone crisis line. NAMI has state organizations and local affiliates across the United States.

National Institute of Mental Health, NIH, HHS
www.nimh.nih.gov/health/topics/suicide-prevention/index.shtml

The National Institute of Mental Health (NIMH) website section on suicide prevention includes information and resources useful for a variety of audiences, including researchers, health care professionals, and consumers. NIMH also conducts research on suicide and suicide prevention. Research updates can be found through "News From the Field: Research Findings of NIMH-funded Investigators at EurekAlert!" at: http://search.eurekalert.org/e3/query.html?qt=youth+suicide+prevention&charset=iso-8859-1&qc=ev3rel&rf=1&col=ev3rel.

Substance Abuse and Mental Health Services Administration, HHS
www.samhsa.gov

SAMHSA funds and supports the National Lifeline and SPRC and manages the Garrett Lee Smith grant program, which funds state, territorial, and tribal programs to prevent suicide among youth. It has

developed the National Registry of Evidence-Based Programs and Practices (NREPP), which reviews evidence of effectiveness for prevention programs on topics related to mental and substance use disorders, including suicide. SAMHSA also sponsors several prevention campaigns.

Suicide Prevention Efforts for Individuals With Serious Mental Illness: Roles for the State Mental Health Authority, 2008
National Association of State Mental Health Program Directors (NASMHPD)

www.sprc.org/library/SeriousMI.pdf

This report outlines the State Mental Health Authority's (SMHA) leadership role in preventing suicide among people with serious mental illness. It suggests ways in which SMHAs can increase collaboration, raise awareness of the signs of suicide, and intervene to save lives.

Substance Use Disorders

Alcohol and drug abuse are second only to depression and other mood disorders as the most frequent risk factors for suicide.[218] According to data from the National Violent Death Reporting System (NVDRS), in 2008 alcohol was a factor in approximately one-third of suicides reported in 16 states.[27] Opiates, including heroin and prescription painkillers, were present in 25.5 percent of suicide deaths, antidepressants in 20.2 percent, cocaine in 10.5 percent, marijuana in 11.3 percent, and amphetamines in 3.4 percent.

Suicide is a leading cause of death among people with substance use disorders (SUDs). Substance use may increase the risk for suicide by intensifying depressive thoughts or feelings of hopelessness while at the same time reducing inhibitions to hurting oneself.[219] Alcohol and some drugs can cause a "transient depression," heighten impulsivity, and cloud judgment about long-term consequences of one's actions.

About 8.5 percent of U.S. adults are estimated to have an alcohol use disorder, which includes alcohol dependence and alcohol abuse.[13] About one-fourth of all the suicides in the United States are estimated to occur among individuals with alcohol use disorders.[9] Acute (e.g., binge drinking episodes) and chronic use of alcohol are associated with suicidal behaviors.[220-222] Among individuals with alcohol use disorders, suicide frequently takes place within the context of a major depression and interpersonal stressors. Aggression, impulsivity, hopelessness, and partner-relationship disruptions are also risk factors.[223] Studies have shown that depression is present in 45 percent[224] to more than 70 percent[225] of those with alcohol and substance use disorders who die by suicide.

Although less is known about the relationship between suicide risk and other drug use, the number of substances used seems to be more predictive of suicide than the types of substances used.[226] Findings from a few initial studies suggest that treatment of drug abuse may help reduce the risk for future suicidal behaviors.[227]

SUDs and chronic substance use can lead to consequences and losses that contribute to suicide risk factors. Individuals in treatment for substance use disorders and/or transitioning between levels of care may be especially vulnerable.[228] A large number of people in treatment have co-occurring mental disorders that increase suicide risk, particularly mood disorders. At the time these individuals enter treatment, their

substance abuse may be out of control, they may be experiencing a number of life crises, and they may be at peaks in depressive symptoms. In addition, mental disorders associated with suicidal behaviors, such as mood disorders, PTSD, anxiety disorders, and some personality disorders, often co-occur among people who have been treated for substance use disorders. Crises that are known to increase suicide risk, such as relapse and treatment transitions, may occur during treatment. According to one study, compared with the general population, individuals treated for alcohol abuse or dependence have a 10 times greater risk of eventually dying by suicide.[228] Among those who inject drugs, the risk is about 14 times greater than in the general population.[228]

More is known about the factors that increase the risk of suicidal behaviors among this population than about the factors that may be protective. SUDs share many risk factors with suicide: family history of suicide or child abuse; history of mental disorders, particularly mood disorders; history of or family history of addiction; impulsiveness; feelings of isolation; barriers to mental health and/or treatment; relational, social, work, or financial losses; physical illness/chronic pain; access to lethal methods; and prejudice associated with asking for help.

