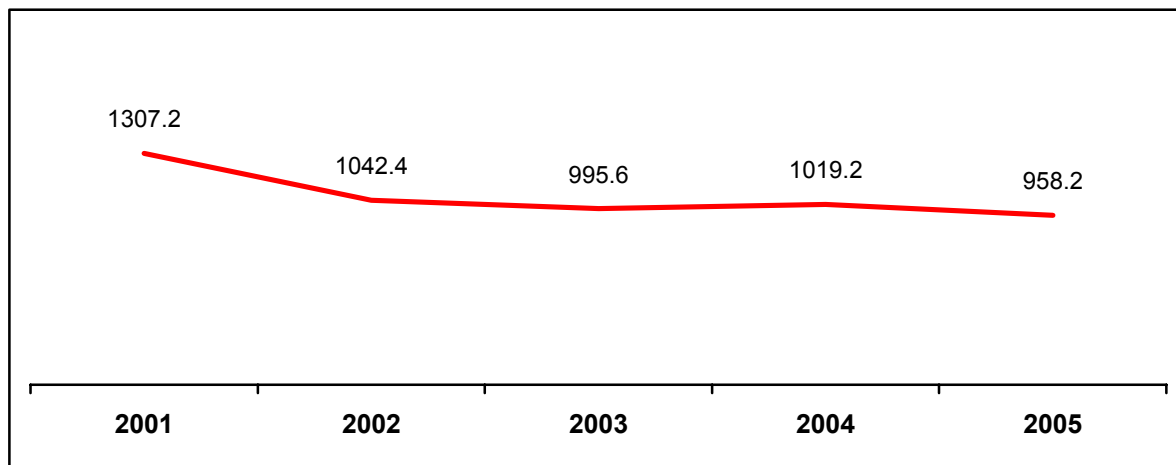


Suicide

Mental disorders are health conditions that are characterized by alterations in thinking, mood, or behavior (or some combination), which are associated with distress and/or impaired functioning and spawn a host of problems that may include disability, pain, or death. The age-adjusted hospitalization rates due to mental disease in Kansas City are shown in Figure 106.

Figure 106 Age-adjusted hospitalization rates per 100,000 population due to mental disease, Kansas City, Mo



Suicide is a complex behavior that can be prevented in many cases by early recognition and treatment of mental disorders. It is often perceived as the solution for a one's depression.⁴²² Suicide rates in the United States have declined in recent years, reversing earlier trends.⁴²³ In 2004, suicide was the 11th leading cause of death in the US.⁴²⁴ 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.⁴²⁵ Among young adults there are significant differences between males and females in the risk factors for attempted suicide.⁴²⁶ The age-adjusted suicide mortality rate for men has changed very little over the past 3 decades, while national mortality data indicate that the rate has

⁴²²Kansas City Metropolitan Health Council. *Depression in Kansas City. What's being done and what is needed.* 2005.

⁴²³ 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

⁴²⁴ Minino AM et al. Deaths: final data for 2004. *Nat Vital Stat Reports.*2007;55(19). www.cdc.gov/nchs

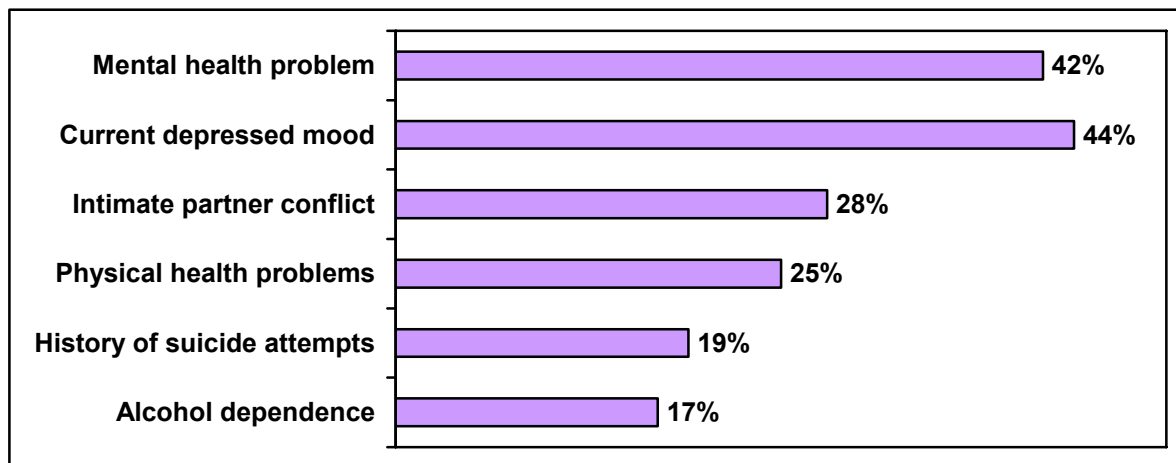
⁴²⁵ Kessler RC et al. Trends in suicide ideation, plans, gestures, and attempts in the United States, 1990-1992 to 2001-2003. *J Am Med Ass* 2005;293:2487-2495.

