

Suicide Among 15 to 24 Year Olds by Gender, Race/Ethnicity and State 1900 to 2000

Suicide is the third leading cause of death among people 15 to 24 year olds, following accidents and homicide. Over all age ranges it is the eleventh leading cause of death so it strikes young people especially hard. In 1999 more teenagers and young adults killed themselves than were killed by cancer, heart disease, AIDS, birth defects, stroke and chronic lung disease combined. Reportedly, ten percent of college students considered suicide in the 1995 National College Health Risk Behavior Study.

In this analysis we examine suicide rates by gender for people 15 to 24 years old. We first reported data on suicides in the March 2002 issue of OPPORTUNITY (#117). This is a significant expansion of that earlier report.

Our interest in these gruesome data results directly from the relatively very poor performance of males compared to females in the education system in the United States over the last 30 years. While girls have been making steady progress year after year, boys seem to be stuck where they were in the 1960s:

- Between 1967 and 2000 the proportion of women ages 18 to 24 that were enrolled in college doubled from 19.2 to 38.4 percent. During this same period the proportion of men ages 18 to 24 that were enrolled in college decreased from 33.1 to 32.6 percent.
- In the fall of 1999 there were 5,559,000 men and 7,122,000 women enrolled in higher education as undergraduates. 30 years earlier there were 4,008,000 men and 2,876,000 women undergraduate students. The number of men enrolled increased by 39 percent and the number of women enrolled increased by 148 percent.
- In 2001 the proportion of bachelor's degrees awarded to women was 57.4 percent, although women are about 49 percent of the college-age population. Men with about 51 percent of the population earned just 42.6 percent of the bachelor's degrees.

By a broad array of measures young males are floundering in the educational system.

Here we examine an independent measure of the mental health of young males to add understanding of where our young men and women are in their lives. The results of this analysis should be no less than terrifying to those who are concerned about the lives and prospects of young males:

- During the first three decades of the last century males ages 15 to 24 were about 1.4 times as likely to kill themselves as were females of the same age. Beginning about 1930 this male-to-female suicide ratio began to grow and reached 2.0 in 1938, 3.0 in 1952, 4.0 in 1977, 5.0 in 1988 and peaked at 6.3 in 1993. In 2000 it was 5.8.
- Between 1960 and 2000 the suicide rate for males ages 15 to 24 increased from 8.2 per 100,000 population to 17.4, or by 112 percent. The suicide rate for females ages 15 to 24 increased 2.2 to 3.0 or by 36 percent.
- American Indians have the highest suicide rates among 15 to 24 year olds for both genders, and Asians the lowest.
- The male suicide rate in 2000 is more than 6 times the female suicide rates for white non-Hispanics, blacks and Hispanics.
- The most common means of suicide among 15 to 24 year olds in 2000 were gunshot and hanging.

The Data

The data used in this analysis have been collected since 1900 by the National Center for Health Statistics (NCHS) and its predecessors. We have scrambled to assemble the time-series of suicide data for 15 to 24 years olds by gender for the last 101 years. We have also visited the National Center for Health Statistics in Hyattsville, Maryland, to meet with professional staff on data issues.

Suicide data are now published by NCHS in the annual publication *Health, United States (year)*. This publication is available on the NCHS website at:

www.cdc.gov/nchs/products/pubs/pubd/02hustop.htm

Older data were published by the National Office of Vital Statistics of the U.S. Department of Health, Education and Welfare in annual vital statistics reports. These reports are available as pdf files at:

www.cdc.gov/nchs/about/major/dvs/mortdata.htm

We are particularly grateful to Arialdi Minino and Lois A. Fingerhut of the National Center for Health Statistics for their time and special efforts to prepare some of the data used in this analysis.

This analysis gathered and examined more data than space permits in this issue of OPPORTUNITY. Additional charts and spreadsheets--including state data on suicides by gender for 1998, 1999 and 2000--are available in the PDF version of this article from our Website, www.postsecondary.org.

Suicide Rates by Gender

In 2000 the death rate by suicide for 15 to 24 year olds was 10.4 per 100,000 population. For males the suicide rate was 17.4 and for females the suicide rate was 3.0.

The chart on page 12 shows suicide rates for males and females ages 15 to 24 years from 1900 through 2000. Generally suicide rates for young males and females were relatively high around 1910, dropped in the 1920s, rose again in the 1930s, were at their lowest in the 1940s and 1950s. Then in the late 1950s both rates begin to rise and diverge. The female suicide rate rose again until 1977 and has decline thereafter. The male rate continued rising until 1994 and has since declined.