Perceiving that there are clear reasons to live is thought to be an important protective factor in this group. Other protective factors may include: a child at home and/or childrearing responsibilities; an intact marriage; a trusting relationship with a counselor, physician, or other service provider; employment; religious attendance and/or belief in religious teachings against suicide; and an optimistic or positive outlook. Sobriety can be a protective factor, along with attendance of mutual support group meetings.

Resources

National Institute on Alcohol Abuse and Alcoholism, NIH, HHS
www.niaaa.nih.gov

National Institute on Alcohol Abuse and Alcoholism (NIAAA) provides leadership in the national effort to reduce alcohol-related problems. Alcohol is a significant risk factor for suicide, and the NIAAA publishes studies on how alcohol use interacts with conditions such as depression and stress to contribute to suicide. NIAAA also provides data on alcohol involvement in suicide.

National Institute on Drug Abuse, NIH, HHS
www.nida.nih.gov

National Institute on Drug Abuse (NIDA) funds and publishes studies on the effects of substance abuse on mental health, including suicide, and hosts *Suicide Studies Lectures,* which review current standards to define, classify, assess, and treat suicide-related disorders that sometimes play a role in drug abuse and addiction. NIDA also sponsored a landmark workshop, *Drug Abuse and Suicidal Behavior*.

Substance Abuse and Mental Health Services Administration, HHS
www.samhsa.gov

SAMHSA funds and supports the National Lifeline and SPRC and manages the Garrett Lee Smith grant program, which funds state, territorial, and tribal programs to prevent suicide among youth.

It has developed NREPP, which reviews evidence of effectiveness for prevention programs on topics related to mental and substance use disorders, including suicide. SAMHSA also sponsors several prevention campaigns.

Substance Abuse and Suicide Prevention: Evidence and Implications—A White Paper, 2008
Center for Substance Abuse Treatment (CSAT), SAMHSA, HHS

www.samhsa.gov/matrix2/508SuicidePreventionPaperFinal.pdf

This white paper provides an overview of the advances made over the past decade in substance abuse prevention and treatment and suicide prevention. It addresses the epidemiology of suicide, provides an overview of what we know about the impact of substance abuse on suicide risk, and explores suicide prevention in the context of behavioral health promotion and illness prevention.

TIP 50: Addressing Suicidal Thoughts and Behaviors in Substance Abuse Treatment, 2009
www.kap.samhsa.gov/products/manuals/tips/pdf/TIP50.pdf

Video companion:
www.store.samhsa.gov/product/Addressing-Suicidal-Thoughts-and-Behaviors-in-Substance-Abuse-Treatment/VA10-TIP50

TIP 50 provides counselors with tools to use in treatment and agency administrators with ways to ensure that suicide ideation is detected and addressed early and appropriately. *TIP 50* also provides insights on how various drugs used by clients might affect mood and addresses cultural and gender issues that could influence behavior.

Lesbian, Gay, Bisexual, and Transgender Populations

Studies over the last four decades suggest that LGBT individuals may have an elevated risk for suicide ideation and attempts. Attention to this disparity has been limited, in part because neither the U.S. death certificate nor the NVDRS identify decedents' sexual orientation or gender identity. Thus, it is not known whether LGBT people die by suicide at higher rates than comparable heterosexual people.

Across many different countries, a strong and consistent relationship between sexual orientation and nonfatal suicidal behavior has been observed.[229] A meta-analysis of 25 international population-based studies found the lifetime prevalence of suicide attempts in gay and bisexual male adolescents and adults was four times that of comparable heterosexual males.[230] Lifetime suicide attempt rates among lesbian and bisexual females were almost twice those of heterosexual females. Lesbian, gay, and bisexual (LGB) adolescents and adults were also found to be almost twice as likely as heterosexuals to report a suicide attempt in the past year. A later meta-analysis of adolescent studies[38] concluded that LGB youth were three times more likely to report a lifetime suicide attempt than heterosexual youth, and four times as likely to make a medically serious attempt. Across studies, 12 to 19 percent of LGB adults report making a suicide attempt, compared with less than 5 percent of all U.S. adults; and at least 30 percent of LGB adolescents report attempts, compared with 8 to 10 percent of all adolescents. To date, population-based studies have not identified transgender participants, but numerous nonrandom surveys show high rates of suicidal

behavior in that population, with 41 percent of adult respondents to the 2009 National Transgender Discrimination Survey reporting lifetime suicide attempts.[231]

