

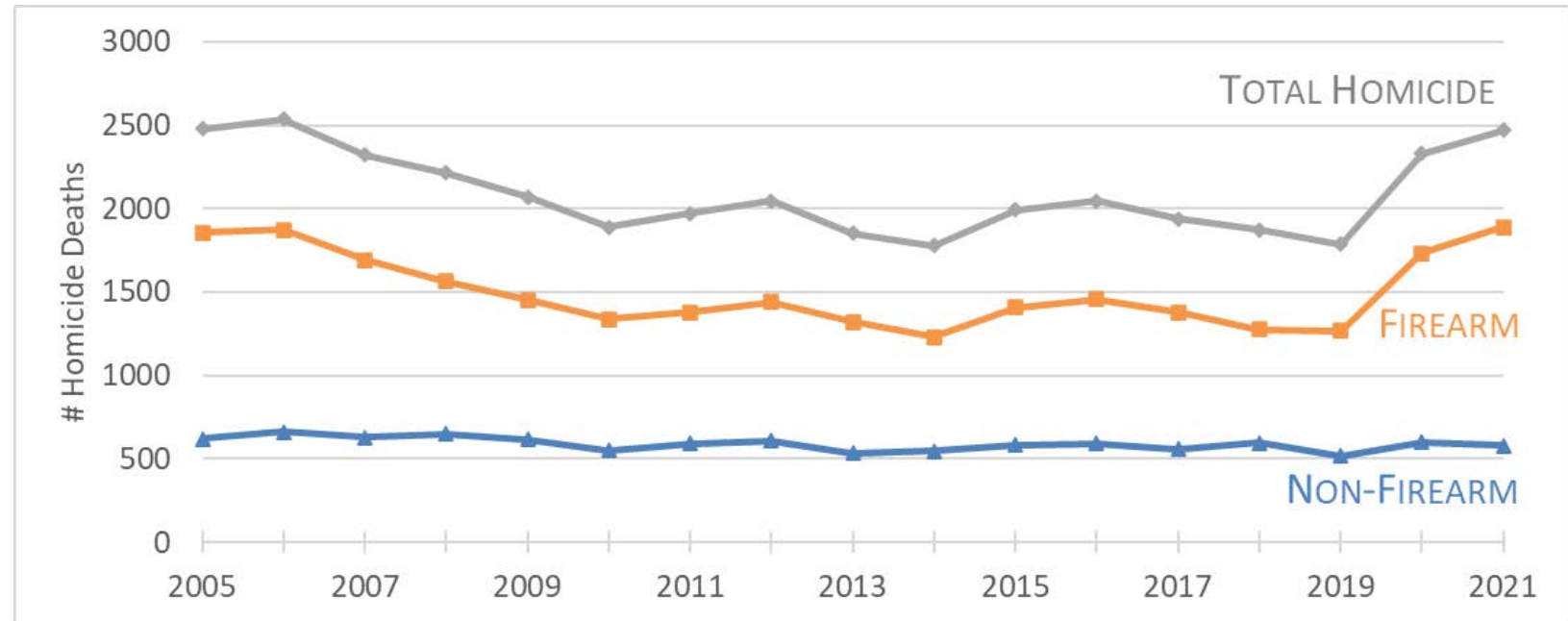
Firearm Violence: Data on Firearm Death, Non- Fatal Injury, and Storage Practices

Injury and Violence Prevention Branch
Center for Healthy Communities
California Department of Public Health (CDPH)
September 2022

