

SUICIDE IN SAN DIEGO COUNTY:

1996 - 2001



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SUICIDE IN SAN DIEGO COUNTY: 1996 - 2001

CHIP's Message

Dear Reader,

Community Health Improvement Partners (CHIP) is pleased to present *Suicide in San Diego County: 1996 - 2001*, a project of the CHIP Suicide Prevention Committee.

CHIP is a collaboration of 30 San Diego hospitals, health plans, community clinics, physicians, universities, schools, community-based organizations and the County of San Diego Health and Human Services Agency. The partners of CHIP are dedicated to improving health for San Diego County's communities through collaboration and assessment.

This report draws on the epidemiological support of the County Health and Human Services Agency's Division of Emergency Medical Services (EMS) to provide a picture of suicide in San Diego County from information in the Medical Examiner's Database. The Office of the Medical Examiner is charged with investigating and determining the cause of death in all homicides, suicides, motor vehicle fatalities, occupation-related deaths, drug abuse deaths, and certain deaths due to apparent natural causes.

Information about suicide, like that presented in this report, helps us understand and track the suicide problem from both a regional and a state/national perspective as we embark on strategies to reduce it. This information also serves to promote public awareness of the magnitude of the suicide problem and the need for broad-based support for suicide prevention.

CHIP would like to acknowledge the contribution of the Division of Emergency Medical Services staff for their help in the preparation of this report. Special recognition is extended to Alan Smith, MPH, EMS Epidemiologist, who co-authored this report.

We hope you find this report useful.

Sincerely,

Beth Sise, JD, RN, MSN, CPNP
Chair
CHIP Suicide Prevention Committee

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Introduction

Suicide now ranks first among causes of non-natural death in San Diego County, exceeding deaths by motor vehicle crashes, homicide, drug overdose, and other non-natural causes. From 1996 through 2001, suicide took the lives of 2,000 San Diegans, claiming about one person each day and outnumbering homicides (807) by 2.5 to 1.

The devastating impact of suicidal behavior, however, reaches far beyond those who actually take their own life. It is believed that for every suicide, there are six "survivors"- persons who suffer lasting emotional trauma when someone close to them dies as a result of suicide.¹ Moreover, for every one completed suicide, there are an estimated 8 to 25 attempted suicides.²

Alarming numbers like these, evident nationwide, resulted in a recent call by the U.S. Surgeon General for the nation, states, and communities to apply public health methods to address the suicide problem. Among the goals set forth in the *National Strategy for Suicide Prevention*,³ the Surgeon General challenges us to work together to promote awareness that suicide is a major preventable public health problem. This calls for increasing collaboration among public and private entities to use means to raise public awareness of suicide and suicide prevention, including developing public education campaigns and disseminating information through the World Wide Web.

In this report, *Suicide in San Diego County: 1996 - 2001*, the Community Health Improvement Partners' (CHIP) Suicide Prevention Committee takes one important step toward meeting that goal. This report presents data about suicide in the county overall and among three distinct age groups: adolescents and young adults, working-aged adults, and older adults. The information in this report should prove helpful to those in need of basic information and trends on suicide in San Diego County, including community-based agencies, government agencies, businesses, healthcare, media, and private individuals.

¹ American Association of Suicidology. Available at <http://www.suicidology.org>.

² Suicide Facts. National Institute of Mental Health. Available at <http://www.nimh.nih.gov/research/suifact.htm>.

³ National Strategy for Suicide Prevention: Goals and Objectives for Action. Rockville, MD: US Dept. of Health and Human Services, Public Health Service, 2001. Available at <http://www.mentalhealth.org/suicideprevention>.

Section 1: All Ages

Leading Causes of Non-Natural Death

In San Diego County from 1996 through 2001, suicide was the leading cause of non-natural death for all ages combined, followed by motor vehicle crashes, drug overdoses, and homicides.

Suicide impacted certain age groups to different degrees. In San Diego County from 1996 through 2001:

- Among young people ages 15 to 24, suicide was the third leading cause of non-natural death.
- Among the working population, ages 25 to 64, suicide was either the first or second leading cause of non-natural death.
- Among older adults ages 65 and up, suicide was either the first or the second leading cause of non-natural death.

Heaven's Gate

In March of 1997, 39 individuals participated in a cult-related group suicide. These suicides are included in the table of leading causes of non-natural death, shown on this page. However, because of the extraordinary nature of this event, they have been excluded from all further analyses in this report. Their exclusion does not change the ranking of suicide as a leading cause of death for all ages combined.

Leading Causes of Non-Natural Death by Age Group of Victim, County of San Diego 1996 - 2001				
Age Group of Victim	Rank of Cause of Death			
	1	2	3	4
0-4	Homicide 47	Drowning 40	Motor Vehicle 32	Asphyxiation 17
5-9	Motor Vehicle 31	Homicide 11†	Drowning 11†	Burn 3
10-14	Motor Vehicle 34	Homicide 10	Suicide 7	Drowning 5
15-19	Motor Vehicle 178	Homicide 78	Suicide 72	Drowning 18
20-24	Motor Vehicle 276	Homicide 142	Suicide 134	Drug Overdose 60
25-34	Suicide 343	Motor Vehicle 293	Drug Overdose 249	Homicide 208
35-44	Drug Overdose 592	Suicide 432	Motor Vehicle 287	Homicide 143
45-54	Drug Overdose 455	Suicide 372	Motor Vehicle 211	Homicide 77
55-64	Suicide 205	Motor Vehicle 124	Drug Overdose 92	Falls 64
65-74	Suicide 168	Motor Vehicle 132	Falls 93	Drug Overdose 39
75-84	Falls 195	Suicide 185	Motor Vehicle 134	Asphyxiation 22
85+	Falls 202	Suicide 80	Motor Vehicle 62	Asphyxiation 15
All Ages	Suicide 2000	Motor Vehicle 1811	Drug Overdose 1525	Homicide 807

Source: County of San Diego, Health and Human Services Agency, Division of Emergency Medical Services, Medical Examiner's Database 1996 – 2001
† Tie

Section 1: All Ages

Suicides by Age Group and Year

Suicide in Children 14 and Under.

According to the National Center for Injury Prevention and Control, from 1980-1997, the national rate of suicide among children aged 10-14 years increased by 109%.⁴ Although suicide among young children is a rare event, the dramatic rise in the rate in this age group emphasizes the need for increased efforts to prevent suicide in this age group.

In San Diego County, there was a total of 7 suicides among the 14-and-under age group for the entire period of 1996 through 2001. While each suicide is in itself significant, this relatively small number does not lend itself to reliable annual data that can support statistical conclusions.

Suicides by Age Group and Year: 1996 - 2001

Age Groups	1996	1997	1998	1999	2000	2001	Total
15-19	16	10	17	7	11	11	72
20-24	21	25	24	17	26	21	134
25-34	67	59	54	54	57	49	340
35-44	76	71	72	54	73	70	416
45-54	58	41	57	62	73	69	360
55-64	36	26	34	30	37	37	200
65-74	30	33	24	26	25	28	166
75-84	31	38	31	32	27	26	185
85+	14	12	17	12	15	10	80
Total	352	315	330	296	345	323	1961

Source: County of San Diego Health and Human Services Agency, Division of Emergency Medical Services, Medical Examiner Database, 1996 – 2001

Note: Total includes those with unknown age and younger than 15 years. Cult-related suicides are excluded.

⁴ Suicide in the United States. National Center for Injury Prevention and Control. Available at <http://www.cdc.gov/ncipc/factsheets/suifacts.htm>.

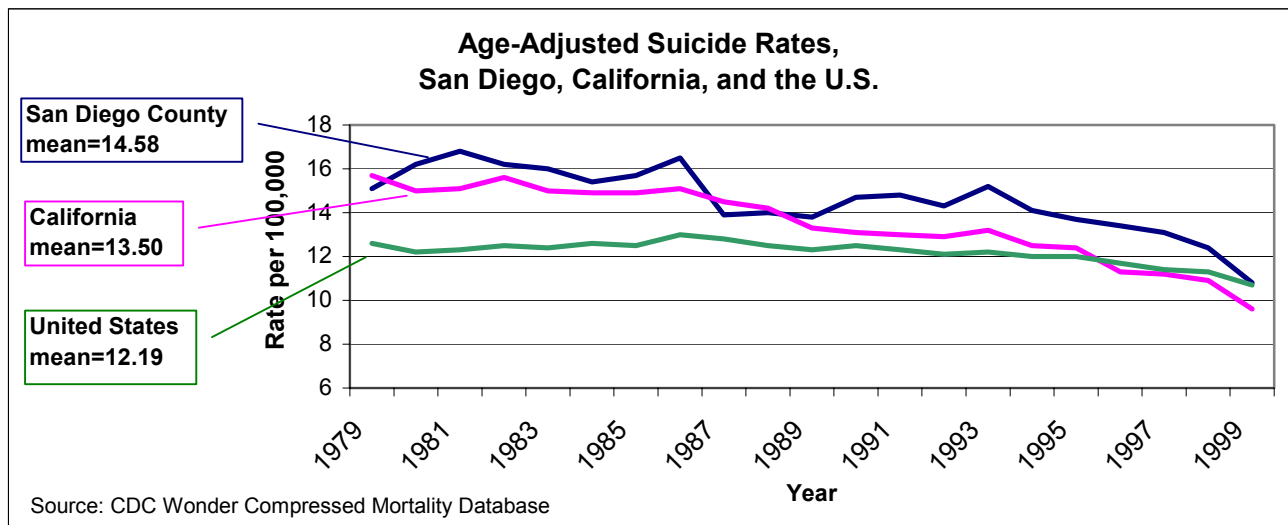
Comparison with California and the United States

According to data from the Centers for Disease Control and Prevention (CDC)⁵, the age-adjusted suicide rate⁶ has been consistently higher in San Diego County than in the state of California or the United States overall.

In 1999, the most recent national data available, suicide rates were as follows:

- United States: 10.7
- California: 9.6
- San Diego County: 10.8

Healthy People 2010,⁷ a report published by the U.S. Department of Health and Human Services, has set a target of 5.0 suicides per 100,000 population. Clearly, our county, our state, and the nation as a whole must gear up to make a significant impact on the suicide problem.



