SUICIDE: FACTS, FIGURES AND THEORIES

Goal:
Identify the prevalence, incidence, and significance of suicide, in order to increase awareness of the issue as a public health concern and decrease the stigma associated with suicide.

After completing this activity participants will be able to:
- Identify the rate and prevalence of suicide
- Describe the major theories that explain suicide
- Identify the major risk factors for suicide
- Recognize your role in suicide prevention and intervention

Professional Practice Gaps
More than 30,000 Americans committed suicide in 2003 -- 50% more than the number who died by homicide (AAS, 2006). Moreover, an estimated 25 people attempt suicide for every individual who dies by intentional self-harm (McIntosh, 2003). According to the US Centers for Disease Control, suicide was the 11th leading cause of death in 2001, as well as the 3rd leading cause of death among 15- to 24-year-olds. This resulted in an average of one suicide every 17 minutes.

DEMOGRAPHICS

More than 30,000 Americans committed suicide in 2003 -- 50% more than the number who died by homicide (AAS 2006). Moreover, an estimated 25 people attempt suicide for every individual who dies by intentional self-harm (McIntosh 2003). According to the US Centers for Disease Control, suicide was the 11th leading cause of death in 2001, as well as the 3rd leading cause of death among 15- to 24-year-olds. This resulted in an average of one suicide every 17 minutes.

People of every age and background commit and have committed suicide, and there is no single "type" of suicidal individual. Certain demographic groups, however, attempt and die by suicide at significantly higher rates than the general population. In the United States, white males commit the vast majority of suicides. Four males in the United States die by suicide for every female who does, although women reportedly attempt suicide more often than men (Spicer and Miller 2000).

Elderly white males exhibit the highest suicide rates of any demographic group. In fact, the American Association of Suicidology (AAS) reports that Americans over age 65 commit suicide at a rate of 15.3 per 100,000 people, much greater than the national rate of 10.8 per 100,000 (McIntosh 2003).

Yet the incidence of suicide among young people is increasing. From 1980 to 1997, the incidence of suicide among 15- to 19-year-olds increased by 11% and among 10- to 14-year-olds by 109% (NCIPC 2003). The AAS reports that the current rate of suicide among 15- to 24-year-olds is 9.9 per 100,000, only slightly lower than the national average of 10.8 per 100,000. This is an average of 1 death every 2 hours and 12.4 minutes (McIntosh, 2003). Despite these statistics, suicide experts suggest that suicides and suicide attempts are underreported, partially due to confusion regarding what constitutes "suicide," "suicide attempt," and "accident." So what, exactly, is suicide?
DEFINITIONS

**Suicide** is an intentional act of self-harm that results in death. This can include "indirect or passive" self-harm, such as deliberately not moving from the path of an oncoming car (Maris et al. 2000). A suicide is sometimes referred to as a **completed suicide**, distinguishing a fatal act from a nonfatal suicide attempt.

A **suicide attempt** is an act of self-harm committed with intent to die but not resulting in death. It may or may not result in injury (O'Carroll et al. 1999). This also can be referred to as a **suicide gesture**. Intentional, direct injury of one's own body constitutes **self-harm**. This includes "actions such as self-laceration, self-battering, taking overdoses or exhibiting deliberate recklessness." These behaviors are ways of coping with distress and may be done with or without the intent to die (ASHIC 2003).

Whether an act of self-harm results in death depends on the **lethality** of the method employed. Lethality is the likelihood that a given method of self-harm -- e.g., gunshot wounds, drug overdose, cutting -- will result in death. Lethality can also refer to an individual. In this application, lethality indicates the likelihood that a person will complete suicide in the near future (Shneidman 1996).

**Intent**, in terms of suicide, is the conscious desire to harm one's self and/or to die as a result of self-injury. A person's intent directly contributes to his or her lethality.

**Suicide threat** is behavior that implies -- either directly or indirectly -- that a suicidal act may occur in the near future. This does not involve any actual self-harm (O'Carroll et al. 1999).

