



Guns and Suicide

Suicide is the 10th leading cause of death in the United States, responsible for more American deaths than Parkinson's disease, liver disease or hypertension.¹ In 2017, the most recent year for which data are available, more than 47,000 Americans died by suicide—an average of 129 per day.² The number of suicide deaths is dwarfed by the number of attempts—estimated at roughly 1.4 million in the United States that same year. More than 10 million American adults reported that they seriously thought about suicide in 2017.³

The problem is getting worse. According to data from the Centers for Disease Control and Prevention (CDC), the age-adjusted rate of suicide in the United States rose by about 30 percent in the last two decades, with increases for almost every age group. The suicide rate has increased every year for the past decade.⁴

The growing suicide rate in the United States is driven in large part by the lethality and easy accessibility of guns, which in 2017 were used in more than half of suicides.⁵ About 85 percent of those who attempt suicide with a gun die; without a gun, about 95 percent survive.⁶ Research shows that the impulse of suicide often is sudden and transitory, and nine of 10 survivors do not attempt again. An analysis of 14 scientific studies found that having access to a firearm triples the risk of death by suicide.

Geography is a strong predictor of the prevalence of gun suicide.⁷ Those living in rural areas are almost 75 percent more likely to die by firearm suicide than those in metropolitan areas. Residents of Montana are almost 10 times more likely than those of New York. Residents of Wyoming and Alaska are more than four times as likely as those of California.

Firearm suicide correlates strongly with gender; men are six and a half times more likely than women to die by gun suicide. The gun suicide rate also varies widely by age, education level and veteran status. Individuals ages 65 and over are twice as likely as teenagers to die by gun suicide. Veterans and service members are one and a half times more likely than those who have not served in the military.

Differences in firearm suicide rates are even starker when associated factors are considered together. For example, the firearm suicide death rate for older men in rural areas is more than 20 times the rate for older women in metropolitan areas. Compared to black men ages 65 and over, older white men have an up to five times higher risk for gun suicide.⁸

These striking data make it clear that portions of the U.S. population are suffering from a suicide epidemic. However, this epidemic is not restricted to certain demographics—gun suicide rates are growing across age, gender, geography, income, educational status and other factors. More research is needed to find ways to address this growing problem, but one thing seems certain—easy access to firearms is a primary contributor to the suicide epidemic.

KEY FACTS:

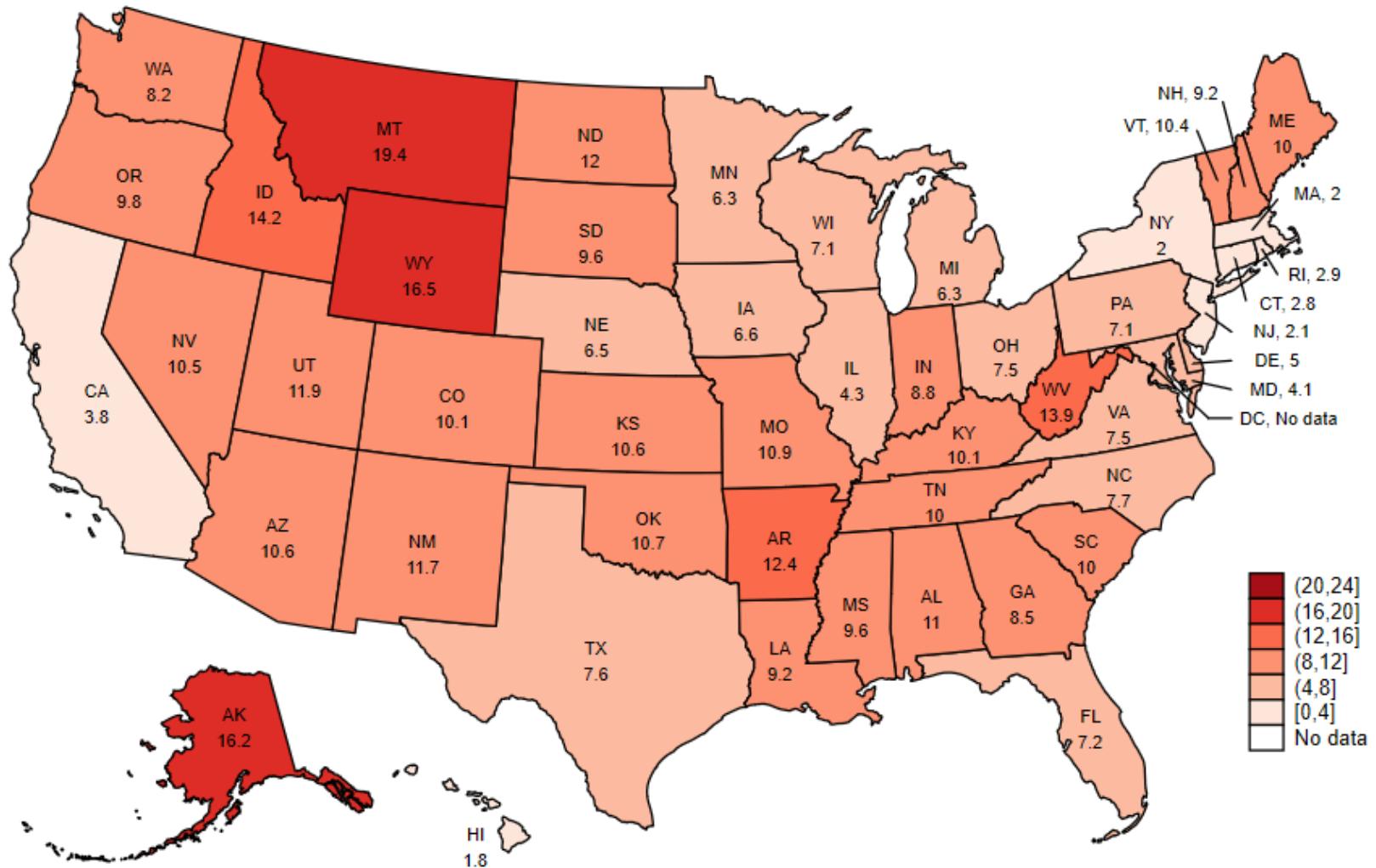
- Suicide is the 10th leading cause of death in the United States.
- In 2017, more than 47,000 Americans died by suicide. In addition:
 - 1.4 million Americans attempted suicide, and
 - 10.6 million Americans thought seriously about ending their lives.
- Lifetime medical and work-loss costs due to suicides and suicide attempts are estimated at almost \$70 billion per year.
- The rate of suicide in the United States rose by about 30 percent in the last two decades.
- There are 1.5 times more gun suicides each year than gun homicides.
- Having access to a firearm triples the risk of death by suicide.
- Firearms were used in more than half of suicides in 2017.
- For each 10 percentage-point increase in household gun ownership, the youth suicide rate increases by more than 25 percent.
- About 85 percent of those who attempt suicide with a gun die compared to only about five percent without a gun.
- The firearm suicide rate is almost 10 times higher in the United States than in other high-income countries.
- Americans living in rural areas are almost 75 percent more likely to die by gun suicide than those in urban areas.
- Men are 6.5 times more likely to die by gun suicide than women.
- White men are more than seven times as likely to die by gun suicide as gun homicide.
- The firearm suicide death rate for older men in rural areas is more than 20 times the rate for older women in metropolitan areas.

