Gender and Ethnic Differences in Older Adult Suicide

August 2011
Causes of Suicide

Research has shown that the vast majority of those who kill themselves are mentally ill at the time of their death. Of people with severe depressive illnesses, 10 to 15 per cent will commit suicide. Paradoxically depressive illnesses are more common in women, but suicide is more common in men.

Several possible explanations exist for this apparent discrepancy.

- The more severe the depression is, the more likely it is to lead to suicide. So one possibility is that more severe forms of depressive illness are equally common in men and women. In addition, once men are depressed, they are more likely to end their lives. They are also more likely to choose especially lethal methods when they attempt suicide, for example, hanging or shooting. Depressive illness among people under 25 years of age is probably much more common now than it was 50 years ago, which may be one reason why the suicide rate is increasing in young men.
- Alcoholism leads to suicide in 10 per cent of affected people. Alcoholism is much more common in men (though it is increasing rapidly among women).
- Schizophrenia (a relatively uncommon condition affecting 1 in 100 of the population) leads to suicide in 10 per cent of affected people.

As well as being male, several other risk factors for suicide have been identified:

- **Age**: suicide in men peaks in the 20s and again in the 60s and 70s.
- **Unemployment**: the suicide rate has been shown to rise and fall with the unemployment rate in a number of countries – half of the record 33,000 people who committed suicide in Japan in 1999 were unemployed.
- **Social isolation**: those who kill themselves often live alone and have little contact with others. They may have been recently widowed or have never married.
- **Chronic illness**: any chronic illness increases the risk of suicide.
- **Certain occupations**: people with certain occupations are more likely to die by suicide, for example farmers (who usually work alone, may be unmarried and have access to the means of suicide, such as a shotgun or poisonous weed killer).

Many of the above risk factors affect men more than women. It is important to remember that many people are subject to these factors, but only a tiny minority of them will end their own lives. Other factors are also significant. The most important risk factor is the presence of a mental illness. The most important protective factor is the presence of good support from family or friends.

Although the majority of people who have depression do not die by suicide, having major depression does increase suicide risk compared to people without depression. The risk of death by suicide may, in part, be related to the severity of the depression. New data on depression that has followed people over long periods of time suggests that about 2% of those people ever treated for depression in an outpatient setting will die by suicide. Among those ever treated for depression in an inpatient hospital setting, the rate of death by suicide is twice as high (4%).
Those treated for depression as inpatients following suicide ideation or suicide attempts are about three times as likely to die by suicide (6%) as those who were only treated as outpatients. There are also dramatic gender differences in lifetime risk of suicide in depression. Whereas about 7% of men with a lifetime history of depression will die by suicide, only 1% of women with a lifetime history of depression will die by suicide. (Health News Flash)

A number of recent national surveys have helped shed light on the relationship between alcohol and other drug use and suicidal behavior. A review of minimum-age drinking laws and suicides among youths age 18 to 20 found that lower minimum-age drinking laws were associated with higher youth suicide rates. In a large study following adults who drink alcohol, suicide ideation was reported among persons with depression. In another survey, persons who reported that they had made a suicide attempt during their lifetime were more likely to have had a depressive disorder, and many also had an alcohol and/or substance abuse disorder. In a study of all non-traffic injury deaths associated with alcohol intoxication, over 20 percent were suicides.

Suicide rates are increasing rapidly among the elderly. Common causes include:

1. Social isolation and solitary living, which leaves them vulnerable and lonely. It is estimated that 50 per cent of the elderly people who commit suicide live alone.
2. Depression (due to death of a spouse, difficulty in adjusting to unfamiliar situations in life or retirement from work)
3. Deteriorating health conditions such as permanent disability or chronic illness
4. Inability to face and manage crisis
5. Stressful events in life (such as bankruptcy, divorce, etc) which provoke a person to take the extreme step of committing suicide

Elders who are at a high risk of suicide usually show certain behavioral and personality traits such as higher dependency, being overcome by an intense sense of helplessness and hopelessness, possess poor crisis management abilities, are extremely irritability, and demonstrate a certain degree of antisocial behavior.

