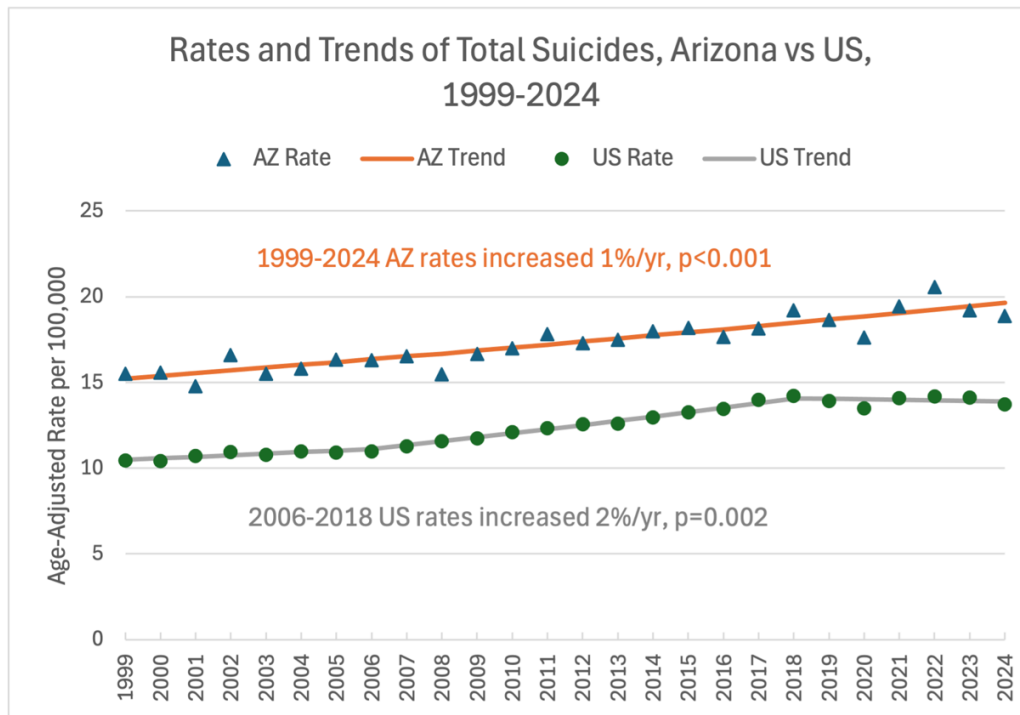


# Suicides and Firearms in Arizona: A Data Review & Policy Call to Action

**Allan Williams, Ph.D.**

Suicides represent an urgent and worsening public health concern. Recent data from the CDC (2020-2024) indicated a total of 241,832 suicides from all means in the US (132/day) for an age-adjusted rate of 13.9 per 100,000 persons. During that same period, Arizona experienced 7,463 suicides (4/day) for a rate of 19.2 per 100,000, a rate significantly higher than the US rate.

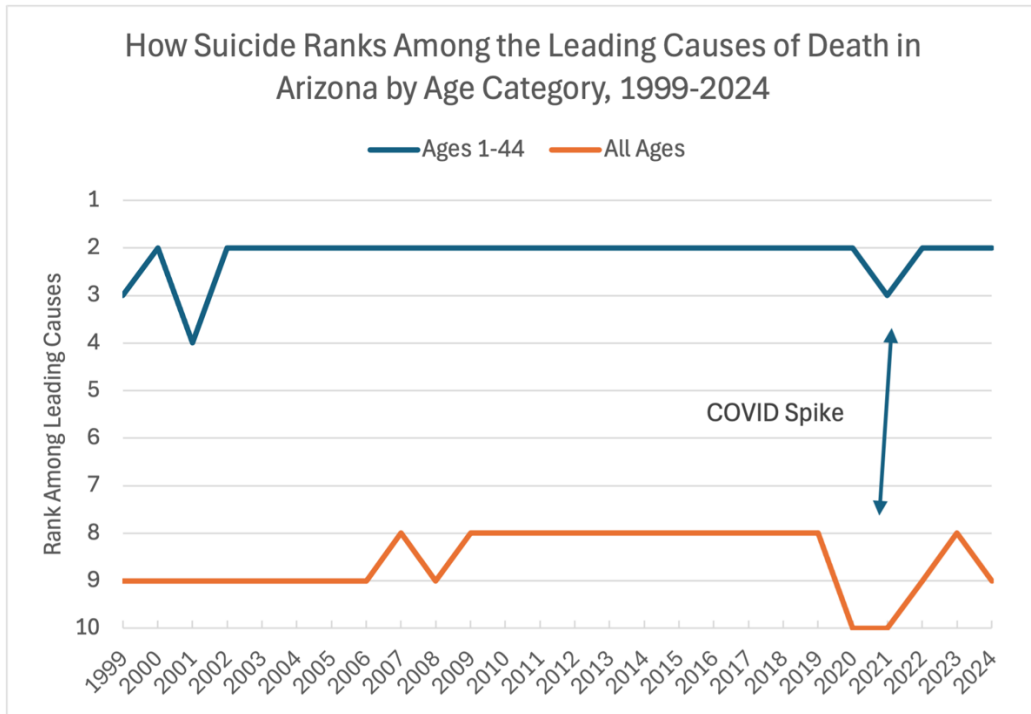
Trends from 1999 to 2024 show that Arizona's suicide rates have increased by 1% per year while US rates increased by 2% per year from 2006 to 2018 before leveling off.