Contents

THE LINK BETWEEN GUNS AND SUICIDE	5
<i>Suicide is the leading cause of violent death in the United States</i>	
<i>Suicide deaths have increased markedly</i>	
<i>Most suicides and violent deaths are gun-related</i>	
<i>Easy access to guns is associated with higher suicide rates</i>	
GEOGRAPHY	8
<i>Firearm suicide is more common in the United States than in other high-income countries</i>	
<i>States with the highest rates of gun ownership have the highest firearm suicide rates</i>	
<i>Metro areas have lower firearm suicide rates, but rates vary by region</i>	
GENDER, RACE AND AGE	9
<i>Men are six and a half times more likely to die by gun suicide than women</i>	
<i>Firearm suicide is much more prevalent among white men</i>	
<i>Older Americans are at a higher risk</i>	
<i>Increased suicide rates at midlife leads to a decline in overall U.S. life expectancy</i>	
<i>Gun suicide deaths are increasing among youth</i>	
FIREARM-RELATED OCCUPATIONS	12
<i>Veterans have high rates of firearm suicide</i>	
<i>First responders also are at risk</i>	
CONCLUSION	13
APPENDIX	14

Firearm Suicide Rates

All Ages by State (per 100,000), 2017



Data source: CDC WISQARS. Age-adjusted rates (base year is 2000).
Note: Data for DC unavailable

THE LINK BETWEEN GUNS AND SUICIDE

Suicide is the leading cause of violent death in the United States

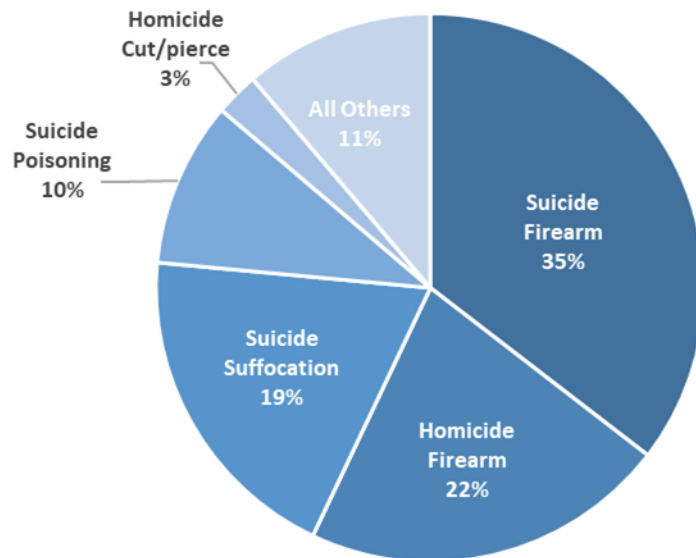
Suicide is the leading cause of violent death in the United States. In 2017, there were over 67,000 violence-related injury deaths. According to the Centers for Disease Control and Prevention (CDC), the top five causes of violence-related injury deaths that year were firearm suicides (35 percent), firearm homicides (22 percent), suicide by suffocation (19 percent), suicide by poisoning (10 percent) and homicide by cutting/piercing (3 percent).

Injury death rates vary widely by age. For this reason, demographers often calculate suicide and most death rates on an age-specific or age-adjusted basis. Age-specific rates equal the total number of deaths observed among a specific age group, divided by the population of the age group and multiplied by 100,000.⁹ Age-adjusted rates weight the observed (“crude”) rate based on a constant underlying age distribution.

Age adjusting ensures that differences over time or by geographic areas or other factors are not just a reflection of different age distributions being compared. This report provides statistics on death rates using data from the CDC Web-based Injury Statistics Query and Reporting System (WISQARS). All death rates are reported as an age-specific rate or an age-adjusted rate based on the 2000 U.S. (standard) population, unless otherwise noted.

The age-adjusted death rate by suicide in the United States in 2017 was 14.0 (per 100,000).¹⁰ In 2017, the leading cause of violent death when taking into account both the intent and means of death was firearm suicide (23,854), followed by firearm homicide (14,542). The rate of firearm suicide deaths in the United States in 2017 was 7.3. In comparison, the rate for motor vehicle traffic deaths was 11.9, and for homicide deaths, the rate was 6.1.

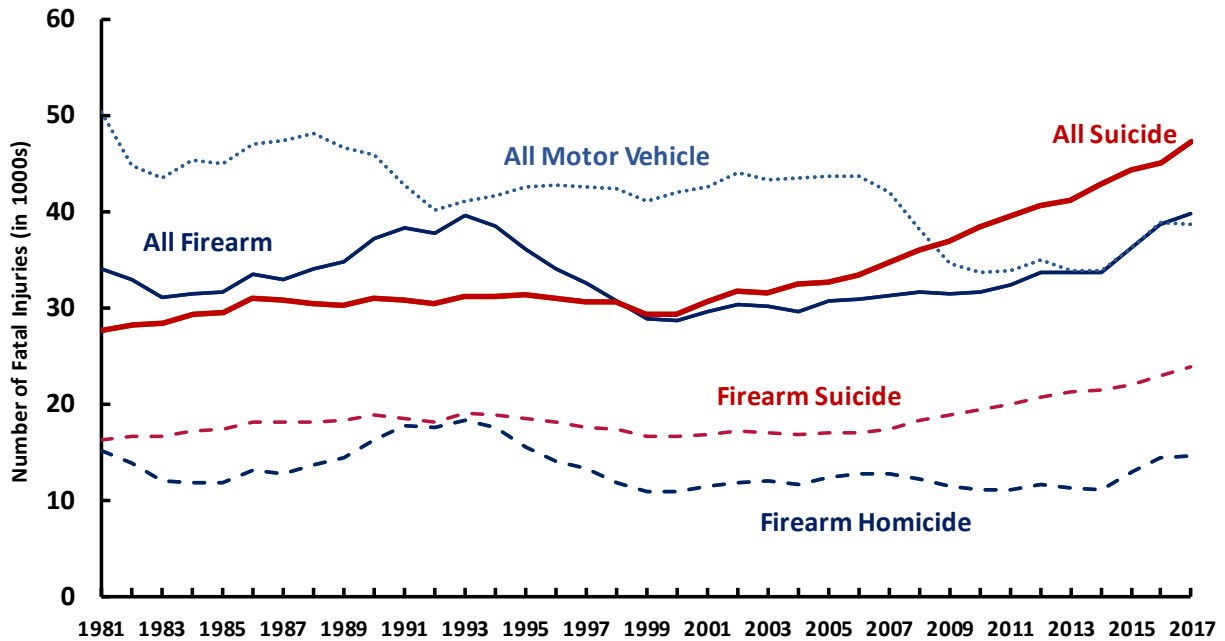
Top 5 Leading Causes of Violent Deaths, 2017
All Races, Both Sexes, All Ages



Source: CDC WISQARS

Note: Causes of death shown as a percent of total violent deaths.

Motor Vehicle, Suicide and Firearm Deaths
1981 - 2017



Source: CDC WISQARS

Suicide deaths have increased markedly

Suicide imposes severe costs on American families and society as a whole. According to the CDC, suicide and self-injury cost the economy \$70 billion a year, and that is just in lifetime medical and work-lost costs alone.