Intent to die involves **suicidal ideation**, which is any thought about harming one's self. Ideation ranges from fleeting thoughts about committing suicide (sometimes called passive suicidal ideation) to developing a detailed suicide plan.

A **suicide act** can result in death, injury, or neither. It is any action committed for which there is proof that a person intended to kill himself or herself (O'Carroll et al. 1999).

SUICIDE GEOGRAPHY

Researchers have long studied the role of geography on suicide risk but have arrived at many conflicting results (Lester 2000). In the United States, the western mountain states typically exhibit the highest suicide rates, whereas the lowest rates are in the smaller, denser northeastern states. Suicide rates ranged from 6.1 per 100,000 in New York to 21.8 per 100,000 in Wyoming in 2003 (AAS 2006).

Experts have attempted to link these figures to the mobility of the regional population, availability of guns, social isolation, and weather. The results have varied, showing positive correlations between variables in many instances and no correlation in others. Studies and suicide statistics from previous decades have indicated that states with high percentages of residents originally from other states or countries have relatively high suicide rates (Kushner 1989).

(Data from McIntosh 2003)
A BRIEF HISTORY OF SUICIDE AND THEORIES

Only recently has suicide been recognized formally as a significant public health threat, even though it has been a persistent problem in the United States since the country's founding.

_The Surgeon General's Call to Action to Prevent Suicide_ was released in 1999, calling on individual states to develop suicide plans; today, 18 states have developed suicide prevention initiatives, and most other states and territories have formal plans to develop their activities. This time line tracks significant points in American and European efforts to understand, deal with, and prevent suicide.

- 967 - England criminalizes suicide
- 1629 - First recorded American suicide
- 1791 - French Revolution legalizes suicide
- 1897 - Durkheim publishes *Le Suicide*
- 1920 - Freud publishes *Mourning and Melancholia*
- 1938 - Menninger publishes *Man Against Himself*
- 1949 - Shneidman begins studying suicide notes
- 1949 - The National Institute of Mental Health is founded
- 1970 - FDA approves lithium to treat bipolar patients
- 1976 - Asberg releases serotonin study
- 1996 - US Air Force initiates study on suicide
- 1999 - The US Public Health Service releases _The Surgeon General's Call to Action to Prevent Suicide_
- 2000 - Researchers discover a genetic mutation affecting serotonin reception
- 2002 - FDA approves clozapine

COGNITIVE THEORIES

Cognitive theories of suicide focus on the thoughts of suicidal individuals. In his study of suicide theories, Lester (1998) noted that cognitive theory was the most descriptive. Aaron Beck is most closely associated with cognitive-behavioral theory. His work essentially asserts that the cognitive link between depression and suicide is hopelessness. This hopelessness manifests itself in suicidal people's negative views of the future, themselves, and their situation/problem:

- **Future**: unrealistic expectations of continued suffering, frustration, difficulty, and isolation
- **Self**: feelings of incompetence, helplessness, and being unloved
- **Situation/problem**: insurmountable, unsolvable, unbearable

These negative views result in the individual's desire to escape, as life becomes less desirable than death. He or she believes that the current situation will not improve and that there will be no end to current suffering.

Cognitive-Behavioral Therapy is currently a popular strategy used by therapists and psychologists to counter distorted thinking patterns that lead to hopelessness and suicidal thoughts. This therapy is based on the concept that thoughts -- not external events -- dictate feelings and behavior, and altering negative thought patterns can improve how one feels and lives. The therapy employs individual counseling, as well as practical applications and assignments outside of sessions, to help
people develop healthy responses to stressors and understand that psychological suffering can end without self-harm (NACBT 2003).

**DURKHEIM AND SOCIOLOGICAL THEORIES OF SUICIDE**

Emile Durkheim's (1951) work provides the basis for most sociological theories of suicide. His ideas, which date to the 19th century, are based upon epidemiological studies. His theory states that there are 2 dimensions of social influence on individuals: *social integration*, which is the degree of connection between an individual and a social network, and *social regulation*, which is the degree of influence that society has over an individual. These 2 forces may lead to 4 different types of suicide.