**Gender Disparities**

According to the National Center for Injury Prevention and Control, Americans who are 65 years and above, constitute only 13 percent of the entire population, but account for about 20.2 percent of all suicide cases in the country. These statistics are from 1992 data. The suicide patterns in older people are quite different for men and women. In their analysis, researchers have found that white men are at highest risk of suicide.

Suicide accounts for 1 in 100 deaths. The majority of those who die in this way are men.

- The suicide rate for men in their 40s is 3.5 times higher than it is for women.
- The suicide rate for men in their 50s is 4 times higher than it is for women.
- The suicide rate for men in their 60s is 5 times higher than it is for women.
- Suicide rates are highest among Americans aged 65+.
- Men accounted for 83% of suicides in this category.
• Firearms were the most common method of suicide by both men and women accounting for 77% of men and 33% of women suicides in that age group.
• Risk factors for suicide among older persons differ from those among the young. Older persons have a higher prevalence of depression, a greater use of highly lethal methods and social isolation. They also make fewer attempts per completed suicide, have a higher-male-to-female ratio than other groups, have often visited a healthcare provider before their suicide, and have more physical illness. (MenStuff, 2011)

Overall, three times as many women as men in the United States report a history of attempted suicide. (NIMH, 2006) But, men are four times more likely to actually kill themselves. (USPSTF, 2006) Choice of method may play a role in explaining this gender disparity: White men tend to use more violent and more lethal means than other suicide victims. In 2001, 73 percent of all suicide deaths and 80 percent of all firearm suicide deaths were white males.

Suicide grows as a risk for white elderly males as they age. As shown in Table 1, white men ages 85 and older have the highest annual suicide rate of any group—51.4 deaths per 100,000. In contrast, the highest rate for white women peaks between ages 45 and 64 at 7.8 deaths per 100,000.

Death Rates for Suicide by Age and Sex, 2003

<table>
<thead>
<tr>
<th>Age Group</th>
<th>Suicide Rates per 100,000</th>
</tr>
</thead>
<tbody>
<tr>
<td>15-24</td>
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</tr>
<tr>
<td>25-34</td>
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<td>85+</td>
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</tbody>
</table>


Table 1

While suicide is the 11th leading cause of death in the United States, with 11 suicide deaths per 100,000 Americans, white men over the age of 65 commit suicide at almost triple that overall rate. (Minino, Heron, Smith, 2006) These men are also eight times more likely to kill themselves than are women of the same age group, and have almost twice the rate of all other groups of male contemporaries.

Rate of suicide for males also varies by county. Data provided in Appendix A shows that the rate per 100,000 ranges from 11.6 in Stanislaus County to 36.5 per 100,000 in Humboldt County. The statewide average is 16.8 per 100,000.
The reasons why the number of men taking their own lives has risen in recent years are far from clear. All of the proposed explanations share a common feature – the changing role of men in society.

- Adolescence has been prolonged, with adulthood and independence reached at a much later age than previously. Two generations ago, work began at the age of 14; one generation ago at 16 years for most; now many men only achieve financial independence in their mid 20s.
- Men have a more stressful time in achieving educational goals than in the past and are now less successful in this regard than women.
- Work is much less secure now and periods of unemployment are the norm for many (psychologically the threat of unemployment is at least as harmful as unemployment itself).
- Alcohol use, and abuse, has increase markedly since the Second World War. Such use is often an attempt to cope with stress and to self-medicate symptoms.
- Illegal drug abuse has become much more common (a correlation between the youth suicide rate and the rate of convictions for drug offences has been demonstrated in some countries).
- Changes that are assumed to be symptoms of the 'breakdown of society' are associated with a rising suicide rate (examples include the rising divorce rate and falling church attendances).

Analysts are divided over how to explain the elevated risk of suicide for older white men. Some researchers point to a lack of resilience or coping ability. Others point to men's choice of more lethal means of suicide. More generally, systemic obstacles related to the primary care system (as well as cultural bias that assumes depression is a natural feature of aging) also inhibit detection of older people at risk of suicide.

