



Monitoring Firearm-Related Deaths in California, 2019

Background

Use of firearms as a mechanism to facilitate violence is a concerning public health problem. Nationally, in 2019 there were 39,707 firearm-related deaths, which equates to 109 firearm-related deaths per day¹. The medical cost associated with these deaths alone was estimated to be over \$233 million in 2019², and the economic impact since then has been estimated to exceed tens of billions of dollars in medical expenses and lost productivity¹. In addition, these deaths have a tremendous impact on the lives of those who are left behind¹. Understanding the patterns and nuances of these deaths is essential to development of data-informed prevention strategies and policies that address firearm violence. This report is intended to serve as a resource to better understand the deaths of those impacted by firearm violence so that they can be prevented in the future.

Data Sources

Vital statistics data are collected from death certificates for all violent deaths that occur in California. Enhanced surveillance through CalVDRS is completed for a subset of participating counties by linking vital statistics data to supplemental data abstracted from coroner and medical examiner reports, toxicology reports, and law enforcement reports. Circumstances that contributed to the death that were documented in these reports were abstracted from this supplemental data and included in the surveillance system. This additional data can address the **who, what, where, when** and **how** of the deaths to help us try to understand **why** they occurred and prevent similar deaths from occurring in the future.

This document summarizes demographic data for firearm-related deaths of California residents in 2019. Data on the circumstance surrounding each of these deaths are also summarized for decedents of firearm-related violent deaths that occurred in the subset of 30 participating CalVDRS counties. Circumstance data is reported as a percentage of incidents where circumstances were known; circumstances are known for 84% of firearm-related violent deaths.

About CalVDRS

The California Violent Death Reporting System (CalVDRS) is housed in the Injury and Violence Prevention Branch in the California Department of Public Health. CalVDRS is funded by the Centers for Disease Control and Prevention to conduct statewide surveillance on violent deaths that occur in California. Violent deaths include homicide (including legal intervention deaths that result from law enforcement acting in the line of duty), suicide, unintentional firearm deaths, and deaths of undetermined intent that meet the CalVDRS definition. CalVDRS collects data from multiple sources (i.e., death certificates, medical examiner/coroner reports, and law enforcement reports) in order to gain a more comprehensive understanding of the circumstances surrounding these deaths. The goal of this system is to promote development of data-driven public health prevention strategies that aim to reduce the number of violent deaths that occur each year.

Results

All Firearm-Related Deaths in California Residents

Firearms were used in more than 1 in 3 suicide deaths (36%) and nearly 2 of every 3 homicides (69%). Firearm-related violent deaths comprised 45% of violent deaths to CA residents (n=2,954) in 2019.

- 1587 were suicides (54%)
- 1328 were homicides (including Legal Intervention) (45%)
- 27 unintentional firearm deaths (1%)
- 10 undetermined intent (<1%)
- 2 due to late effects (<1%; late effects are residual conditions that result in death more than a year after the firearm injury)

Majority of firearm-related deaths:

- 48% White
- 88% Male
- 62% in the 25-64 age range

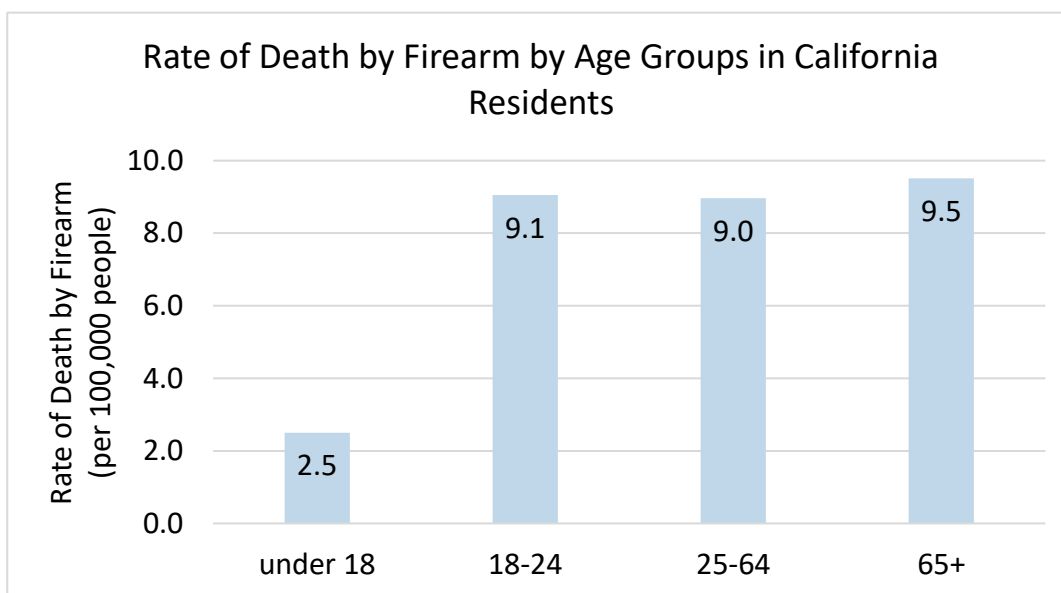


Figure 1: Overall rate of death by firearm by age group in California residents, 2019

- Homicide was the most common manner of death for firearm-related deaths for those under the age of 18 (74%) and 18-24 years old (72%).
- Suicide was the most common manner of death for firearm-related deaths for those 25-64 years old (50%) and those older than 65 years (92%).

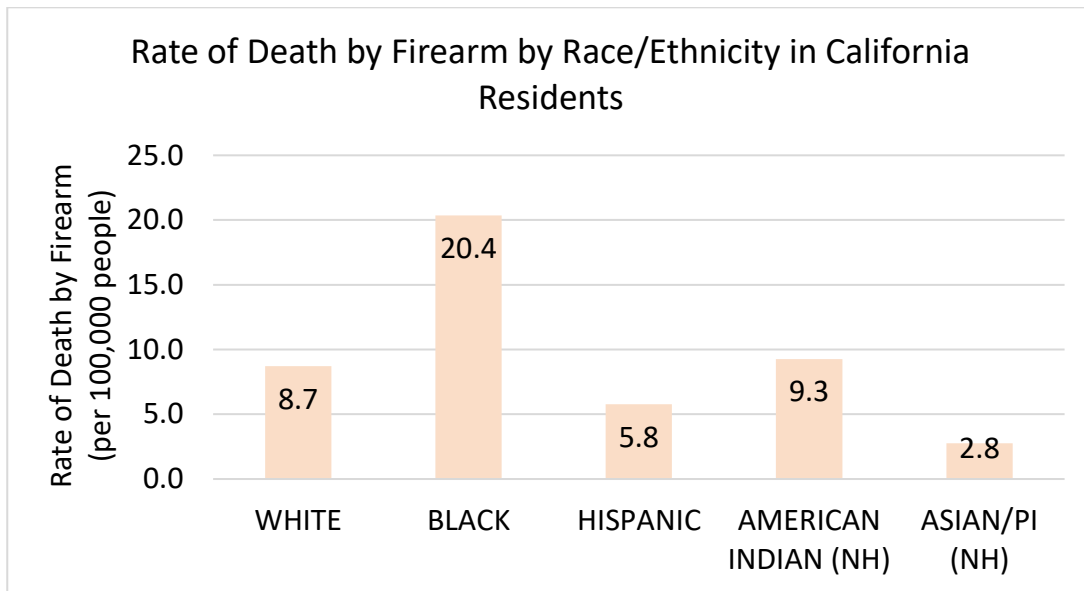


Figure 2: Overall rate of death by firearm by race/ethnicity in California residents, 2019

- Highest rate of homicide death by firearm by race/ethnicity in California residents, 2019 is 17.3 deaths per 100,000 people in the Black population
- Highest rate of suicide death by firearm by race/ethnicity in California residents, 2019 is 7.3 deaths per 100,000 people in the White population, followed by the American Indian population (2.9 deaths per 100,000 people)