In the dimension of social integration, there are 2 types of suicide: egoistic and altruistic. **Egoistic suicide** results from a lack of social integration, due to a limited or nonexistent social network. **Altruistic suicide**, on the other hand, results from extreme social integration; an individual who commits altruistic suicide feels overly obligated in his or her duties to others.

Fatalistic and anomic suicides are functions of social regulation. Those who commit **fatalistic suicides** do so because they have been rejected by society. **Anomic suicides**, on the other hand, are committed by those attempting to deviate from social expectations in their deaths.

Large-scale societal crises may result in heightened suicide rates because the existing social order is challenged. An economic depression, for example, may be accompanied by an increased suicide rate. This is not due, however, to poverty or unemployment specifically but rather a result of a rapid change of conditions, expectations, and individuals’ self-regard.

**PSYCHOLOGICAL THEORIES: FREUD AND MENNINGER**

Sigmund Freud did not study suicide in detail but claimed that depressed individuals did not have the energy to kill themselves unless they had identified an external object or person whom they wished to kill, internalized that object, and turned their aggression against it. Karl Menninger expanded on this theory to develop the concept of the suicidal person’s 3 wishes: the wish to be killed (*guilt*), the wish to kill (*revenge*), and the wish to die (*hopelessness*) (Maris et al., 2000). Individuals who are suicidal wish to be killed in order to relieve their loved ones of a burden. Yet they also wish to kill in order to express their anger and aggression at those they feel have wronged them. Finally, they wish to die, due to the unbearable pain they experience.

**PSYCHOLOGICAL THEORIES: SHNEIDMAN**

Shneidman (2001) describes suicide as a "drama of the mind." He coined the term *psychache*, which is the psychological pain -- consisting of negative emotions and unmet psychological needs -- that an individual experiences. It differs from physical pain since it stems from emotional, rather than physical, discomfort. Psychache creates an overwhelming amount of distress in an individual so that he or she perceives suicide as the only way to escape the pain.

Shneidman's needs classification originated with Henry A. Murray (Shneidman 1996). He identified 5 groups of psychological needs that, if not met, are closely linked to suicide:
• **Succorance and affiliation**: These are basically the needs for love and close relationships.

• **Achievement, autonomy, order, and understanding**: When these needs are undernourished in an individual, he or she feels a lack of control, order, and consistency.

• **Dominance, aggression, and counteraction**: When these needs are frustrated, anger often results.

• **Affiliation and nurturance**: Loss of relationships gives way to a thwarted need for affiliation and nurturance that then leads to suicide.

• **Affiliation, defense, and shame-avoidance**: When these needs are frustrated, one can feel shame, humiliation, and disgrace.

Shneidman puts these needs into 2 groups: **modal** and **vital**. When an individual is under limited or no stress, he or she focuses on modal needs, the daily needs that one is capable of surviving without (e.g., entertainment). The needs that one lives with on a daily basis are modal, while the needs that must be met for life to be bearable are vital. When an individual comes under duress, his or her focus transfers from modal to vital needs. When a loved one dies, for example, the individual's focus may shift from a need for entertainment to a need for succorance. A denial of vital needs often can lead to suicide acts. However, it is not solely the unmet need that results in suicide but also the shift of attention from modal to vital.

Shneidman (1996) also states that the combination of **perturbation** (i.e., psychache) and lethality -- the willingness and ability to kill oneself -- results in suicide. However, denying a suicidal individual access to lethal means will not eliminate the lethality of that individual. To reduce the person's lethality, an intermediary must try to identify and alleviate the suicidal person's psychache (Shneidman, 1996). According to this theory, the most important question to ask such persons is, "Where do you hurt?" (Shneidman 2001).

