

Suicide

Suicide is defined as a death resulting from the use of force against oneself when a preponderance of the evidence indicates that the use of force was intentional.⁵⁸⁰ This category includes deaths of person who intended only to injure rather than kill themselves, cases of so-call “Russian roulette,” and suicides involving only passive assistance to the decedent (eg supplying the means or information needed to complete the act). The category does not included deaths caused by chronic or acute substance abuse without the intent to die or deaths attributed to autoerotic behavior (eg self-strangulation during sexual activity). Nearly half of the suicide-related internet websites provide advice on “how to” take one’s own life.⁵⁸¹

National

Suicide rates in the United States have declined in recent years, reversing earlier trends.⁵⁸² In 2006, suicide was the 11th leading cause of death with 32,185 deaths or 1.3% of all deaths that year.⁵⁸³ More males committed suicide than females and the percent of white deaths attributed to suicide was twice that for blacks. Among persons 15-24 years of age, suicide accounted for 11.8% of all deaths.

Using national data from 2005,⁵⁸⁴ the age-adjusted mortality rates are shown in Figure 127. White males had a rate 3.9 times that of white females (19.7 and 5.0, respectively) while black males had a rate 4.8 times that of black females (8.7 and 1.8, respectively). Firearms were used in 52.1% of suicides, suffocation/hanging in 22.2%, poison in 17.6%, cutting/piercing in 1.8% drowning in 1.1%, and other methods in 5.2%.

Although suicide rates have been declining, no significant decrease occurred in suicidal thoughts, plans, gestures, or attempts during the 1990s despite a dramatic increase in treatment.⁵⁸⁵ Among young adults there are significant differences between males and females in the risk factors for attempted suicide.⁵⁸⁶ The age-adjusted suicide mortality rate for men has changed very little over the past 3

⁵⁸⁰ Karch DL et al. Surveillance for violent deaths – National Violent Death Reporting System, 16 states, 2005. *MMWR Morb Mortal Surv Summ* 2008;57:SS-3.

⁵⁸¹ Biddle L et al. Suicide and the internet. *Brit Med J* 2008; 336:800-802.

⁵⁸² McKeown RE, Cuffe SP, Schulz RM. US suicide rates by age group, 1970-2002: an examination of recent trends. *Am J Public Health* 2006;96:1744-1751

⁵⁸³ Heron MP et al. Deaths: preliminary data for 2006. *Natl Vital Stat Rep* 2008;56(16). www.cdc.gov/nchs

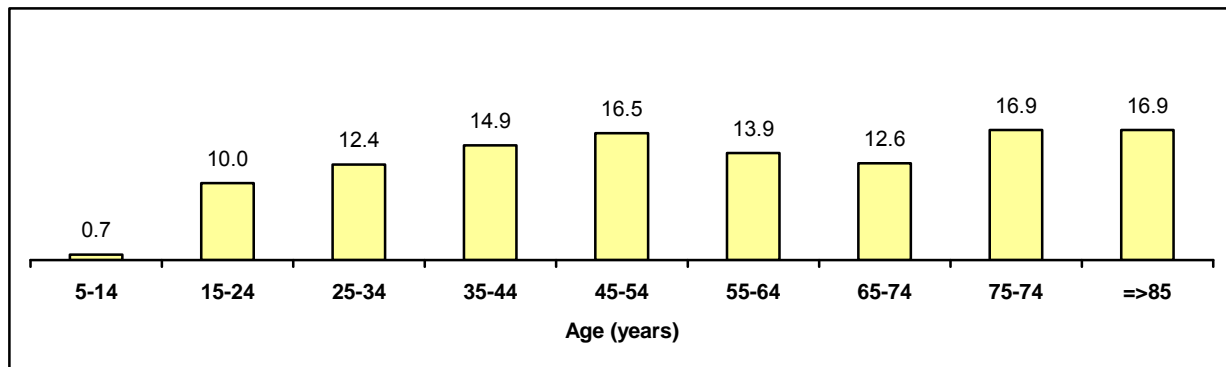
⁵⁸⁴ Kung HC et al. Deaths: final data for 2005. *Natl Vital Stat Rep* 2008;56(10). www.cdc.gov/nchs

⁵⁸⁵ Kessler RC et al. Trends in suicide ideation, plans, gestures, and attempts in the United States, 1990-1992 to 2001-2003. *J Am Med Ass* 2005;293:2487-2495.