Most studies have found suicide attempt rates to be higher in gay/bisexual males than in lesbian/bisexual women, which is the opposite of the gender pattern found in the general population. As in the overall population, there is some evidence that the frequency of suicide attempts may decrease as LGB adolescents move into adulthood,[232] although patterns of suicide attempts across the lifespan of sexual minority people have not been conclusively studied. Within LGB samples, especially high suicide attempt rates have been reported among African American, Latino, Native American, and Asian American subgroups.[233-235]

Suicidal behaviors in LGBT populations appear to be related to "minority stress,"[236] which stems from the cultural and social prejudice attached to minority sexual orientation and gender identity. This stress includes individual experiences of prejudice or discrimination, such as family rejection, harassment, bullying, violence, and victimization. Increasingly recognized as an aspect of minority stress is "institutional discrimination" resulting from laws and public policies that create inequities or omit LGBT people from benefits and protections afforded others.[231, 237-240] Individual and institutional discrimination have been found to be associated with social isolation, low self-esteem, negative sexual/gender identity, and depression, anxiety, and other mental disorders. These negative outcomes, rather than minority sexual orientation or gender identity per se, appear to be the key risk factors for LGBT suicidal ideation and behavior. An additional risk factor is contagion resulting from media coverage of LGBT suicide deaths that presents suicidal behavior as a normal, rational response to anti-LGBT bullying or other experiences of discrimination. Further research is needed to explore the pathways to suicidal behaviors for transgender individuals, including the impact of prejudice and discrimination.

Factors that foster and promote resilience in LGBT people include family acceptance,[239] connection to caring others and a sense of safety,[66] positive sexual/gender identity, and the availability of quality, culturally appropriate mental health treatment.[58] Strategies for preventing suicidal behaviors in LGBT populations include: reducing sexual orientation and gender-related prejudice and associated stressors; improving identification of depression, anxiety, substance abuse, and other mental disorders; increasing availability and access to LGBT-affirming treatments and mental health services; reducing bullying and other forms of victimization that contribute to vulnerability within families, schools, and workplaces; enhancing factors that promote resilience, including family acceptance and school safety; changing discriminatory laws and public policies; and reducing suicide contagion.

Collaboration between suicide prevention and LGBT organizations is needed to ensure the development of culturally appropriate suicide prevention programs, services, and materials, and to facilitate access to care for at-risk individuals. A promising example is the development of guidelines for media in talking about suicide in LGBT populations[241] created by a coalition of AFSP and several national LGBT organizations. Another critical need is closing knowledge gaps through additional research and improved surveillance. Efforts are underway to expand the inclusion of sexual orientation and gender identity measures in federal health and mental health surveys, and to develop and test procedures for postmortem identification of LGBT people in NVDRS.

Resources

American Foundation for Suicide Prevention: LGBT Initiative
www.afsp.org/index.cfm?page_id=6FB9BA00-7E90-9BD4-C33BD398EAAE73C0

This initiative works on suicide prevention among the LGBT population in a number of ways, including producing a conference, funding research grants, working to improve how the media covers anti-gay bullying, helping its chapter volunteers bring understanding of suicide into their local LGBT communities, and creating LGBT mental health educational resources and training tools.

Stop Bullying Website
www.stopbullying.gov

A website that provides information from various government agencies on what bullying is, what cyberbullying is, who is at risk, and how individuals can prevent and respond to bullying.

Suicide Prevention Among LGBT Youth: A Workshop for Professionals Who Serve Youth
SPRC
www.sprc.org/training-institute/lgbt-youth-workshop

This is a free workshop kit to help staff in schools, youth-serving organizations, and suicide prevention programs take action to reduce suicidal behavior among LGBT youth. It contains a Leader's Guide, sample agenda, PowerPoint presentations, sample script, and handouts.