Every year of the last century the male suicide rate is greater than the female suicide rate. But the gap in the rates begins to widen most sharply around 1960. For males the greatest increase in suicide rates occurs between 1956 when it was 6.3 per 100,000 and 1977 when it reached 22.9.

The male and female suicide rates appear to be on quite different trajectories during the second half of the last century. To examine this more carefully we have constructed the chart on page 13. This chart shows the ratio of the male suicide rate divided by the female suicide rate for 15 to 24 year olds between 1900 and 2000. This chart is especially useful in identifying the advent of the relatively more troubled lives of boys and young men compared to girls and young women. This chart shows that:

- Between 1900 and 1929 the ratio of the male to female suicide rates averaged 1.4. Males were about 40 percent more likely to kill themselves than were females.
- About 1930 this ratio began to increase. By 1938 it reached 2.05. Males were now twice as likely to kill themselves as were females.
- The next milestone was reached in 1952 when the male to female suicide ratio reached 3.25. From there it went to 4.32 in 1977, 5.21 in 1988, and peaked at 6.32 in 1994.
- After 1994 the suicide ratio declined 5.4 in 1997 before rising back to 5.8 in 2000.

While suicide rates for females ages 15 to 24 have generally declined over the last century, suicide rates for males have generally increased--particularly since the late 1950s. The result is that young males are now nearly six times more likely to kill themselves than are females. Apparently the lives of young women improved significantly during the last century, while the lives of young men were deteriorating, particularly after 1958.

We have examined suicide rates for 15 to 24 year olds by race and ethnicity with available federal vital statistics data. The results are largely consistent with the above findings.

Whites and non-whites. Suicide rates by gender for whites and non-whites are available for the years 1914 through 1993. Over this period suicide rates for whites both male and females have consistently been higher than the rates for

non-whites. The rates have tended to rise and fall together, and for both white and non-white males the rise in suicide rates is particularly sharp after the late 1950s.

But of particular interest here is the ratio of male-to-female suicide rates for white and non-whites ages 15 to 24 years. We have plotted these data for the years of available data, 1914 through 1993. The charted results are available in the PDF version of this analysis on our Website. The ratios for whites and non-whites are nearly identical over the 80 years of available data.

The chart on page 14 shows male and female suicide rates for 15 to 24 year olds by race/ethnicity. In each racial/ethnic group the male suicide rates are several multiples of the female rates. Here the greater racial/ethnic detail is helpful:

- Among males suicide rates were highest for American Indians and white non-Hispanic males, and lowest for Asians.
- Among females the suicide rate for American Indians stands out as highest, while the rates for black and Hispanic females are lowest.

States. Our analysis of available data on suicides by gender among 15 to 24 year olds at the state level was hampered by the lack of population controls that would have permitted the calculation of suicide rates. Nevertheless Arialdi Minino of the National Center for Health Statistics tabulated the numbers of suicides by gender for the 15 to 24 year old age group by state for the years 1998, 1999 and 2000. We have recompiled his data to calculate the male proportion of all suicides among 15 to 24 year olds in each state during these years. The results are shown in the chart on this page.

For these years and this age group there were 10,282 male and 1,758 female suicides in 1998, 1999 and 2000. Therefore 85.5 percent of the suicides were males and the balance of 14.5 percent were females. For each female suicide there were 5.8 male suicides.

Across the 50 states plus the District of Columbia the share of suicides by males ranged from 93.8 percent in **Vermont** to 72.2 percent in **Hawaii**. We see no clear geographic pattern here: in every state males more often kill themselves than do women in the 15 to 24 year old age group, usually by better than a 5 to 1 margin.

Conclusion

Suicide has become a guy thing. It was not always so. In the first three decades of the last century males between 15 and 24 years were only slightly more likely to kill themselves than were females. But in the last four decades of the last century young males took suicide over as their way out of the challenges they faced in their lives. Young males are now about six times more likely to kill themselves than are young females.