⁵ www.cdc.gov

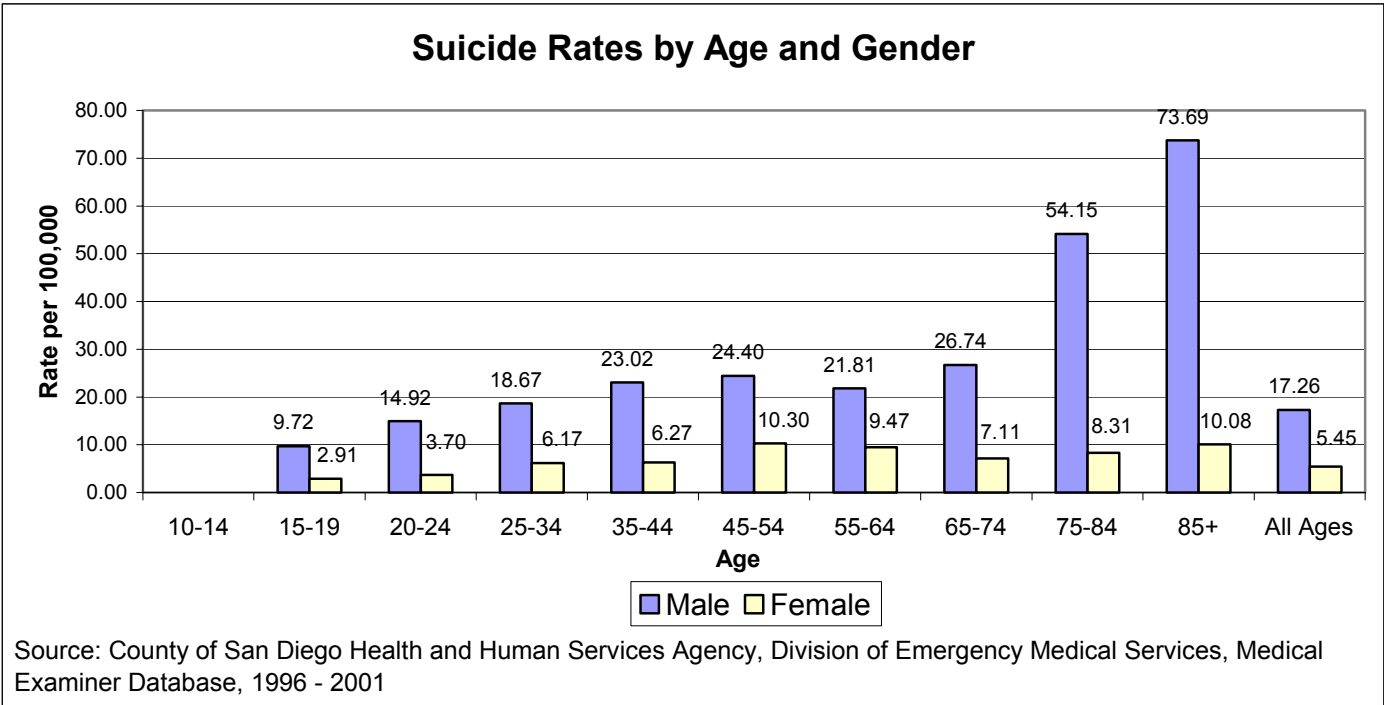
⁶ Age adjustment is performed to compare rates of conditions whose rates vary depending on age for populations with different age distributions. In this case, rates were adjusted to the United States population distribution for the year 2000.

⁷ U.S. Department of Health and Human Services. *Healthy People 2010: Understanding and Improving Health*. 2nd ed. U.S. Government Printing Office, November 2000. Available at: <http://www.health.gov/healthypeople/Document/>.

Section 1: All Ages

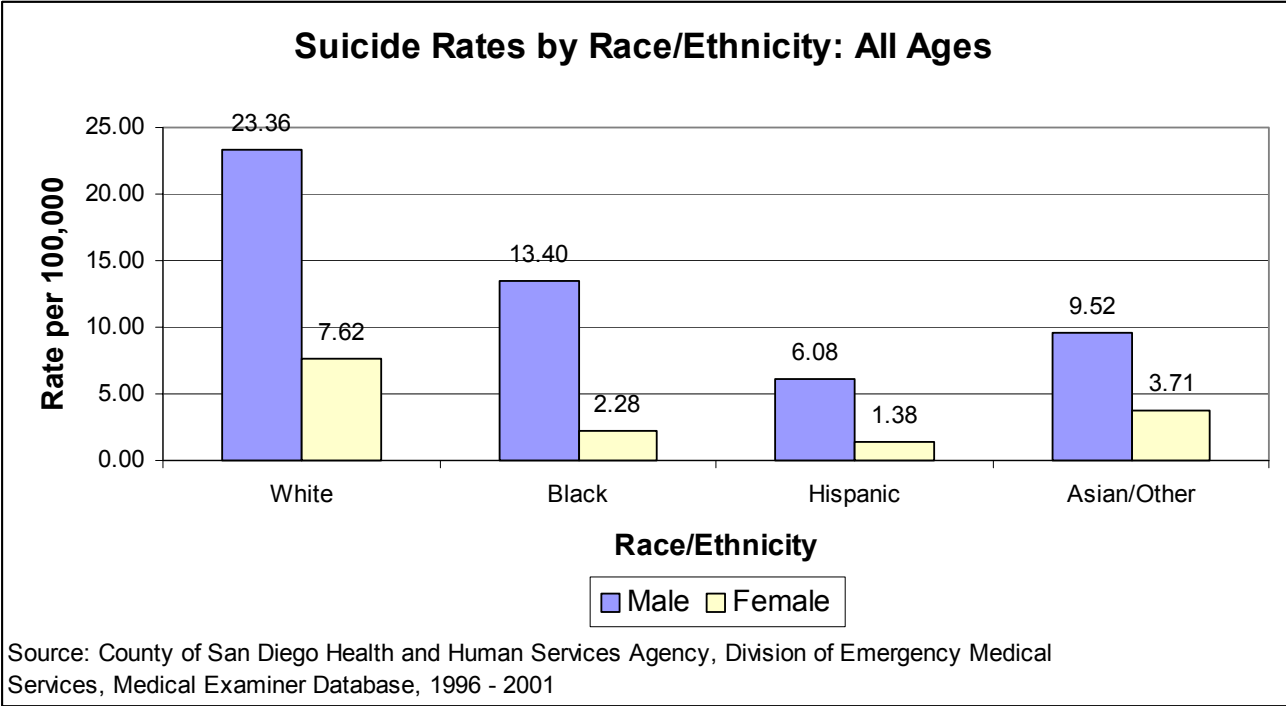
Suicide by Age and Gender

The rate of suicide tells us how many suicides there were in proportion to the total population. In San Diego County from 1996 through 2001, the suicide rate averaged 11.45 per 100,000 people each year. Males were three times more likely than females to commit suicide, and the rate among males increased dramatically with increasing age. In contrast to males, who were at greatest risk of committing suicide when they reached the oldest age groups, the female suicide rate was highest in the 45- to 54-year-age group.



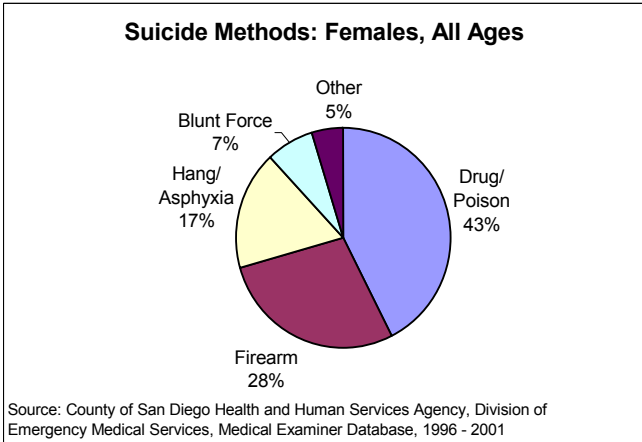
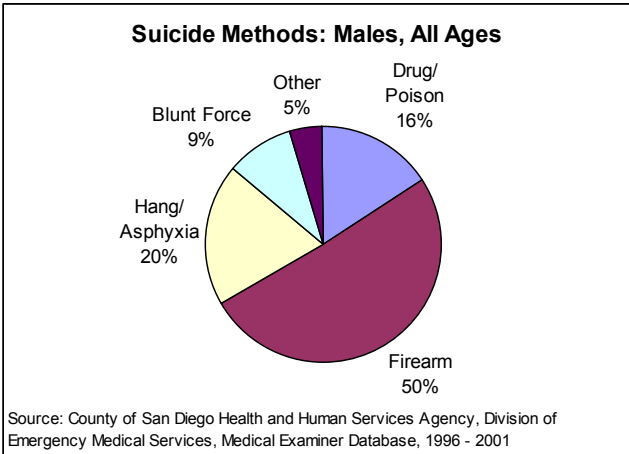
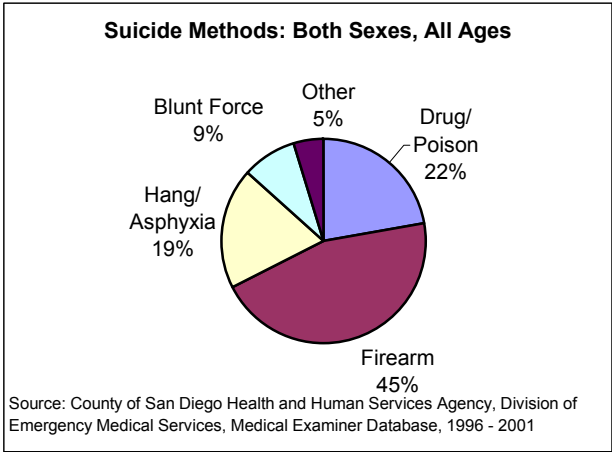
Race/Ethnicity

The suicide rate among Whites was nearly double all other races combined, with White males having the highest risk of any race/gender combination. Both genders were at increased risk in the White population compared with other racial/ethnic groups, and males were substantially more at risk of committing suicide among all groups.