Firearm Deaths

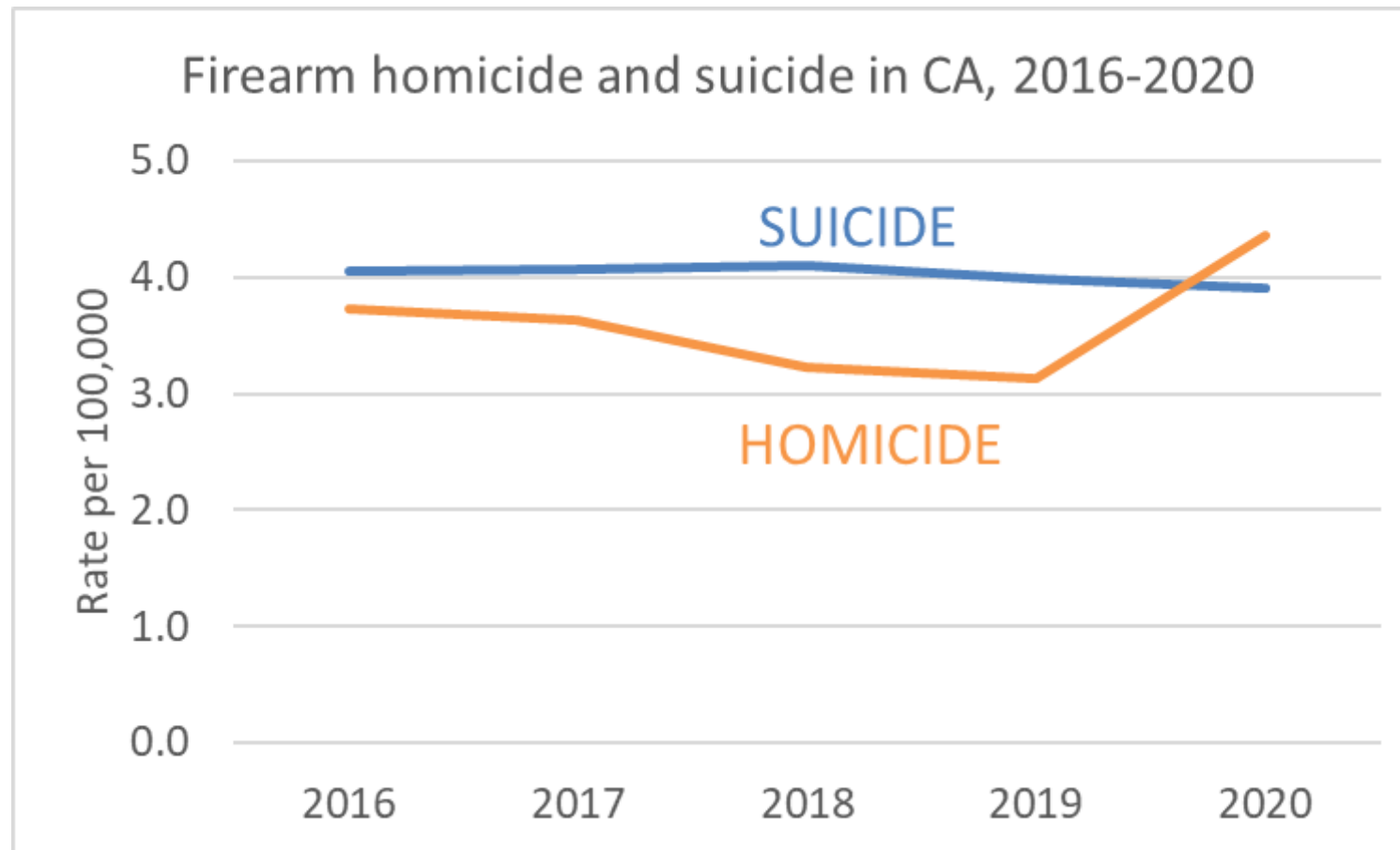
Dramatic Increase in Homicides in California in 2020

- 31% increase in the number of homicides from 2019 to 2020
- Increase continues through 2021
- Reverses 12 years of decline
- Increase primarily due to an increase in the number of homicides using firearms



Sources: 2005-2013 CDPH, Death Statistical Master File (DSMF); 2014-2020 CDPH, California Comprehensive Master Death Files (CCMDF); 2021 California Comprehensive Death Files (CCDF) Dynamic Files, extracted 5/12/2022.