Some researchers argue that older white males lack the resilience and coping mechanisms that make older white women and older black people less prone to suicide. (Canetto, 1997) The lower suicide rates among women suggest that women are capable of more complex and flexible coping strategies than men, according to Silvia Canetto, a Colorado State University psychology professor who specializes in gender issues in suicidal behavior.

Unlike men, argues Canetto, women experience more changes in roles and body functioning during adulthood, perhaps preparing them for physical changes in late life. In contrast, men are socialized to be in control and shape the world according to their needs. When a problem arises, they are encouraged to use force to assert their will. As a result, Canetto writes, men arrive at late life with unrealistic expectations and a limited range of coping strategies.

Additionally, suicide rates are higher among men, even though women attempt suicide twice as much as men, said prevention specialist Katherine Wootten of the Suicide Prevention Resource Center, because men are less likely to engage in help-seeking behavior when they recognize they have a problem. “There’s a general stigma around mental illness and an added layer of being a man,” she said. “It’s less acceptable to seek help because of social norms.”
Racial/Ethnic Disparities

As shown in Table 2, as black and white men age the gap in suicide rates between the two groups widens considerably. White males in the 45-64 age range commit almost three times as many suicides (26.1 per 100,000) as their black male contemporaries (at 9.0 per 100,000). Disparities along ethnic lines for elderly males are also substantial. Compared with white males ages 65 and older (32.0), African American males (9.2 suicides per 100,000), Hispanic or Latino males (15.6), and Asian or Pacific Islander males (17.5) in the same age range had significantly lower suicide rates. The disparity grows among those ages 75-84 (37.5 per 100,000 for whites, compared with 11.3 per 100,000 for black males).

Male Death Rates for Suicide, by Race, Hispanic Origin, and Age, 2003

Table 2

As shown in Figure 1, there are also gender differences in suicide rates by race/ethnicity. During 2002-2006, the highest suicide rates for males ages 65 and older were among the Non-Hispanic Whites with 33.16 suicides per 100,000 and the highest rates for females ages 65 and older were among the Asian/Pacific Islanders with 6.43 suicides per 100,000. (Centers for Disease Control and Prevention, National Center for Injury Prevention and Control, Division of Violence Prevention, 2009)
Experts explain high suicide rates among white men by illustrating factors that keep suicides rates low in minority communities. “If you speak to African Americans about suicide, they will tell you it’s a sign of weakness, not assertiveness. It’s seen as shameful,” said Dr. David Shaffer, professor of psychiatry and pediatrics at Columbia University. “There’s lots of weight given in white liberal cultures to free choice. African Americans tend to be more conservative in beliefs.” The Suicide Prevention Resource Center’s Black American fact sheet said that “beliefs about suicide may act as a protective factor. Religious communities condemn suicide while secular attitudes regard suicide as unacceptable and a behavior of white culture, alien to black culture.”

“It’s about a cultural norm. In the black community, it is not that turning violence outward is acceptable, it’s that turning it inward is more unacceptable.” Rigid social systems are protective factors, Shaffer said. “If you compare belonging to a group with fundamentalist beliefs, you get a lower rate because of tight social-support networks,” he said. Shaffer cited Muslims, Evangelicals and Jews as having low suicide rates worldwide. Though, differences in rates are beginning to diminish as cultural differences diminish, he said. (Patel, 2007)

Some researchers have also speculated that the white/black differential in suicide rates may be explained through major social institutions such as family, church, and social-support systems that in the African American community seem to offer a buffer against social forces that might otherwise promote suicide. (Early, Akers, 1993)
Researchers who have noted the disparity in suicide rates between Hispanics and non-Hispanic whites have said that familism—or an emphasis on close relationships with extended kinship—may offer Hispanics better protection against suicide. Experts say that Hispanics tend to maintain closer relationships with family members than do whites. And their cultural tendency toward fatalism (or the expectation of adversity) may also help Hispanics adapt to chronic stress, according to analysts. (Oquendo, 2001)

**Prevention**

Timely recognition of these signs of depression and responding to the cries of help of the people at risk of committing suicides can help to reduce the rapidly increasing instances of elderly suicide cases. Correct medication, pain management, counseling and family support are extremely crucial.