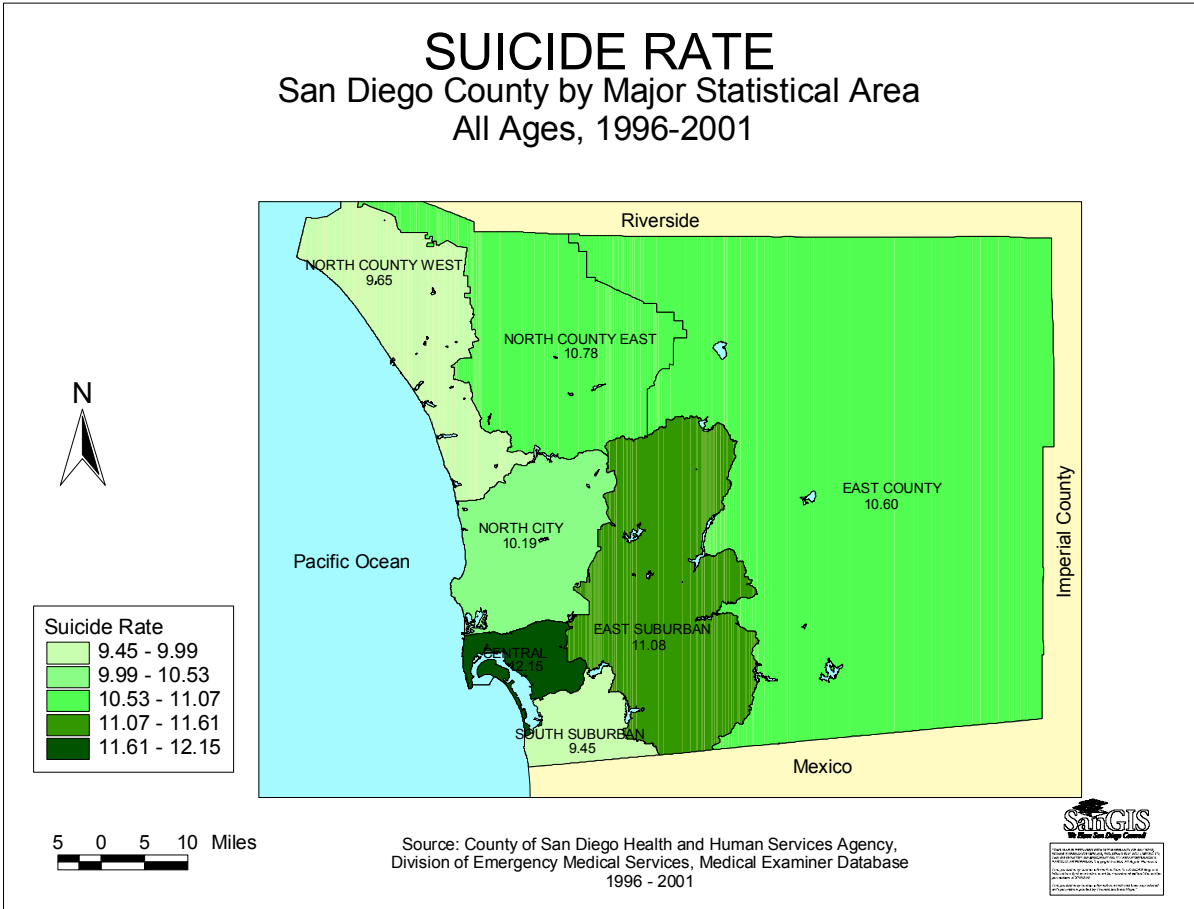
Suicide Methods

Firearms were by far the leading method of completed suicide, accounting for 45% of suicides overall, and half of suicides committed by males. Females more often used drugs or poisons to commit suicide (43%).



Where is it Happening?

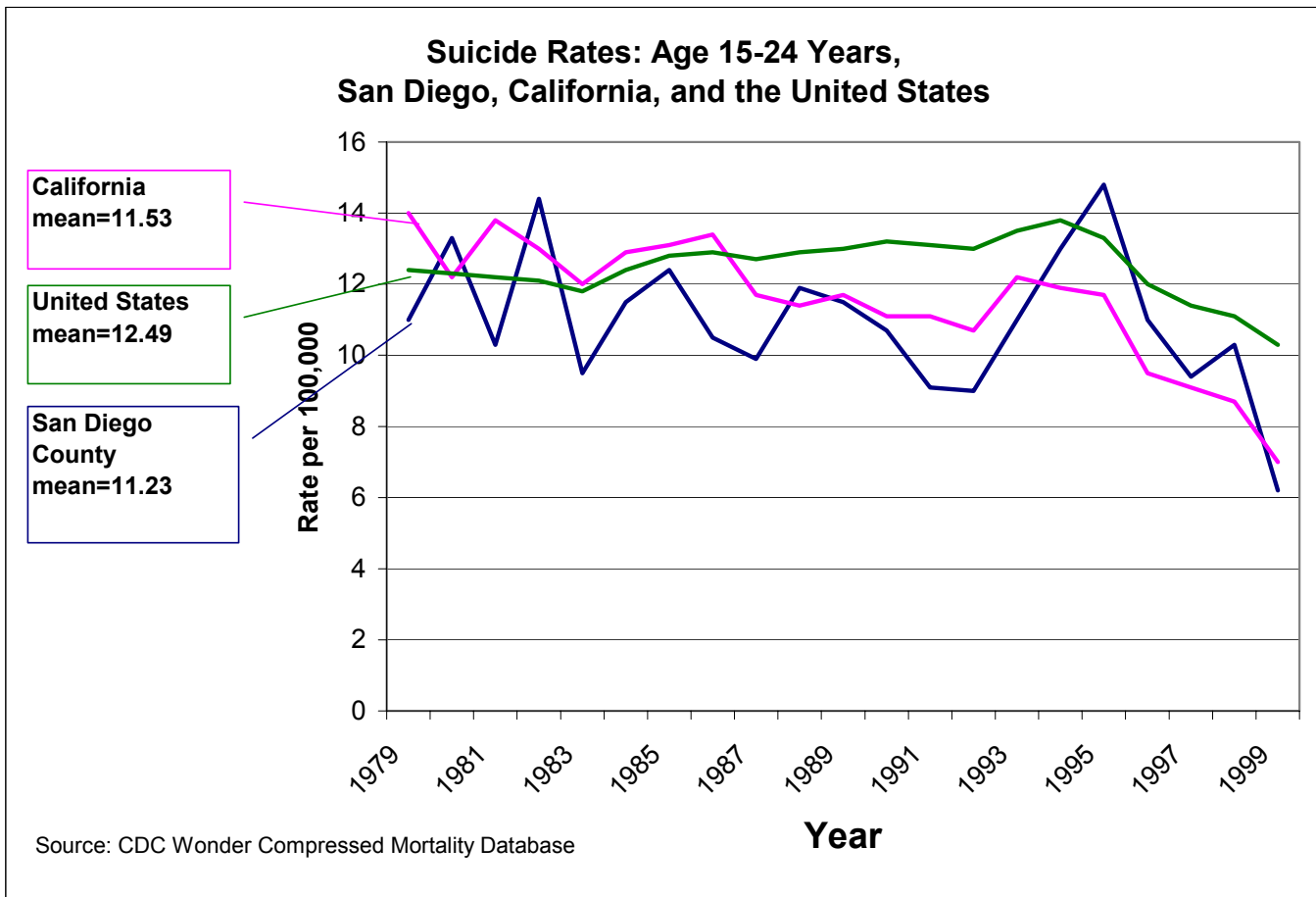
The suicide rate was highest in the Central Major Statistical Area (MSA), which encompasses downtown San Diego and the surrounding communities. The lowest rate was observed in the South Suburban MSA, which covers the communities of Chula Vista, Sweetwater, and South Bay.



Section 2: Adolescents and Young Adults

Comparison with California and the United States

Suicide rates in teens and young adults (age 15-24) over the past two decades have seen an overall decline, but remain at levels that are still too high.

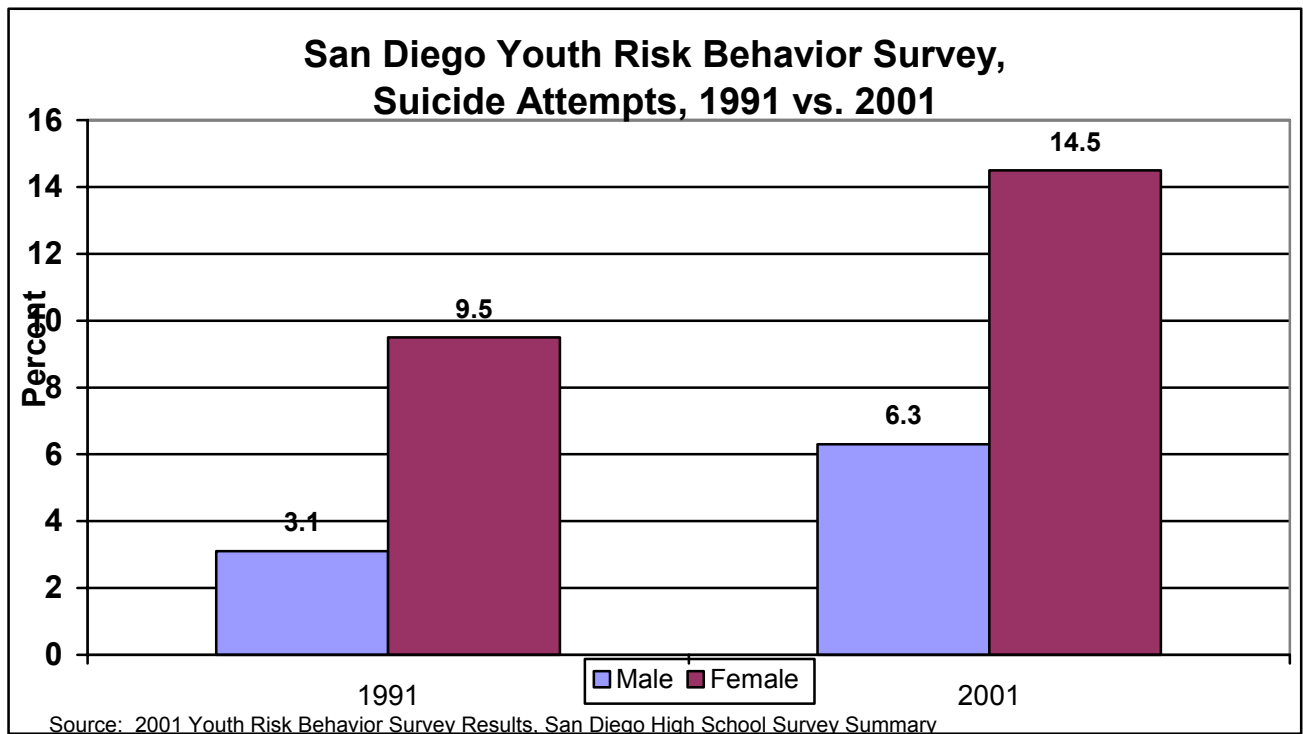


Section 2: Adolescents and Young Adults

Youth Risk Behavior Survey

Examining data on suicide attempts may lead to important information on reducing the rate of suicide, particularly among youth. The Youth Risk Behavior Survey (YRBS), conducted by the Centers for Disease Control and Prevention (CDC), measures a variety of risky teen behaviors, including suicide attempts. San Diego City Schools participate in this voluntary survey, which is given every two years to students in grades 9-12.