**BIOLOGICAL THEORIES**

Recently, there has been a great deal of research on possible biological explanations for suicide. A significant number of suicide cases exhibit dysfunction in the prefrontal cortex (PFC), which has been called the "executive control center" of the brain. Studies have identified low levels of -- and abnormal interactions among -- neurotransmitters in the PFC (specifically serotonin, dopamine, and norepinephrine) as common traits among those who attempt and complete suicide.

• Kraemer and colleagues (1997) linked reduced serotonin function to aggressive, impulsive, and risk-taking behaviors, all of which are associated with suicide.

• Placidi and colleagues (2001) examined patients who were diagnosed with major depression. Those who had made serious suicide attempts had significantly lower levels of serotonin than both the controls and those who had made less lethal attempts. They noted no difference in levels of dopamine or norepinephrine.

• Ordway (1997) discussed the depletion of norepinephrine and the co-occurring increase in noradrenergic proteins that have been found in individuals who have committed suicide, suggesting that they have experienced chronic stress and depression.

• Engstrom and colleagues (1999), however, examined the interaction between serotonin, dopamine, and norepinephrine metabolites in cerebrospinal fluid. They found that those who attempted suicide had abnormal relationships between the metabolites of their...
neurotransmitters as well as low levels of dopamine metabolite HVA, compared to control subjects. However, the suicide attempters did not exhibit lower levels of serotonin metabolite 5-HIAA, contradicting the findings of similar studies.

While suicidal individuals have presented regularly with neurobiological dysfunctions in recent studies, the precise dynamics of these dysfunctions remain unclear.

ETIOLOGY OF SUICIDE

Etiology of Suicide
So how do all these theories actually apply to the person sitting in front of you? As noted earlier, suicide originates in psychological pain and hopelessness. The roots of this pain can be divided into 3 categories: external stressors, internal psychological conflict, and neurobiological dysfunction (Shea 1999).

External/Environmental Stressors
Often, the pain leading to suicide comes in response to acute or chronic external stressors, which are most commonly losses. Some losses may be very tangible, such as the death of a loved one or deteriorating health. Other losses may be more experiential, such as perceived or actual public humiliation or the loss of social standing, which could result in Durkheim's altruistic suicide. It is important to remember that individuals respond to these losses in personal ways. An event that one person experiences as simply an unfortunate fact of life may be viewed by another as a reason to stop living.

Internal Conflict
The impact that an external event has on an individual depends on the psychological and emotional stability of that person. Suicides often are preceded by months or years of painful internal conflict, for which suicide is seen as the final and only solution. Consistent with psychological and cognitive theories, internal conflict involves both the emotional and logical reactions of individuals. Emotionally, individuals become hopeless and find their pain intolerable. Cognitively, they often fall into distorted thinking patterns. Shea (1999) succinctly states that the individual is struggling with 2 questions: (1) will suicide work for him or her (i.e., is it a viable solution to his or her problems), and (2) is suicide the "right" thing to do (i.e., does it fit within his or her moral code).

Neurobiological Dysfunction
Recently, the possibility of a neurological basis for suicide has been the focus of study. Researchers have linked dysfunction in the prefrontal cortex (PFC) of the brain to a statistically significant number of suicides. Neurologists believe that this area of the brain allows humans to override reflexes with reasoned decisions. Hence, a malfunctioning PFC theoretically allows humans to drown out their natural reflex against self-harm. Moreover, studies have concluded that many suicidal individuals have imbalanced levels of serotonin, dopamine, and norepinephrine, all of which are vital to PFC function (Placidi et al. 2001; Engstrom et al. 1999). Substance abuse can also have both short- and long-term effects on neurobiology.
SOME RISK FACTORS

Several risk factors are commonly associated with suicide. Shea (1999), however, warns that suicide cannot be predicted from a simple statistical aggregate of these risk factors; rather, it is the result of an individual’s decision that self-destruction is a viable solution to his or her problems.

The most reliable predictor of future suicidal behavior is a previous suicide attempt. In fact, 27.5% of Americans who have previously attempted suicide eventually die by suicide (Baldessarini 2003). In addition, those with a family history of suicidal behavior are at higher risk than the general population.

