



## Monitoring Firearm-Related Deaths in California, 2020

### Background

Use of firearms as a mechanism to facilitate violence is a concerning public health problem. Nationally, in 2020 there were 45,222 firearm-related deaths, which equates to 124 firearm-related deaths per day<sup>1</sup>. This was a 30% increase in firearm-related deaths over 2019, which was seen nationally as well as in California. The medical cost associated with these deaths alone was estimated to be over \$289 million in 2020 and, when combined with the value of life lost, the economic impact exceeds \$483 billion<sup>2</sup>. Understanding the patterns and nuances of these deaths is essential to the 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 deaths 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 2020. Data on the circumstance surrounding these deaths are also summarized for decedents of firearm-related violent deaths that occurred in the subset of 34 participating CalVDRS counties. Circumstance data is reported as a percentage of incidents where circumstances were known; circumstances are known for 83% 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 (58 counties)

Firearms were used in more than 1 in 3 suicide deaths (37%) and nearly 3 of every 4 homicides (74%). Firearm-related violent deaths comprised 50% of violent deaths to CA residents (n=3,451) in 2020.

- 1552 were suicides (45%)
- 1833 were homicides (including Legal Intervention) (53%)
- 39 were unintentional firearm deaths (1%)
- 27 were of undetermined intent (<1%)

Majority of firearm-related deaths:

- 41% White
- 88% Male
- 63% in the 25-64 year old age range

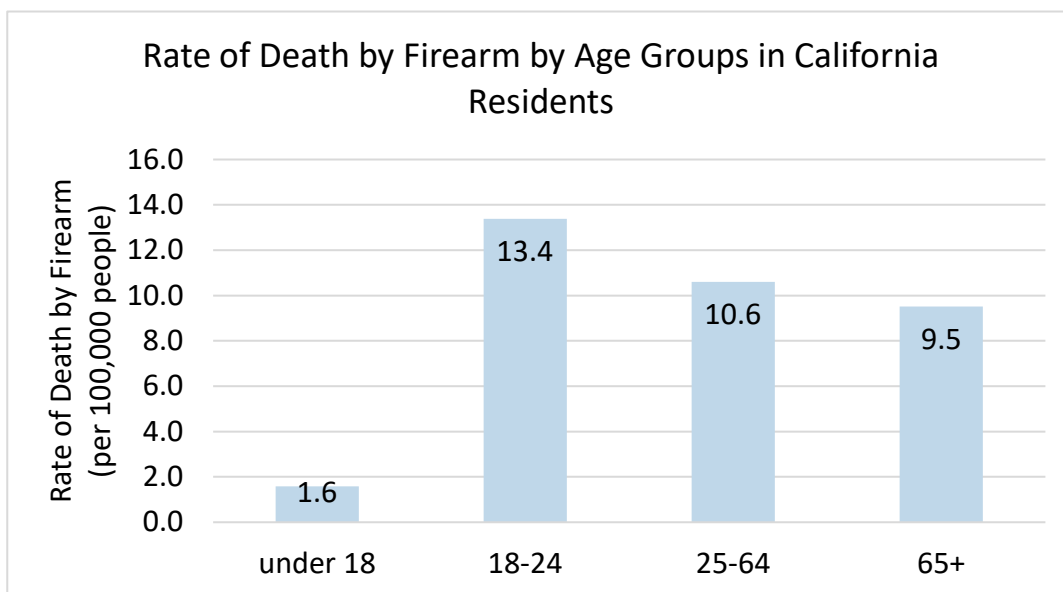


Figure 1: Overall rate of death by firearm by age group in California residents, 2020

- Homicide was the most common manner of death for firearm-related deaths for those under the age of 18 (71%), 18-24 years old (76%), and 25-64 years old (59%).
- Suicide was the most common manner of death for firearm-related deaths for those older than 65 years (91%).
- Less than 1% of firearm victims were under the age of 10.