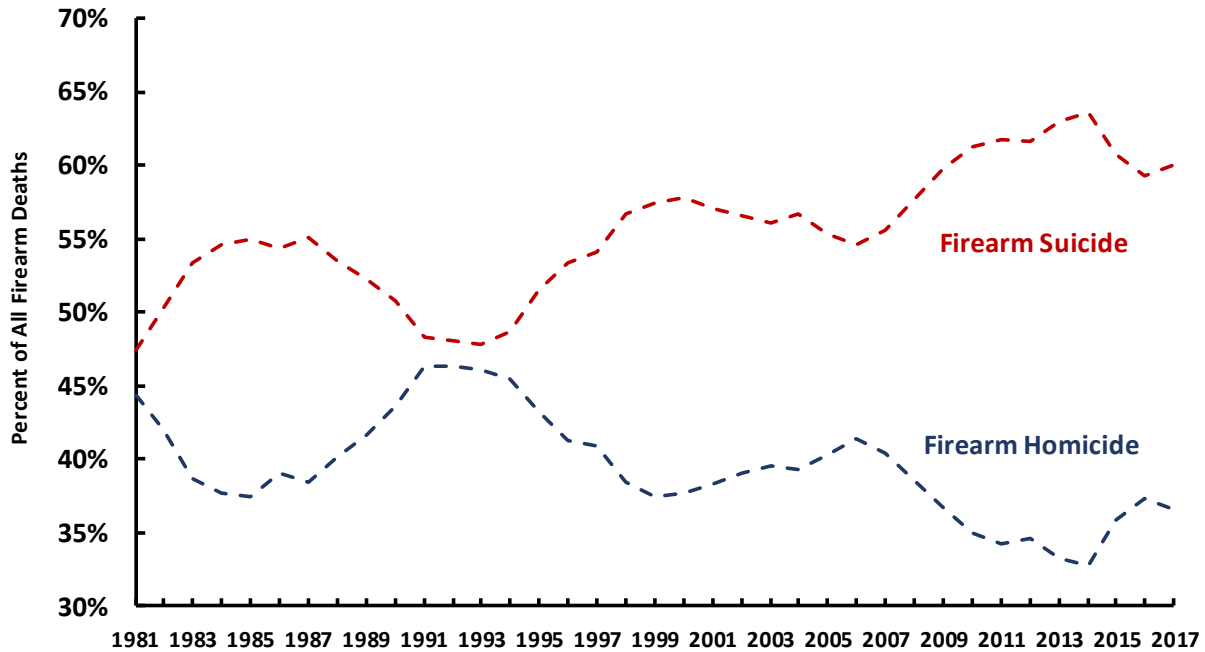
In the last two decades, the number of suicide deaths in the United States has increased markedly. The suicide rate in the United States rose by about 30 percent, perhaps correlated with increasing economic distress due to mortgage defaults and rising unemployment before and after the recent recession of the early 2000s and the 2007 to 2009 financial crisis.

However, a reversal in rates during periods of economic recovery has not been observed. Rather, there has been a secular upward trend in overall suicide rates across the business cycle. Rates for youth and young adults have increased in more recent years. Data suggest that the increase partly is fueled by the large and increasing number of firearm suicides since the late-2000s. Among all suicides (47,173), over half are by firearm (51 percent).

Most suicides and violent deaths are gun-related

In 2017, there were nearly 40,000 firearm deaths in the United States. Among all firearm deaths, gun suicide is the leading cause of death—making up more than 60 percent of all firearm deaths. Since the CDC began publishing data in 1981, gun suicides have outnumbered gun homicides every year. Since 2009, the number of gun suicides has been one and a half times higher than the number of gun homicides each year.

Share of Suicide and Homicide Firearm Deaths
1981 - 2017



Source: CDC WISQARS

Note: Other types of firearm deaths include unintentional, intent undetermined and legal intervention.

Easy access to guns is associated with higher suicide rates

A 2014 review of 14 different scientific studies concluded that having access to a firearm triples the risk of death by suicide.¹¹ Other research has found a correlation between guns and suicide rates, even when controlling for race and gender as well as other factors associated with suicide like age, education, poverty, unemployment, serious mental illness and substance abuse.¹² There is a positive association between levels of household gun ownership and overall suicide rates for the entire population, in every age group and for both men and women at both regional and state levels.¹³ One study found that for each 10 percent decline in household firearm ownership there was an associated decline in the firearm suicide rate of 4 percent.¹⁴

Having access to a firearm during a moment of increased suicide risk, such as a job loss, increases the risk of completing suicide.¹⁵ Research shows that the impulse of suicide is transitory and that access to guns is a risk factor for whether a suicide attempt is fatal. The interval between the decision to act and an attempt can be as short as 10 minutes or less, and research shows a substitute to a different method is unlikely when a highly lethal method is unavailable. Among adults who have recently purchased a gun, there is a higher firearm suicide rate, especially within the first year of a gun purchase.¹⁶

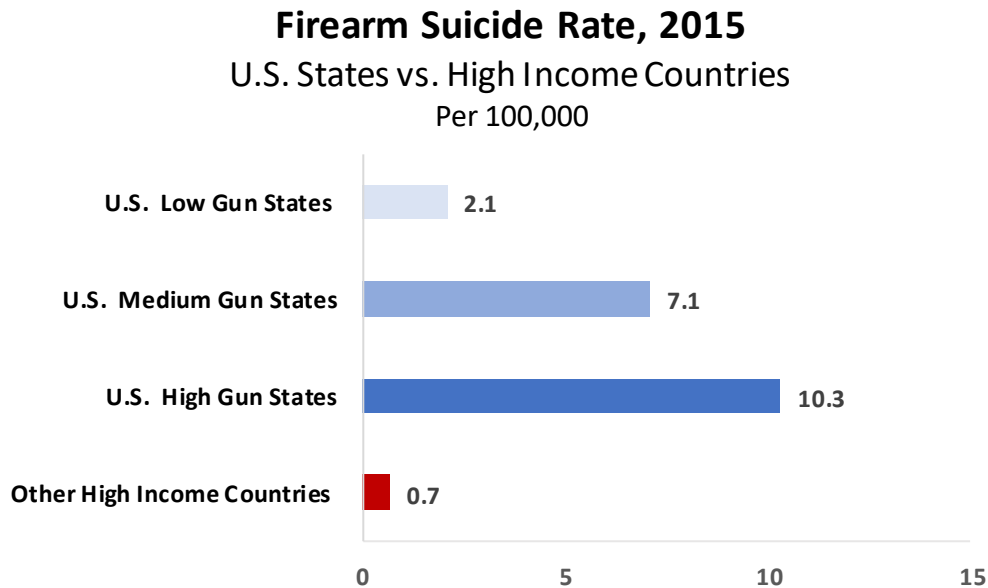
The high correlation between access to guns and suicide rates is closely tied to the lethality of firearms—suicide attempts involving a firearm are far more likely to result in death than an

attempt by any other means.¹⁷ About 85 percent of those who attempt suicide with a gun die compared to only about five percent without a gun.¹⁸

GEOGRAPHY

Firearm suicide is more common in the United States than in other high-income countries

Firearm suicide is much more prevalent in the United States than in similar high-income countries. According to a recent study (based on 2015 data), the firearm suicide rate was about 10 times higher in the United States than in similar industrial countries.¹⁹ In other high-income countries, the 2019 study found that only five percent of overall suicides are firearm suicides, compared to over half in the United States. The firearm suicide rate in high-gun states (10.3) in the United States is nearly 15 times higher compared to other high-income countries (0.7).