Analysts say that all elderly could be targeted more effectively by suicide prevention efforts. For instance, studies of suicide among elderly persons have found that 70 percent of elderly suicide victims saw their primary care provider within a month of death. Health care providers could use that knowledge to prevent suicides by improving the detection and treatment of mental disorders and other suicide risk factors in the primary care setting. (Miller, Druss, 2003)

Education campaigns could help men to seek assistance rather than suffer in silence.

- About 80 per cent of women who have committed suicide will have consulted their doctors and received treatment before their deaths.
- Only 50 per cent of men will have done so.
- For men aged less than 25 years of age, the proportion is only 20 per cent.

While more research is needed to determine why some groups who are at-risk for suicide actually attempt it more than others, possible prevention interventions, include:

- Public-health campaigns to help people recognize risk factors or symptoms; and
- Better detection and treatment of people at risk of suicide in late life, including more training for primary-health providers who are likely to come into contact with elderly at-risk individuals.
References:


Suicides, 1999-2005

Nationwide
- 11th ranking cause of death
- Average of 31,045 residents died by suicide each year
- Suicide rate: 11.6 per 100,000
- Average of 85 suicides every day

Age
- 70+ years: highest suicide rate; 14% of suicides; rate 2.1 times the rate for 15 to 19 years

Method
- Firearm: leading method; rate 6.3 per 100,000; 2nd ranking cause of injury deaths
- Suffocation: 2nd leading method; rate 2.4 per 100,000; 2nd ranking cause of injury deaths
- Poisoning: 3rd leading method; rate 2.0 per 100,000; 8th ranking cause of injury deaths
- If half of undetermined intent poisonings were self-inflicted, suicides in the U.S. would be 5% higher

Race/Ethnicity
- White Non-Hispanic (NH): 84% of suicides; rate 13.9 per 100,000
- Hispanic: 6% of suicides; rate 5.7 per 100,000
- Black NH: 6% of suicides; rate 5.8 per 100,000
- Other NH: 4% of suicides; rate 8.1 per 100,000
- White NH suicide rate 2.4 times the Black NH rate

Average Annual Self-Inflicted Injuries by Age Group, United States Residents

- Average medical cost per case: $3,983
- Average work-loss cost per case: $1,224,322
Hospitalized Attempts, 2005

**Nationwide**
- Total of 174,861 hospitalized attempts per year
- Hospitalized attempt rate: 63.3 per 100,000
- Average of 479 attempts every day

**Gender**
- Males: 40% of attempts; rate 51.1 per 100,000
- Females: 60% of attempts; rate 75.1 per 100,000
- Female attempt rate 47% greater than male rate

**Age**
- 15-19 years: highest hospitalized attempt rate; 13% of hospitalized attempts

**Method**
- Poisoning: leading method; 144,744 annual attempts; rate 52.4 per 100,000
- Cut/Pierce: 2nd leading method; 20,057 annual attempts; rate 7.3 per 100,000
- If half of undetermined intent poisonings were self-inflicted, suicide attempts in the U.S. would be 9% higher

**Costs**
- Average medical cost per case: $9,127
- Average work-loss cost per case: $11,146

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**Self-Inflicted Injuries by Age Group, Gender, and Method, United States Residents**