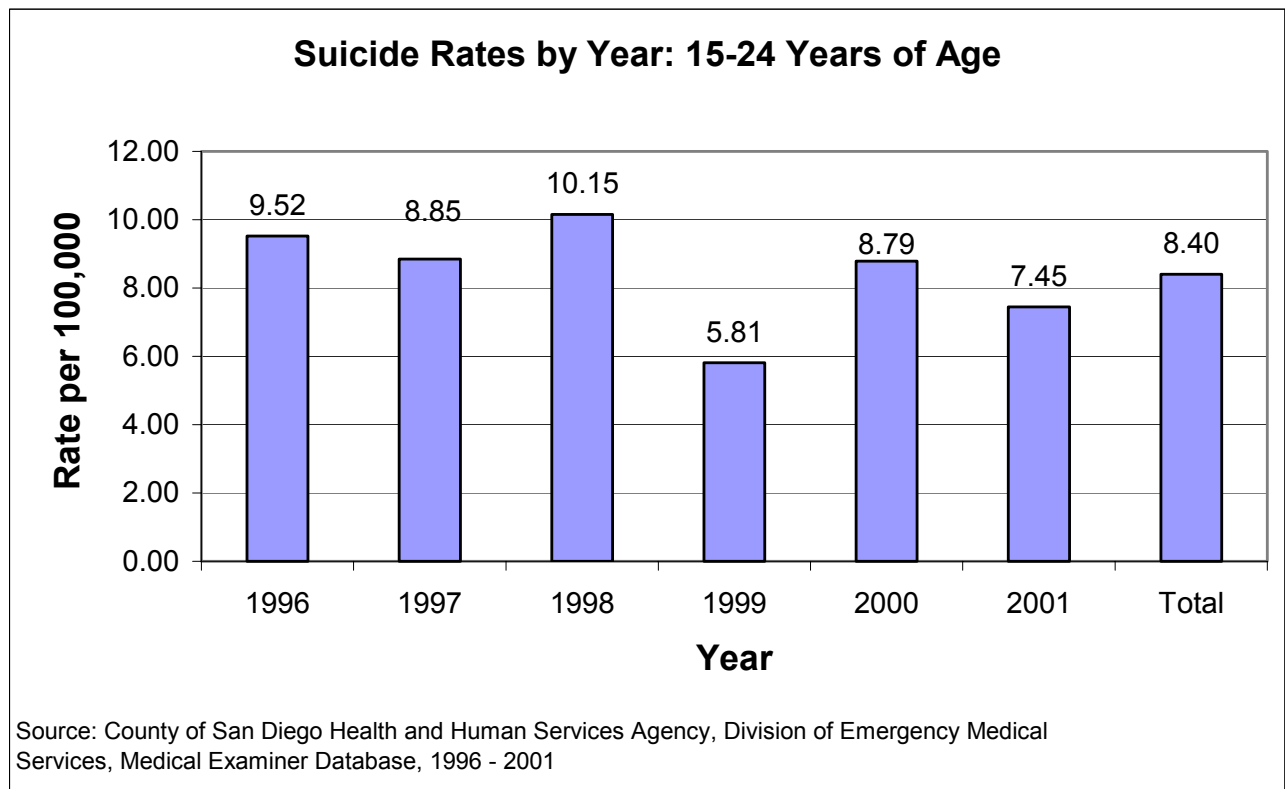
The 2001 YRBS showed that the percentage of San Diego City Schools students surveyed who reported attempting suicide at least once during the previous 12 months was 10.5%. This was up from 6.3% in the 1991 survey. The national average for 2001 was 8.8%.



Section 2: Adolescents and Young Adults

Annual Rates

Completed suicides among teens and young adults (age 15-24) in San Diego County for the most part have remained stable from 1996 through 2001, averaging 8.40 suicides per 100,000. This rate fell considerably in 1999 (5.81 per 100,000); however, it rebounded to slightly above the average in the next year.

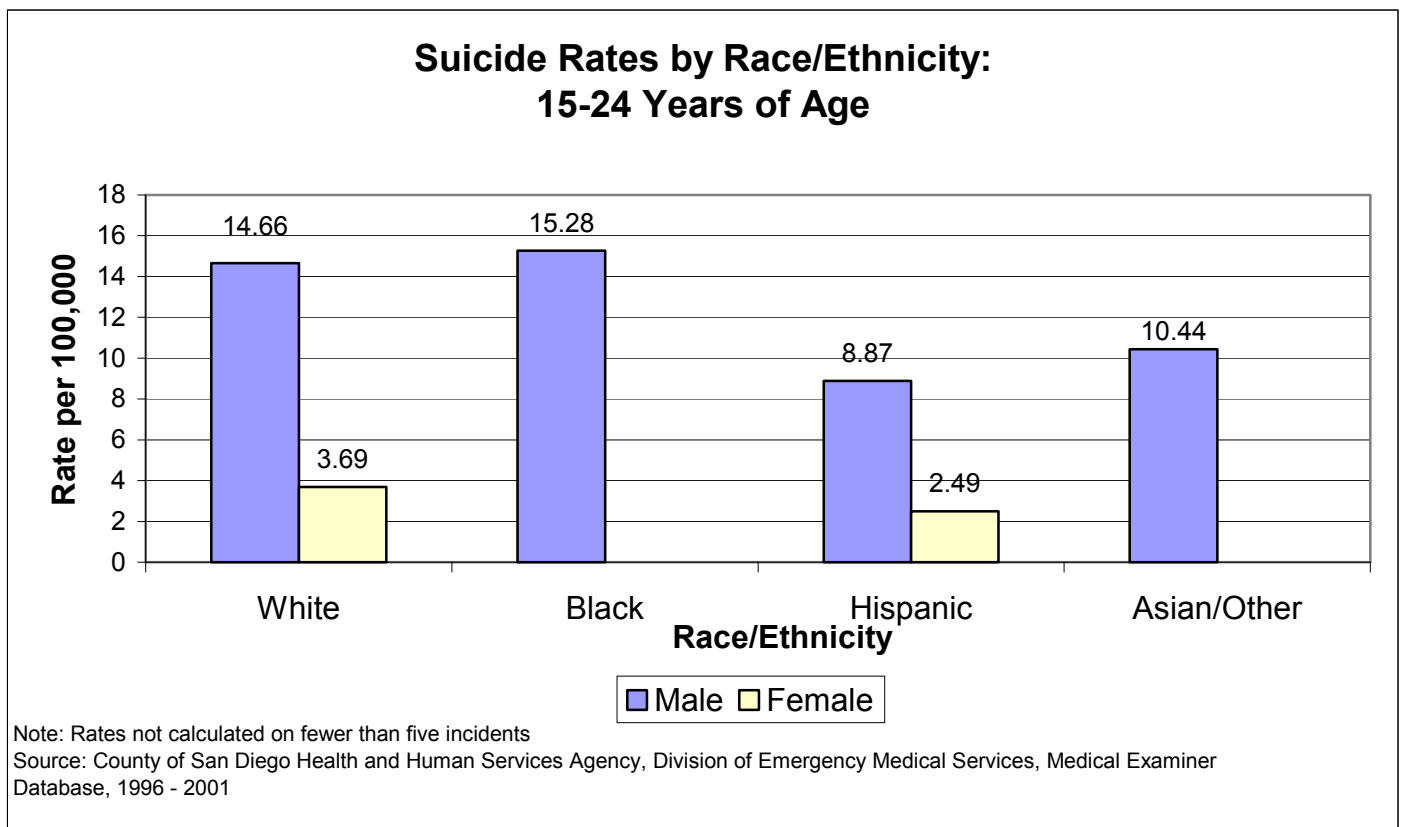


Section 2: Adolescents and Young Adults

Race/Ethnicity

Suicide among San Diego County's teens and young adults is highest among Black males and White males, followed by Asian/Other males and Hispanic males. Suicide does occur among females in all races in this age group, however the numbers are too small to calculate rates for Black females and Asian/Other females.

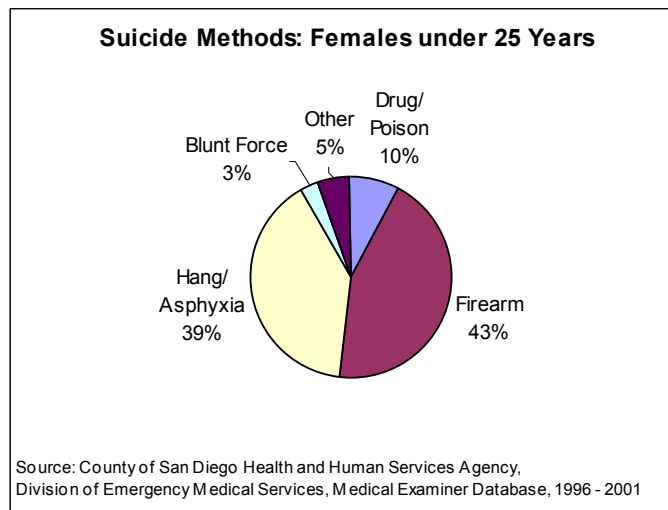
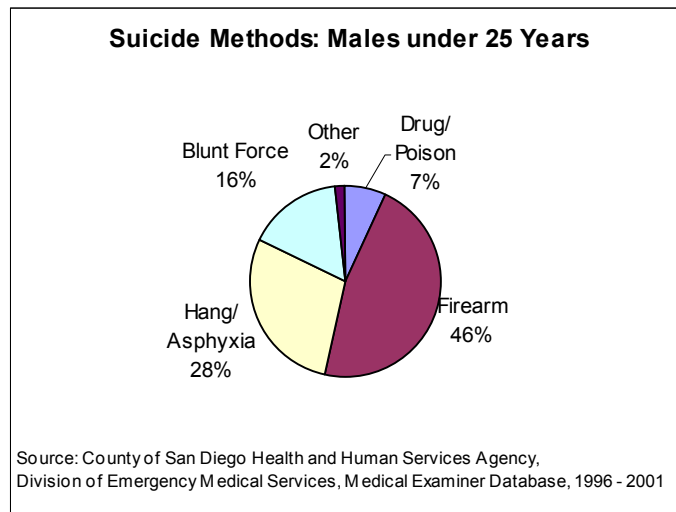
The racial and gender profile for suicide among teens and young adults as a group more closely parallels that of the population profile for this age group in the county. In contrast, the racial and gender profile for suicide for San Diego County overall clearly rates White males as the highest risk group.