Source: Grinshteyn and Hemenway, 2019

States with the highest rates of gun ownership have the highest firearm suicide rates

Multiple studies have found that high rates of gun ownership are associated with higher rates of firearm suicide across different U.S. states. Overall, the states that rank highest in terms of gun ownership also rank among the highest in suicide and firearm suicide rates, while the states that rank lowest for gun ownership rank among the lowest for overall suicide and firearm suicide.²⁰ High suicide gun death rates are concentrated in the Rocky Mountain region and the South.²¹

Montana has the highest suicide firearm death rate in the country (19.4), followed by Wyoming (16.5) and Alaska (16.2). A survey found that these states also have some of the highest gun ownership rates in the country.²²

The percentage of total suicides by firearms is also revealing. In Alabama and Montana, guns are used in nearly 69 percent of all suicides. In Mississippi and West Virginia, the figure is more

than 65 percent. It is approximately 63 percent in South Carolina, Wyoming and Georgia. Alabama, Alaska, Georgia, Mississippi, Montana, South Carolina, West Virginia and Wyoming all have limited gun safety legislation.²³

Many states with higher firearm suicide rates lack basic gun safety laws, such as extreme risk protection order laws.²⁴ Residents of Montana are almost 10 times more likely to die by suicide with a firearm than those of New York. Residents of Wyoming and Alaska are more than four times as likely to die by firearm suicide as those of California.

The situation in some states with tighter gun laws is very different.²⁵ In Massachusetts, only 22 percent of suicides involve guns; in New York, only 26 percent; and, in California, about 37 percent.

Although states with higher rates of gun ownership have higher rates of firearm suicide and overall suicide, these states have comparable non-firearm suicide rates. This suggests that the state differences in suicide death rates are tied to having access to firearms.²⁶

Metro areas have lower firearm suicide rates, but rates vary by region

The firearm suicide rate in metro areas is 6.3, whereas the rate in rural (non-metro) areas is much higher at 11.0. However, the rates in metro areas vary substantially by region. There are higher rates of firearm suicide in metro areas of rural states in the Rocky Mountain region and the South. For example, Oklahoma City, Oklahoma; Salt Lake City, Utah; and Birmingham-Hoover, Alabama have rates more than double the metro average and higher than the national average (13.5, 12.4 and 11.9, respectively).²⁷ From 2012-2013 to 2015-2016, the CDC reports firearm suicide rates increased faster than the national average in these states.

Rounding out the metropolitan statistical areas (MSAs) with the 10 highest firearm suicide rates are Jacksonville, Florida; Louisville/Jefferson County, Kentucky-Indiana; Phoenix-Mesa-Scottsdale, Arizona; Kansas City, Missouri-Kansas; Las Vegas-Henderson-Paradise, Nevada; Nashville/Davidson-Murfreesboro-Franklin, Tennessee; and Denver-Aurora-Lakewood, Colorado, with rates ranging from 9.6 to 11.

The three MSAs with the lowest rates were all in the Northeast: New York-Newark-Jersey City, New York-New Jersey-Pennsylvania; Boston-Cambridge-Newton, Massachusetts-New Hampshire; and Hartford, Connecticut, with rates ranging from 1.5 to 2.5.

GENDER, RACE AND AGE

Men are six and a half times more likely to die by gun suicide than women

Men are about four times more likely than women to die by suicide. However, the disparity is much wider for gun suicides—men are about six and a half times more likely than women to die by firearm suicide.

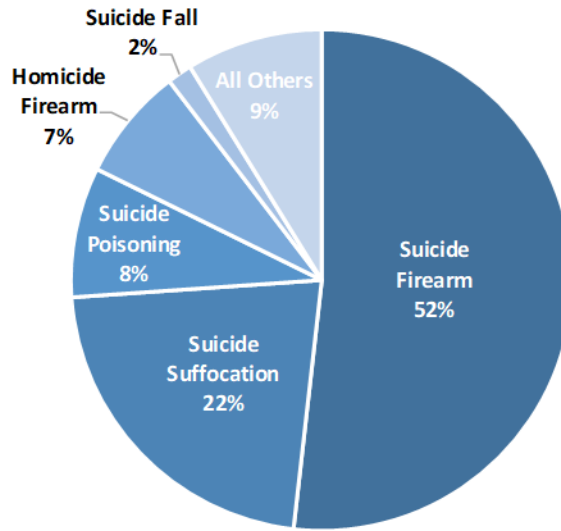
In 2000, the firearm suicide rate for men was 11.0, while it was 1.5 for women. By 2017, the rate for men had increased 13 percent to 12.4; while for women, it had increased 28 percent, but only to 1.9.

Firearm suicide is much more prevalent among white men

White men comprise most of firearm suicides (79 percent) in the United States, followed by white women (12 percent). Just over half of violent deaths among white men are by gun suicide (52 percent). White men are more than seven times as likely to die by gun suicide as gun homicide.

Among white women, firearm suicide is tied as the leading cause of violent death in the United States, along with death by suicide poisoning (27 percent, each). White women are more than twice as likely to die by gun suicide as gun homicide.

Top 5 Leading Causes of Violent Deaths, 2017
White Men, All Ages



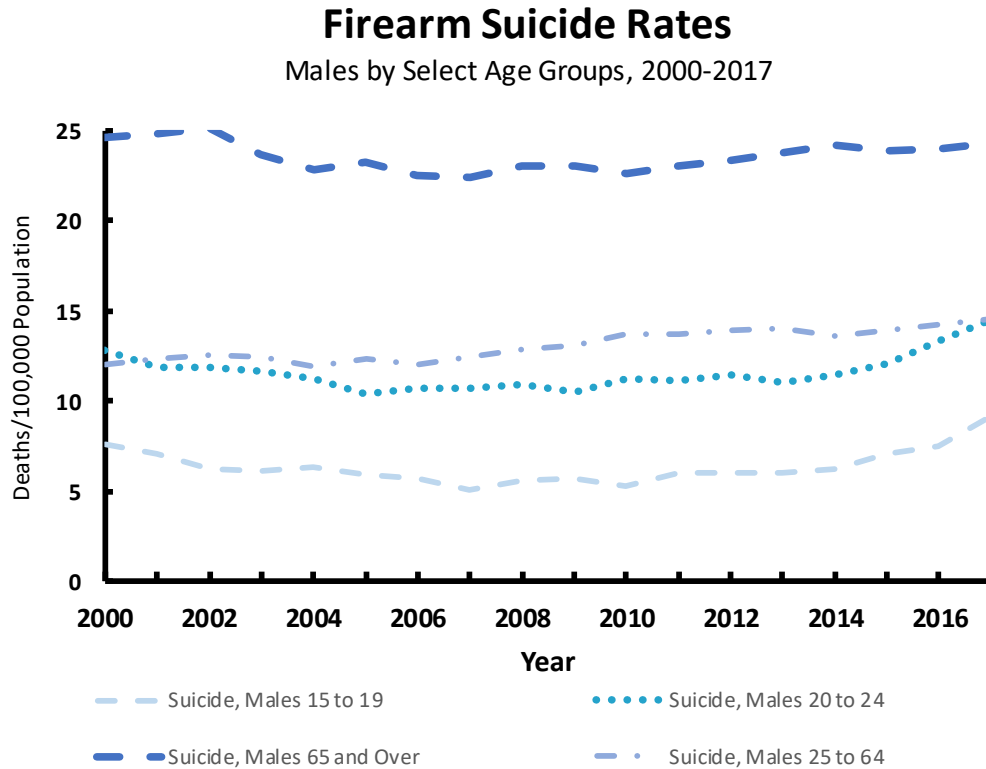
Source: CDC WISQARS
Note: Causes of death shown as a percent of total violent deaths.