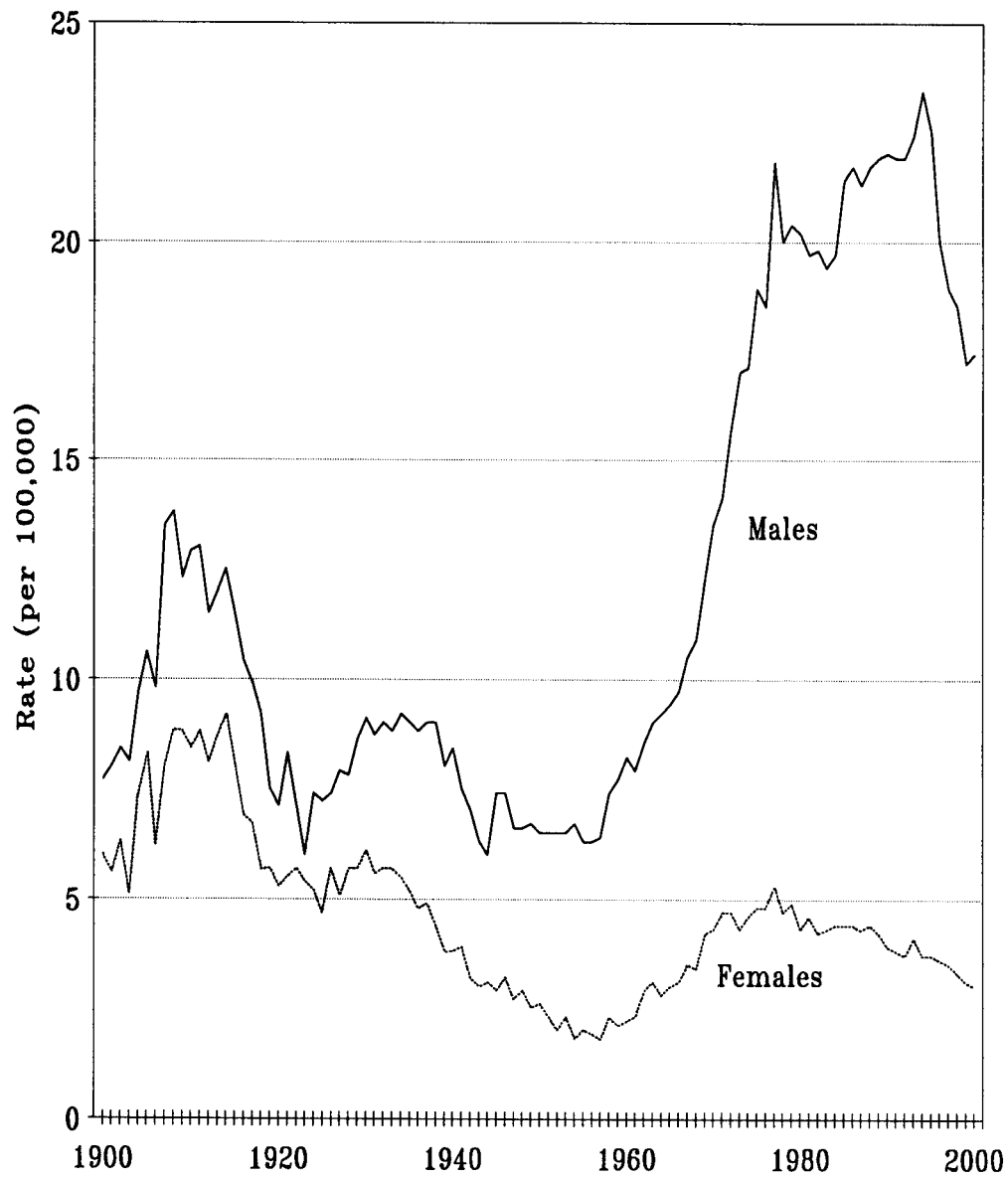
Our interest in suicide is to use it as an independent measure of the minds of young men, particularly compared to the mental health of young women.

When considered in this way, the long time series of male to female suicide ratios offers useful insight. The appearance of mental health problems disproportionately affecting young males begins about 1930, at the beginning of the Great Depression. Until then males were only about 40 percent more likely than females to kill themselves. But by 1938 they were twice as likely.