## Leading Causes of Death

The magnitude of overall suicide deaths can be further put into context by examining how suicide ranks among the leading causes of death. Since 2012, suicide has been the 2<sup>nd</sup> leading cause of death in the US among ages 1-44 years and the 10<sup>th</sup> or 11<sup>th</sup> leading cause among all ages except for peak COVID pandemic years.

As shown below, suicide has been the 2<sup>nd</sup> leading cause of death in Arizona among those 1-44 years of age since 2002 and the 8<sup>th</sup> or 9<sup>th</sup> leading cause among all ages, except the peak COVID pandemic years.



### Years of Potential Life Lost (YPLL)

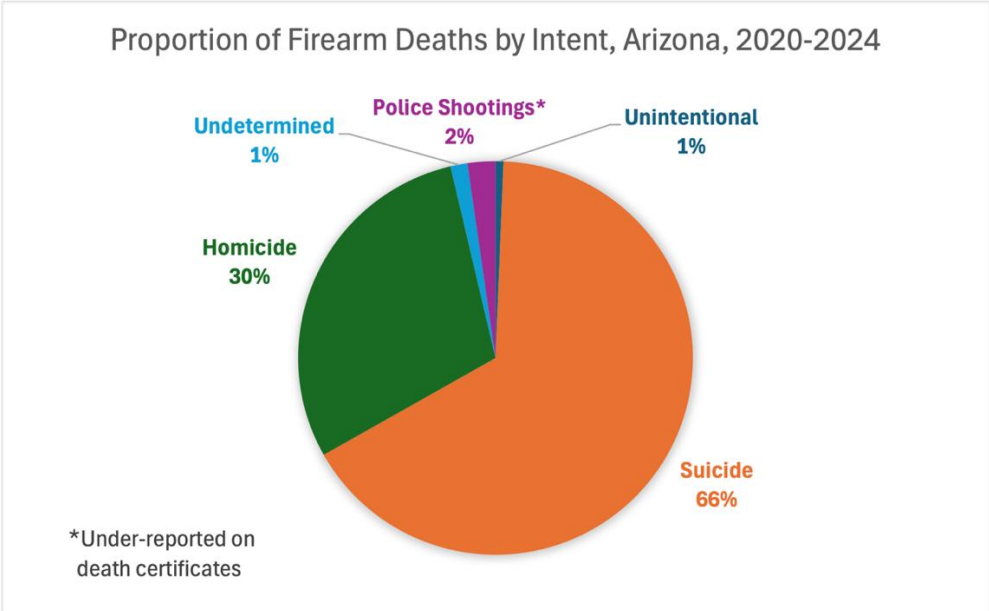
Another common measure of the impact of a cause of death is the number of years of potential life lost (YPLL) in a population from that cause of death before some chosen age, such as age 65 or 75. That measure is readily available for injury deaths from the [CDC WISQARS](#) web site. In 2023 alone, the 49,316 total suicide deaths in the US resulted in 969,011 YPLL while the 27,300 firearm suicides in the US resulted in 491,120 YPLL before age 65. In Arizona in 2023 the 1,506 total suicide deaths caused 28,597 YPLL while the 951 firearm suicides that year caused 16,037 YPLL before age 65.