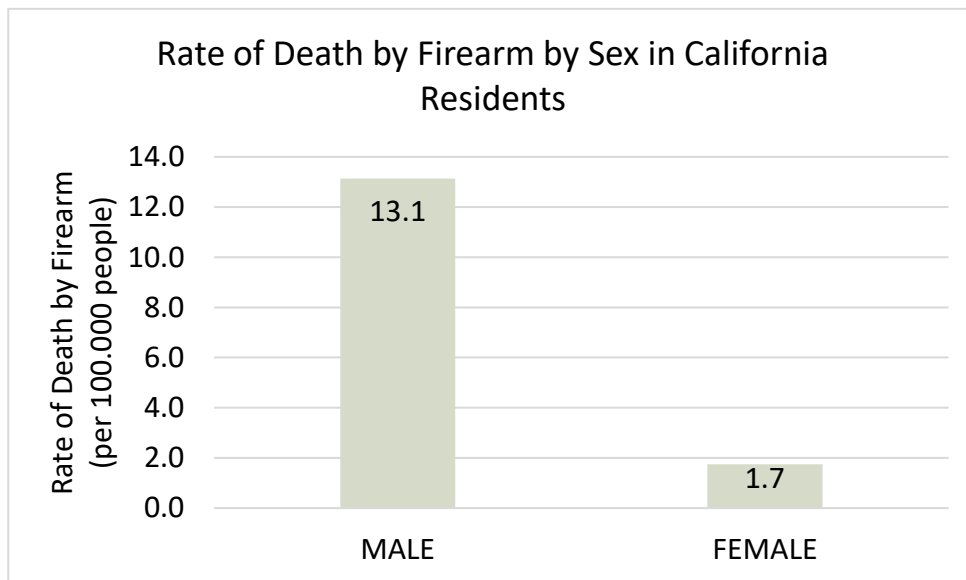


Figure 3: Overall rate of death by firearm by sex in California Residents, 2019

- Firearms were the most common weapon used by males who died by suicide (41%); 17% of females who died by suicide used a firearm
- Nearly 3 out of 4 male homicides (73%) used a firearm as a weapon and over half (56%) of female homicides used a firearm as a weapon

Firearm-Related Suicide Circumstances in CalVDRS Participating Counties

- Of the 826 firearm-related suicide deaths from CalVDRS participating counties, 88% (n=723) had at least one circumstance documented
- Circumstances are not mutually exclusive; more than one can be applicable for a single death
- 37% of those who died due to a firearm-related suicide were diagnosed with a current mental health problem and over a quarter (27%) were noted to have been in a depressed mood
- 14% of those who died due to a firearm-related suicide had a history of mental health treatment and 10% were currently receiving mental health treatment
- People over the age of 25 who died by firearm-related suicide were most likely to have a history of suicidal thoughts or plans (34%) and to have recently disclosed intent to commit suicide (14%)

MENTAL HEALTH CIRCUMSTANCES	10-17 years (n=17)	18-24 years (n=42)	25-64 years (n=398)	65+ years (n=266)
Current mental health problem	35%	43%	44%	26%
Current mental health treatment	12%	12%	14%	5%
History of mental health treatment	18%	21%	19%	6%
Current perceived depressed mood	24%	24%	26%	29%
History of suicidal thoughts or plans	29%	24%	34%	33%
History of previous suicide attempt	6%	10%	13%	6%
Recently disclosed intent to commit suicide	6%	19%	14%	13%
Left a suicide note	41%	33%	27%	37%

Firearm-Related Suicide Circumstances in CalVDRS Participating Counties (continued)