⁵⁸⁶ Zhang J et al. Gender differences in risk factors for attempted suicide among young adults: findings from the Third National Health and Nutrition Examination Survey. *Ann Epidemiol* 2005;15:167-174.

decades while declining fairly consistently among women.

Figure 127 Age-adjusted suicide death rates per 100,000 population, US, 2005



Why people kill themselves is a complex issue, yet, in many cases, it often can be prevented by early recognition and treatment of mental disorders; it is often perceived as the solution for a one's depression.⁵⁸⁷ More than 90% of decedents are reported to have had a mental or substance abuse disorder, or a combination of disorders (Figure 128).⁵⁸⁸ Toxicological testing indicates that a substantial percentage of suicide decedents test positive for alcohol or other drugs, with alcohol being detected in a third of cases.⁵⁸⁹ yet, there is evidence to suggest that non-Hispanic black suicide decedents are less likely to have had depression than non-Hispanic whites⁵⁹⁰ and that suicide attempts among blacks are more common than previously thought.⁵⁹¹

In addition to mental and substance abuse disorders, risk factors include prior suicide attempt, stressful life events and access to lethal suicide methods. The rate of suicide for people who had a prior suicide attempt is 100 times higher in the year following the episode than for the general population. Long term studies show that this increased rate of suicide persists. In Jackson County, Mo, suicide victims

⁵⁸⁷Kansas City Metropolitan Health Council. Depression in Kansas City. What's being done and what is needed. 2005. 35 p.

⁵⁸⁸ Patel N et al. Homicides and suicides – National Violent Death Reporting System, United States, 2003-2004. *MMWR Morb Mortal Wkly Rep* 2006;55:721-724.

⁵⁸⁹ Karch D, et al. Toxicology testing and results for suicide victims – 13 states, 2004. *MMWR Morb Mortal Wkly Rep* 2006;55:1245-1248.

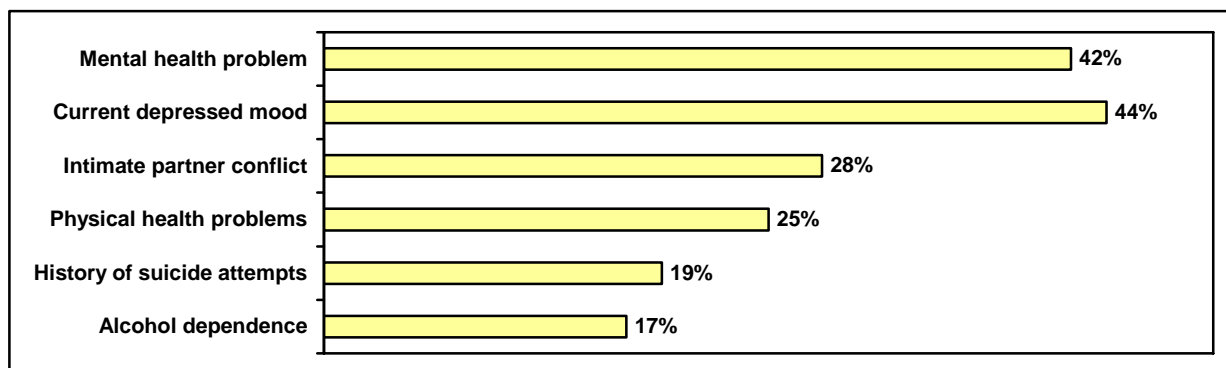
⁵⁹⁰ Abe K et al. Characteristics of black and white suicide decedents in Fulton County, Georgia, 1988-2002. *Am J Public Health* 2006;96:1794-1798.

⁵⁹¹ Joe S et al. Prevalence of and risk factors for lifetime suicide attempts among blacks in the United States. *J Am Med Ass* 2006;296:2112-2123.