<table>
<thead>
<tr>
<th>Age Group</th>
<th>Suicides</th>
<th>Male</th>
<th>Female</th>
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<th>Avg Cost Per Case</th>
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<th>Female</th>
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<tbody>
<tr>
<td></td>
<td>N Rate</td>
<td>N Rate</td>
<td>N Rate</td>
<td>N Rate</td>
<td>Medical</td>
<td>Work Loss</td>
<td>N Rate</td>
<td>N Rate</td>
</tr>
<tr>
<td>5-14</td>
<td>2.95 1.0</td>
<td>0.0 0.3</td>
<td>272 0.7</td>
<td>$14,218</td>
<td>$1,049,417</td>
<td>1.289</td>
<td>0.2 4.228</td>
<td>22.4 5.709</td>
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<tr>
<td>15-19</td>
<td>13.12 0.5</td>
<td>28 0.28</td>
<td>1,954 7.5</td>
<td>$4,703</td>
<td>$1,023,506</td>
<td>0.731</td>
<td>62.3 19.697</td>
<td>150.722 129.105</td>
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<tr>
<td>20-29</td>
<td>4.10 1.8</td>
<td>2.2 0.18</td>
<td>8,859 15.9</td>
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<td>$1,042,490</td>
<td>10.451</td>
<td>71.9 23.043</td>
<td>115.140 40.611</td>
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<td>30-39</td>
<td>5.98 2.8</td>
<td>2.6 1.5</td>
<td>12,033 12.8</td>
<td>$3,670</td>
<td>$1,538,091</td>
<td>2.902</td>
<td>76.2 47.859</td>
<td>106.078 78.993</td>
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<td>50-59</td>
<td>5.81 3.0</td>
<td>1.7 0.9</td>
<td>7,508 13.7</td>
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<td>$1,341,359</td>
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<td>70+</td>
<td>3.00 4.8</td>
<td>0.4 0.9</td>
<td>4,958 16.4</td>
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<td>$104,654</td>
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<table>
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<tr>
<th>Method</th>
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<th>Avg Cost Per Case</th>
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<td>N Rate</td>
<td>N Rate</td>
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<td>Work Loss</td>
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<td>$7,056</td>
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<td>15.819 6.3</td>
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<td>Poisoning</td>
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<td>5.347 2.0</td>
<td>$5,467</td>
<td>$1,164,780</td>
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<td>Suffocation</td>
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<td>0.8</td>
<td>$3,057</td>
<td>$1,510,122</td>
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<td>Other/Unspecified</td>
<td>1.305</td>
<td>1.1</td>
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<td>0.4</td>
<td>$8,681</td>
<td>$1,309,580</td>
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<tr>
<td>Total</td>
<td>24,823</td>
<td>18.9</td>
<td>6.222</td>
<td>4.5</td>
<td>31,085</td>
<td>11.6</td>
<td>$3,683</td>
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Rates are per 100,000 population aged 5 and over. For table details and data sources, see Methods page. Rates based on 5 or fewer cases may be unstable, use with caution. Rows and columns may not add due to rounding. All costs are in year 2006 dollars. Not all self-inflicted injuries are suicide attempts.


This has been published by the Suicide Prevention Resource Center at EDC. It is the reader’s sole responsibility to determine whether any of the information contained in these materials is useful to them. These materials are based upon work supported by the Department of Health and Human Services, Substance Abuse and Mental Health Services Administration under grant No. 1U79 SM57392-03. Any opinions, findings and conclusions, or recommendations expressed in this material are those of the author(s) and do not necessarily reflect the views of the Department of Health and Human Services, Substance Abuse and Mental Health Services Administration.
## Suicide

### Facts at a Glance

#### Fatal Suicidal Behavior

In 2007:
- Suicide was the eleventh leading cause of death for all ages.¹
- More than 34,000 suicides occurred in the U.S. This is the equivalent of 94 suicides per day, one suicide every 15 minutes or 11.25 suicides per 100,000 population.¹
- The National Violent Death Reporting System includes information on the presence of alcohol and other substances at the time of death. For those tested for substances, the findings from the 16 states revealed that one-third of those who died by suicide were positive for alcohol at the time of death and nearly 1 in 5 had evidence of opiates, including heroin and prescription pain killers.²

#### Nonfatal Suicidal Thoughts and Behavior

- Among young adults ages 15 to 24 years old, there are approximately 100–200 attempts for every completed suicide.³
- Among adults ages 65 years and older, there are approximately four suicide attempts for every completed suicide.²
- In 2009, 13.8% of U.S. high school students reported that they had seriously considered attempting suicide during the 12 months preceding the survey; 3.3% of students reported that they had actually attempted suicide one or more times during the same period.⁴

#### Gender Disparities

- Males take their own lives at nearly four times the rate of females and represent 78.8% of all U.S. suicides.¹
- During their lifetime, women attempt suicide about two to three times as often as men.⁵
- Suicide is the seventh leading cause of death for males and the fifteenth leading cause for females.³
- Suicide rates for males are highest among those aged 75 and older (rate 56.1 per 100,000).³
- Suicide rates for females are highest among those aged 45-54 (rate 8.8 per 100,000 population).³
- Firearms are the most commonly used method of suicide among males (55.7%).³
- Poisoning is the most common method of suicide for females (40.2%).³