⁴²⁶ 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.

declined fairly consistently among women.

Why people kill themselves is a complex issue. More than 90% of such persons are reported to have had a mental or substance abuse disorder, or a combination of disorders, as shown by the National Violent Death Reporting System (Figure 107).⁴²⁷ Toxicological testing indicates that substantial percentages of suicide decedents test positive for alcohol or other drugs, with alcohol being detected in a third of cases.⁴²⁸ Yet, there is evidence to suggest that non-Hispanic black suicide decedents are less likely to report depression than non-Hispanic whites⁴²⁹ and that suicide attempts among non-Hispanic blacks are more common than previously thought.⁴³⁰

Figure 107 Percentage of suicides by selected circumstances, adapted from National Violent Death Reporting System, 2004.



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. Work by the Jackson County Medical Examiner and the Kansas City Health Department showed that suicide victims 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

⁴²⁷ Patel N et al. Homicides and suicides – National Violent Death Reporting System, United States, 2003-2004. *MMWR* 2006;55:721-724.

⁴²⁸ Karch D et al. Toxicology testing and results for suicide victims – 13 states, 2004. *MMWR* 2006;55:1245-1248.

⁴²⁹ 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.

⁴³⁰ 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.

lifestyle.⁴³¹

In 2005, 49 Kansas Citizens died by suicide. The age-adjusted death rate for suicide in Kansas City is shown in Figure 108. Among the top 10 causes of death by age group, suicide ranked 3rd for 15-24 y olds, 4th for 25-34 y olds, and 2nd for 35-44 y olds. The age-adjusted death rates for suicide during 2001-2005 fluctuate with age (Figure 109).

Figure 108 Age-adjusted death rates per 100,000 population due to suicide, Kansas City, Mo

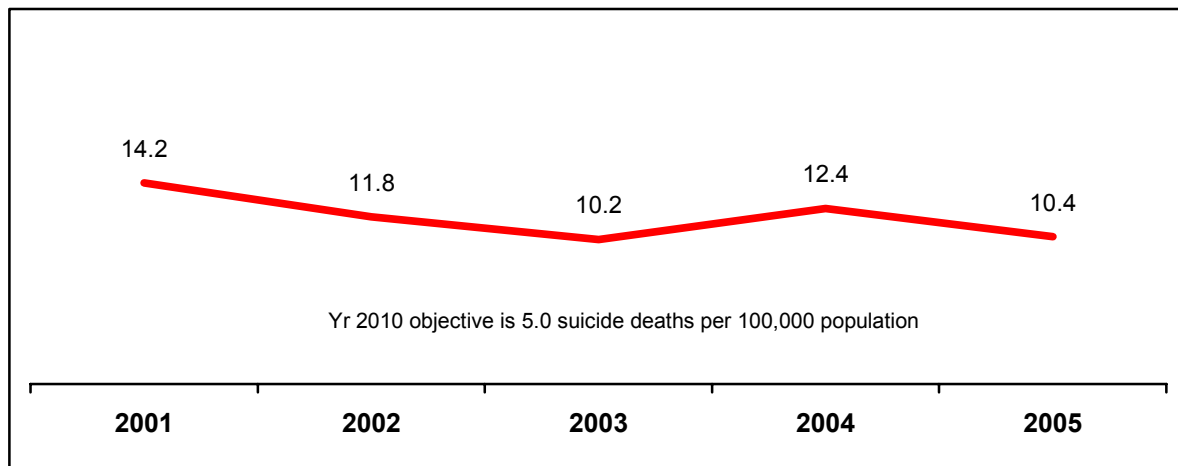
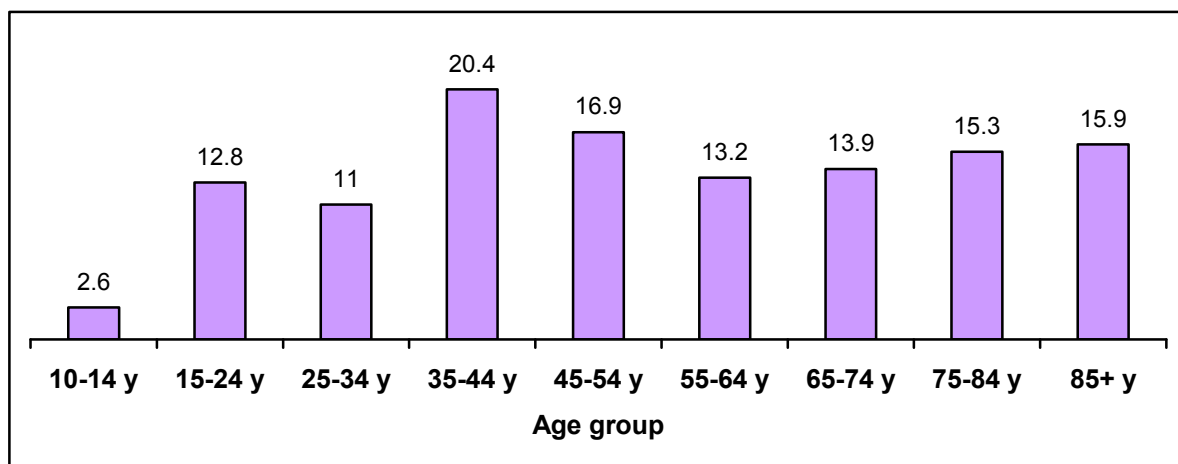