Researchers have estimated that over 90% of suicides can be linked to psychiatric disorders (Harris and Barracough 1997). Major depression, bipolar disorder, and substance abuse are the conditions most closely related to attempted and completed suicide. Researchers have found lithium and certain antidepressants effective in reducing the incidence of suicide attempts among these populations (Mann 2002; Baldessarini et al. 2001). Just recently, the Food and Drug Administration approved suicide prevention as a new indication for Clozaril® (clozapine).

Additionally, other medical (nonpsychiatric) illnesses have been linked to increased suicide risk. Cancer and AIDS are the most prominent of these, but individuals with other conditions, such as Huntington's disease and multiple sclerosis, also attempt and commit suicide at markedly higher rates than the general population (Maris et al. 2000).

Several environmental factors also place individuals at high risk for suicide. Suicides often are preceded by negative or traumatic precipitating events, such as divorce, loss of a spouse, job loss, or episodes of abuse.

To die by suicide, one must have access to lethal means. In the United States, access to firearms specifically has been shown to be a risk factor for suicide (Brent 2001). Over half of all suicides in the United States are committed with firearms (CDC 2002; McIntosh 2003).

Diagnostic, psychological, and environmental factors cumulatively determine suicide risk. Hence, each case should be assessed and approached uniquely, based on that person’s individual circumstances.

CASE ILLUSTRATION: JOHN KENNEDY TOOLE

John Kennedy Toole (December 17, 1937 - March 26, 1969) was an American novelist who died by suicide. His most famous work, A Confederacy of Dunces, was published 11 years after his death.

Toole was born and raised in New Orleans and spent free time in the French Quarter with musicians. After graduating with honors from Tulane University, he worked briefly in a men's clothing factory. All of these experiences inspired various aspects of Dunces.

Soon thereafter, Toole attended Columbia University in New York City on a Woodrow Wilson fellowship and taught at Hunter College. He received a master's degree and then spent a year as an assistant professor of English at Southwestern Louisiana University. Toole also spent some time pursuing a doctorate at Columbia, but he did not finish his degree because he was drafted into the US Army in 1961. He served for 2 years in Puerto Rico, teaching English to Spanish-speaking
recruits. During this time, friends noticed signs of depression in Toole as well as increased alcohol use.

After his stint in the military, Toole returned to New Orleans, lived with his parents, and began to teach at Dominican College. In 1964, he sent his manuscript for *A Confederacy of Dunces* to the publishing company Simon and Schuster, Inc. He corresponded for 2 years with Robert Gottlieb, an editor at the company, but never revised the manuscript to Gottlieb's satisfaction.

Toole began to deteriorate rapidly after he lost hope of publishing his book, which he considered to be a masterpiece, and after relations at home became strained. He began to drink heavily and sought help from a family doctor, who prescribed medication for his chronic headaches and anxiety. Friends noted that he became acutely paranoid between 1966 and 1968. Although he entered the doctoral program at Tulane University in the fall of 1968, he stopped attending classes shortly thereafter. He also stopped teaching classes at Dominican College.

After a heated argument with his family while suffering from what his mother described as a "nervous breakdown," Toole disappeared in January 1969. On March 26, he was found dead on the side of a road near Biloxi, Mississippi. He committed suicide by putting one end of a garden hose into the exhaust pipe of his car and the other end into the window where he was sitting.

After his death, Toole's mother insisted that the writer Walker Percy read the manuscript for *A Confederacy of Dunces*. After some resistance, Percy eventually agreed and fell in love with the book. *A Confederacy of Dunces* was published in 1980, with Percy providing the foreword. Toole posthumously won a Pulitzer Prize for fiction, and his magnum opus has sold more than 1.5 million copies in 18 languages (Nevils and Hardy 2001; Weier 2001).

**TOOLE'S RISK FACTORS**

Which of these patterns or events in Toole's life are strong predictors of suicidal behavior?

