

# Epidemiology

## & Program Evaluation

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*An informational bulletin from the Riverside County Department of Public Health*

## Suicide in Riverside County, 2008

### Introduction

Older adults and older men in particular have the highest suicide rates in Riverside County and across the U.S. Meanwhile, women are more likely than men to be hospitalized for attempting suicide, particularly as teens and middle aged adults. While there are many risk factors for suicide, depression is very common for all victims. Other risk factors include: family history of mental disorder or substance abuse; family history of suicide; family violence, including physical or sexual abuse; firearms in the home; incarceration; and exposure to the suicidal behavior of others.<sup>1</sup>

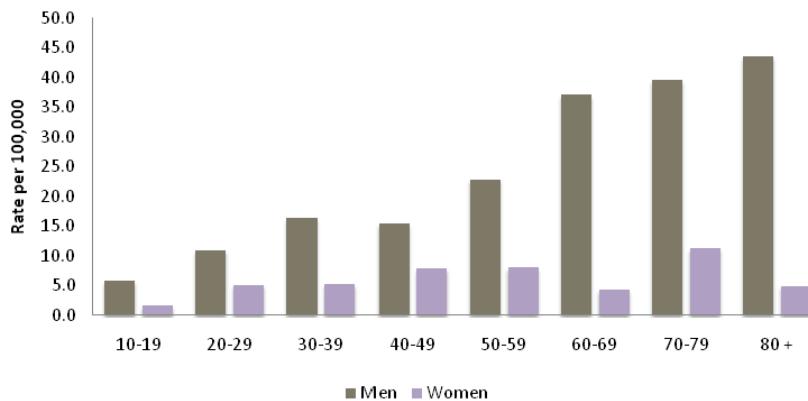
This health brief will explore the available data to shed more light on this largely preventable public health problem and its impact on Riverside County residents.

### Key Findings

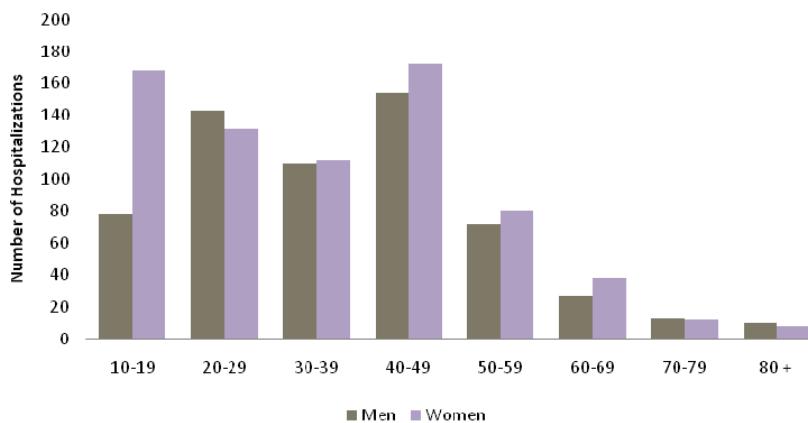
In Riverside County...

- Suicide is the 9th leading cause of death, taking more lives than homicide.
- Though only 14 percent of the population, residents over 60 years old account for over 30 percent of suicides.
- Nearly 80 percent of suicide victims are White.
- Females aged 10-19 years are twice as likely to be hospitalized for attempted suicide.

**Exhibit 1. Suicide Rates by Age and Sex, Riverside County, 2008**



**Exhibit 2. Self-harm Hospitalizations by Sex and Age, Riverside County, 2008**



### Suicide

In 2008, Riverside County recorded 200 suicide deaths (150 males, 50 females) equating to an age-adjusted rate of 10.1 suicides per 100,000: a rate more than double the Healthy People 2010 goal of 4.8 deaths per 100,000. For perspective on the magnitude of this problem, there were 109 homicides in 2008, nearly half the number of suicides.

As can be seen in Exhibit 1, suicide does not impact all groups equally. Taking a closer look at suicide rates by sex and age, we see that in 2008 men committed suicide roughly 3 times more often than women. When looking at residents over age 60, men commit suicide 4 times more often than women. Meanwhile, the overall suicide rate spikes to 24 deaths per 100,000 population in the 70 to 79 year old age group, versus 4 deaths per 100,000 in the 10 to 19 year old age group.