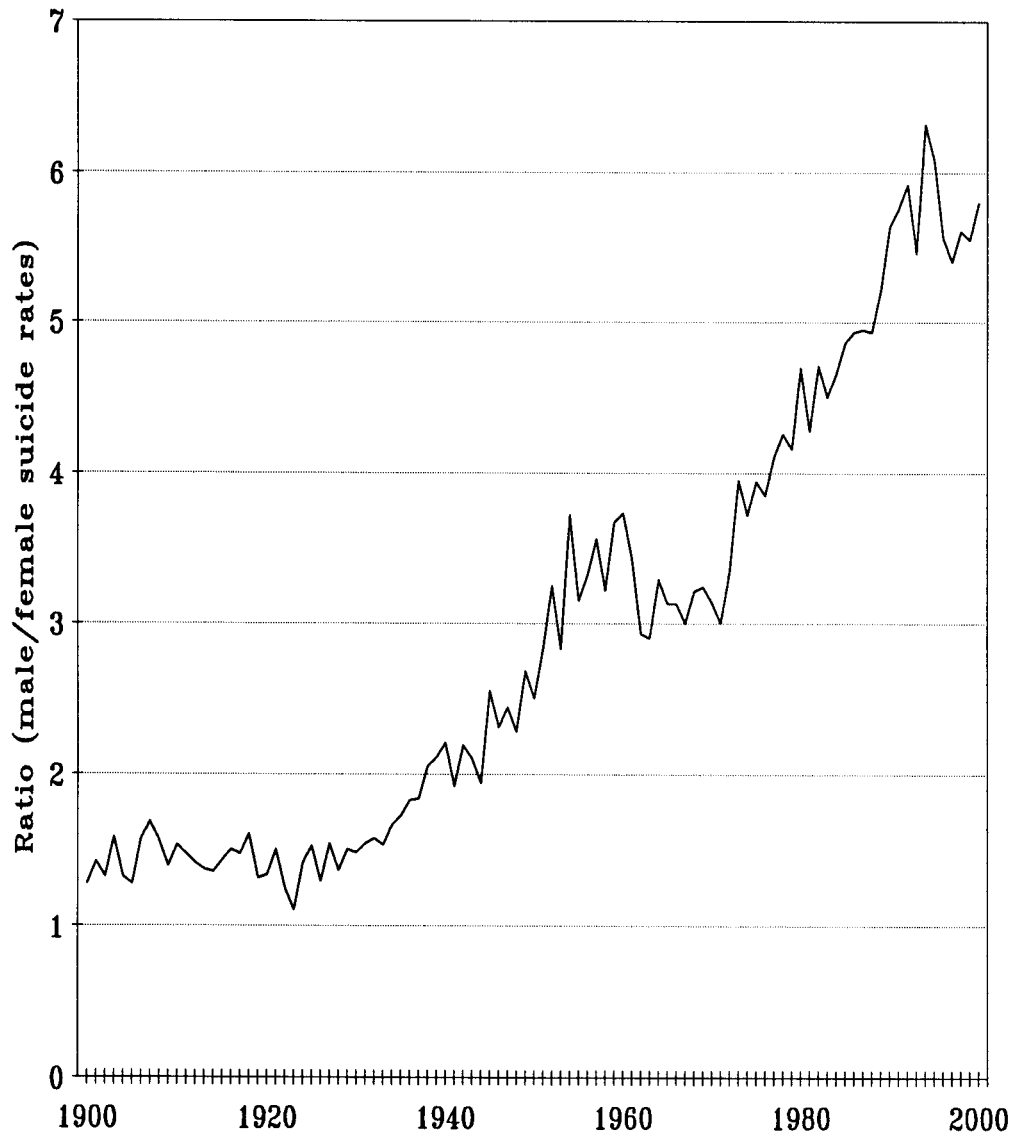
The steady deterioration in young male mental health continued unabated after the Depression, through World War II, abating briefly in the late 1960s and early 1970s before resuming its gruesome growth to the peak reached in 1994. The starkness of the picture portrayed by these data pleads for response.

The past century was far kinder to young women than it was to young men. Our young men deserve better.