Under 18 years old

12% had a relationship problem with a family member

29% experienced school problems

18-24 years old

21% had either alcohol dependence, substance abuse issues, or both

24% had a problem with their current or former intimate partner

14% were involved in an argument or conflict prior to their death

10% experienced job or financial problems

25-64 years old

28% had either alcohol dependence, substance abuse issues, or both

27% had a problem with their current or former intimate partner

14% were involved in an argument or conflict prior to their death

13% experienced job or financial problems that contributed to their death

65 years and older

9% had either alcohol dependence, substance abuse issues, or both

60% experienced physical health problems that contributed to their death

Firearm-Related Homicide Circumstances in CalVDRS Participating Counties

- Of the 661 firearm-related homicide deaths from CalVDRS participating counties, 81% (n=534) had at least one circumstance documented
- Circumstances are not mutually exclusive; more than one can be applicable for a single death
- Older adults (65+ years of age; 78%) were most likely to know the suspect responsible for their death and 11% of firearm-related homicides in that age group involved a family relationship problem
- Younger victims (10-17 years old; 59%) were more likely to be involved in a gang-related firearm-related homicide than older firearm-related homicide victims (65+ years of age; 6%)
- Younger victims (under 18 and 18-24 years; both 33%) were more likely to be involved in a drive-by shooting
- 22% of firearm-related homicides were precipitated by another crime
- Approximately a quarter of those under the age of 65 were involved in an argument that resulted in a homicide
- Older adults over the age of 65 were more likely to be victims of homicide due to being a bystander (6%)
- For firearm-related intimate partner homicides – younger adults were more likely to be involved in a single homicide (under 18 0%; 18-24 83%; 25-64 48%), whereas older adults were more likely to be involved in a situation where homicide(s) was followed by a suicide (65+ 86%)

HOMICIDE CIRCUMSTANCES	10-17 years (n=46)	18-24 years (n=110)	25-64 years (n=360)	65+ years (n=18)
Suspect was known to victim	13%	19%	23%	78%
Gang-related	59%	46%	44%	6%
Precipitated by another crime	22%	22%	23%	11%
Drive-by shooting	33%	33%	22%	6%
Drug involvement	11%	10%	8%	6%
Intimate partner violence related	0%	5%	9%	39%
Family relationship problem	0%	1%	3%	11%
Argument led to homicide	4%	28%	25%	28%
Fight between two people	11%	5%	9%	0%
Random violence	0%	3%	1%	0%
Homicide victim was a bystander	4%	1%	<1%	6%
Legal intervention deaths	7%	7%	14%	6%

Resources

Homicide Prevention Resources:

[Firearm Violence Prevention](#)

[Preventing Intimate Partner Violence Across the Lifespan: A Technical Package of Programs, Policies, and Practices](#)

[A Comprehensive Technical Package for the Prevention of Youth Violence and Associated Risk Behaviors](#)

Suicide Prevention Resources:

Know the Signs

Every day in California friends, family and co-workers struggle with emotional pain. And, for some, it's too difficult to talk about the pain, thoughts of suicide, and the need for help.

Everyone can play a role in suicide prevention by learning the warning signs of suicide, finding the words to reach out

to a loved one, and knowing where to turn for help. Visit <http://www.suicideispreventable.org> to learn more about suicide prevention.



The Centers for Disease Control and Prevention (CDC), [Preventing Suicide: A Technical Package of Policy, Programs, and Practices](#).

National Suicide Prevention Hotline 1-800-273-TALK (8255)

Chat also available at suicidepreventionlifeline.org or text 741741.

References

1. Firearm Violence Prevention. Centers for Disease Control and Prevention Violence Prevention website. Accessed February 7, 2022. <https://www.cdc.gov/violenceprevention/firearms/fastfact.html>.
2. Data & Statistics (WISQARS): Cost of Injury Reports. Center for Disease Control and Prevention website. Accessed February 7, 2022. <https://wisqars.cdc.gov:8443/costT/ProcessPart1FinishOutServlet>.

Notes about CalVDRS data

In 2019, 30 counties participated in CalVDRS enhanced data collection, including: Amador, Butte, Colusa, Fresno, Glenn, Humboldt, Imperial, Kern, Kings, Lake, Lassen, Los Angeles, Marin, Modoc, Mono, Placer, Sacramento, San Benito, San Diego, San Francisco, San Mateo, Santa Cruz, Shasta, Siskiyou, Solano, Sonoma, Tehama, Trinity, Ventura, and Yolo Counties. Together, the CalVDRS counties represent 56% of the violent deaths that occurred in 2019 in California and cover a mix of both urban and rural counties across the state.

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For more information on CalVDRS please contact IVPB@cdph.ca.gov.

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<https://tinyurl.com/CalVDRS>