Figure 109 Age-specific death rates per 100,000 population by age group for suicide, Kansas City, Mo, 2001-2005



⁴³¹ Young TW et al. The Richard Cory phenomenon: Suicide and socioeconomic status in Kansas City, Missouri. *J Forensic Sci* 2005;50:443-447.



A review of suicides that occurred in Kansas City between 2001 and 2005, showed that non-Hispanic white males accounted for 56.8% of the suicides, followed by non-Hispanic black males (18.1%), non-Hispanic white females (15.8%), Hispanic males (3.9%), non-Hispanic black females (2.7%), and Hispanic females (0.8%). The age distribution and methods of suicide are given in Table 106. There were differences by sex in the choice of method of suicide (Table 107). Overall, 57% of men chose firearms while 69% of women utilized other methods. And, if one simply looks at race, 55% of non-Hispanic whites used firearms compared to 48% of non-Hispanic blacks and 17% of Hispanics.

Table 108 presents information on suicide from the Missouri Department of Health and Senior Services MICA database, for the Kansas City metropolitan area.

Table 106 Suicides by age group and method, Kansas City, Mo, 2001-2005

Age Group			Method of Suicide			
	# Suicides	% of Total		Frequency	% of Total	
5-14 y	4	1.5	Handgun	90	34.0	
15-24 y	39	14.7	Hanging, strangulation & suffocation	49	18.5	
25-34 y	40	15.1	Self-poisoning	49	18.5	
35-44 y	73	27.5	Rifle, shotgun & larger firearm	41	15.5	
45-54 y	48	18.1	Other firearms	6	2.3	
55-64 y	23	8.7	Jumping	9	3.4	
65-74 y	19	7.2	Drowning	8	3.0	
75-84 y	14	5.3	All others	13	4.9	
>85 y	5	1.9	Total	265		
Total	265					

Table 107 Method of suicide by sex and race, Kansas City, Mo, 2001-2005

Method			White, non-	Black, non-	Hispanic	Asian	Native American
	Male	Female	Hispanic	Hispanic	Hispanic		
Handgun	76	14	69	19	0	2	0
Hanging, strangulation, & suffocation	41	8	33	8	8	0	0
Self-poisoning	29	20	36	11	0	1	1
Rifle, shotgun, & larger firearm	40	1	33	6	2	0	0
Other firearms	5	1	4	2	0	0	0
Jumping	8	1	4	5	0	0	0
Drowning	5	3	4	3	1	0	0
All others	9	4	10	2	1	0	0
Total	213	52	193	56	12	3	1

Table 108 Suicides in Kansas City, Mo, metropolitan area, 2001-2005

	Total suicides	Age-adjusted rate per 100,000 population
Kansas City	259	11.7
Clay County, all	125	12.8
Jackson County, all	423	12.8
Platte County, all	47	11.5
Missouri	3,576	12.4