**Hopelessness**

Hopelessness is one of the most cited risk factors for suicide, as suicidal individuals often believe that death is the only way to alleviate their pain. After Toole lost hope of publishing his book, he also lost hope of realizing his dreams and lost faith in his abilities. Sadly, his correspondence with Robert Gottlieb and his book's subsequent acclaim show that his hopelessness was more a product of his constricted perspective than a realistic assessment of his ability and potential.

**Heavy drinking**

The abuse of alcohol, a depressant, often incubates suicidal ideation, and individuals are often intoxicated when they attempt suicide. A heavy drinker since his student days, Toole lived in circumstances where alcohol abuse was normal behavior, particularly in the Army and in an alcohol-friendly New Orleans society.

**Attraction to literature**

Despite myths that artists frequently commit suicide, an attraction to the arts never has been proven to heighten an individual's risk for suicide. For Toole, writing and literature served as creative outlets...
that gave him purpose. In fact, during his depressive episodes (most notably following President John F. Kennedy's assassination) he produced almost no writing.

Conflict with family
Family conflict and lack of familial support have been shown to increase an individual's risk for suicide. In Toole's case, the last of his many arguments with his mother was possibly the precipitating event that overwhelmed his ability to cope.

His paranoid behavior
The paranoia Toole exhibited damaged many of his relationships with friends, colleagues, and students, isolating him from needed social support. Moreover, his condition indicates mental illness that could have been treated. Toole's father also exhibited paranoia in the years prior to Toole's psychological difficulties -- another potential precursor of his problems.

Stopped taking classes and isolating himself from friends
Impending problems became apparent as Toole's relationships soured. Suicides are typically preceded by a trail of broken relationships, often worsening a person's pain while decreasing the opportunities for intervention.

Chronic headaches
It is not unusual for people to seek medical attention when in need of psychiatric care; in fact, studies have shown that approximately half of those who commit suicide have visited a physician shortly before taking their lives.

Military service
While a relatively high number of combat veterans suffer from Posttraumatic Stress Disorder, there is little evidence to suggest that military service generally increases suicide risk.

Perceived failure as an author
While an individual's perceived failure may not always result in suicide, when the failure experienced in an already vulnerable state, the person may use catastrophization and over-generalization, which results in a state of extreme distress.

OVERVIEW OF INTERVENTIONS

Recognizing Someone is Suicidal
When you recognize that someone is suicidal, what should you do? If you review the chart below, you will notice that many of the ways in which you can help do not require a special degree or training. To see how anyone can intervene at some level, read the recommendations from the American Association of Suicidology (see sidebar at right).

Family
Family Help
Parents, siblings, and other family members

• Encourage voluntary hospitalization
• Call crisis line, 911, or the ER
• Ask if they would attend an emergency appointment at a mental health clinic
• If already in treatment, call mental health clinician (doctor or therapist)

Community

Community Help
Friends, neighbors, teachers, spiritual leaders
• Inform the individual of available treatment such as counseling or voluntary hospitalization
• Call crisis line, 911, or the ER
• Encourage family involvement
• Try to normalize their feelings, letting them know they are not the only person who has suicidal thoughts
• Encourage individuals to express their true feelings

Nurses

Nursing Support
Medical professionals involved with individual
• Encourage psychological treatment
• Give the individual a list of local or national crisis numbers
• Encourage family involvement
• Recommend a therapist or group
• Contact a doctor

Physicians

Physician Involvement
Family doctor or new doctor recognizing symptoms
• Send them home with or without medications as situation warrants
• Refer patient to a counselor
• Recommend a therapist or group
• Suggest an emergency mental health appointment
• If already in treatment, call the treating therapist

Counselors

Counselor Interventions
Counselors, therapists, or group leaders
• Contact a doctor
• Facilitate hospitalization
• Encourage family involvement
• Continue treatment
• Develop a no-harm contract

Intermediaries should seek help -- in the form of psychotherapy, medication, or other interventions -- for anyone exhibiting signs of suicidal ideation or behavior. Often suicidal people need help but are incapable of -- or resistant to -- finding it on their own. There are several ways to get assistance for the person:
• Call a crisis line, which can be found in a telephone directory, or 1-800-SUICIDE, or 911.
• Take those at risk to an emergency room.
• Under less severe circumstances, make an emergency appointment at a local mental health center.
• If an individual is already receiving psychological treatment, contact his or her caregiver as soon as the individual exhibits or threatens suicidal behavior.