### Suicide Costs

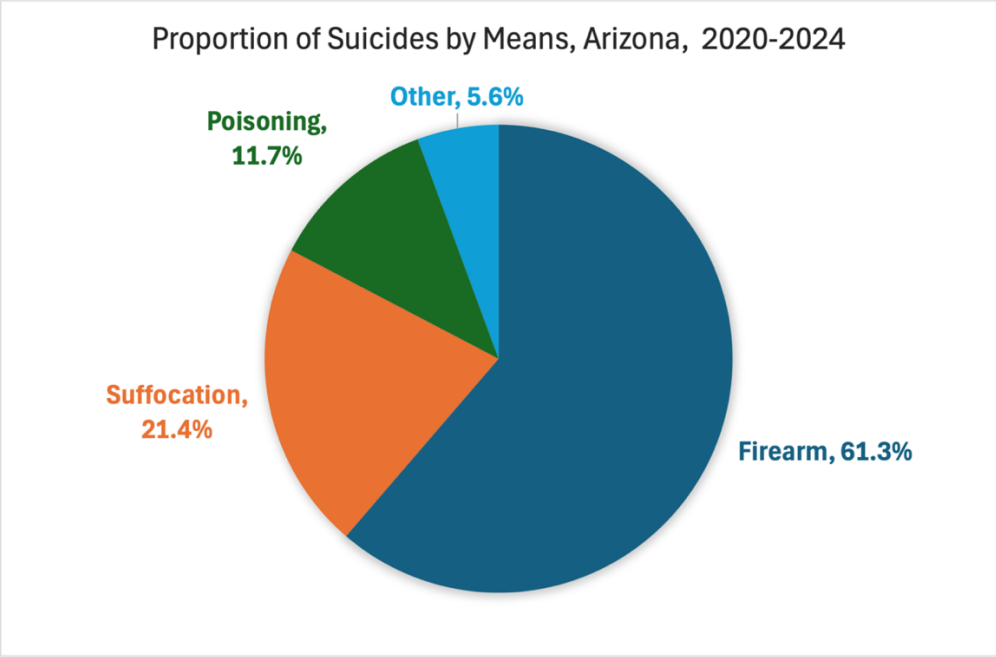
Suicides impose an enormous cost on families and society. Cost estimates by [CDC WISQARS](#) based on the medical and “statistical life” costs indicated that the 1,506 total suicides in Arizona in 2023 resulted in combined costs of over \$15 billion and a per capita cost of \$2,039 for every Arizona resident. The cost of firearm suicides in 2023 was estimated at \$9.12 billion with a per capita cost of \$1,227.

### The Role of Firearms

While homicides, police shootings, and mass/school shootings grab the media attention on a regular if not daily basis, none of these categories of firearm deaths either individually or collectively account for the majority of firearm deaths in the US or in Arizona. While collaborating on our 2023 AZPHA report [Gun Violence in Arizona: Data to Inform Prevention Policies](#), the most surprising finding to me was that firearm suicides were the leading category of firearm deaths.

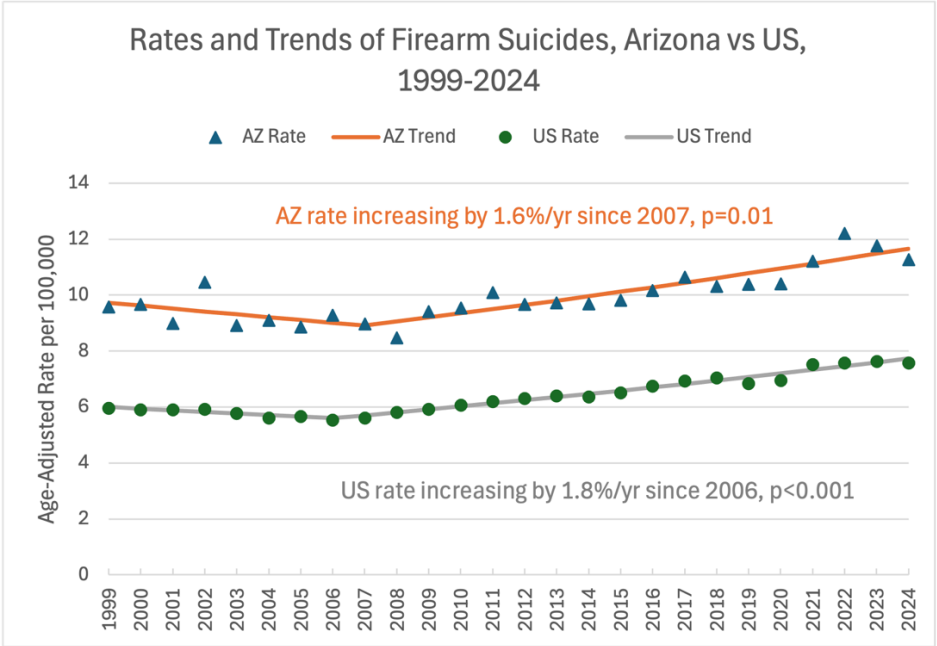


While two out three firearm deaths in Arizona are due to suicides, firearms are also the most frequent means of committing suicide. CDC suicide mortality data include the means/mechanism of suicide for each decedent. However, as shown in the graphic below, just three of the dozen potential means accounted for 94% of suicides in Arizona during 2020-2024.