Section 2: Adolescents and Young Adults

Suicide Methods

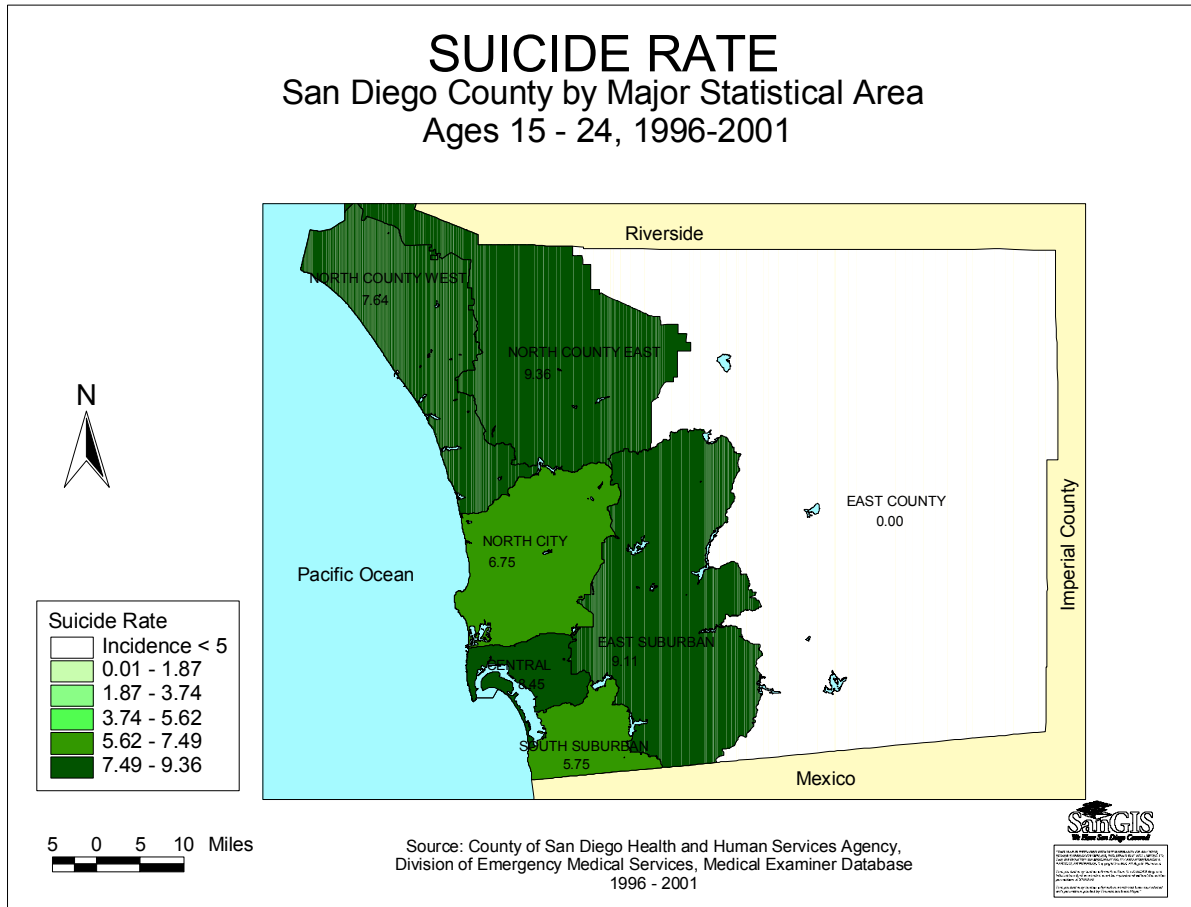
Firearms were by far the leading method of completed suicide among teens and young adults, accounting for 46% of suicides by males and 43% by females. Suicide by firearm, and indeed all suicide methods, were much more evenly distributed between the sexes in this age group in the county. This stands in contrast to suicide methods used among all ages combined in San Diego County, where females overall were more likely to use drugs/poisons and males were more likely to use firearms.



Section 2: Adolescents and Young Adults

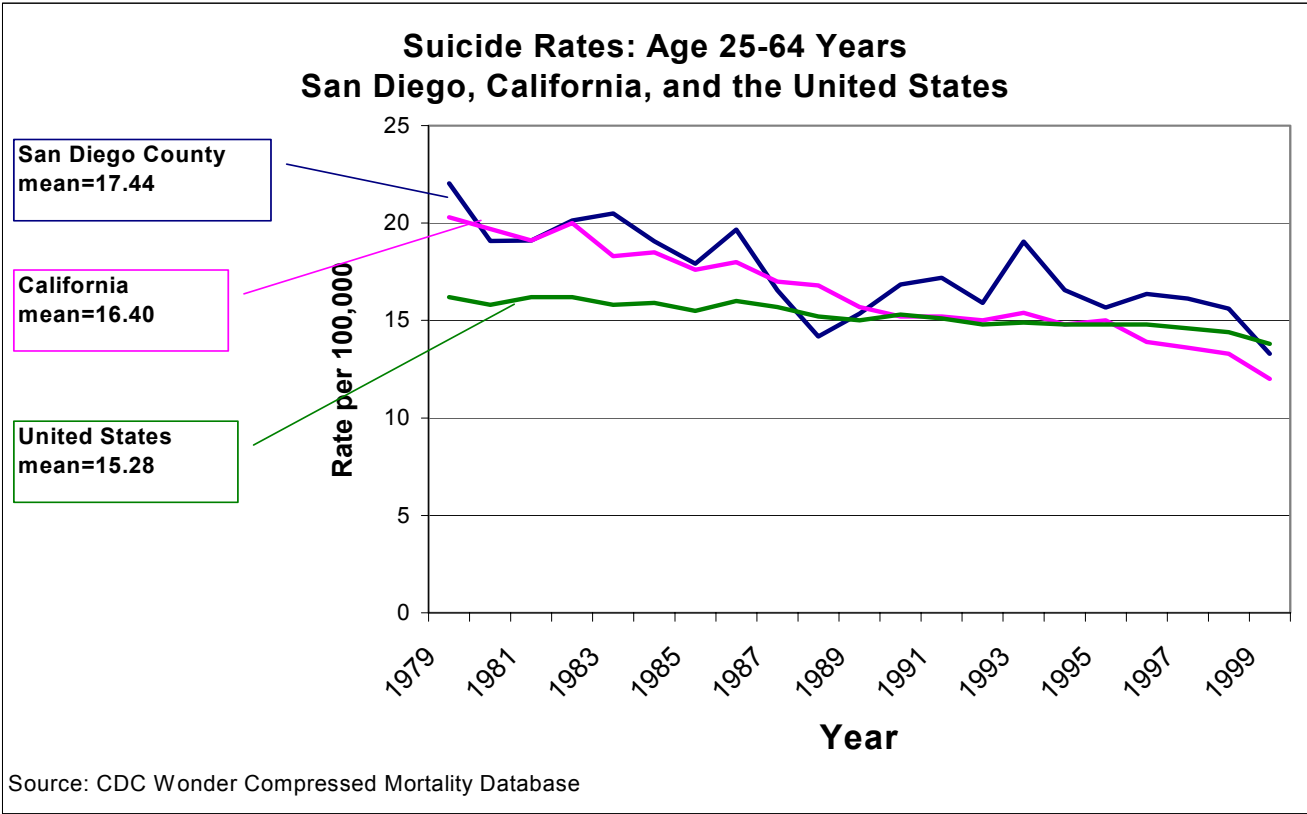
Where is it Happening?

The suicide rate was highest in the North County East Major Statistical Area (MSA), which encompasses Escondido, Fallbrook, Pauma, San Marcos, Valley Center, and Vista. The lowest rate was observed in the North City MSA, which covers the communities of Coastal (e.g., Pacific Beach, La Jolla), Del Mar, Kearny Mesa, Poway, and Scripps Ranch.



Comparison with California and the United States

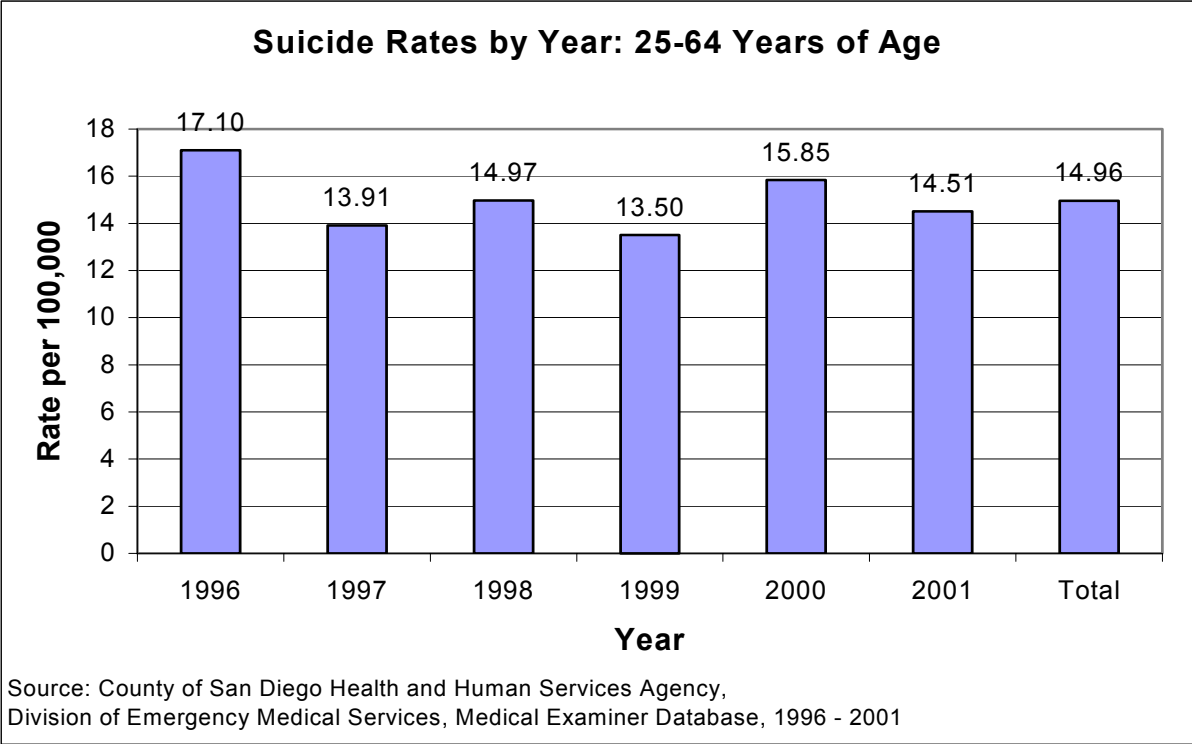
Suicide rates in working aged adults (25-64 years) over the past two decades have seen an overall decline, but remain at levels that are still too high. In contrast with the 15- to 24-year-age group, in which the suicide rate is lower in San Diego than in California or the United States, San Diego's working-aged adults have a relatively higher suicide rate.



