

## Resource Sheet #5: Risk and Protective Factors\*

### Overview

Every year approximately 30,000 people die by suicide in the United States. Approximately 650,000 people yearly receive emergency treatment after attempting suicide. It is the third leading cause of death among American youths and the eleventh for Americans of all ages.

Over the last 100 years suicides have out-numbered homicides by at least 3 to 2.

The rates of suicide are exceptionally high among certain populations. In almost all industrialized countries, men 75 years of age and older have the highest suicide rate among all age groups. The rate of suicide among African-Americans has historically been lower than that of Caucasians, but in young African-American males the gap has been gradually closing. The rate of suicide among Indians and Alaska Natives of the United States is about 1.7 times the rate of the nation as a whole. Suicide rates for jail inmates are 9 times greater than that of the general population and 15 times higher for men alone. Young homosexual or bisexual males are at greater risk than heterosexuals for suicide attempts, but findings are less clear regarding suicide completion.

Over 90 percent of suicides in the United States are associated with mental illness and/or alcohol and substance abuse. Yet is important to remember that as many as 10 percent of people who complete suicide do not have any known psychiatric diagnosis. This percentage appears higher in some populations.

Demographic, psychological, biological, social and cultural factors all have a significant impact on the risk of suicide. While risk factors are often discussed individually, the need for an integrated understanding is most important.

### Demographic factors†

*Elderly Caucasian men have the highest suicide rate; American Indians and Alaskan Native young men have the second highest rate.*

The national average suicide death rate in 2003 was 11/100,000.

- For 75-84 year old Caucasian men, the suicide death rate was 37.5/100,000.
- For those 85 and older, the suicide death rate was 51.4/100,000.
- For American Indian and Alaskan Native young men (15 to 24 years of age), the suicide death rate was 27.2/100,000.

### Sex

- There are 4 male deaths by suicide to every 1 female death by suicide.
- There are 3 females who attempt suicide for every 1 male who attempts.

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\* Institute of Medicine of the National Academies (2002). *Reducing Suicide: A National Imperative*. Washington, D.C. The National Academies Press.

† National Center for Injury Prevention and Control, Centers for Disease Prevention and Control.  
[http://webappa.cdc.gov/sasweb/ncipc/mortrate10\\_sy.html](http://webappa.cdc.gov/sasweb/ncipc/mortrate10_sy.html)

## **Race**

*The Caucasian population has higher rates of completed suicides than the African-American population.*

In 2003, the age-adjusted suicide death rate in the Caucasian population was 11.8/100,000 and in the African-American population the suicide death rate was 5.24/100,000.

The rate of suicide among African Americans has historically been lower than that of Caucasians, but in young African-American males the gap has been gradually closing. The rates of completed suicide are particularly low among African-American women.

*The rate of suicide among Indians and Alaska Natives of the United States is about 1.7 times the rate of the nation as a whole.*

## **Geographical location**

*The highest suicide death rates are in the western United States and Alaska.*

## **Psychological factors**

### ***Psychiatric disorder***

The vast majority of individuals (over 90%) who die by suicide suffer from diagnosable psychiatric disorders. Almost all psychiatric disorders, including alcohol and substance disorders are associated with an increased risk of suicide. Suicide most commonly is associated with a diagnosis of depression. Recent research has increasingly established anxiety disorders and borderline personality disorder as significantly elevating suicide risk. The presence of both psychiatric disorders and/or substance abuse further increases suicide risk. About 90 percent of suicides are associated with mental illness, but over 95 percent of those afflicted with a mental disorder never attempt suicide.

### ***Alcohol abuse***

About one fourth of all completed suicides in the U.S. are individuals with alcohol use disorders. Alcohol intoxication is indicated in as many as 64 percent of suicide attempts.

Alcohol or substance use disorder, conduct disorder, and impulsivity/sensation-seeking often co-occur and represent particular suicide risk for youth.