The Trevor Project
www.thetrevorproject.org

This national organization focused on crisis and suicide prevention among lesbian, gay, bisexual, transgender, and questioning (LGBTQ) youth provides a 24-hour, toll-free, crisis intervention phone line (1–866–488–7386); an online, social networking community for LGBTQ youth aged 13 to 24 and their friends and allies; educational programs for schools; and advocacy initiatives.

Members of the Armed Forces and Veterans

The suicide rate for active duty military personnel has historically been significantly lower than the rate for a comparable population of Americans. However, both the numbers and rates of suicide have been increasing over the past decade. In 2001, the U.S. Department of Defense (DoD) recorded 160 total suicides for a rate of 10.3 per 100,000.[242] Suicide rates began to increase in 2006, driven primarily by a steady upward trend in the number of suicides in the Army and Marine Corps. In 2009, the DoD identified 309 total active duty suicides, for a rate of 18.3 per 100,000. The number of suicides has been on the rise in the Reserve Component (RC) as well. In 2009, there were 104 suicides of service members who were in the RC and not on active duty at the time of the event.[243] In 2010, this number increased to 180, with the Army National Guard having the largest increase in the total number of suicides from 48 in 2009 to 101 in 2010.

For calendar year 2010, service members who were white and under the age of 25, junior enlisted (E1–E4), or high school educated were at increased risk for suicide relative to comparison groups in the general population.[244] Service members most frequently used firearms as the means for suicide. Drug overdose was the most frequent method for suicide attempts, and the misuse of prescription medication was more frequent than illegal drugs. Most service members were not known to have communicated their potential for self-harm with others prior to suicide or attempted suicide. The majority of service members who died by suicide did not have a known history of a mental or substance use disorder. Finally, the overwhelming majority of suicides occurred in a nondeployed setting, and more than half of those who died by suicide did not have a history of deployment.

The Centers for Disease Control and Prevention (CDC) estimates that veterans account for approximately 20 percent of the deaths from suicide in America.[245] There is controversy in the scientific literature about whether suicide rates are higher among veterans than among other Americans after controlling for sex, age, and minority status.[246, 247] However, rates appear to be increased among two important groups: veterans who have recently returned from service in Afghanistan and Iraq,[248] and those who receive health care services from the Veterans Health Administration (VHA),[249] the health care system operated by the U.S. Department of Veterans Affairs (VA). In the most recent years for which data are available, suicide rates for male VHA patients were approximately 1.4 times greater than for other American men. For female VHA patients, rates were approximately twice as high as among American women. Both increases reflect the higher rates of medical and mental health conditions, disability, and other risk factors for suicide that occur among VHA patients. In VHA, as in DoD, firearms represented the most common means for suicide and overdoses represented the most common means for attempts.[248] Approximately half of all suicides in VHA occurred among patients known to have mental health conditions.[250] An increase in the suicide rate among returning veterans first appeared in 2006,[248] and rates continue to be monitored closely. The rates as observed echo the increase that occurred for the first few years after veterans returned from service in Vietnam.[251]

Efforts to identify individuals at risk and to monitor the military and veteran populations as a whole are currently in place in at DoD and VA. Mental health services have been enhanced in both departments, and an array of suicide prevention programs have been implemented.

In DoD, the Deputy Assistant Secretary of Defense for Readiness (DASD(R)) leads a collaborative effort across the Department to address suicide. The *Final Report of the Department of Defense Task Force on the Prevention of Suicide by Members of the Armed Forces*[251] has served as a catalyst for the Department to review and assess all policies and programs that relate to suicide prevention. Based on the report and action plans developed from it, a departmental implementation memorandum was signed by the Under Secretary of Defense for Personnel and Readiness in September 2011 to guide the Department's ongoing efforts.

Established in November 2011, the Defense Suicide Prevention Office (DSPO) is part of the DoD's Office of the Under Secretary of Defense for Personnel and Readiness. DSPO oversees all strategic development, implementation, centralization, standardization, communication, and evaluation of DoD suicide programs, policies, and surveillance activities. To reduce the impact of suicide on Service members and their families, DSPO uses a range of approaches related to policy, research, communications, and behavioral health. DSPO works closely with the Army, Navy, Air Force, Marine Corps, Coast Guard and National Guard Bureau, as well as other governmental and nongovernmental agencies, to support Service members and strengthen a resilient and ready force. DSPO strives to help foster a climate that encourages Service members to seek help for their behavioral health issues.