Firearm Homicides Now Surpass Firearm Suicides

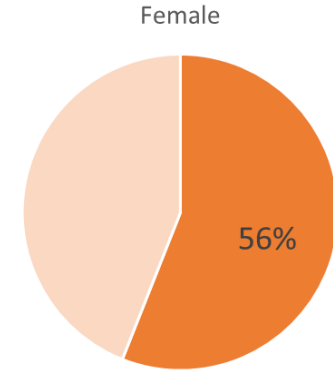
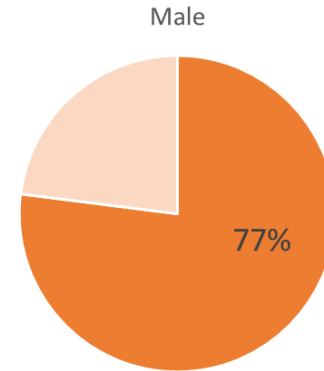


Source: CCDPH. EpiCenter: California injury data online. Data extracted, September 16, 2022.

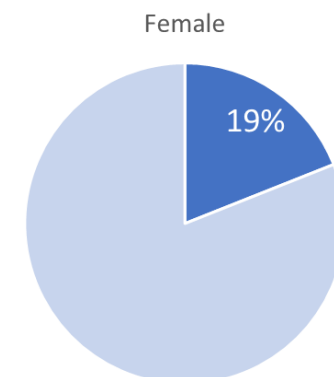
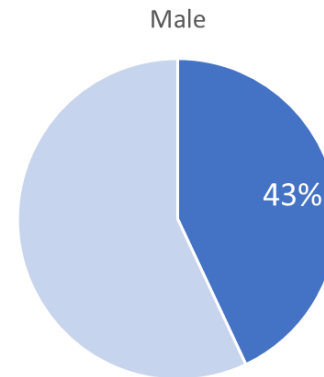
<https://skylab4.cdph.ca.gov/epicenter>