### Attempted Suicide

National sources estimate that there are 25 attempted suicides for every suicide.<sup>2</sup> While men commit suicide more often, women are hospitalized for suicide attempts (self-harm) over 30 percent more often than men in Riverside County. From 2003 to 2007, females averaged 859 hospi-

*(Continued from page 1)*

talizations per year compared to 647 hospitalizations for men. This disparity is most obvious among adolescents where the ratio of hospitalization for girls to boys is roughly 2 to 1 (Exhibit 2). A growing body of research implicates adverse childhood events like physical or sexual abuse as strong risk factors for attempted suicide among teens.<sup>3</sup> Since 2001, the leading cause of non-fatal injury among County teens has been attempted suicide, with rates nearly double that of motor vehicle crashes.<sup>4</sup>

As age increases, the ratio of men to women who attempt suicide becomes nearly 1 to 1. The number of unsuccessful suicide attempts drops off markedly for those over 60, as recovery from bodily trauma becomes less likely with age. As Exhibit 3 illustrates, the rate of attempted suicide peaks in middle age while completed suicide is highest among those 70 to 79. Whether someone is hospitalized for a suicide attempt or actually completes the suicide is also largely a function of the chosen manner and its lethality.

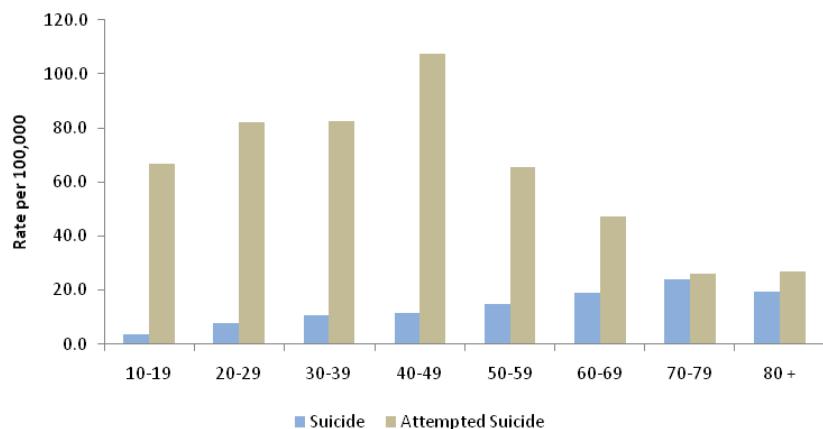
## Manner of Suicide

In 2008, firearms were involved in 45 percent of suicides, followed by hanging/suffocation and poisoning at 26 and 23 percent, respectively. For men, firearms were the most commonly used method at 54 percent, while women chose poisoning in 46 percent of suicides. According to a recent study examining suicide and firearm use among male decedents, older age, veteran status, residing in areas with higher rates of firearm availability, raised blood alcohol concentration, acute crisis and relationship problems were all associated with firearm use. Rather than being severely depressed, men who use firearms to commit suicide may be reacting to acute situations.<sup>5</sup>

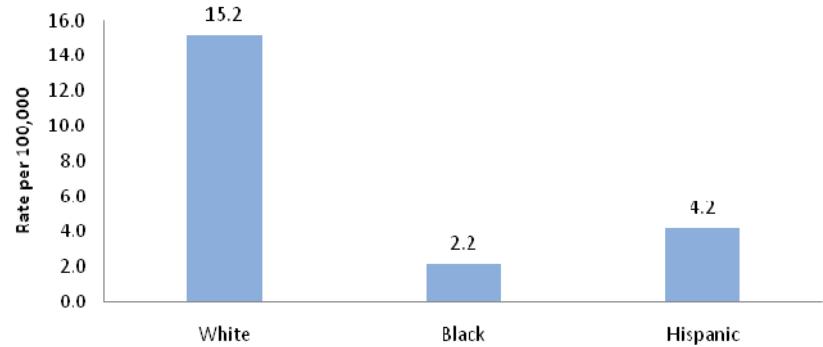
## Race/Ethnicity

The rate of suicide among Whites is nearly 3 times higher than Hispanics and 7 times higher than African Americans. Nearly 80 percent of suicides are committed by white county residents and nearly 60 percent of all suicide vic-

**Exhibit 3. Completed vs. Attempted Suicide by Age, Riverside County, 2008**



**Exhibit 4. Suicide Rate by Race/Ethnicity, Riverside County, 2008**



tims are white men. This is part of a national trend that research has not adequately explained. While the rate for American Indian/Native Americans was not calculated due to the small number of victims in the county, at the national level, suicide is the 2nd leading cause of death among Native Americans aged 15 to 34.<sup>2</sup>

## From the desk of Rebecca Hansen, Injury Prevention

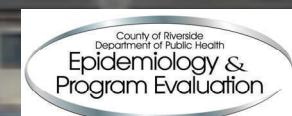
Suicide is a significant problem in Riverside County, taking the lives of youth and elderly. Adolescent girls and middle-aged men and women are most likely to be hospitalized for attempted suicide while men above the age of 60 are the most frequent victims of suicide. Firearms were involved in most male suicides while poisoning was most common among female victims. Significant racial/ethnic disparities are evident with most victims being White. Prevention efforts should focus on these groups, including youth and elderly, providing education and social support to those most at risk of suicidal ideation and behavior.

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