



Suicide in the U.S.: Statistics and Prevention

A fact sheet of statistics on suicide with information on treatments and suicide prevention. (2009).

Options

- See all NIMH publications about: [Statistics](#), [Suicide Prevention](#), [Prevention](#)
- Browse Mental Health Topics
- About NIMH Publications

- Introduction
- What are the risk factors for suicide?
- Are women or men at higher risk?
 - Is suicide common among children and young people?
 - Are older adults at risk?
 - Are Some Ethnic Groups or Races at Higher Risk?
- What are some risk factors for nonfatal suicide attempts?
- What can be done to prevent suicide?
- What should I do if I think someone is suicidal?
- For More Information About Suicide
- References

Suicide is a major, preventable public health problem. In 2006, it was the eleventh leading cause of death in the U.S., accounting for 33,300 deaths. The overall rate was 10.9 suicide deaths per 100,000 people.¹ An estimated 12 to 25 attempted suicides occur per every suicide death.¹

Suicidal behavior is complex. Some risk factors vary with age, gender, or ethnic group and may occur in combination or change over time.

If you are in a crisis and need help right away:

Call this toll-free number, available 24 hours a day, every day: 1-800-273-TALK (8256). You will reach the National Suicide Prevention Lifeline, a service available to anyone. You may call for yourself or for someone you care about. All calls are confidential.

What are the risk factors for suicide?

Research shows that risk factors for suicide include:

- depression and other mental disorders, or a substance-abuse disorder (often in combination with other mental disorders). More than 90 percent of people who die by suicide have these risk factors.²
- prior suicide attempt
- family history of mental disorder or substance abuse
- family history of suicide
- family violence, including physical or sexual abuse
- firearms in the home.³ The method used in more than half of suicides
- incarceration
- exposure to the suicidal behavior of others, such as family members, peers, or media figures.²

However, suicide and suicidal behavior are not normal responses to stress; many people have these risk factors, but are not suicidal. Research also shows that the risk for suicide is associated with changes in brain chemicals called neurotransmitters, including serotonin. Decreased levels of serotonin have been found in people with depression, impulsive disorders, and a history of suicide attempts, and in the brains of suicide victims.⁴

Are women or men at higher risk?

- Suicide was the seventh leading cause of death for males and the sixteenth leading cause of death for females in 2006.¹
- Almost four times as many males as females die by suicide.¹
- Firearms, suffocation, and poison are by far the most common methods of suicide, overall. However, men and women differ in the method used, as shown below.⁵

Suicide by:	Males (%)	Females (%)
Firearms	86	81
Suffocation	23	19
Poisoning	13	10

Is suicide common among children and young people?

In 2006, suicide was the third leading cause of death for young people ages 15 to 24.¹ Of every 100,000 young people in each age group, the following number died by suicide:⁶

- Children ages 10 to 14 — 1.3 per 100,000
- Adolescents ages 15 to 19 — 1.2 per 100,000
- Young adults ages 20 to 24 — 12.5 per 100,000

As in the general population, young people were much more likely to use firearms, suffocation, and poisoning than other methods of suicide, overall. However, while adolescents and young adults were more likely to use firearms than suffocation, children were dramatically more likely to use suffocation.⁶

There were also gender differences in suicide among young people, as follows:

- Over four times as many males as females ages 15 to 19 died by suicide.¹
- More than six times as many males as females ages 20 to 24 died by suicide.¹

Are older adults at risk?

Older Americans are disproportionately likely to die by suicide.

- Of every 100,000 people ages 65 and older, 14.2 died by suicide in 2006. This figure is higher than the national average of 10.9 suicides per 100,000 people in the general population.¹
- Non-Hispanic white men age 65 or older had an even higher rate, with 48 suicide deaths per 100,000.¹

Are Some Ethnic Groups or Races at Higher Risk?

Of every 100,000 people in each of the following ethnic/racial groups below, the following number died by suicide in 2006.¹

- Highest rates:
 - American Indian and Alaska Natives — 15.1 per 100,000
 - Non-Hispanic Whites — 13.9 per 100,000
- Lowest rates:
 - Hispanics — 4.9 per 100,000
 - Non-Hispanic Blacks — 5.0 per 100,000
 - Asian and Pacific Islanders — 5.7 per 100,000

What are some risk factors for nonfatal suicide attempts?

- As noted, an estimated 12 to 25 nonfatal suicide attempts occur per every suicide death. Men and the elderly are more likely to have fatal attempts than are women and youth.⁷
- Risk factors for nonfatal suicide attempts by adults include depression and other mental disorders, alcohol and other substance abuse and separation or divorce.^{8,9}
- Risk factors for attempted suicide by youth include depression, alcohol or other drug-use disorder, physical or sexual abuse, and disruptive behavior.¹⁰
- Most suicide attempts are expressions of extreme distress, not harmless bids for attention. A person who appears suicidal should not be left alone and needs immediate mental-health treatment.

What can be done to prevent suicide?