Firearms are the Leading Mechanism of Violence

74% of all HOMICIDES are by firearms →

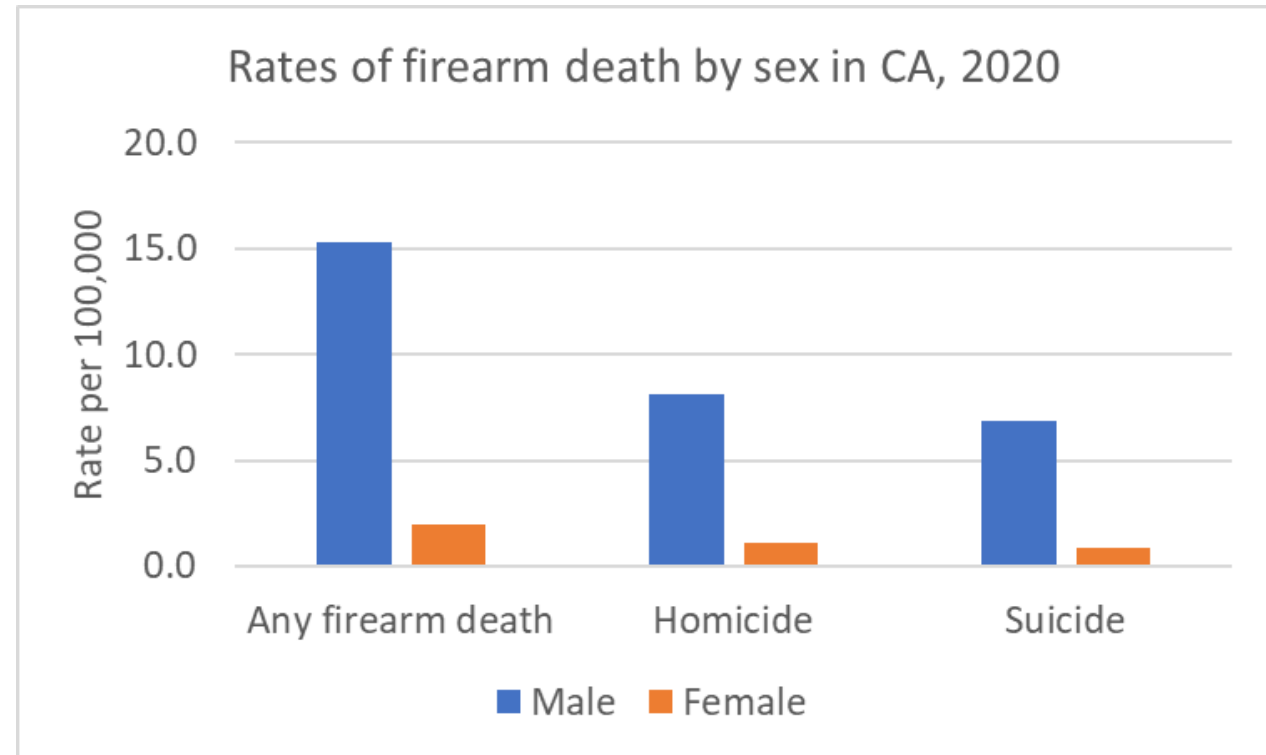


37% of all SUICIDES are by firearms →



Males Make Up Vast Majority of Firearm Violence Victims

- Rates of firearm death are more than 7 times higher in men
- Sex differences exist in all demographic groups

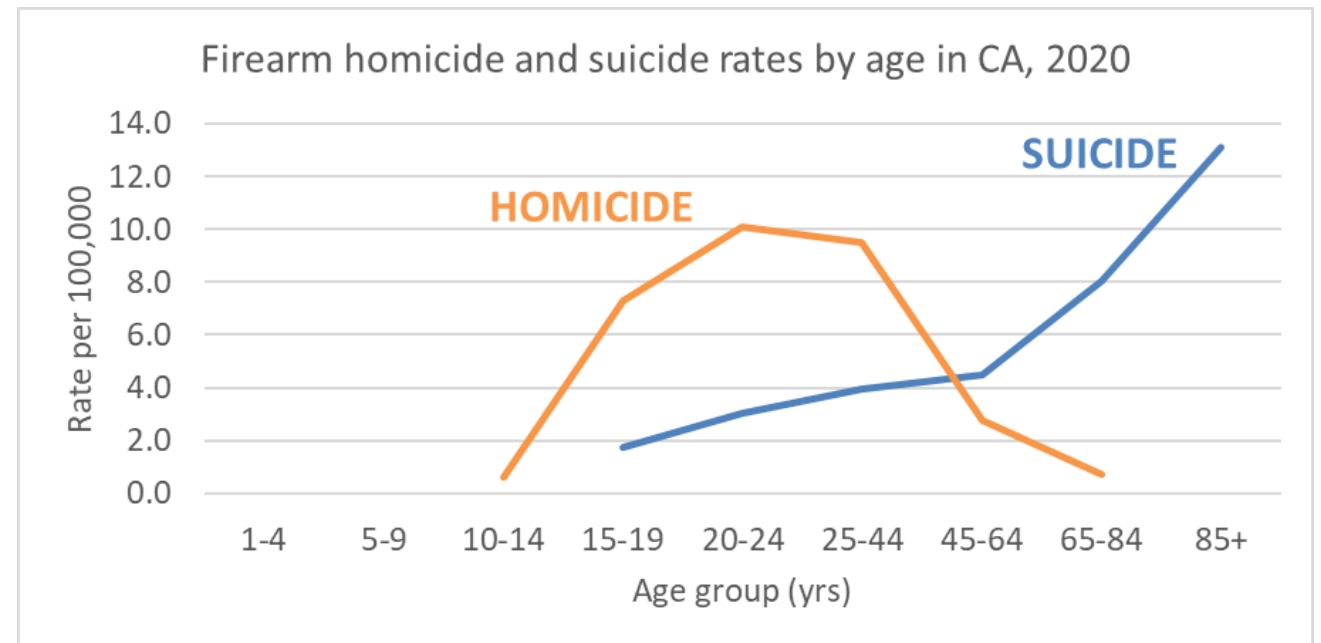


Source: CCDPH. EpiCenter: California injury data online. Data extracted, September 16, 2022.