VA's current suicide prevention began with the approval of its *Mental Health Strategic Plan* in 2004. Implementation of the plan led to an increase in core mental health staff on a national level, by 50 percent; from about 14,000 in 2005 to about 21,000 by the end of 2010.[248] Moreover, it led to developing the *Handbook on Uniform Mental Health Services in VA Medical Centers and Clinics*,[252] a policy document that specifies requirements for services that must be available to all veterans with mental health conditions.

The VA suicide prevention program is based on the principle that prevention requires ready access to high-quality mental health services within the health care system, supplemented by two additional components: (1) public education and awareness activities promoting engagement for those who need help; and (2) availability of specific services addressing the needs of those at high risk. Activities have included creating a national office for suicide prevention, partnering with SAMHSA and its Lifeline program to add a veterans' call center to its national 800–273–TALK/8255 crisis line, funding suicide prevention coordinators with support staff in each VA medical center, and initiating public information strategies focused on promoting the use of the crisis line and of VA services for those in need.

Resources

Defense Centers of Excellence for Psychological Health and Traumatic Brain Injury
www.dcoe.health.mil/SuicidePreventionWarriors.aspx

The Defense Centers of Excellence (DCoE) suicide prevention page includes information and campaign materials to raise awareness and encourage help seeking and access to mental health services specific to service branches of the military, families, and veterans. The DCoE sponsors the Real Warriors Campaign, a multimedia portal with resources to promote resilience, facilitate recovery, and support reintegration of returning service members, veterans, and their families.

National Guard/Reserve
www.ng.mil/features/suicide_prevention/default.aspx

The website for the National Guard's suicide prevention program features a six-part film on resilience among National Guard personnel. Other resources include a media gallery, a list of military and

nonmilitary organizations with information on suicide, and news stories from National Guard leadership and other branches of the military.

Tragedy Assistance Program for Survivors
www.taps.org

Tragedy Assistance Program for Survivors (TAPS) provides information and services to those who have suffered the loss of a military loved one due to any cause. It offers webinar-based courses, six of which concern suicide, for mental health professionals. Other resources include crisis services, online support groups, seminars for survivors, and the Good Grief Camp for children grieving the loss of a loved one in the military.

U.S. Air Force Suicide Prevention Program
afspp.afms.mil

The Air Force Suicide Prevention Program (AFSPP) is listed on SAMHSA's NREPP. The Air Force requires annual suicide prevention training of all active duty, reserve, guard, and civilian employees. The program's website contains links to a wide range of resources.

U.S. Army Suicide Prevention Program
www.armyg1.army.mil/hr/suicide/default.asp

This program uses Applied Suicide Intervention Skills Training (ASIST) to prepare designated gatekeepers to recognize suicide risk and intervene. All Army personnel, including civilians, are required to participate in Ask, Care, and Escort (ACE) suicide prevention and awareness training. The website also includes awareness materials, data, and tools for commanders to develop suicide prevention programs.

U.S. Department of Defense Restoring Hope
www.defense.gov/home/features/2010/0810_restoringhope_resources/

This web page is a central portal with links to a wide range of suicide prevention and other mental health services, self-help resources, and awareness materials for military in all branches, veterans, providers, and families. Most of the links go to services and resources provided by DoD or VA.

U.S. Department of Defense Suicide Prevention Website
www.health.mil/News_And_Multimedia/Special_Features/suicide-prevention-awareness.aspx

This website provides information on recognizing symptoms of those at risk for suicide, links to suicide prevention in each branch of the military, and a list of outside organizations that can provide information and assistance.

U.S. Department of Defense/U.S. Department of Veterans Affairs Suicide Outreach
www.suicideoutreach.org

This website is a resource collection providing access to support hotlines, self-assessments, treatment options, professional resources and forums, and various multimedia tools. It supports all members of the U.S. Armed Forces and reserve components, veterans, families, and providers.

U.S. Department of Veterans Affairs Mental Health Information
www.mentalhealth.va.gov

This web page serves as a portal for VA mental health services, resources, and programs such as the National Suicide Prevention Crisis Line veterans chat; information on suicide prevention and PTSD; and the Make the Connection Campaign, where veterans can share stories of their experience reintegrating into civilian life.