Primary Care Physicians
Primary care physicians are in a unique position to identify and aid potential suicide victims. As Feldman and Finguerra (2001) note, studies have shown that approximately half of those who completed suicide had visited a physician in the previous month. Thus, physicians and other healthcare professionals need to know the proper steps to follow when dealing with at-risk patients. These steps are more fully explained in our treatment course. A brief overview is provided here to familiarize you with the available options.

• The physician can send a nonlethal patient home after alerting him or her to the therapeutic options and crisis hotlines. The physician also may prescribe psychiatric medication, but suicidal patients should be given only a small number of pills, particularly if they are on medications that are dangerous in overdose (e.g., tricyclic antidepressants). When sending a patient home, the physician should insist on scheduling a follow-up appointment shortly thereafter. Office staff should telephone the patient the following day to reinforce the follow-up and document this contact. If the patient does not keep the follow-up appointment, the staff should again contact via telephone and/or letter, if necessary.
• Physicians can refer the patient to a counselor or therapist. In this case, the doctor or doctor's staff should schedule the appointment for the patient.
• Finally, the physician can hospitalize the patient. This can be done with the patient's permission, in which case he or she simply checks in. If hospitalization is necessary but the patient does not consent, a crisis team should be consulted immediately. Ideally, family members and friends should be involved. In the case of either voluntary or involuntary hospitalization, the physician should be aware of his or her legal obligations.

SUMMARY AND KEY POINTS
Suicide is a significant public health problem, with over 30,000 people dying by suicide each year. They are male and female, young and old, from every area of the country, and from every background. Several risk factors are associated with suicide, but the most reliable predictor is a previous suicide attempt.

• Suicide is defined as intentional self-harm that results in death. Several other terms, such as suicide attempt and suicide ideation, are on a continuum of dangerousness.
• Over the years, several theories have been posited to explain the phenomena of suicide. These include the theories of Freud, Menninger, Shneidman, and, most recently, theories identifying biological bases for suicide.
• Suicide results from a variety of risk factors, phenomenology, and an individual's decision that suicide is the only solution.
• There are a variety of intervention options for suicidal individuals. In the case of suicidal emergencies, intermediaries can seek help by calling a crisis team, 911, or a mental health professional.

RESOURCES AVAILABLE THROUGH THIS MODULE:

• Federal Information on Suicide Prevention
  Federal information on suicide prevention from national websites.

• Frequently Asked Questions About Suicide
  This page includes answers to common questions about rates, causes and risks of suicide, high-risk populations, and prevention.

• International Organizations for Suicide Prevention
  International organizations for suicide prevention.

• Larger, Private Organizations for Suicide Prevention
  A variety of national organizations are involved in suicide prevention. Here are some websites. Please note that these sites are not sponsored by any government agency.

• Local and State Resources
  Local and State resources for the topic of suicide.

• Smaller, Private Organizations for Suicide Prevention
  Smaller, private organizations for suicide prevention links

• Smaller, Youth-Focused Organizations for Suicide Prevention
  Smaller, youth-focused organizations for suicide prevention links.

• Suicide: Cost to the Nation
  This page includes information on lives lost due to suicide and basic facts about suicide.

• Suicide: Fact Sheet
  The fact sheet includes some general facts and statistics, information about suicide among youths and the elderly, an overview of the CDC's prevention program, and links to prevention materials.

REFERENCES USED IN THIS MODULE:


Weier A. John Kennedy Toole biography off the mark. *The Capital Times (Madison, Wis)*. November 30, 2001