Section 3: Working-Aged Adults

Annual Rates

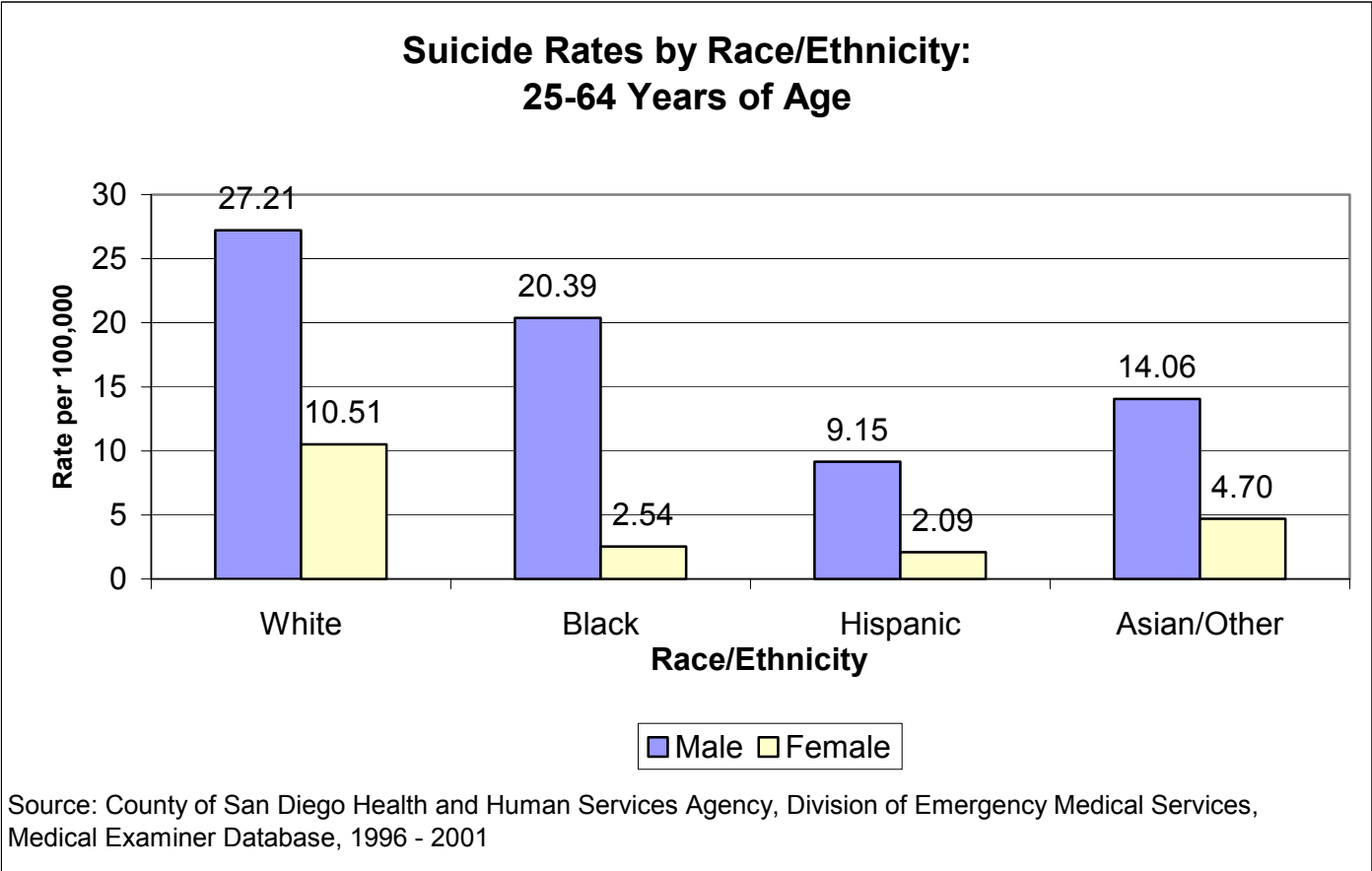
Completed suicides among working-aged adults in San Diego County have remained generally stable from 1996 through 2001, averaging 14.96 suicides per 100,000 people aged 25 – 64 years during this time period.



Section 3: Working-Aged Adults

Race/Ethnicity

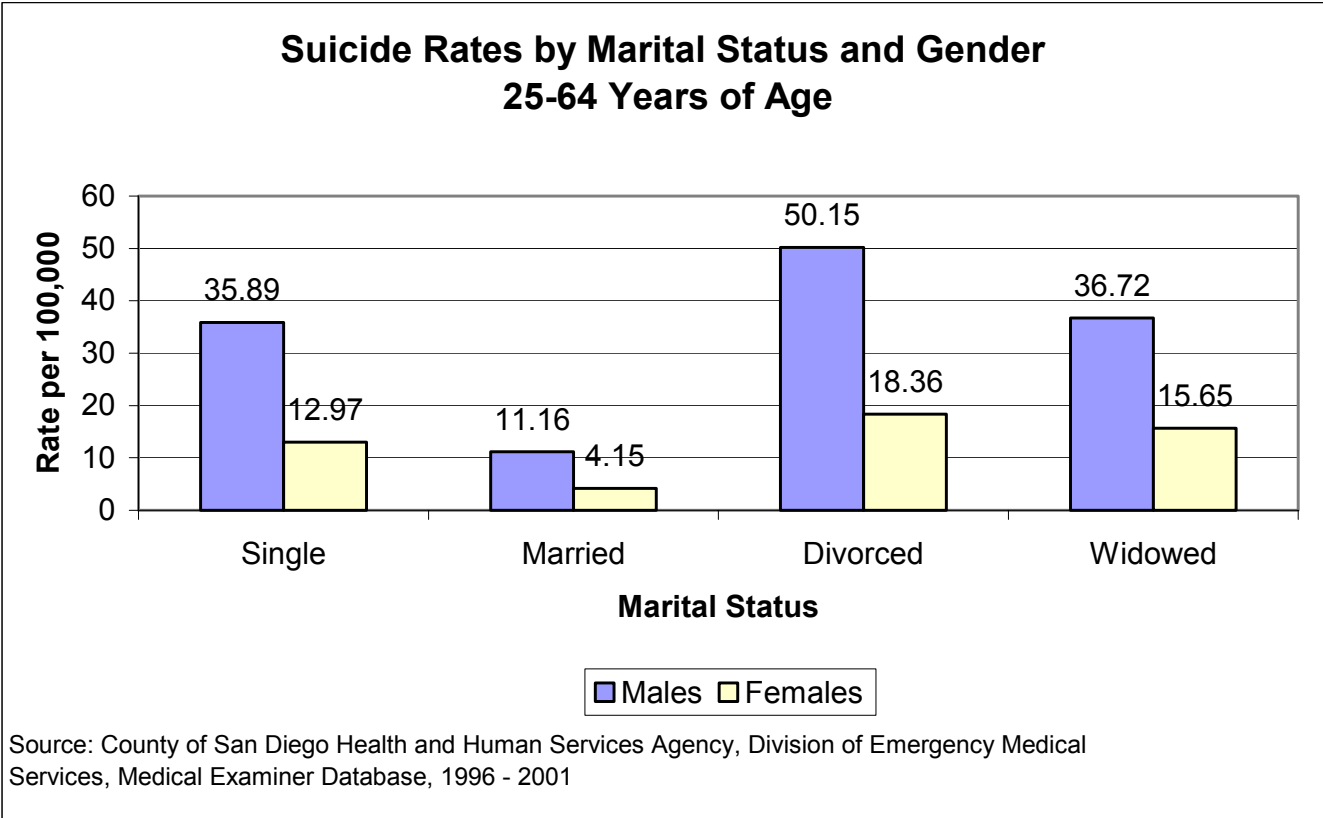
The suicide rate among working-aged adults was highest in Whites, with White males having the highest risk of any race/gender combination. Both genders were at increased risk in the White population compared with other racial/ethnic groups, and males were substantially more at risk of committing suicide among all racial/ethnic groups.



Section 3: Working-Aged Adults

Marital Status

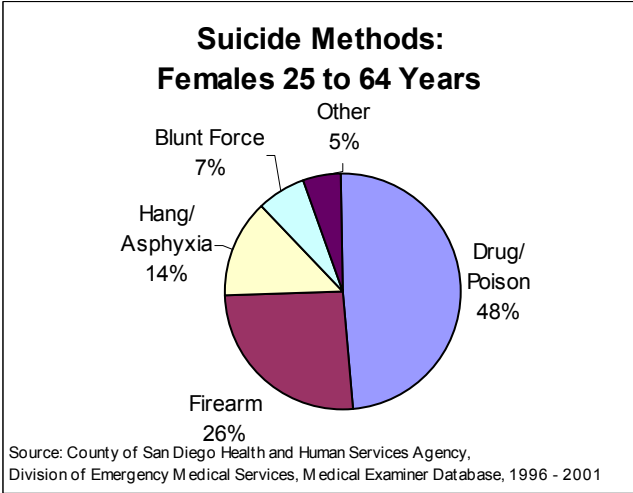
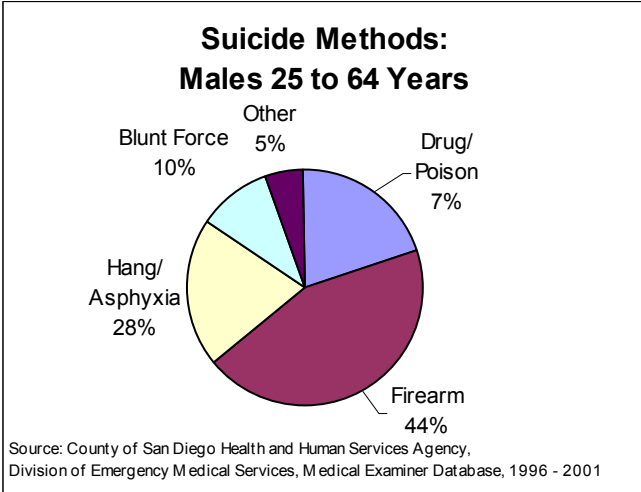
Among working-aged adults (25-64 years), it appears that marital status has a strong association with suicide risk. Those who were divorced, widowed, or single had a higher risk of suicide than those who were married. For example, a divorced male in this age group was nearly five times more likely to commit suicide than a married male.



Section 3: Working-Aged Adults

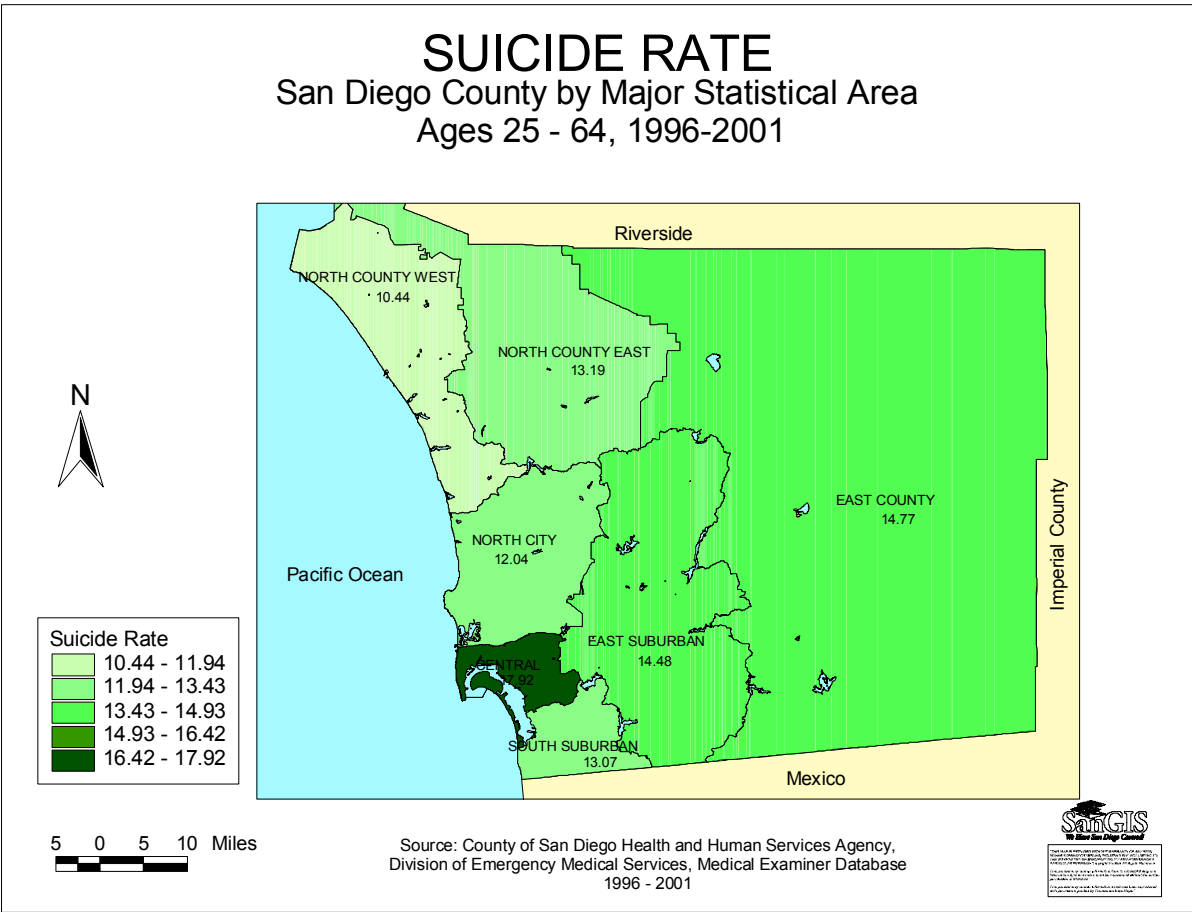
Suicide Methods

Firearms were by far the leading method of completed suicide among working-aged males, accounting for 44%. Among working-aged females, however, only 26% were attributed to firearms, with 48% choosing drugs/poisons. This closely parallels the breakdown of suicide methods used among all ages combined.