Firearm suicides account for a smaller share of violent deaths among non-whites: 30 percent among American Indian men, 15 percent among American Indian women, 25 percent among Asian men, 10 percent among Asian women, 21 percent among Hispanic men, 13 percent among Hispanic women, 12 percent among black men and 9 percent among black women.

Gun ownership, which is associated with rates of firearm suicide, also differs greatly across racial and ethnic lines. Whites are far more likely than either black people or Hispanics to own a gun or to live with someone who owns a gun. Whites are one and a half times more likely than black Americans and nearly two and a half times more likely than Hispanics to own a gun. According to the Pew Research Center, 36 percent of whites, 24 percent of black people and 15 percent of Hispanics own a gun.²⁸

Older Americans are at a higher risk

Older Americans are more likely to die by firearm suicide than younger individuals. Those who are 65 and older accounted for more than 8,600 of the more than 47,000 suicides in 2017. Those in the oldest age group—adults ages 85 and older—have one of the highest rates of suicide.²⁹ The firearm suicide rate for those ages 85 and over (15.0) is almost three times higher than the rate for teens ages 15 to 19 (5.3). Nine in 10 of all firearm deaths in older adults are suicides.



Source: CDC WISQARS

In 2017, the firearm suicide rate for men 65 years old and over (24.3) was nearly double the rate for all men (12.9). Men ages 65 and older also have a higher firearm suicide rate than men ages 25 to 64 (14.6). Compared to black men ages 65 and over, older white men are nearly five times more likely to die by firearm-related suicide.

Illnesses that are common in older persons, such as dementia, may be risk factors for suicide.³⁰ Despite these risk factors, there is less research on reducing the heightened risk of gun suicide among older Americans. About one in three seniors (ages 65 years or older) owns a gun. Another 12 percent live in a household with someone who owns a gun.³¹

Increased suicide rates at midlife leads to a decline in overall U.S. life expectancy

Researchers have found a decrease in life expectancy due partly to an increase in suicide among middle-aged white men and women (ages 45 to 54).³² According to professors Anne Case and Angus Deaton, winner of the Nobel Prize in economics, the change from a downward to an upward trend in midlife mortality among whites in the 21st century ended decades of progress in mortality rates. The reversal was observed only in the United States, and in no other high-income country.³³ If the earlier progress had continued, the researchers claim that half a million deaths would have been avoided over the fifteen-year period they studied from 1999 to 2013. Deaton and Case coined the term “deaths of despair” to describe deaths from drugs, alcohol and suicide among less educated and middle-aged whites.

A report by the National Center for Health Statistics found that life expectancy at birth started to decline in 2015 and that progress against many of the leading causes of death has stalled or reversed. The increase in mortality—attributed by many to increasing suicide and firearm-related deaths and also to the rapid increase in opioid-related deaths—is found to be concentrated among less educated and middle-aged whites. These groups have experienced rising mortality since the late 1990s.³⁴

Gun suicide deaths are increasing among youth

The firearm suicide rate for young people is lower than for older adults. According to 2017 CDC data, the rate for all teens (5.3) is less than half the rate for Americans ages 65 and over (11.8). While suicide is the 10th leading cause of death among Americans, it became the second leading cause of death for those ages 10 to 34 in 2016.³⁵ Each year, there are over 1,000 children and teen suicide deaths by gun.³⁶

The firearm suicide rate among teens (ages 15 to 19) and adults in their early twenties (ages 20 to 24) has increased in recent years for both males and females.³⁷ However, the gender disparity in firearm suicides among youth persists. While the firearm suicide rate for males of all ages is six and a half times higher than for females, the rates among teens and younger adults are nearly eight times higher for males than for females. From 2013 to 2017, the firearm suicide rate increased by 10 percent among all men. During this period, it increased by over 50 percent for male teens and by one-third (32 percent) for men in their early twenties.

As is true among older Americans, access to firearms has a large effect on the rate of firearm suicide deaths among young people. For each 10 percentage-point increase in household gun ownership, the youth suicide rate increases by more than 25 percent.³⁸ Seventy-five percent of guns used in adolescent gun suicides come from a parent or other family members.³⁹

FIREARM-RELATED OCCUPATIONS

Veterans have high rates of firearm suicide

According to the 2019 National Veteran Suicide Prevention Annual Report, an average of 17 veterans died by suicide each day—6,139 veterans in 2017 alone. Suicides among veterans are increasing. The age- and sex-adjusted suicide rate for the veteran population increased 50 percent between 2005 and 2017, from 18.5 to 27.7.

Overall suicide patterns differ starkly by the combined effects of veteran status and gender. The 2017 rate of suicide among women veterans was more than twice the rate of non-veteran women, while the rate of suicide among male veterans was 130 percent higher than the rate among non-veteran males. The 2017 rate of suicide among male veterans was more than double the rate of female veterans, 39.1 and 16.8, respectively.⁴⁰

Among veterans, younger adults (ages 18 to 34) had the highest suicide rate (44.5). From 2005 to 2017, the suicide rate for younger adults increased by 76 percent. The number of suicides was highest among older veterans (ages 55 to 74 years). Suicide among older adults accounted for 38 percent of all suicides among veterans.⁴¹

While active-duty soldiers may be typically healthier than the general population, the accessibility of firearms among veterans may increase the risk of firearm suicide. The firearm suicide rate for veterans is one and a half times higher than for non-veterans.⁴² Firearms were the method of suicide in 71 percent of male veteran suicide deaths and 43 percent of female veteran suicide deaths. Among non-veterans, firearm is the method for 54 percent of suicides among men and 31 percent of suicides among women.⁴³

First responders also are at risk

First responders also face suicide rates that exceed those of the overall population. In fact, a recent study found that firefighters and police officers are more likely to die by suicide than in the line of duty.⁴⁴ In 2017, at least 103 firefighters died by suicide, compared to 93 firefighters who died in the line of duty. That same year, there were 140 police officer suicides, compared to 129 line of duty deaths, according to the study. Other organizations, such as Blue H.E.L.P., report the trend continued in 2018, though estimates of the number of suicides differ.⁴⁵ As of August 1, 2019, Blue H.E.L.P. tracked an increase of 24 percent in police officer suicides since the prior year.⁴⁶

CONCLUSION

The United States is experiencing a suicide epidemic, with more than 47,000 suicide deaths in 2017 alone. Guns were used in more than half of all suicide deaths. Access to a gun triples the risk of death by suicide.

Firearm suicide rates vary widely by geography. Americans are 10 times more likely to die by gun suicide than residents of other high-income countries. Within the United States, those living in rural areas are 75 percent more likely to die by firearm suicide than those in large metropolitan areas. Variation among states with different gun laws and rates of gun ownership are striking. For example, residents of Montana are almost 10 times more likely than those of New York.

Firearm suicide also is closely associated with gender, race and age—with death rates for men six and a half times higher than for women, twice as high for white people as for black people, and nearly three times higher for those over age 85 than for teens. Members of the military and first responders also are at high risk.