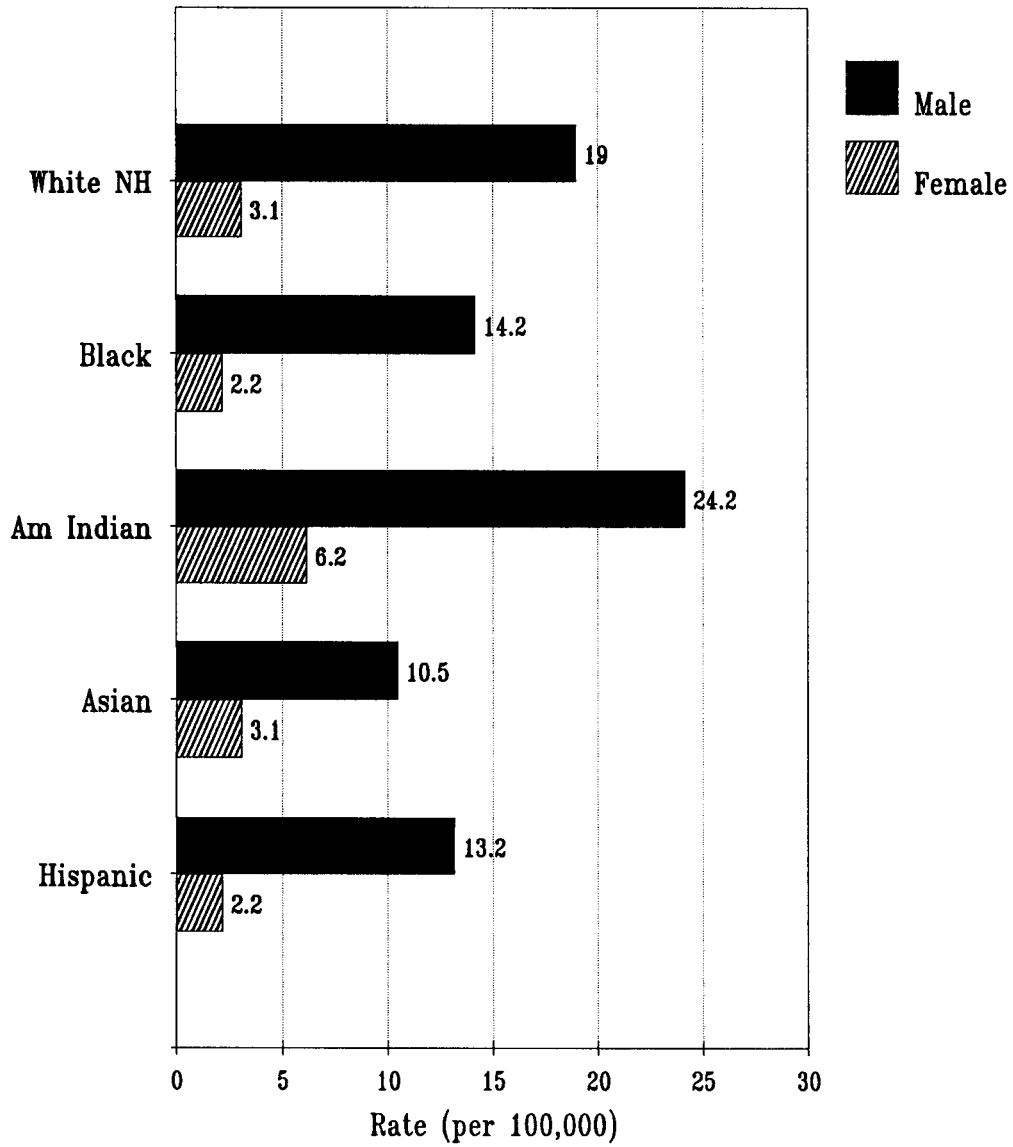
Suicide Rates for Males and Females Ages 15 to 24 1900 to 2000



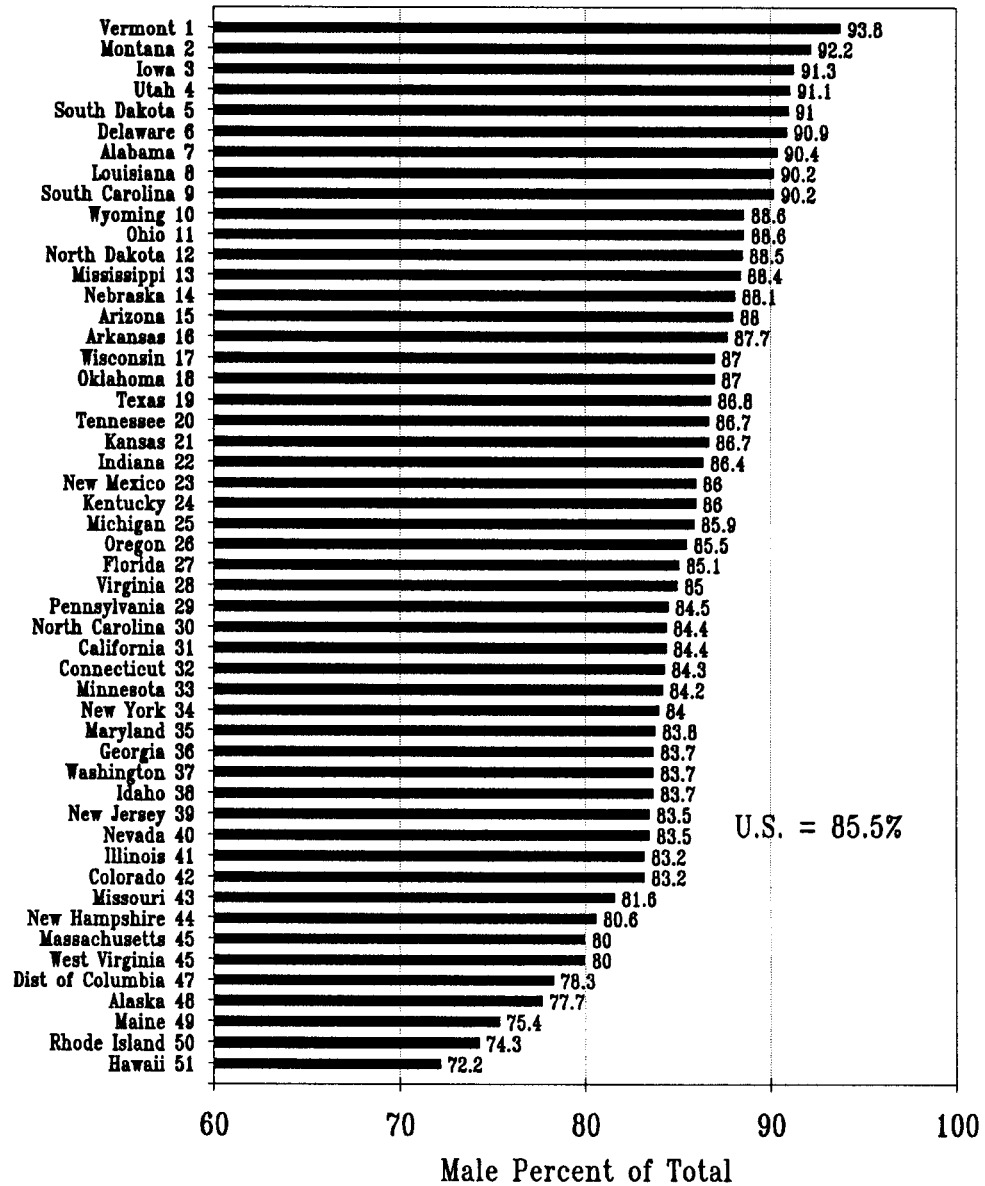
Ratio of Male to Female Suicide Rates
Among 15 to 24 Year Olds
1900 to 2000