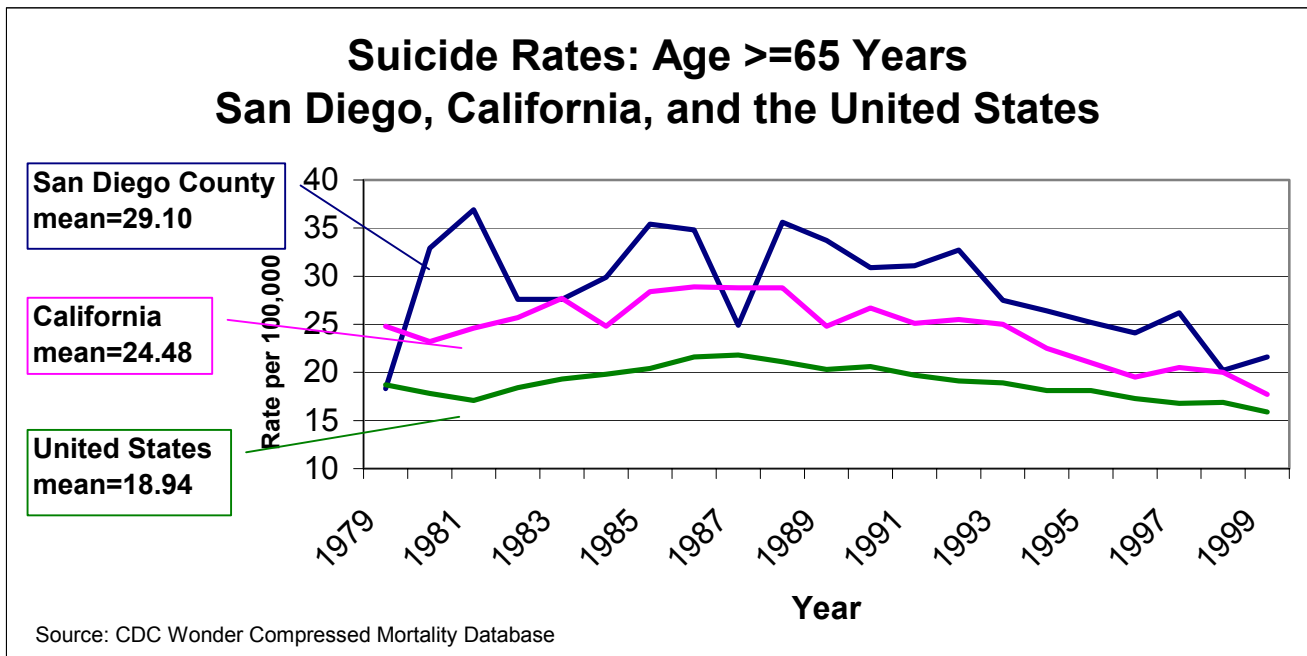
Where is it Happening?

Among working-aged adults (age 25-64), the suicide rate was highest in the Central Major Statistical Area (MSA), which encompasses downtown San Diego and the surrounding communities. The lowest rate was observed in the North County West MSA, which includes Carlsbad, Oceanside, Pendleton, and San Diegoito.



Comparison with California and the United States

According to data from the Centers for Disease Control and Prevention (CDC)⁸, the suicide rate among older adults (ages 65 and up) has been significantly higher in San Diego County than in either the state of California or the United States overall.

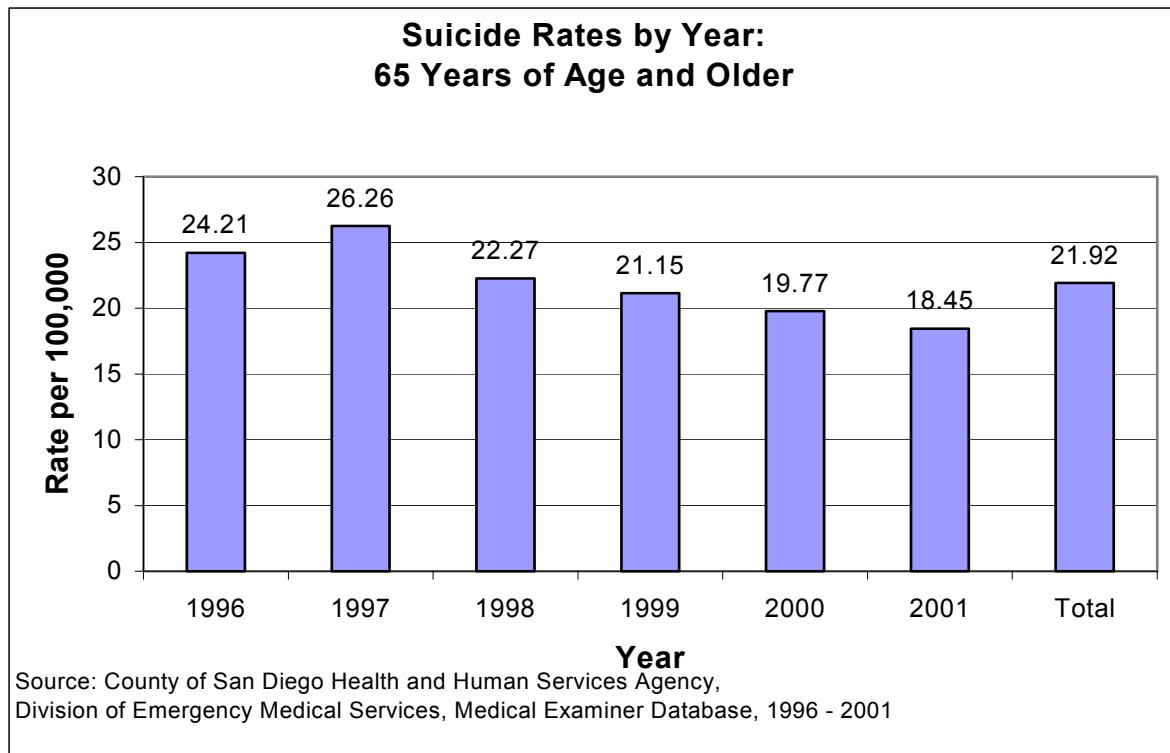


⁸ www.cdc.gov

Section 4: Older Adults

Annual Rates

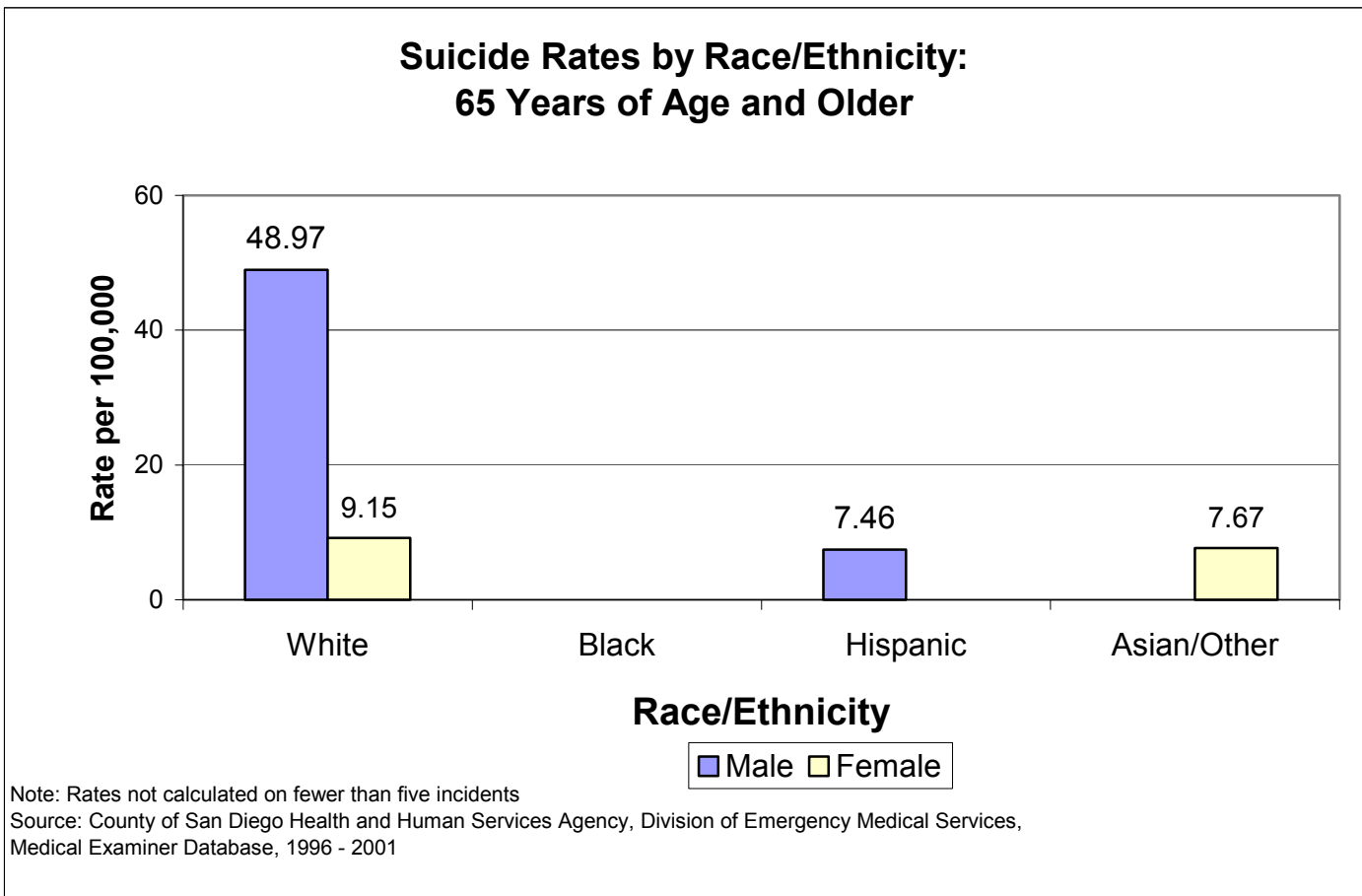
Although still too high, the rate of suicide among older adults (ages 65 and older) is inching downward. For example, the suicide rate in 2001 was almost 30% lower than it was in 1997.