Individuals with more than one high risk factor are many times more vulnerable than individuals with low risk factors. For example, the firearm suicide rate for older men in rural areas is more than 20 times the rate for older women in metropolitan areas. For Americans in these demographics, gun suicide is a crisis.

APPENDIX

Firearm Suicide Rates by Year and Gender, All Ages

Year	All Ages		
	Both Sexes	Women	Men
2000	5.88	1.47	10.98
2001	5.90	1.44	11.04
2002	5.92	1.39	11.12
2003	5.77	1.38	10.78
2004	5.65	1.47	10.41
2005	5.66	1.35	10.54
2006	5.54	1.37	10.25
2007	5.63	1.38	10.40
2008	5.82	1.43	10.72
2009	5.91	1.50	10.82
2010	6.06	1.49	11.13
2011	6.16	1.62	11.18
2012	6.29	1.66	11.40
2013	6.38	1.74	11.49
2014	6.36	1.77	11.41
2015	6.49	1.83	11.61
2016	6.71	1.93	11.93
2017	6.92	1.88	12.39

Source: CDC WISQARS. Age-adjusted rates (base year is 2000).

Crisis Resources

- For any life-threatening emergency, call 911 immediately.
- If you are experiencing suicidal thoughts, call the National Suicide Prevention Lifeline at 1-800-273-TALK (8255).
- Crisis Text Line: You can text NAMI to 741-741 to be connected to a free, trained crisis counselor.

Firearm Suicide Rates by Year, Among Men for Select Age Groups

Males by Age Group					
	Children	Teens	Young Adults	Working Age	Retirement Age
Year	(0 to 14)	(15 to 19)	(20 to 24)	(25 to 64)	(65 and Over)
2000	0.29	7.61	12.79	12.01	24.62
2001	0.22	7.04	11.83	12.37	24.85
2002	0.22	6.28	11.9	12.56	25.2
2003	0.20	6.15	11.62	12.41	23.69
2004	0.16	6.34	11.27	11.97	22.86
2005	0.23	5.95	10.37	12.31	23.25
2006	0.17	5.7	10.72	11.98	22.53
2007	0.15	5.05	10.69	12.44	22.42
2008	0.13	5.61	10.89	12.89	23.05
2009	0.17	5.75	10.45	13.13	23.02
2010	0.22	5.32	11.28	13.75	22.64
2011	0.26	6.06	11.16	13.67	23.1
2012	0.29	6.01	11.41	13.98	23.32
2013	0.37	5.98	11.02	14	23.83
2014	0.44	6.28	11.42	13.66	24.2
2015	0.36	7.06	12.09	13.89	23.92
2016	0.40	7.51	13.36	14.22	23.98
2017	0.50	9.15	14.54	14.59	24.33

Source: CDC WISQARS. Age-specific rates.

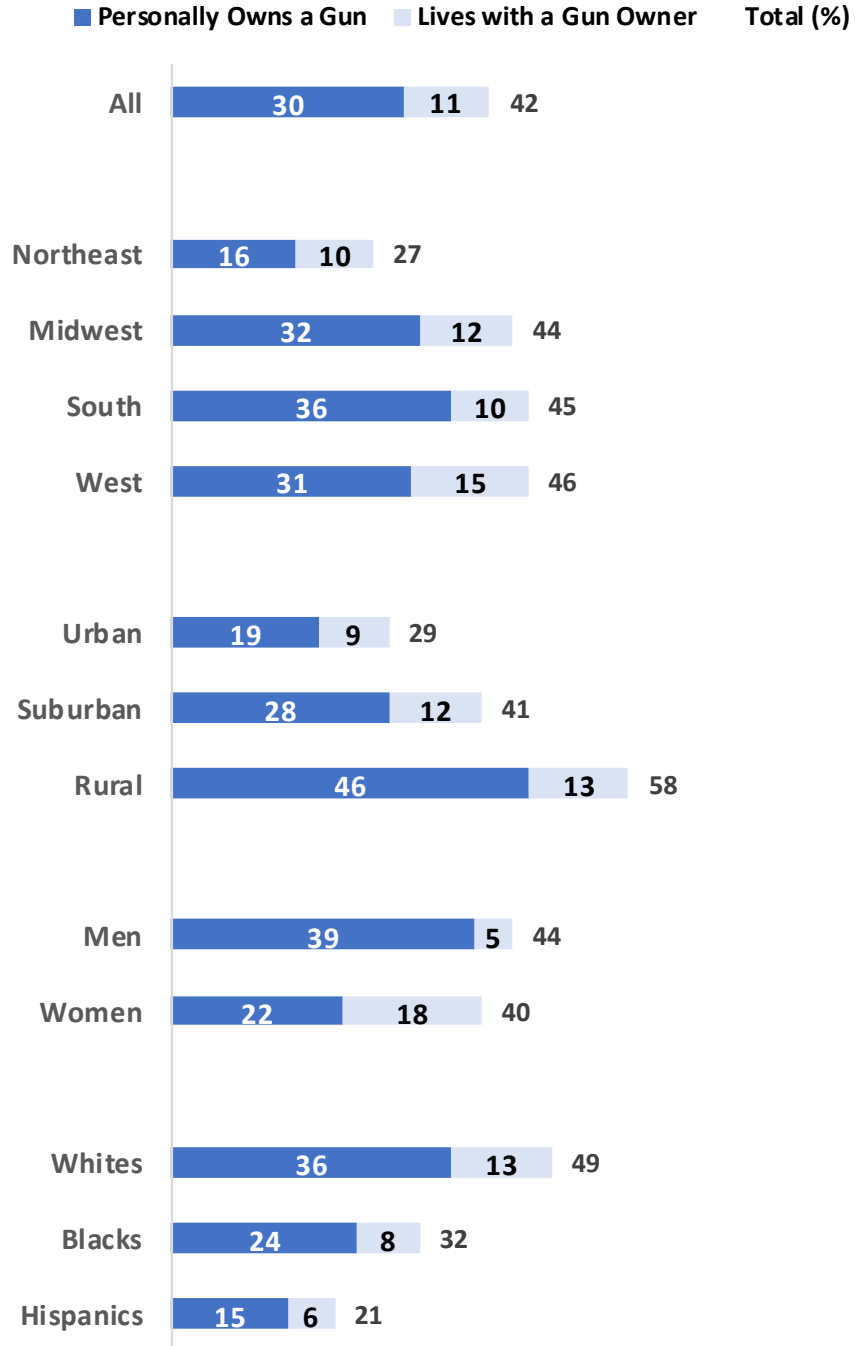
Guns and Suicide

Firearm Suicide Rates by State, Among Men for Select Age Groups (2013-2017)