#### Racial and Ethnic Disparities

- Among American Indians/Alaska Natives ages 15–34 years, suicide is the second leading cause of death.³
- Suicide rates among American Indian/Alaskan Native adolescents and young adults ages 15 to 34 (20.9 per 100,000) are 1.8 times higher than the national average for that age group (11.4 per 100,000).³
- Hispanic and Black, non-Hispanic female high school students in grades 9-12 reported a higher percentage of suicide attempts (11.1% and 10.4%, respectively) than their White, non-Hispanic counterparts (6.5%).⁴

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[¹](#)
[²](#)
[³](#)
[⁴](#)
## Suicide Facts at a Glance

### Age Group Differences

- Suicide is the second leading cause of death among 25-34 year olds and the third leading cause of death among 15- to 24-year olds.¹
- Among 15- to 24-year olds, suicide accounts for 12.2% of all deaths annually.¹
- The rate of suicide for adults aged 75 years and older was 16.0 per 100,000.¹

### Nonfatal, Self-Inflicted Injuries*

- In 2008, 376,306 people were treated in emergency departments for self-inflicted injuries.²
- In 2008, 163,489 people were hospitalized due to self-inflicted injury.³
- There is one suicide for every 25 attempted suicides.³

### Suicide-Related Behaviors among U.S. High School Students

In 2009:

- 13.8% of students in grades 9-12 seriously considered suicide in the previous 12 months (17.4% of females and 10.5% of males).⁴
- 6.3% of students reported making at least one suicide attempt in the previous 12 months (8.1% of females and 4.6% of males).⁴
- 1.9% of students had made a suicide attempt that resulted in an injury, poisoning, or an overdose that required medical attention (2.3% of females and 1.6% of males).³

*The term “self-inflicted injuries” refers to suicidal and non-suicidal behaviors such as self-mutilation.

### References


Suicide occurs when a person ends their life. It is the 11th leading cause of death among Americans. But suicide deaths are only part of the problem. More people survive suicide attempts than actually die. They are often seriously injured and need medical care.

Most people feel uncomfortable talking about suicide. Often, victims are blamed. Their friends, families, and communities are left devastated.

**Who is at risk for suicide?**

Suicide affects everyone, but some groups are at higher risk than others. Men are about 4 times more likely than women to die from suicide. However, 3 times more women than men report attempting suicide. In addition, suicide rates are high among middle-aged and older adults.

Several factors can put a person at risk for attempting or committing suicide. But, having these risk factors does not always mean that suicide will occur.

Risk factors for suicide include:

- Previous suicide attempt(s)
- History of depression or other mental illness
- Alcohol or drug abuse
- Family history of suicide or violence
- Physical illness
- Feeling alone

*Note: These are only some risk factors. To learn more, go to www.cdc.gov/injury/violenceprevention.*

**Why is suicide a public health problem?**

- More than 34,000 people kill themselves each year.¹
- More than 376,000 people with self-inflicted injuries are treated in emergency rooms each year.¹

**How does suicide affect health?**

Suicide, by definition, is fatal. Those who attempt suicide and survive may have serious injuries like broken bones, brain damage, or organ failure. Also, people who survive often have depression and other mental health problems.

Suicide also affects the health of the community. Family and friends of people who commit suicide may feel shock, anger, guilt, and depression. The medical costs and lost wages associated with suicide also take their toll on the community.

www.cdc.gov/violenceprevention
Understanding Suicide

How can we prevent suicide?

The goal is to stop suicide attempts.

- **Learn the warning signs of suicide.**
  Warning signs can include changes in a person's mood, diet, or sleeping pattern. The American Association of Suicidology (www.suicidology.org) has detailed information on what to look for and how to respond.

- **Get involved in community efforts.**
  The National Strategy for Suicide Prevention lays out a plan for action. It guides the development of programs and seeks to bring about social change. For more information, go to www.mentalhealth.samhsa.gov/suicideprevention/strategy.asp.

How does CDC approach suicide prevention?

