

Slide 1: These slides were created by the University of California, Davis Violence Prevention Research Program and last updated in February 2019.

Slide 2: From [C.D.C.'s New Chief Worries as Much About Bullets as About Bacteria](#), a conversation with Dr. David Satcher published in the New York Times on 26 September 1993.

Slide 3: Data come from [CDC WISQARS](#) (Web-based Injury Statistics Query and Reporting System) and from the 2015 *Mother Jones* article entitled [The True Cost of Gun Violence in America](#) by Mark Follman et al.

Slide 4: The mortality rate from firearm violence has remained essentially unchanged since just before the turn of the twenty-first century.

Relatively low rates of firearm violence during the 1950s and early 1960s (average 7.3/100,000 population during 1951 to 1963) were followed by a rapid increase through the mid-1970s, a secondary increase into the early 1990s to rates higher than ever previously recorded, and a rapid decline from 1994 to 1999. Rates remained stable thereafter and above the 1950s-1960s baseline (average ~10/100,000 population during 1999 to 2013). A new upward trend began in 2015.

By contrast, mortality rates from motor vehicle traffic events declined by nearly 60% from 1969 to present, such that for the past several years mortality from motor vehicle traffic events only slightly exceeded that from firearm violence. In 2017, these lines crossed for the first time in history.

Slide 5: Over the decade ending in 2017, most deaths from firearm violence have been suicides, not homicides. Even when firearm homicide rates were at their highest during the late 1980s and early 1990s, and for most of the twentieth century, firearm deaths from suicide have outnumbered those from homicide. Nearly two-thirds (60%) of deaths from firearm violence were suicides in 2017.

Slide 6: In 2017, the risk profiles among males for firearm homicide and suicide differed substantially. Homicide risk peaked at age 20-24 and declined thereafter, and mortality from homicide exceeded that from suicide through aged 35-39. Suicide risk generally increased with age, such that the firearm suicide rate exceeds the firearm homicide rate beginning at ages 40-44. The age-related increase in suicide risk was particularly evident among the elderly.

Slide 7: Homicide risk is concentrated to a remarkable degree among black males through much of the lifespan. In 2017, the firearm homicide rate for black males aged 20-29 was at least five times higher than that for Hispanic males and nearly 20 times that for white males in the same age group.

Slide 8: Firearm homicide historically has been concentrated among black males: at its peak in 1993, the firearm homicide rate for black males was more than double that for Hispanic males and more than 15 times that for white males. Firearm homicide rates declined for males from the early 1990s to 1999 but began to increase again in 2015.

Slide 9: In contrast to homicide, risk for firearm suicide is concentrated among white males, and the disparity increases with age. In 2017, rates for whites during adolescence and early adulthood rose more than those for blacks and Hispanics and generally continued to increase with age thereafter, most rapidly beginning at ages 65-69. In contrast, rates for black and Hispanic males decreased following young adulthood until middle age, before increasing again among the elderly.

From age 45 onward, the firearm suicide rate for white males was at least 3 times that for black or Hispanic males.

Slide 10: In 2017, risk of death from firearm violence, including both suicide and homicide, was highest among black males through the age of 49. White males were at greatest risk thereafter, but at rates well below those for younger black males.

The findings presented through this point have followed a traditional public health paradigm, emphasizing subsets of the population that are at highest risk for firearm violence. The population health model, however, stresses that the greatest number of cases—often called the burden—of an adverse health condition may arise from low-risk subsets of the population, if those subsets are sufficiently large. Mortality from firearm violence among males provides a good example of the advantages of employing both these complementary perspectives at once.

Slide 11: This graph illustrates the burden of firearm violence. The numbers of deaths involved are the same as in the prior graph. Black males have the highest number of deaths from firearm violence in any one age group: in 2017, there were 1,897 deaths from firearm violence among black males age 20-24. Note, however, the burden of firearm violence among older white, non-Hispanic males.

Slide 12: Firearm homicide rates for black females exceed those for white or Hispanic women throughout nearly the entire lifespan. For the 20-24 age group, the rate of firearm homicide for black females is nearly five times that for Hispanic females and seven times that for white females.

In 2017, the firearm homicide rate for black females in this 20-24 age group was less than 10% of the rate for black males in the same age group. At the same time, the firearm homicide rate for black females from birth through ages 35-39 exceeded that for white males in those age groups.

Slide 13: Firearm suicide rates for females are highest for whites throughout the lifespan. At their peak, in the 50-54 age group, the rate for white females is more than six times higher than those for black and Hispanic females.

In 2017, the firearm suicide rate for white females between ages 50 and 54 was less than 25% the rate for white males in the same age group.

Slide 14: The death rate from unintentional firearm injury remains pretty stable for youth through age 21, but rates for firearm homicide and suicide both begin steady increases around age 12.

Slide 15: All graphed data come from [CDC WISQARS](#) (Web-based Injury Statistics Query and Reporting System), 1981-2017.