State	All Ages	(20 to 24)	(25 to 64)	(65 and Over)
Alabama	18.06	18.11	22.52	33.86
Alaska	25.89	49.07	29.71	30.35
Arizona	17.26	16.22	21.06	35.77
Arkansas	18.47	20.78	21.85	37.97
California	7.28	5.85	7.73	20.75
Colorado	17.42	19.38	20.9	31.47
Connecticut	5.33	3.45	6.87	11.35
Delaware	10.55	11.36	13.06	19.86
District of Columbia	2.41	.	3.02	.
Florida	12.26	11.11	14.97	27.65
Georgia	14.11	15.96	16.78	28.28
Hawaii	3.90	3.99	5.25	8.02
Idaho	22.05	27.37	26.36	38.34
Illinois	7.23	5.91	8.58	15.75
Indiana	14.58	17.26	17.96	26.33
Iowa	11.96	13.71	14.78	20.26
Kansas	15.54	16.21	19.11	28.78
Kentucky	17.81	16.19	21.96	33.49
Louisiana	15.78	17.47	18.63	30.88
Maine	16.16	21.43	19.2	29.86
Maryland	7.78	6.72	9.36	17.63
Massachusetts	3.40	3.64	4.16	7.14
Michigan	11.91	12.22	15.14	20.52
Minnesota	10.53	13.25	12.94	17.34
Mississippi	15.98	17.97	19.62	29.27
Missouri	17.47	19.9	21.92	30.37
Montana	26.59	30.58	32.82	41.57
Nebraska	11.75	15.61	14.58	17.44
Nevada	17.50	17.55	19.18	41.31
New Hampshire	14.09	19.92	17.67	21.42
New Jersey	3.79	3.26	4.34	9.8
New Mexico	19.97	25.77	23.24	40.93
New York	4.19	3.86	5.1	8.98
North Carolina	13.16	13.17	15.83	27.09
North Dakota	18.38	26.38	24.75	18.96
Ohio	12.64	15.15	15.2	24.78
Oklahoma	19.56	21.82	23.79	34.93
Oregon	16.51	17.87	18.92	35.55
Pennsylvania	12.24	13.63	15.19	24.23
Rhode Island	5.42	.	7.29	10.46
South Carolina	16.45	19.11	21.03	27.45
South Dakota	15.94	29.21	18.52	21.5
Tennessee	17.16	16.26	20.78	33.69
Texas	12.53	13.51	14.65	25.94
Utah	19.53	19.79	24.03	31.88
Vermont	16.24	20	20.49	31.31
Virginia	12.79	15.53	15.11	25.94
Washington	12.74	14.6	14.32	26.82
West Virginia	20.43	17.09	26.15	38.54
Wisconsin	12.64	15.33	16.25	19.63
Wyoming	26.23	31.05	29.12	47.37

Source: CDC WISQARS. Some data for Rhode Island and Washington, D.C. not shown due to small sample size. Age-adjusted rates for all ages (base year is 2000); otherwise age-specific rates shown.

Gun Ownership, 2017 By Geography, Gender and Race



Source: Pew Research Center. Self-reported responses collected by survey.
Note: Percents shown may not add to subtotals due to rounding.

- ¹ Kochanek, David D. et al. 2019. "Deaths: Final Data for 2017." *National Vital Statistics Reports (NVSR)* 68(9):1-76. https://www.cdc.gov/nchs/data/nvsr/nvsr68/nvsr68_09-508.pdf.
- ² American Foundation for Suicide Prevention (AFSP). n.d. "Suicide Statistics." AFSP. Retrieved September 24, 2019. <https://afsp.org/about-suicide/suicide-statistics/>; Heron, Melonie. 2019. "Deaths: Leading Causes for 2017. Centers for Disease Control and Prevention, National Center for Health Statistics, National Statistics Reports 68(6):1-76. https://www.cdc.gov/nchs/data/nvsr/nvsr68/nvsr68_06-508.pdf.
- ³ Centers for Disease Control and Prevention (CDC). n.d. "Preventing Suicide." Accessed September 27, 2019. <https://www.cdc.gov/violenceprevention/suicide/fastfact.html>.
- ⁴ Hedegaard, Holly, Sally C. Curtin and Margaret Warner. 2018. "Suicide Rates in the United States Continue to Increase." NCHS Data Brief (309):1-8. <https://www.ncbi.nlm.nih.gov/pubmed/30312151>; Hedegaard, Holly et al. 2018. "Suicide Mortality in the United States, 1999-2017." NCHS Data Brief (330):1-8. <https://www.cdc.gov/nchs/products/databriefs/db330.htm>.
- ⁵ American Foundation for the Prevention of Suicide (AFPS). n.d. "Suicide Statistics." <https://afsp.org/about-suicide/suicide-statistics/>.
- ⁶ Harvard Public Health. 2016. "Guns & Suicide." Harvard Public Health Magazine, Madeline Drexler, Editor. Retrieved October 10, 2019. https://www.hsph.harvard.edu/magazine/magazine_article/guns-suicide/; Everytown for Gun Safety. 2019. "Firearm Suicide in the United States." August 30, 2019. <https://everytownresearch.org/firearm-suicide/>.
- ⁷ Terms for "gun" and "firearm" are used interchangeably in this report. Data for firearm suicides rates are based on suicide by firearm as defined by the CDC (ICD-10 Codes: X72-X74). The CDC categorizes as a firearm gunshot wound any wound from powder-charged handguns, shotguns and rifles. <https://www.cdc.gov/ncipc/wisqars/nonfatal/definitions.htm>.
- ⁸ For this report, we analyze the intersection of race and ethnicity. "Hispanic" or "Latino" refer to persons of any race, while "white," "black," "American Indian" and "Asian" refer to non-Hispanics only.
- ⁹ Centers for Disease Control and Prevention (CDC). n.d. "Incidence and Death Rates." Retrieved October 10, 2019. https://www.cdc.gov/cancer/uscs/technical_notes/stat_methods/rates.htm.
- ¹⁰ All suicide rates are reported as per 100,000 residents. All rates are age-adjusted unless rate is reported for a specific age group and/or otherwise noted.
- ¹¹ Anglemyer, Andrew, Horvath Tara and George Rutherford. 2014. "The Accessibility of Firearms and Risk for Suicide and Homicide Victimization among Household Members: A Systematic Review and Meta-analysis." *Annals of Internal Medicine* 160(2):101-110. <https://annals.org/aim/fullarticle/1814426/accessibility-firearms-risk-suicide-homicide-victimization-among-household-members-systematic>.
- ¹² Grassel, K. M. et al. 2003. "Association between Handgun Purchase and Mortality from Firearm Injury." *Injury Prevention*, Vol. 9, No. 1, 2003, pp. 48-52. <https://ucdavis.pure.elsevier.com/en/publications/association-between-handgun-purchase-and-mortality-from-firearm-i>; Kung, H. C. et al. 2005. "Substance Use, Firearm Availability, Depressive Symptoms, and Mental Health Service Utilization Among White and African American Suicide Decedents Aged 15 to 64 Years." *Annals of Epidemiology* 15 (8):614-621. <https://www.ncbi.nlm.nih.gov/pubmed/16118006>.
- ¹³ Miller, Matthew, Deborah Azrael and David Hemenway. 2002. "Household Firearm Ownership and Suicide Rates in the United States." *Epidemiology* 13(5): 517-524. <https://www.ncbi.nlm.nih.gov/pubmed/12192220>.
- ¹⁴ Miller, Matthew et al. 2006. "The Association between Changes in Household Firearm Ownership and Rates of Suicide in the United States, 1981-2002." *Injury Prevention* 12(3): 178-82. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2563517/>.
- ¹⁵ American Public Health Association (APHA). n.d. "Reducing Suicides by Firearms." Retrieved September 27, 2019. <https://www.apha.org/policies-and-advocacy/public-health-policy-statements/policy-database/2019/01/28/reducing-suicides-by-firearms>.
- ¹⁶ National Research Council. 2004. *Firearms and Violence: A Critical Review*, Washington, D.C.: National Academies Press. <https://www.nap.edu/download/10881>.
- ¹⁷ Azrael, Deborah, Philip J. Cook and Matthew Miller, 2004. "State and Local Prevalence of Firearms Ownership Measurement, Structure, and Trends." *Journal of Quantitative Criminology*, Vol. 20, No. 1, March, pp. 43-62.
- ¹⁸ Everytown for Gun Safety. 2019. "Firearm Suicide in the United States." <https://everytownresearch.org/firearm-suicide/>.
- ¹⁹ Grinshteyn, Erin and David Hemenway. 2019. "Violent Death Rates in the US Compared to Those of the Other High Income Countries, 2015." *Preventive Medicine*, 123, 20-26. <https://www.ncbi.nlm.nih.gov/pubmed/30817955>.
- ²⁰ American Public Health Association (APHA). n.d. "Reducing Suicides by Firearms." Retrieved September 27, 2019. <https://www.apha.org/policies-and-advocacy/public-health-policy-statements/policy-database/2019/01/28/reducing-suicides-by-firearms>.
- ²¹ The Rocky Mountain region includes the states of Colorado, Arizona, Utah, Nevada, New Mexico, Idaho, Montana and Wyoming. https://www2.census.gov/geo/pdfs/maps-data/maps/reference/us_regdiv.pdf.
- ²² Kalesan, Bindu et al. 2015. "Gun Ownership and Social Gun Culture." *Injury Prevention*. <https://injuryprevention.bmj.com/content/injuryprev/early/2015/06/09/injuryprev-2015-041586.full.pdf?keytype=ref&ijkey=doj6vx0laFZMsQ2>.
- ²³ Giffords Law Center. n.d. Extreme Risk Laws. Accessed September 27, 2019. <https://giffords.org/wp-content/uploads/2018/08/Extreme-Risk-Laws-Toolkit.pdf>. Alabama, Louisiana and Kentucky have introduced extreme risk protection laws.
- ²⁴ Giffords Law Center. n.d. Annual Gun Law Scorecard. Accessed September 27, 2019. <https://lawcenter.giffords.org/scorecard/#CA>.
- ²⁵ Giffords Law Center. n.d. Annual Gun Law Scorecard. Accessed September 27, 2019. <https://lawcenter.giffords.org/scorecard/#CA>.
- ²⁶ Miller, Matthew et al. 2007. "Household Firearm Ownership and Rates of Suicide across the 50 United States." *The Journal of Trauma* 62(4):1029-34. <https://www.ncbi.nlm.nih.gov/pubmed/17426563>; American Public Health Association (APHA). n.d. "Reducing Suicides by Firearms." Retrieved September 27, 2019. <https://www.apha.org/policies-and-advocacy/public-health-policy-statements/policy-database/2019/01/28/reducing-suicides-by-firearms>.
- ²⁷ Kegler, Scott R. et al. 2018. "Firearm Homicides and Suicides in Major Metropolitan Areas — United States, 2012–2013 and 2015–2016." *Morbidity and Mortality Weekly Report* 67(44): 1233-1237. <https://www.cdc.gov/mmwr/volumes/67/wr/pdfs/mm6744a3-H.pdf>.
- ²⁸ Parker, Kim, Juliana Horowitz, Ruth Igielnik, Baxter Oliphant and Anna Brown. 2017. America's Complex Relationship with Guns. Pew Research Center. <https://www.pewsocialtrends.org/wp-content/uploads/sites/3/2017/06/Guns-Report-FOR-WEBSITE-PDF-6-21.pdf>.
- ²⁹ Axelrod, Josh, Samantha Balaban and Scott Simon. 2019. "Isolated and Struggling, Many Seniors Are Turning To Suicide." NPR.Org. <https://www.npr.org/2019/07/27/745017374/isolated-and-struggling-many-seniors-are-turning-to-suicide>.
- ³⁰ Betz, Marian E. et al. 2018. "Firearms and Dementia: Clinical Considerations." *Annals of Internal Medicine* 169(1): 47-49. <https://annals.org/aim/fullarticle/2680727>.
- ³¹ Ibid.