<https://skylab4.cdph.ca.gov/epicenter>

Firearm Violence Impacts All Ages

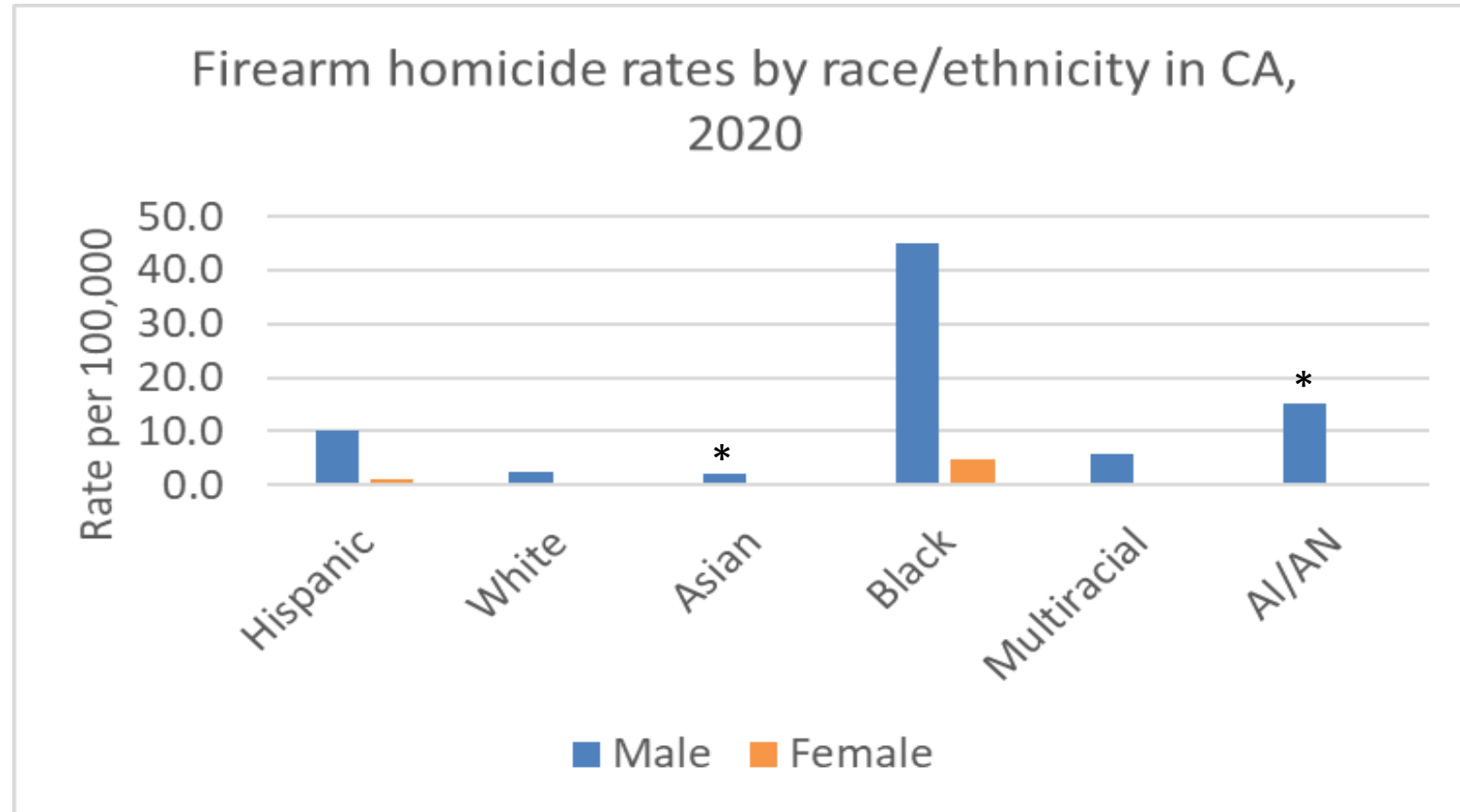
- In 2020, homicide was the most common manner of firearm-related death for youth and young adults
- Suicide was the most common manner of firearm-related death for older adults



Source: CCDPH. EpiCenter: California injury data online. Data extracted, September 16, 2022.