### ***Hopelessness***

Hopelessness is related to suicidal behaviors across age, diagnoses, and severity of disorder. Hopelessness is a critical, modifiable risk factor for reducing suicide. Effective treatments exist for reducing hopelessness.

## **Biological factors**

### ***Dysregulation of the hypothalamic-pituitary-adrenal (HPA) axis***

Dysregulation of the HPA axis appears associated with suicidality across psychiatric diagnoses. Such HPA axis dysfunction often develops following adverse developmental experiences and traumatic or chronic stress.

### ***Reduced serotonergic and altered noradrenergic function***

Low levels of serotonin and/or its metabolite have been found in the brains and cerebrospinal fluid of serious suicide attempters and those who die by suicide. Studies suggest that impaired serotonin function specifically influences suicidal behaviors via increased impulsive/aggressive behaviors.

### ***Genetic influences***

Studies have found evidence of genetic influences on suicidal behaviors through family studies of suicide, high suicide rates among adoptees whose biological families have elevated rates, and high concordance of suicide among identical vs. fraternal twins.

### ***Childhood trauma***

Childhood trauma, especially child sexual abuse, has emerged as a strong and independent risk factor for suicidal behavior in adolescents and adults. Of the many types of childhood trauma, childhood sexual abuse is the strongest and most independent risk factor for suicide attempts, accounting for 9 to 20 percent of suicide attempts. Exposure to childhood trauma can affect the developing brain with potentially lifelong alterations in the physiological stress response system and cognitive development (as well as psychological and behavioral effects).

## **Social and Cultural Factors**

### ***Familial factors***

A relative who has attempted or died by suicide can serve as a behavioral model for another family member, or can signal a genetic or biochemical vulnerability to suicide.

Parental psychopathology (such as depression, substance abuse, or admission to psychiatric hospital) is associated with increased risk for suicide.

Family history of sexual abuse and family discord are associated with increased risk for suicide.

### ***Contagion***

The “copycat effect” is the term used to describe the phenomenon of what happens when a highly publicized suicidal action described in detail in the media stimulates others to engage in the same or similar behavior. Contagion underlies “clusters” of suicide.

### ***Perception of suicide***

Culture strongly influences how individuals view suicide. Cultural values and social structures largely determine the type and degree of both stressors and support, availability of lethal means, access to treatment, and social prescriptions or proscriptions concerning suicidal behavior. Cultures vary in their stigma against suicide and mental health treatment, rendering cross-cultural comparisons of suicidal behavior difficult.

## Preworkshop Exercise

**Part A:** Refer to the charts on the next two pages. Then circle risk factors and underline protective factors described in the following case studies.

### ***Penny***

Penny is 12 years old. Her cocaine-addicted father walked out when she was 5, only weeks after her brother was born and diagnosed as having cerebral palsy, never to be seen again. As a single parent, Penny's mother was overwhelmed with the demands of attending to her brother's needs; Penny frequently was thrust into a surrogate parent role in order to help her mother merely cope. Occasionally babysitters were hired to alleviate her mother's stress. One babysitter, a middle-aged woman and a friend of the mother, had a teenage son who, whenever he could, sexually abused Penny. Penny was "sworn to secrecy" lest some more intolerable fate were to befall her or her brother.

Penny withdrew into herself. A bright student at first, her school performance faltered and she had difficulty concentrating. She complained of dysmenorrhea. She increasingly threw temper tantrums and was oppositional toward her mother and teachers. More often, she simply would avoid school. Twice, unbeknownst to anyone, she tried a different kind of withdrawal, toying with some of her mother's sleeping pills, taking "a few to test out how long she would sleep."

Three days prior to her arrival in the emergency room, Penny watched a television movie about sexual abuse and the walls came tumbling down. Penny's rage, fear, and sense of worthlessness tearfully poured out to her mother, along with her story of abuse. With her mother's disbelief, there now emerged in Penny a panic that her abuser's threats now would be enacted. Her anxiety simply overwhelmed her. She found the .22 caliber handgun her mother had hidden in the rear of her nightstand and pulled the trigger.