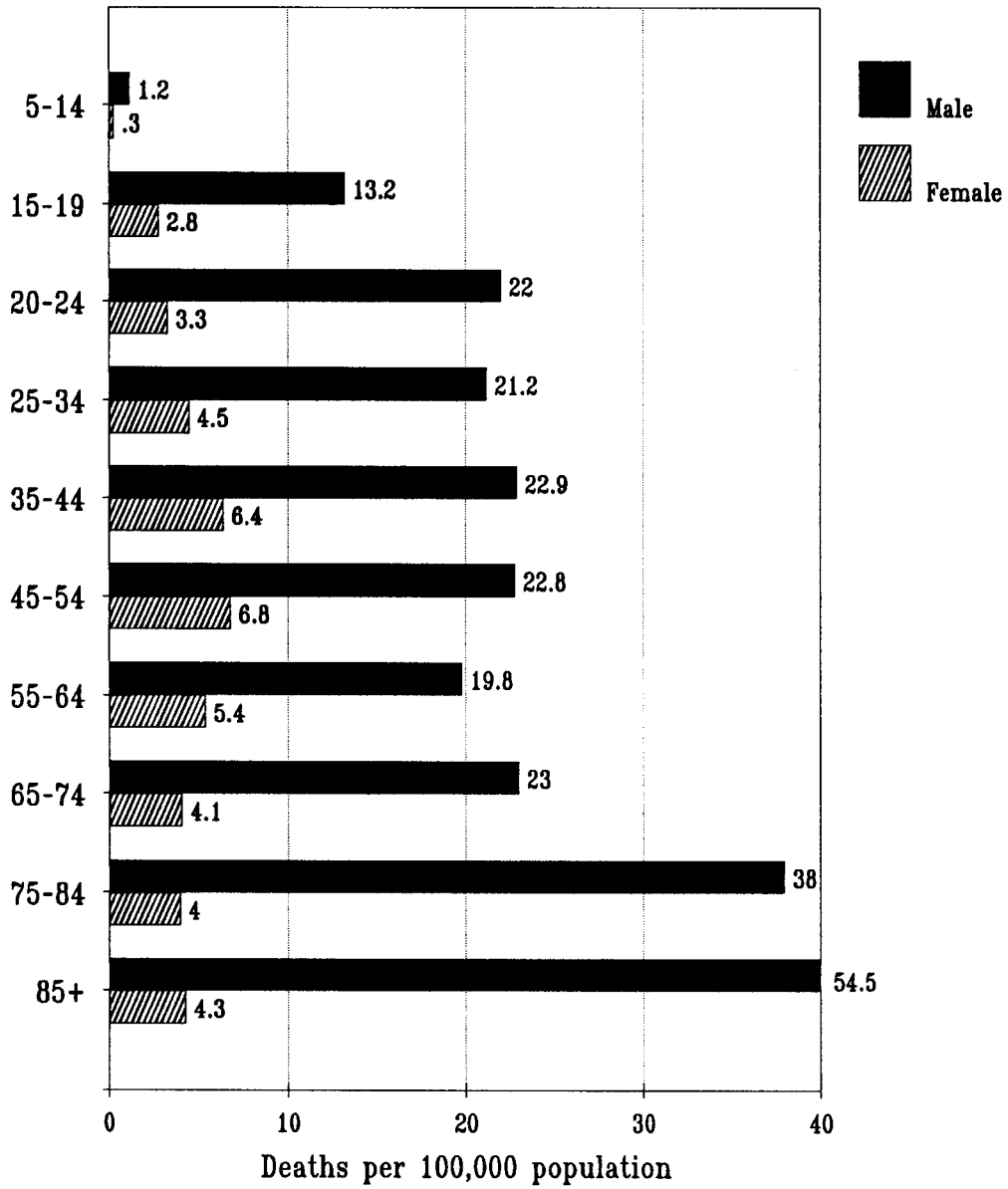
**Suicide Rates by Gender and Race/Ethnicity
for Ages 15 to 24 Years
2000**