SUICIDE

were 1) more likely to live in houses than were controls rather than in apartments or trailers, 2) more likely to live in more expensive homes than controls, 3) more likely to kill themselves because of factors other than financial strain, and 4) if financial strain was a factor, more likely to kill themselves after becoming accustomed to a more affluent lifestyle.⁵⁹²

Figure 128 Percentage of suicides by selected circumstances (adapted from National Violent Death Reporting System, 2004).

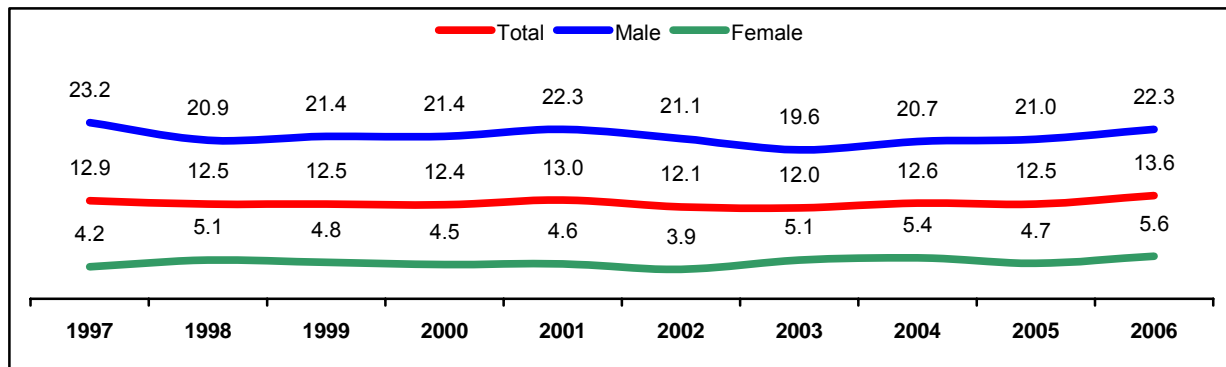


Missouri

In 2006, 798 Missourians killed themselves. This was the highest number and the highest age-adjusted death rate in the past 10 years (Figure 129). Males had an age-adjusted death rate 4.5 times higher than females. Hispanics accounted for only 1.2% of the suicides, but across all racial/ethnic groups, more males killed themselves than females. Firearms were used in 59.5% of suicides between 1997 and 2006, including 64.9% of those by men and 37.2% of those by women.

⁵⁹² Young TW et al. The Richard Cory phenomenon: suicide and socioeconomic status in Kansas City, Missouri. *J Forensic Sci* 2005;50:443-447.

Figure 129 Age-adjusted suicide death rates per 100,000 population, Missouri, 1997-2006



Kansas City

The number of Kansas City residents who commit suicide is variable year-to-year and the age-adjusted death rate is typically 2-3 times higher than the *Healthy People 2010* objective of 5.0 deaths per 100,000 population (Figure 130). The age-specific annualized death rates for suicide are shown in Figure 131. Tables 158 and 159 provide the ages of decedents and methods of suicide. The choice of methods is similar to what has been reported nationally and in Missouri, namely men chose firearms while women utilized other methods. Non-Hispanic white males were 58% of suicide decedents between 2002 and 2006 (Figure 132).

Figure 130 Suicide deaths and age-adjusted death rates per 100,000 population, Kansas City, Mo