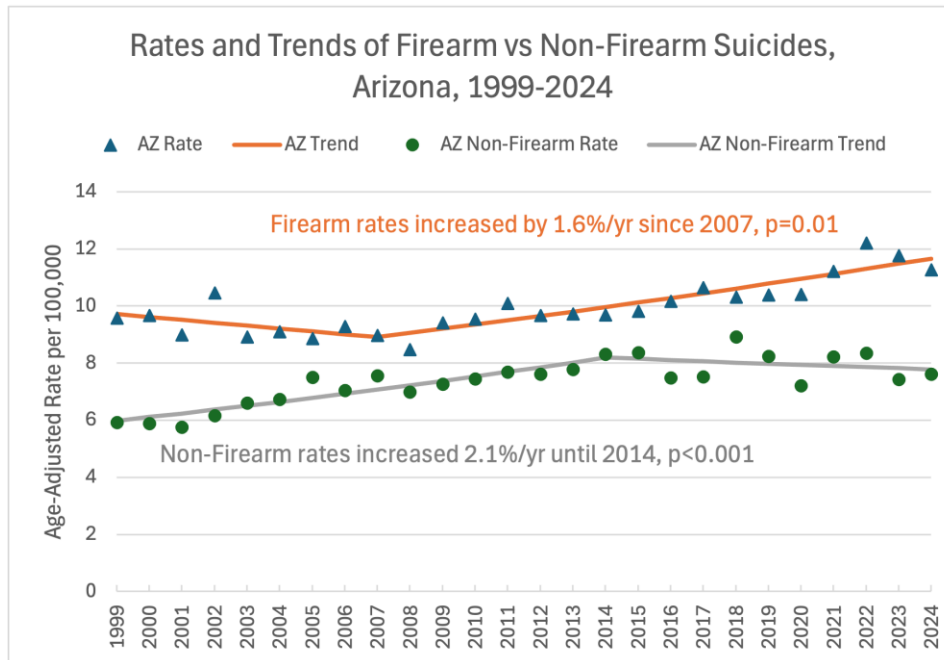


**Firearm Suicide Trends and Demographics**

Firearm suicide rates have been increasing in Arizona by 1.6% per year since 2007 and in the US by 1.8% per year since 2006.



However, trends differ in Arizona between firearm suicides and non-firearm suicides. Non-firearm suicides increased at a higher rate (2.1% per year) but only until 2014, after which rates leveled off, while firearm suicides have continued to increase.



As detailed in the [2023 AZPHA report](#), the proportion of suicides involving firearms varies significantly by sex, race, age, geographic location, and other factors. For example, while firearms are the most frequent means of suicide for both males and females, 67% of males used a firearm, while only 39% of females did so during 2020-2024. Among racial and ethnic categories, firearms were the leading means of suicide except among non-Hispanic American Indians where suffocation accounted for nearly 62% of suicide deaths during 2020-2024. The proportion of suicide deaths involving a firearm increased with age, ranging from 34% for ages 5-14 to 79% for ages 75-84.

### Firearm Laws and Suicide Prevention

While preventing suicide deaths requires [mental health care and many other approaches](#), “means restriction” is a well-established approach that limits access to suicide methods through environmental or policy changes, e.g. ([here](#)) and ([here](#)). While much of the world focuses on means such as bridge jumping or ingesting poisonous pesticides, the situation in the US differs significantly from other countries in relation to firearms: (1) the US has some 400 million firearms, (2) firearms in the home increase the risk of suicide, (3) firearms are involved in the majority of suicide deaths, and (4) firearms are the most lethal means of suicide. A [2019 study by Conner et al](#) reported that 90% of suicide attempts using a firearm were successful, compared to drowning (56%), hanging (53%), gas (31%), jumping (28%), or poisoning (3%).