³² Case, Anne and Angus Deaton. 2015. "Rising Morbidity and Mortality in Midlife among White Non-Hispanic Americans in the 21st Century." *Proceedings of the National Academy of Sciences* 112(49):15078. <https://www.pnas.org/content/112/49/15078>.

³³ Ibid.

³⁴ Gaydos, Lauren et al. 2019. "The Depths of Despair among US Adults Entering Midlife." *American Journal of Public Health* 109(5): 774-780, May 1. <https://ajph.aphapublications.org/doi/full/10.2105/AJPH.2019.305002>.

³⁵ Hedegaard, Holly, Sally C. Curtin and Margaret Warner. 2018. "Suicide Rates in the United States Continue to Increase." NCHS Data Brief (309):1-8. <https://www.ncbi.nlm.nih.gov/pubmed/30312151>.

³⁶ Everytown for Gun Safety. 2019. "Firearm Suicide in the United States." https://everytownresearch.org/firearm-suicide/#foot_note_1.

³⁷ Everytown for Gun Safety. 2019. "The Impact of Gun Violence on Children and Teens." <https://everytownresearch.org/impact-gun-violence-american-children-teens/>.

³⁸ Knopov, Anita et al. 2019. "Household Gun Ownership and Youth Suicide Rates at the State Level, 2005-2015." *American Journal of Preventative Medicine* 56 (3): 335-342. [https://www.ajpmonline.org/article/S0749-3797\(18\)32383-3/abstract](https://www.ajpmonline.org/article/S0749-3797(18)32383-3/abstract).

³⁹ Johnson, Rene et al. 2010. "Who Are the Owners of Firearms Used in Adolescent Suicides?" *Suicide and Life Threatening Behavior* 40:609-611.

⁴⁰ Ibid.

⁴¹ Ibid.

⁴² U.S. Department of Veterans Affairs, Office of Mental Health and Suicide Prevention, 2019. "2019 National Veteran Suicide Prevention Annual Report." Accessed October 11, 2019. https://www.mentalhealth.va.gov/docs/data-sheets/2019/2019_National_Veteran_Suicide_Prevention_Annual_Report_508.pdf; Everytown for Gun Safety. 2019. "Firearm Suicide in the United States," August 30. Accessed September 27, 2019. <https://everytownresearch.org/firearm-suicide/>.

⁴³ Ibid.

⁴⁴ Heyman, Miriam et al. 2018. "The Ruderman White Paper on Mental Health and Suicide of First Responders." https://rudermanfoundation.org/white_papers/police-officers-and-firefighters-are-more-likely-to-die-by-suicide-than-in-line-of-duty/. These are known firefighter suicides that get reported confidentially to the Firefighter Behavioral Health Alliance (FHBA). FHBA estimates that approximately 40 percent of suicides are reported to them.

⁴⁵ BLUE H.E.L.P. n.d. "167 American Police Officers Died by Suicide in 2018." Accessed September 27, 2019. <https://bluehelp.org/158-american-police-officers-died-by-suicide-in-2018/>.

⁴⁶ BLUE H.E.L.P. n.d. "Reported Suicides are up by 24%." Accessed September 27, 2019. <https://mailchi.mp/a8cca26c6d5f/114-law-enforcement-officers-lost-to-suicide-in-2019?e=85d8282a07>.