Section 4: Older Adults

Race/Ethnicity

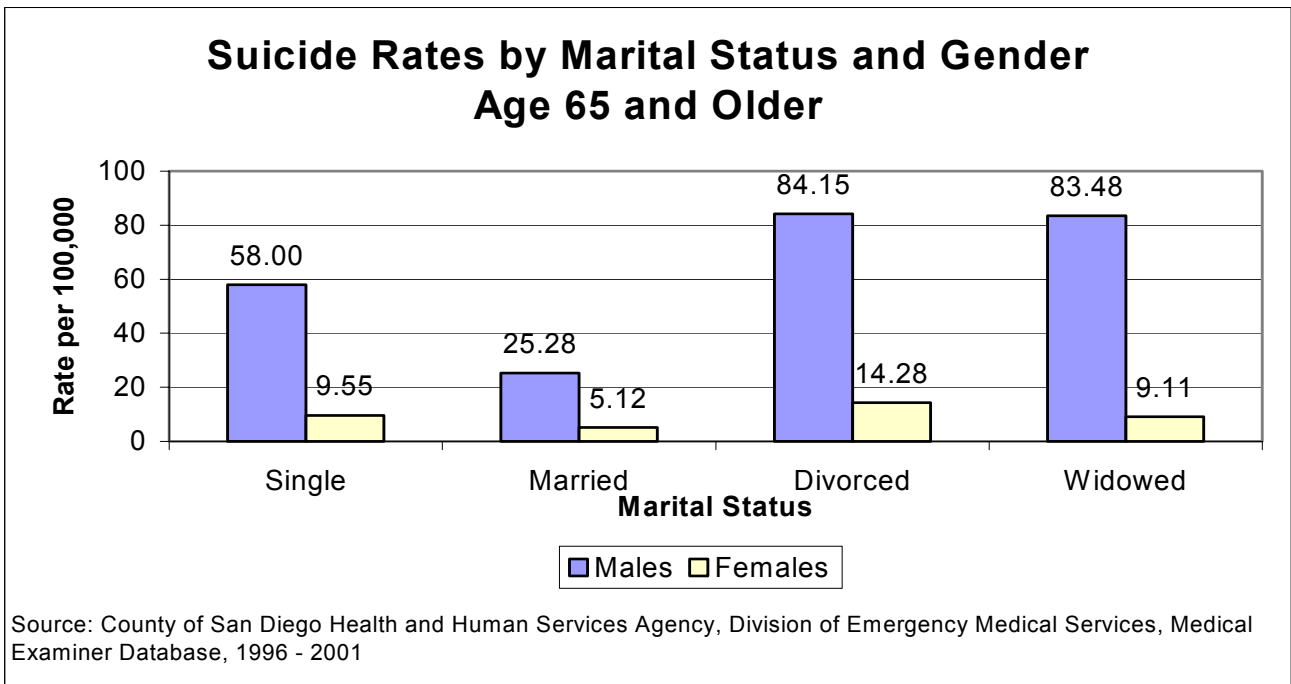
Suicide among older adults in San Diego County is largely a White male phenomenon. Almost 80% of suicides in this age group were male, and 95% were White.



Section 4: Older Adults

Marital Status

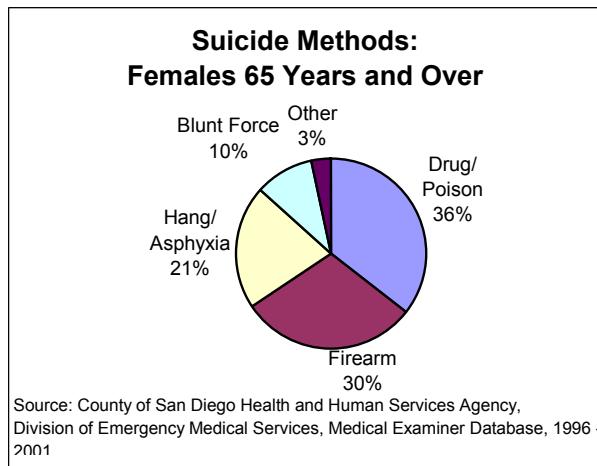
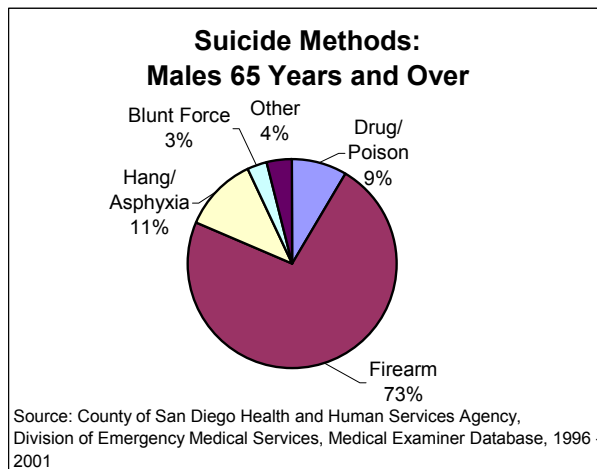
Among older adults (ages 65 and up), marital status has a strong association with suicide risk. Those who were divorced, widowed, or single had a higher risk of suicide than those who were married. For example, a divorced male in this age group was just over three times more likely to commit suicide than a married male. Note that this three-fold increase is in addition to an already high rate of suicide in this age group.



Section 4: Older Adults

Suicide Methods

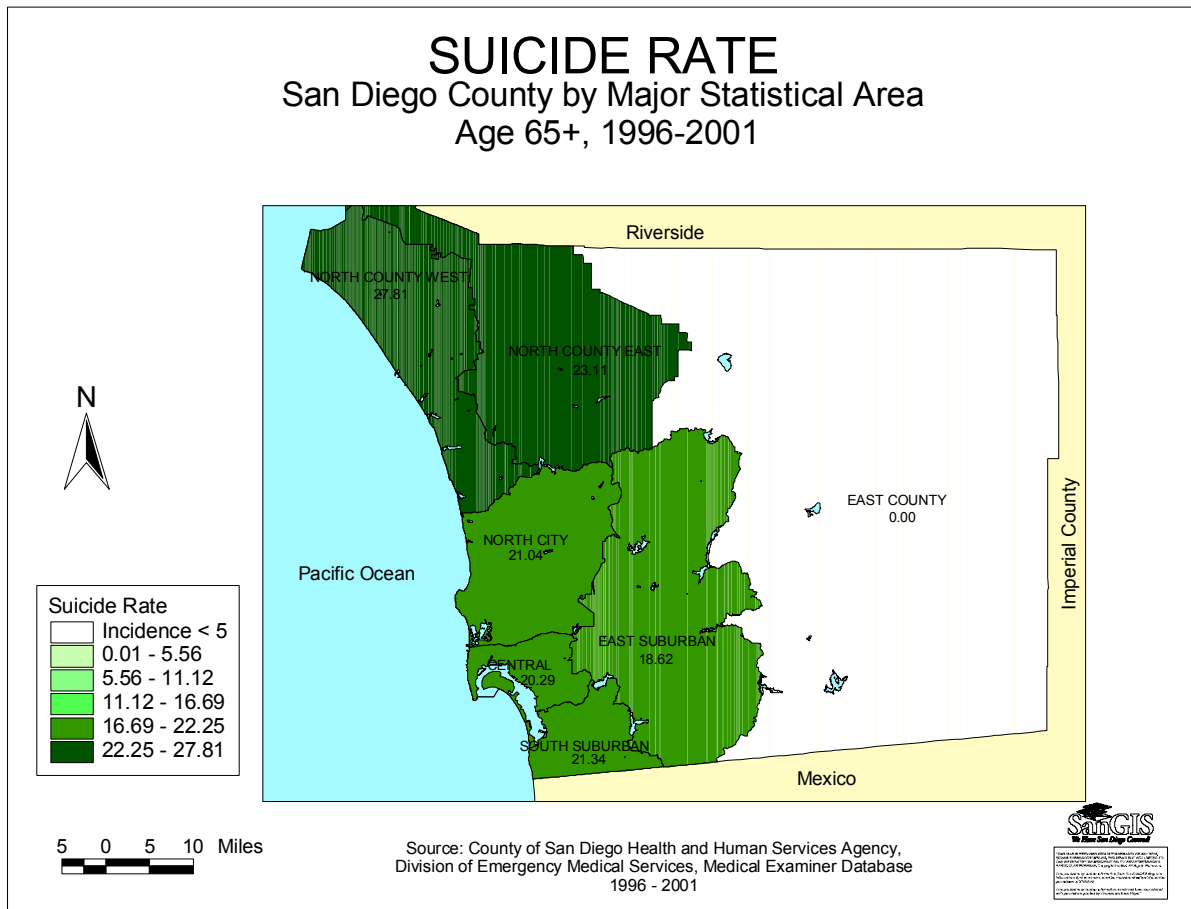
Firearms again were by far the leading method of completed suicide among older adult males, accounting for 73%. Among older adult females, however, only 30% were attributed to firearms, with 36% choosing drugs/poisons.



Section 4: Older Adults

Where is it Happening?

The suicide rate among older adults was highest in the North County West Major Statistical Area (MSA), which includes Carlsbad, Oceanside, Pendleton, and San Dieguito. The lowest rate was observed in the East Suburban MSA, which includes a large area stretching from Ramona south to the border which includes Alpine, El Cajon, Jamul, La Mesa, Lakeside, Lemon Grove, Santee, and Spring Valley.



End Note

Suicide is clearly a major cause of death in San Diego County. It is also a particular burden for certain age, gender, and ethnic groups, as well as certain geographic areas.

Nonetheless, suicide is, in many cases, preventable. At least 90 percent of all people who kill themselves have a mental or substance abuse disorder, or a combination of disorders.⁷ Thus, early recognition and treatment of mental illness and substance abuse problems are among the most promising approaches to suicide prevention. So, too, are strategies that target known risk factors, for example, the reduction in access to lethal suicide methods.

Putting these strategies to work requires a major investment in public health action, which in turn requires significant public awareness of the need for change. This report aims to be one means to help raise the public awareness necessary to achieve that end and reduce the rate of suicide in San Diego County.

⁷ Healthy People 2010, Volume II (second edition), Objective 18: Mental Health and Mental Disorders. Available at http://www.health.gov/healthypeople/Document/HTML/Volume2/18Mental.htm#_Toc486932699.