U.S. Department of Veterans Affairs Suicide Prevention Website
www.veteranscrisisline.net

This website describes the services of the Veterans Crisis Line, a toll-free, confidential resource that connects veterans in crisis and their families and friends with specially trained VA responders. It also includes information on warning signs and awareness and campaign materials.

U.S. Marines Suicide Prevention Program
www.usmc-mccs.org/suicideprevent/

The United States Marine Corps (USMC) program *Never Leave a Marine Behind* is a suicide prevention training program with modules geared toward officers, enlisted soldiers, families, and providers. It also provides awareness materials, help resources, and data.

U.S. Navy Suicide Prevention Program
www.public.navy.mil/bupers-npc/support/suicide_prevention/Pages/default.aspx

This program consists of four elements: Training, Intervention, Response, and Reporting. Annual suicide prevention training is required of active, reserve, and civilian employees. The website lists trainings and resources. Materials include the Navy Leaders Guide, which describes a broad range of supportive interventions, resources, and strategies for supporting sailors in distress.

Men in Midlife

While suicide rates have tended to decrease or remain stable for most age groups in the past two decades, suicides in middle adulthood have increased.[253, 254] Men in their adult years, from their early 20s through their 50s, account for the bulk of suicides and the majority of years of life lost due to suicide.[255] Yet there has been little research on this demographic group, when compared with the number of studies conducted with adolescents and older adults.

Although research exploring the recent surge in suicide in midlife is lacking, existing studies suggest that the factors that may increase the risk for suicidal behaviors in this group are similar to those among other age groups and in both sexes: mental illness that can be discerned from retrospective analyses (particularly mood disorders), substance use disorders (particularly alcohol abuse), and access to lethal means.[28, 80] However, these factors are likely to be exacerbated by other risk-related characteristics that occur more frequently among males, such as the underreporting of mental health problems,[256] a reluctance to seek help,[257] engagement in interpersonal violence,[258] distress from economic hardship (e.g., unemployment),

and dissolution of intimate relationships.[259] More research is needed on the pathways and mechanisms that contribute to suicide among midlife men, using developmental approaches that examine the occurrence and timing of risk factors as they are expressed across the life course.

Very few systematic, large-scale efforts have addressed the prevention of suicide among men in midlife. Although the AFSPP is an example,[260, 261] it remains uncertain whether the lessons gleaned from this closed system can be readily generalized to broader society. Prevention efforts are especially challenging for men because they are less likely to show signs of depression, report suicidal ideation, or seek help or accept it from others, and they often hide their suicide plans or preparations.

Several projects have focused on organizational-level components for early intervention and education.[260, 262, 263] Although studies in other countries point to the positive protective effects of means restriction,[264, 265] no such programs have been successfully implemented in the United States. In terms of changing individual-level trajectories toward suicide, early classroom interventions to enhance interpersonal skills have been shown to reduce suicidal behaviors in early adulthood.[266] Additional targets for intervention include: preventing exposure to violence in early developmental periods, such as bullying/peer victimization, childhood abuse, and domestic violence; enhancing academic engagement and reducing school drop-out rates; mitigating or preventing persisting alcohol and drug misuse; and developing a diverse array of community-based programs that engage men who otherwise would not seek care in traditional health settings or in settings that provide care for mental or substance use disorders.[254] Many of these efforts now are being focused on veterans. However, few data are available at this time to identify a particular evidence-based suicide prevention approach targeting men in midlife.

Resources

Although there are no resources specific to midlife adult suicide prevention, some interventions that focus on workplace settings and gatekeeper training may be particularly relevant to reaching people in this age range.

LivingWorks
www.livingworks.net

LivingWorks is an organization that delivers training in suicide prevention to various groups, including the general public, caregivers, and professionals. Its training programs include ASIST, suicideTALK, safeTALK, and suicideCARE.

QPR Institute
www.qprinstitute.com **(Under "QPR for Organizations," click on "Business.")**

The QPR Institute is centered on the "question, persuade, refer" strategy of suicide prevention training for gatekeepers. The institute offers training and information materials tailored for a variety of organizations and workplace settings, including businesses and corporations.

ValueOptions Strategic Principles for Suicide Prevention
www.valueoptions.com/suicide_prev/html%20paged/Strategy.htm

This website is designed to help create a comprehensive suicide prevention plan for workplaces. It includes materials for senior management, articles, tip sheets, posters, banner graphics, a self-scoring quiz, and sample e-mail messages, as well as instruction on what the prevention plan should include.