### ***PR***

PR's first hospital admission was at the age of 12. Diagnosed as having a major depression, he was admitted with a history of school vandalism and stealing, enuresis (1-2 times/week), and morbid obesity. At admission he admitted to increasing suicide ideation. He was hospitalized for 7 months with major treatment foci being his body image, anxiety and anger management, and social withdrawal.

His second hospitalization occurred at the age of 17. Brought to the hospital by his mother for episodes of angry outburst, paranoia (he feared he was being watched through holes in their apartment wall), self-cutting ("x's on arms in honor of those who had turned against him") and symptoms of visual hallucinations, he was involuntarily admitted. After four days he was discharged with an Axis I diagnosis: Adjustment Disorder with mixed disturbances of emotion and conduct and an Axis II diagnosis: Borderline Personality Disorder.

PR had been unemployed for six months and had given up looking for work. He reportedly ran out of marijuana three days ago and said he was "going crazy." During his high school years he reportedly dealt drugs and was dependent on amphetamines. He currently was taking Depakote and Zoloft.

**Part B:** Highlight risk and protective factors in Preworkshop Reading Resource Sheet #6: The Phenomenology of Suicide: First Person Narratives

**Risk Factors: associated with an increased occurrence of suicidal behavior<sup>‡</sup>**

**Bio/psychological**

- Mental disorders:
  - Affective disorders: Depression and/or Bipolar Disorder
  - Schizophrenia
  - Anxiety disorders
  - Alcohol and/or other drug abuse
  - Antisocial personality disorder
  - Borderline personality disorder
- “States of mind:”
  - Hopelessness
  - Impulsivity
  - Low self-esteem
  - Psychic pain
  - Poor reality testing
  - Paranoid thinking, suspiciousness
- Behaviors:
  - Aggressive tendencies or history of violent behavior
  - Previous suicide attempt
- History:
  - Previous psychiatric treatment
  - History of trauma or abuse
  - Some physical illnesses, severe impairment of physical health
- Recent experience:
  - Loss of close attachment/relationship
  - Recent psychiatric symptoms
  - Recent change in treatment and/or medication
- Suicide ideation
- Physical:
  - Low CSF 5-HIAA, Low cholesterol blood levels
  - Low blood glucose

**Socio-cultural**

- History of family violence: childhood trauma
- Family history of alcoholism
- Social isolation: low or lack of social support and sense of isolation
- Exposure to suicidal behavior: family history of suicide
- Exposure to suicide through the media
- Stigma associated with help-seeking behavior
- Barriers to accessing health care, especially mental health services and substance abuse treatment
- Certain cultural and religious beliefs (e.g., suicide is a noble resolution of a personal dilemma)
- Bullying
- Being bullied
- Family conflicts
- Unemployment or financial loss
- Easy access to lethal weapons: access to a firearm
- Relational or social loss
- Local clusters of suicide that have a contagious influence
- Frequent mobility

**Demographics**

- Male gender (for completions)
- Female gender (for nonfatal attempts)
- Young adult (15-24 years old)
- Older adult (over the age of 65)
- Caucasian
- American Indian/Alaskan Native
- Lesbian, gay, bisexual (for nonfatal attempts)

<sup>‡</sup> The list of risk and protective factors is neither a complete list nor prioritized in any order.

**Protective Factors: associated with a decreased occurrence of suicidal behavior**

**Clinical Care**

- Effective care for mental, physical, and substance abuse disorders
- Easy access to a variety of clinical interventions and support for help-seeking individuals

**Family & Community Support**

- Strong connections to family and community support
- Support through ongoing medical and mental health relationships

**Coping Skills**

- Problem-solving
- Conflict resolution
- Non-violent handling of disputes

**Cultural and Religious Beliefs**

- Beliefs that discourage suicide and support self-preservation

**Resilience**

- Ongoing or continuing sense of hope in the face of adversity

**Restricted access to highly lethal means**

- Reduced or limited access to firearms, toxins, prescription medicines or over-the-counter medications