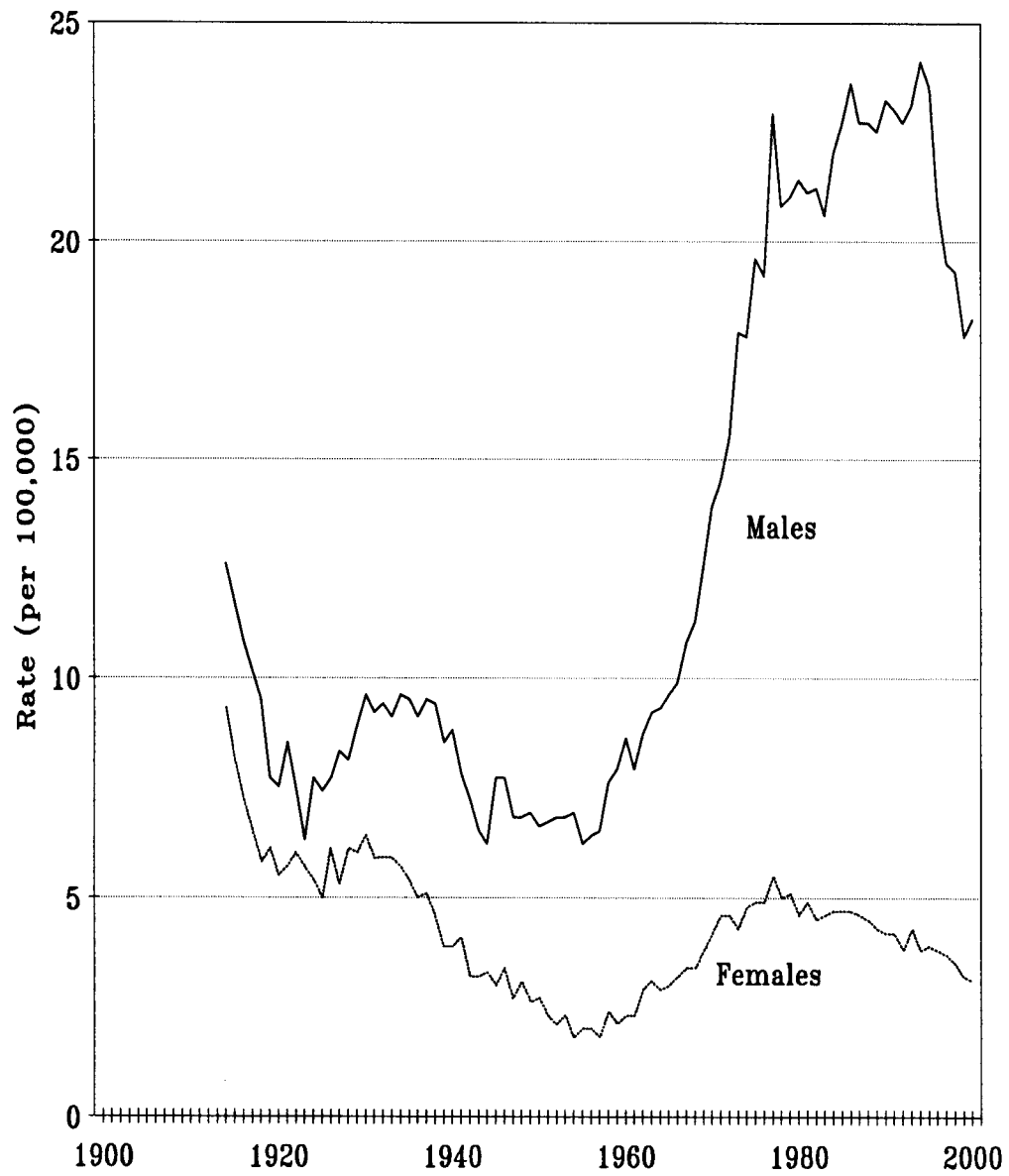
Male Share of Suicides Among 15 to 24 Year Olds by State 1998 to 2000