Means restriction for reducing suicide should clearly focus on firearm access. There is a substantial body of research spanning several decades showing that specific policies and laws

limiting access to a firearm by high risk persons can reduce suicide deaths. The most recent and the most comprehensive critical review of research on the impact of gun policies was published on January 29, 2026 by Smart et al, [\*The Science of Gun Policy: A Critical Synthesis of Research Evidence on the Effects of Gun Policies in the United States, Fifth Edition\*](#) (Rand Corporation). This 400+ page report critically and transparently examines three decades of published literature through 2024 and evaluates the effects of 18 types of gun policies.

Here is their summary of the key findings and recommendations related to firearm suicides:

**Conclusion 1.** We find supportive evidence, our highest evidence rating, that CAP laws, or safe-storage laws, reduce self-inflicted fatal or nonfatal firearm injuries, unintentional firearm injuries and deaths, and firearm homicides among youth. There is also moderate evidence that CAP laws reduce firearm suicides among young people, and limited evidence that such laws reduce unintentional firearm injuries among adults. The evidence is stronger for negligent-storage laws than for reckless endangerment laws [emphasis added]; reckless endangerment laws are sometimes considered a weaker form of CAP law.

*Recommendation 1.* States without negligent-storage CAP laws should consider adopting them or other safe-storage laws as a strategy to reduce total and firearm suicides, unintentional firearm injuries and deaths, and firearm homicides among youth.

*Recommendation 2.* States implementing CAP or other safe-storage laws should support data collection and investigation of the mechanisms by which CAP laws affect injury outcomes, for example, by investigating effects on gun ownership, storage, and thefts.

**Conclusion 4.** There is supportive evidence that increasing the minimum age required to purchase a firearm above the threshold set by federal law can reduce firearm suicides among young people. There is also limited evidence that higher minimum age requirements for purchasing or possessing a firearm may reduce total suicides among young adults and firearm suicides among young people.

*Recommendation 5.* States should consider raising the minimum age to purchase firearms and ammunition above the level of federal requirements as a strategy to reduce firearm suicides among youths.

**Conclusion 5.** There is moderate evidence that waiting periods reduce firearm suicides and total homicides and limited evidence that they reduce total suicides and firearm homicides.

*Recommendation 6.* States without waiting-period laws should consider adopting them as a strategy for reducing suicides and homicides.

*Recommendation 7.* States should consider regulations that delay access to firearms by those who may be in crisis. Examples of laws that may delay such access and for which there is at least moderate evidence that they reduce total or firearm suicides include minimum age of purchase and possession laws, waiting-period laws, and CAP laws.

**Conclusion 6.** There is limited evidence that extreme-risk protection order (ERPO) laws may reduce total and firearm suicides.

*Recommendation 8.* States without ERPO laws should consider adopting such laws as a potential strategy for reducing total or firearm suicides.

### **Arizona Lacks the Laws Known to Reduce Firearm Suicide Risks**

Unfortunately, as discussed in the 2023 [AZPHA report](#) on gun violence, Arizona receives failing grades by two national organizations for its very weak gun laws, [Giffords Law Center](#) and [Everytown Research and Policy](#). These organizations note that Arizona is missing most key laws, including all those that the RAND report **recommends** to reduce firearm suicide deaths:

- Extreme risk protection orders
- Waiting periods
- Child access prevention laws
- Minimum age to purchase
- Universal background checks
- Gun owner licensing
- Most domestic violence gun laws
- Assault weapon restrictions
- Large capacity magazine ban
- Concealed carry permit
- Open carry regulations
- Community violence intervention funding

Further information on firearm suicides can be found in a 24-page 2025 report from The Center for Gun Violence Solutions at the Johns Hopkins Bloomberg School of Public Health, [Gun Violence in the United States 2023: Examining the Gun Suicide Epidemic](#).

Finally, a question that may reasonably be raised about the “means restriction” approach is that if you limit access to a firearm as a means of suicide, wouldn’t the person just seek another means? As previously noted, firearms are a very effective means of suicide and few survive the attempt. Other means – such as poisoning or hanging - are generally much less effective and many people will survive that attempt if a firearm were not accessible. Furthermore, a study by [Brown and colleagues](#) published in 2026 examined the impact of Extreme Risk Protection Orders (ERPO) – often referred to as red flag laws - on both firearm and nonfirearm suicides in 4 states with and 8 without ERPOs. They reported that “ERPOs were associated with 675 fewer estimated firearm suicides without measurable increases in nonfirearm suicides.”