Working Minds: Suicide Prevention in the Workplace
www.workingminds.org

This is a joint program by the Carson J. Spencer Foundation and the Colorado Department of Public Health and Environment, Office of Suicide Prevention, aimed at preventing suicide among working-aged people, particularly men. It provides informational materials and in-person trainings, and features a toolkit for employers to provide training to employees on what to do when facing a suicide crisis that impacts the workplace.

Workplace Strategies for Mental Health
Great-West Life Centre for Mental Health in the Workplace
www.gwlcentreformentalhealth.com/display.asp?l1=7&l2=101&l3=116&d=116&

This website contains a page on suicide prevention and intervention, as well as other information and tools for addressing mental health issues in the workplace.

Older Men

Older men, in particular those who are white, have disproportionately high rates of death by suicide. In 2009, the rate of death by suicide among older white men was 30.15 per 100,000—almost three times the rate among the general population (11.77 per 100,000).[1]

Several factors can increase the risk for suicidal behaviors among older men, including the presence of a mental disorder. Research suggests that older adults who die by suicide are more likely to meet criteria for affective disorders (especially major depressive disorder) than younger adults.[267] Other important risk factors include physical illness and functional decline. Finally, an extensive body of literature indicates that social disconnection increases risk for death by suicide in older men.[267]

Suicide in late life is qualitatively different than in younger adults. Older adults are more likely than younger adults to die by suicide as a result of their first suicide attempt, in part because older adults are more likely than younger adults to use highly lethal means to attempt suicide.[267] Another important difference is that older adults are less likely than younger adults either to have reported suicidal ideation or to have sought mental health treatment prior to their deaths.[268] Interestingly, however, research suggests that most older adults who die by suicide are seen by primary care physicians in the last three months of life.[106]

Although many suicide prevention efforts have targeted youth, older adults have also become a focus of suicide prevention. Since 2001, many national and regional conferences have featured the topic, and many

states have broadened or are in the process of broadening their suicide prevention strategies to include older adults. Some states (e.g., Oregon and Maine) have separate plans for this age group. Mental health parity for Medicare is now being phased in so that seniors in the United States will have the same copay (20 percent) for mental health care as for physical health care.

Several interventions appear to offer significant promise for the prevention of suicide in late life. Most of these interventions have focused on treating depressive symptoms.[267] Because older men do not generally seek mental health treatment, the most effective methods of treating mood disorders in older adults may involve integrating evidence-based depression treatment into the work of primary care offices, social service agencies, and aging services organizations that focus on addressing the needs of older adults. Research has shown that collaborative care models that combine pharmacological and psychosocial treatments for depressive symptoms may be particularly useful. Finally, there is evidence that interventions that attempt to decrease social isolation and disconnection in late life may reduce risk for death by suicide.[267]

Resources

It Takes a Community: Report on the Summit on Opportunities for Mental Health Promotion and Suicide Prevention in Senior Living Communities, 2010

www.sprc.org/library_resources/items/it-takes-community-report-summit-opportunities-mental-health-promotion-and-s

This is a report of the October 2008 "It Takes a Community" summit to advance discussion and action to improve the mental health and reduce the risk of suicide among residents of senior living communities (SLCs). It provides a framework of whole population, at-risk population, and crisis response approaches and includes findings from focus groups of SLC residents.

Late Life Suicide Prevention Toolkit: Life Saving Tools for Health Care Providers, 2006
Canadian Coalition for Seniors' Mental Health

www.ccsmh.ca/en/projects/suicide.cfm

These training materials include an interactive, case-based DVD, the *National Guidelines for Seniors' Mental Health: The Assessment of Suicide Risk and Prevention of Suicide*, a clinician pocket card, a Facilitator's Guide, and a PowerPoint presentation.

Promoting Emotional Health and Preventing Suicide: A Toolkit for Senior Living Communities, 2011
SAMHSA

www.store.samhsa.gov/product/SMA10-4515

This toolkit contains resources to help staff in SLCs promote emotional health and prevent suicide among their residents. The toolkit also provides resources to help residents become active participants in mental health promotion and suicide prevention efforts.

NATIONAL Action Alliance FOR SUICIDE PREVENTION

PEP12-NSSPGOALS