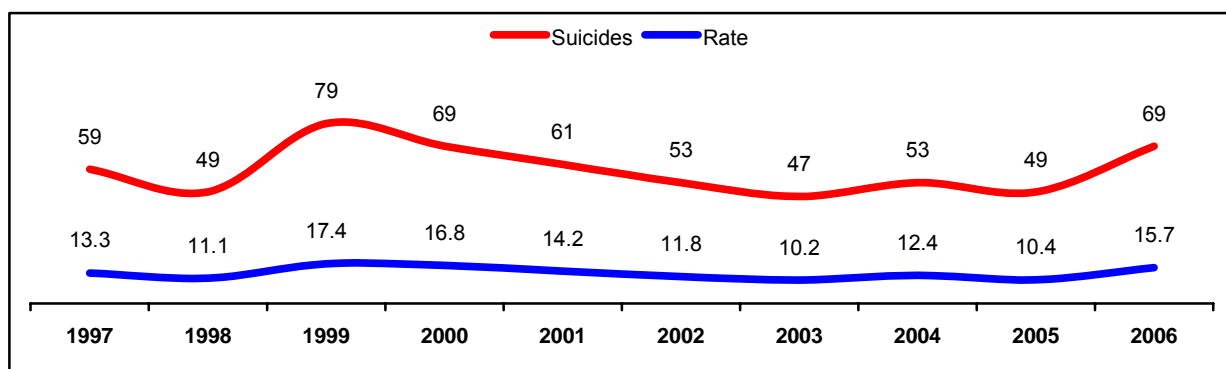


Figure 131 Age-specific death rates per 100,000 population by age group for suicide, Kansas City, Mo, 2002-2006

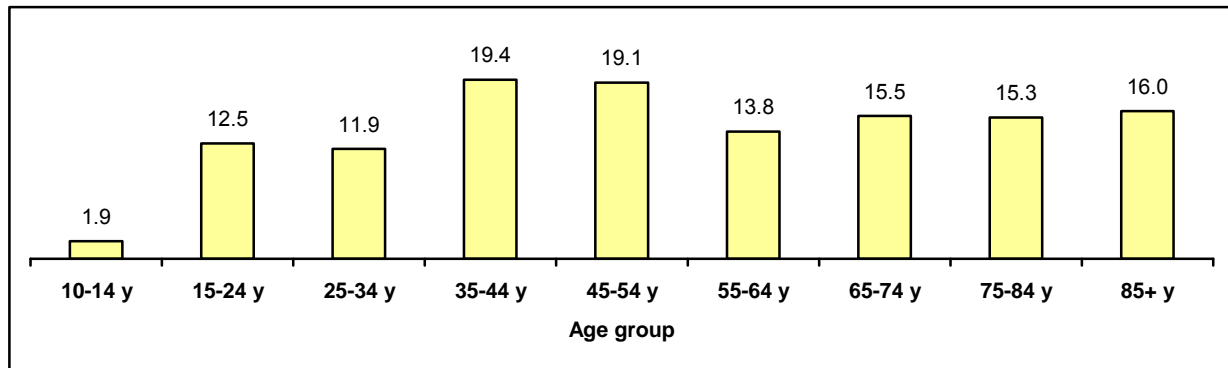


Table 158 Suicides by age group and method, Kansas City, Mo, 2002-2006

Age Group	Method of Suicide	
	# Suicides	% of Total
5-14 years	3	1.1
15-24 years	38	14.0
25-34 years	43	15.9
35-44 years	69	25.5
45-54 years	54	19.9
55-64 years	24	8.9
65-74 years	21	7.7
75-84 years	14	5.2
>85 years	5	1.8
Total	271	100.0

Method of Suicide	Age Group	
	Frequency	% of Total
Handgun	84	31.0
Rifle, shotgun & larger firearm	43	15.9
Other firearms	3	1.1
Self-poisoning	54	19.9
Hanging, strangulation & suffocation	53	19.6
Jumping	12	4.4
Drowning	7	2.6
All others	15	5.5
Total	271	100.0

Table 159 Method of suicide by sex and race, Kansas City, Mo, 2002-2006

Method	Sex		Race		Hispanic	Asian	Native American
	Male	Female	White, non-Hispanic	Black, non-Hispanic			
Handgun	72	12	62	20	0	0	0
Rifle, shotgun, & larger firearm	42	1	35	6	2	0	0
Other firearms	2	1	2	1	0	0	0
Self-poisoning	34	20	43	10	0	0	1
Hanging, strangulation, & suffocation	44	9	34	10	8	1	0
Jumping	11	1	5	7	0	0	0
Drowning	4	3	5	1	1	0	0
All others	11	4	14	1	0	0	0
Total	220	51	200	56	11	1	1

Figure 132 Percent of suicide deaths by race/ethnicity, Kansas City, Mo, 2002-2006