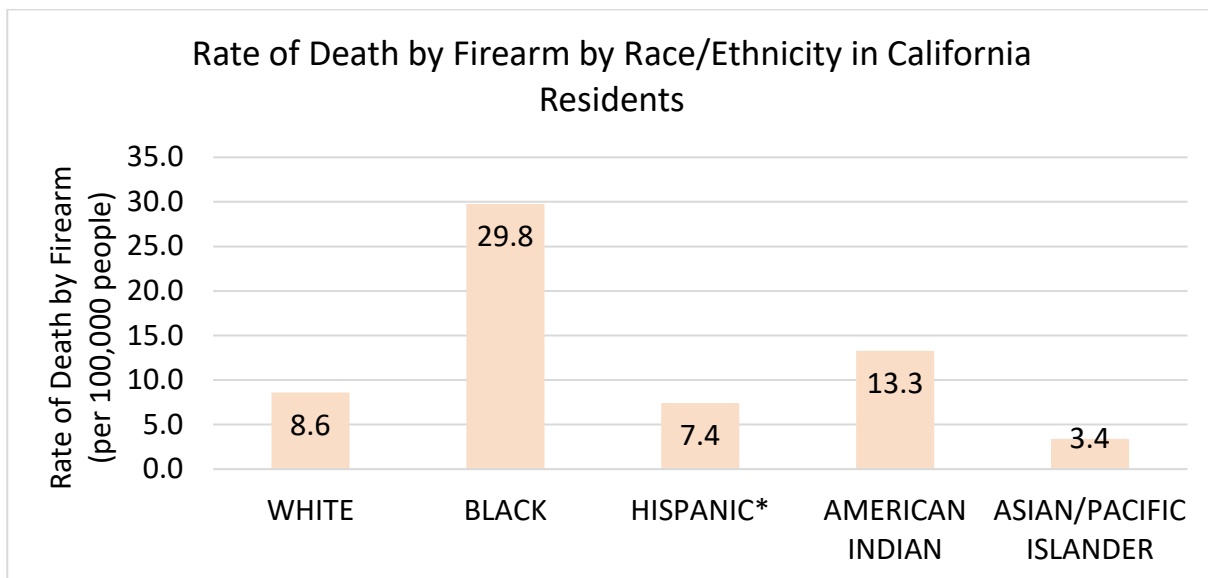


Figure 2: Overall rate of death by firearm by race/ethnicity in California residents, 2020

Note: \*Hispanic of any race

- The highest rate of homicide death by firearm by race/ethnicity in California residents for 2020 was among people who are Black (25.8 deaths per 100,000 people)
- The highest rate of suicide death by firearm by race/ethnicity in California residents for 2020 was among people who are White (6.9 deaths per 100,000 people), followed by people who are Black (3.7 deaths per 100,000 people)

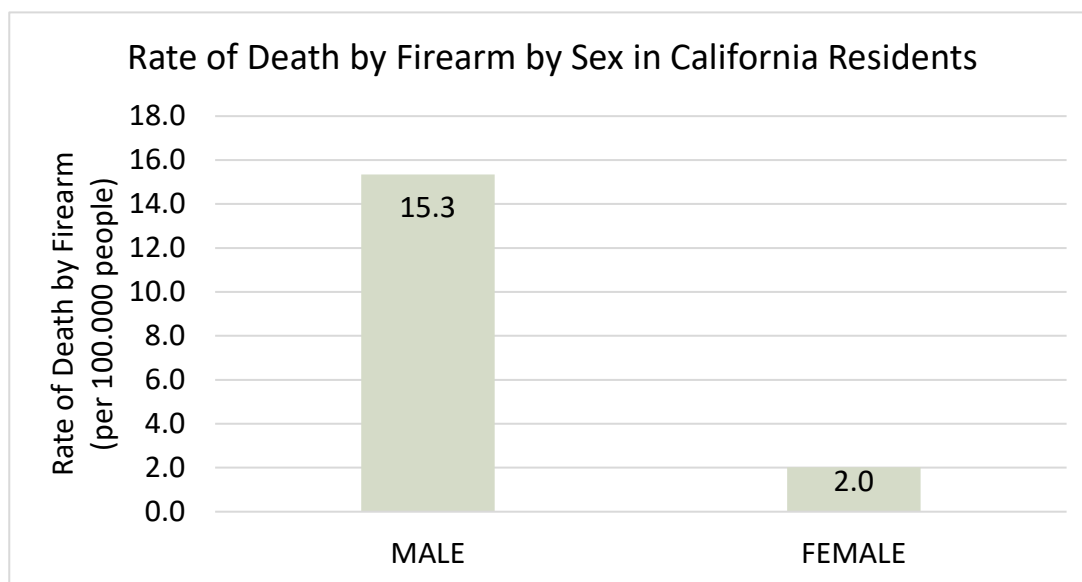


Figure 3: Overall rate of death by firearm by sex in California Residents, 2020

- Firearms were the most common weapon used by males who died by suicide (43%); 19% of females who died by suicide used a firearm
- More than 3 out of 4 male homicides (77%) 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 (34 counties)

- Of the 931 firearm-related suicide deaths from CalVDRS participating counties, 90% (n=840) had at least one circumstance documented; circumstances are not mutually exclusive—more than one can be applicable for a single death
- 40% of those who died due to a firearm-related suicide were diagnosed with a current mental health problem and over a quarter (26%) were noted to have been in a depressed mood
- 15% 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