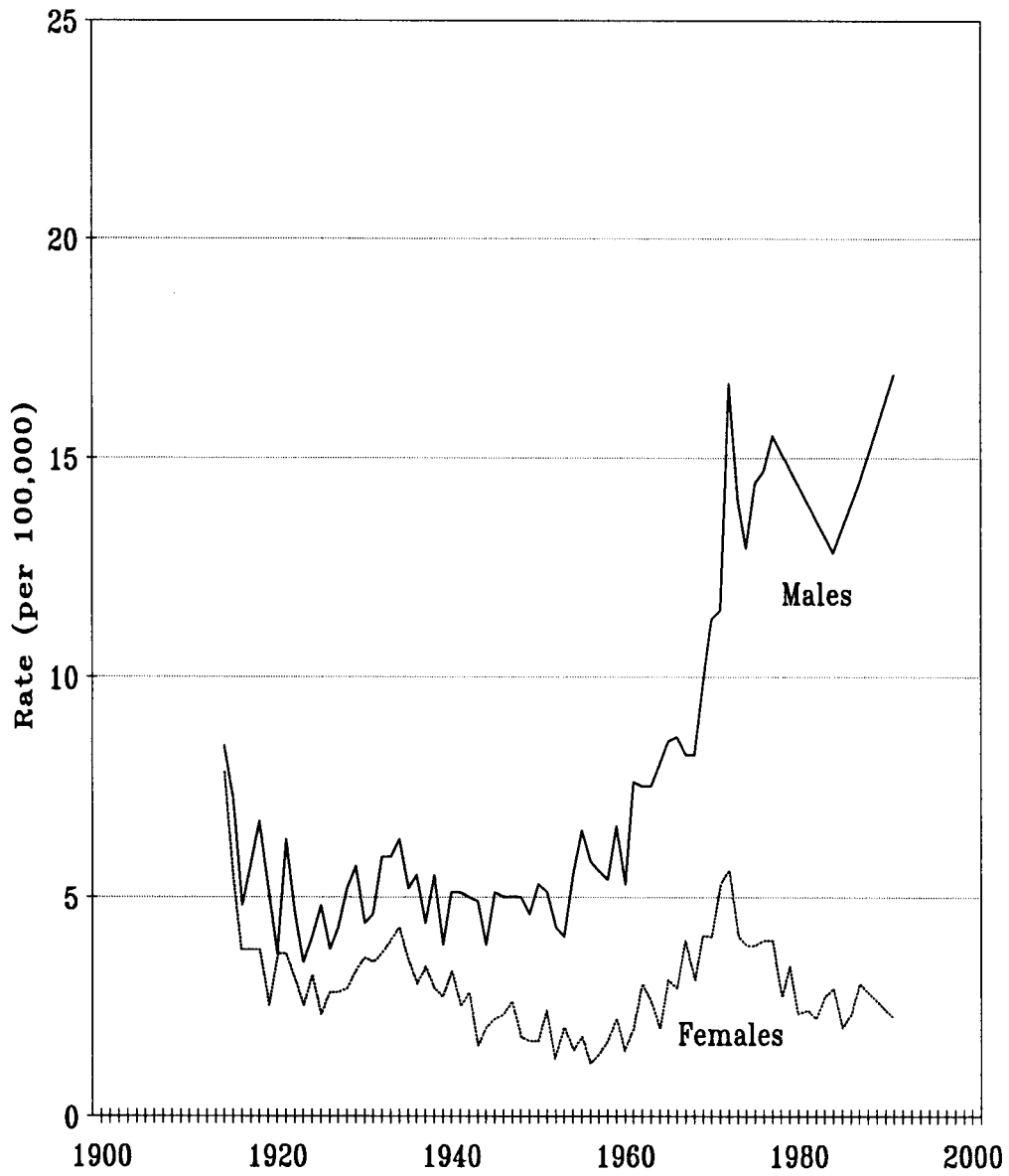
Suicide Rates by Gender and Age 2000



Suicide Rates for White Males and Females Ages 15 to 24 1914 to 2000



Suicide Rates for Non-White Males and Females Ages 15 to 24
1914 to 1993



Ratio of Male to Female Suicide Rates
for Whites and Non-Whites Ages 15 to 24 Years
1914 to 1993