CDC uses a 4-step approach to address public health problems like suicide.

**Step 1: Define the problem**

Before we can prevent suicide, we need to know how big the problem is, where it is, and whom it affects. CDC learns about a problem by gathering and studying data. These data are critical because they help decision makers send resources where needed most.

**Step 2: Identify risk and protective factors**

It is not enough to know that suicide affects certain people in certain areas. We also need to know why. CDC conducts and supports research to answer this question. We can then develop programs to reduce or get rid of risk factors.

**Step 3: Develop and test prevention strategies**

Using information gathered in research, CDC develops and tests strategies to prevent suicide.

**Step 4: Ensure widespread adoption**

In this final step, CDC shares the best prevention strategies. CDC may also provide funding or technical help so communities can adopt these strategies.

For a list of CDC activities, see Preventing Suicide: Program Activities Guide (www.cdc.gov/violenceprevention/suicide/index.html).

Where can I learn more?

If you or someone you know is thinking about suicide, contact the National Suicide Prevention Lifeline at 1-800-273-TALK (1-800-273-8255).

National Institute for Mental Health

www.nimh.nih.gov

Substance Abuse and Mental Health Services Administration

www.samhsa.gov

Suicide Prevention Resource Center

www.sprc.org

Surgeon General's Call to Action to Prevent Suicide

www.surgeongeneral.gov/library/calltoaction/default.htm

References


For more information, please contact:

Centers for Disease Control and Prevention
National Center for Injury Prevention and Control
1-800-CDC-INFO • www.cdc.gov/violenceprevention • odinfo@cdc.gov
Appendix A
Suicide rates per 100,000 by age group, California 2007

Source: California Death Statistical Master files
Prepared by Safe and Active Communities Branch, California Department of Public Health

Suicide rates per 100,000 by race/ethnicity and sex, age 65 + years, California 2000-2007

<table>
<thead>
<tr>
<th>Race/Ethnicity</th>
<th>Rate</th>
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<tbody>
<tr>
<td>White females</td>
<td>6.6</td>
</tr>
<tr>
<td>White males</td>
<td>39.3</td>
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<tr>
<td>Black females</td>
<td>(Too few to calculate)</td>
</tr>
<tr>
<td>Black males</td>
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</tr>
<tr>
<td>Hispanic females</td>
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<tr>
<td>Hispanic males</td>
<td>10.8</td>
</tr>
<tr>
<td>Asian females</td>
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<tr>
<td>Asian males</td>
<td>13.1</td>
</tr>
<tr>
<td>Other and unknown</td>
<td>(Too few to calculate)</td>
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</tbody>
</table>

Source: California Death Statistical Master files
Prepared by Safe and Active Communities Branch, California Department of Public Health
Suicide rates per 100,000 population, age 65 years and older, by county or county cluster, California, 1999-2007

<table>
<thead>
<tr>
<th>County</th>
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<tbody>
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<td>Stanislaus</td>
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<td>Sonoma</td>
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<td>Monterey</td>
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<td>Los Angeles</td>
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<tr>
<td>San Joaquin</td>
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<tr>
<td>Merced, San Benito</td>
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<tr>
<td>Fresno</td>
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<tr>
<td>San Mateo</td>
<td>15.1</td>
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<td>Orange</td>
<td>15.2</td>
</tr>
<tr>
<td>Alameda</td>
<td>15.2</td>
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<tr>
<td>Yolo</td>
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<td>Napa</td>
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<td>Contra Costa</td>
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<td>California</td>
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<td>Solano</td>
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<td>Placer</td>
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<td>San Bernardino</td>
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<td>Riverside, Imperial</td>
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<td>Marin</td>
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<tr>
<td>Lassen, Plumas, Modoc, Sierra</td>
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<tr>
<td>Siskiyou, Del Norte, Trinity</td>
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<tr>
<td>Shasta</td>
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</tr>
<tr>
<td>Yuba</td>
<td>34.4</td>
</tr>
<tr>
<td>Humboldt</td>
<td>35.5</td>
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</table>

Source: California Death Statistical Master files
Prepared by Safe and Active Communities Branch, California Department of Public Health
8-3-10