Research helps determine which factors can be modified to help prevent suicide and which interventions are appropriate for specific groups of people. Before being put into practice, prevention programs should be tested through research to determine their safety and effectiveness.⁹ For example, because research has shown that mental and substance-abuse disorders are major risk factors for suicide, many programs also focus on treating these disorders as well as addressing suicide risk directly.

Studies showed that a type of psychotherapy called cognitive therapy reduced the rate of repeated suicide attempts by 50 percent during a year of follow-up. A previous suicide attempt is among the strongest predictors of subsequent suicide, and cognitive therapy helps suicide attempters consider alternative actions when thoughts of self-harm arise.¹¹

Specific kinds of psychotherapy may be helpful for specific groups of people. For example, a treatment called dialectical behavior therapy reduced suicide attempts by half, compared with other kinds of therapy, in people with borderline personality disorder (a serious disorder of emotion regulation).¹²

The medication clozapine is approved by the Food and Drug Administration for suicide prevention in people with schizophrenia.¹³ Other promising medications and psychosocial treatments for suicidal people are being tested.

Since research shows that older adults and women who die by suicide are likely to have seen a primary care provider in the year before death, improving primary-care providers' ability to recognize and treat risk factors may help prevent suicide among these groups.¹⁴ Improving outreach to men at risk is a major challenge in need of investigation.

What should I do if I think someone is suicidal?

If you think someone is suicidal, do not leave him or her alone. Try to get the person to seek immediate help from his or her doctor or the nearest hospital emergency room, or call 911. Eliminate access to firearms or other potential tools for suicide, including unsupervised access to medications.

For More Information About Suicide

[Suicide Information and Organizations](#) from NLM's MedlinePlus [\(en Español\)](#)

References

1. Centers for Disease Control and Prevention, National Center for Injury Prevention and Control. Web-based Injury Statistics Query and Reporting System (WISQARS). www.cdc.gov/ipeds/wisqars
2. Moscicki EK. Epidemiology of completed and attempted suicide: toward a framework for prevention. *Clinical Neuroscience Research*. 2001; 1: 310-23.

3. Miller M, Azrael D, Hepburn L, Hemenway D, Lippmann SJ. The association between changes in household firearm ownership and rates of suicide in the United States, 1981-2002. *Injury Prevention* 2006;12:178-182; doi:10.1136/ip.2005.010850
4. Arango V, Huang YY, Underwood MD, Mann JJ. Genetics of the serotonergic system in suicidal behavior. *Journal of Psychiatric Research*. Vol. 37: 375-386. 2003.
5. Kessler RC, Borges G, Walters EE. Prevalence of and risk factors for lifetime suicide attempts in the National Comorbidity Survey. *Archives of General Psychiatry*. 1999; 56(7): 617-26.
6. Petronis KR, Samuels JF, Maccioci EK, Anthony JC. An epidemiologic investigation of potential risk factors for suicide attempts. *Social Psychiatry and Psychiatric Epidemiology*. 1990; 25(4): 193-9.
7. U.S. Public Health Service. National strategy for suicide prevention: goals and objectives for action. Rockville, MD: USDHHS, 2001.
8. Gould MS, Greenberg T, Velting DM, Shaffer D. Youth suicide risk and preventive interventions: a review of the past 10 years. *Journal of the American Academy of Child and Adolescent Psychiatry*. 2003; 42(4): 386-405.
9. Brown GK, Ten Have T, Henriques GR, Xie SX, Hollander JE, Beck AT. Cognitive therapy for the prevention of suicide attempts: a randomized controlled trial. *Journal of the American Medical Association*. 2008 Aug 3;294(8):963-70.
10. Linehan MM, Comtois KA, Murray AM, Brown MZ, Gallop RJ, Heard HL, Korslund KE, Tutek DA, Reynolds SK, Lindenboim N. Two-Year Randomized Controlled Trial and Follow-up of Dialectical Behavior Therapy vs. Therapy by Experts for Suicidal Behaviors and Borderline Personality Disorder. *Archives of General Psychiatry*. 2006 Jul;63(7):757-766.
11. Meltzer HY, Alpha L, Green AI, Altamura AC, Arand R, Bertoldi A, Bourgeois M, Chouinard G, Islam MZ, Kane J, Krishnan R, Lindenmayer JP, Polkin S. International Suicide Prevention Trial Study Group. Clozapine treatment for suicidality in schizophrenia: International Suicide Prevention Trial (InterSePT). *Archives of General Psychiatry*. 2003; 60(1): 82-91.
12. Luoma JB, Pearson JL, Martin CE. Contact with mental health and primary care prior to suicide: a review of the evidence. *American Journal of Psychiatry*. 2002; 159: 909-16.

NH Publication No. 06-4594

Some NIMH pages link to PDF files. [Download Adobe Reader](#) to view and print PDF files.

This page last reviewed: July 27, 2009

- [Site Map](#)
- [Newsletters](#)
- [Staff Directory](#)
- [Contact NIMH](#)
- [Jobs](#)
- [Copyright](#)
- [Privacy Policy](#)
- [Policies](#)
- [FOIA](#)

The National Institute of Mental Health (NIMH) is part of the National Institutes of Health (NIH), a component of the U.S. Department of Health and Human Services.