MENTAL HEALTH CIRCUMSTANCES	Under 18 years (n=13)	18-24 years (n=58)	25-64 years (n=462)	65+ years (n=307)	Overall
Current mental health problem	8%	48%	43%	34%	40%
Current mental health treatment	0%	9%	12%	8%	10%
History of mental health treatment	15%	21%	19%	9%	15%
Current perceived depressed mood	15%	31%	26%	26%	26%
History of suicidal thoughts or plans	31%	31%	31%	33%	32%
History of previous suicide attempt	15%	21%	12%	5%	10%
Recently disclosed intent to commit suicide	8%	12%	14%	14%	14%
Left a suicide note	62%	27%	26%	36%	30%

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

### Under 18 years old

15% had a relationship problem with a family member

15% were involved in an argument or conflict prior to their death

### 18-24 years old

35% had either alcohol dependence, substance abuse issues, or both

17% had a problem with their current or former intimate partner

17% were involved in an argument or conflict prior to their death

7% experienced job or financial problems

### 25-64 years old

34% had either alcohol dependence, substance abuse issues, or both

26% had a problem with their current or former intimate partner

17% 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

10% had either alcohol dependence, substance abuse issues, or both

51% experienced physical health problems that contributed to their death

## Firearm-Related Homicide Circumstances in CalVDRS Participating Counties (34 counties)

- Of the 974 firearm-related homicide deaths from CalVDRS participating counties, 77% (n=745) 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, 61%) were most likely to know the suspect responsible for their death and 28% of firearm-related homicides in that age group involved intimate partner violence
- Younger adults and middle-aged victims (under 18 years, 32%; 18-24 years, 50%; 25-64 years 43%) 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 years, 29%) were more likely to be involved in a drive-by shooting
- 16% 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
- For firearm-related intimate partner homicides – the middle age groups were more likely to be involved in a single homicide incident (18-24 years, 67%; 25-64 years, 51%), whereas the youngest and oldest age groups were more likely to be involved in an incident where homicide(s) were followed by a suicide or multiple victim incident (under 18 years, 100%; 65+ years, 60%)

HOMICIDE CIRCUMSTANCES	Under 18 years (n=41)	18-24 years (n=153)	25-64 years (n=533)	65+ years (n=18)	Overall
Suspect was known to victim	41%	13%	19%	61%	20%
Gang-related	32%	50%	43%	6%	43%
Precipitated by another crime	5%	15%	17%	11%	16%
Drive-by shooting	29%	27%	25%	6%	25%
Drug involvement	5%	6%	5%	0%	5%
Intimate partner violence related	12%	2%	8%	28%	7%
Family relationship problem	7%	1%	2%	6%	2%
Argument led to homicide	27%	24%	22%	17%	22%
Fight between two people	5%	11%	7%	0%	7%
Random violence	5%	3%	1%	0%	2%
Homicide victim was a bystander	2%	1%	1%	0%	1%
Legal intervention deaths	0%	5%	12%	11%	11%

## 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), [Suicide Prevention Resource for Action](#).

#### 988 Suicide and Crisis Lifeline

Call or text 988. Chat also available at [988lifeline.org](https://988lifeline.org).



## References

1. Firearm Violence Prevention. Centers for Disease Control and Prevention Violence Prevention website. Accessed October 21, 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 October 21, 2022. <https://www.cdc.gov/injury/wisqars/cost/>.

## Notes about CalVDRS data

In 2020, 34 counties participated in CalVDRS enhanced data collection, including: Amador, Butte, Colusa, Contra Costa, Fresno, Glenn, Humboldt, Imperial, Kern, Kings, Lake, Lassen, Los Angeles, Marin, Mendocino, Merced, Modoc, Mono, Orange, Placer, Sacramento, San Benito, San Diego, San Francisco, San Mateo, Santa Cruz, Shasta, Siskiyou, Sonoma, Stanislaus, Tehama, Trinity, Ventura, and Yolo Counties. Together, the CalVDRS counties represent 68% of the violent deaths that occurred in 2020 in California and cover a mix of both urban and rural counties across the state.

*CalVDRS is supported by a grant funded by the Centers for Disease Control and Prevention (CDC), National Center for Injury Prevention and Control. CDC Grant Number (1 NU17CE010129).*

Brief released January 2023.

For more information on CalVDRS please contact [CalVDRS@cdph.ca.gov](mailto:CalVDRS@cdph.ca.gov).

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