<https://skylab4.cdph.ca.gov/epicenter>

Large Disparities in Firearm Violence Exist by Race/Ethnicity – Homicide

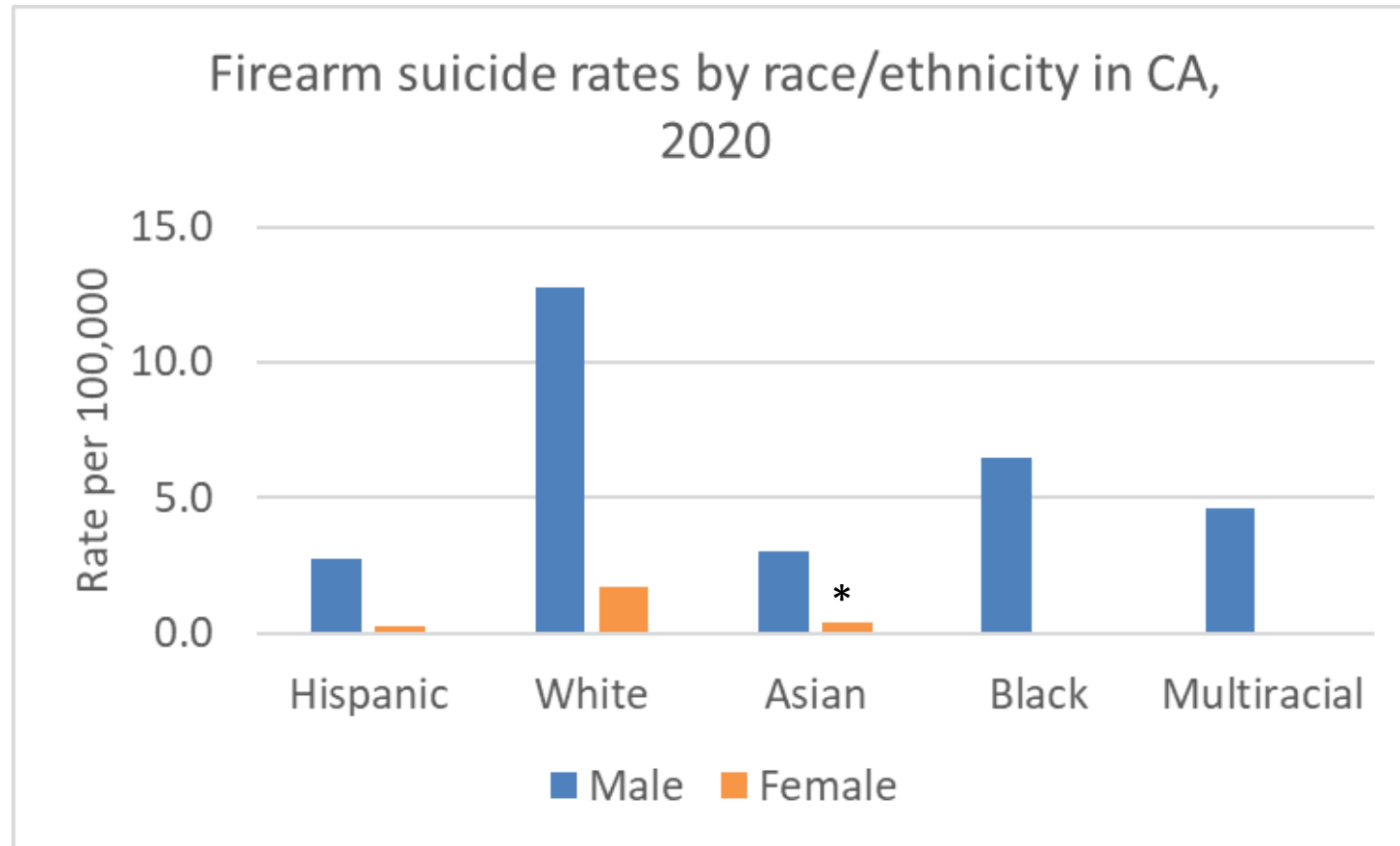


*Rates are based on counts < 20 and may be unstable

Source: CCDPH. EpiCenter: California injury data online. Data extracted, September 16, 2022.

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Large Disparities in Firearm Violence Exist by Race/Ethnicity – Suicide



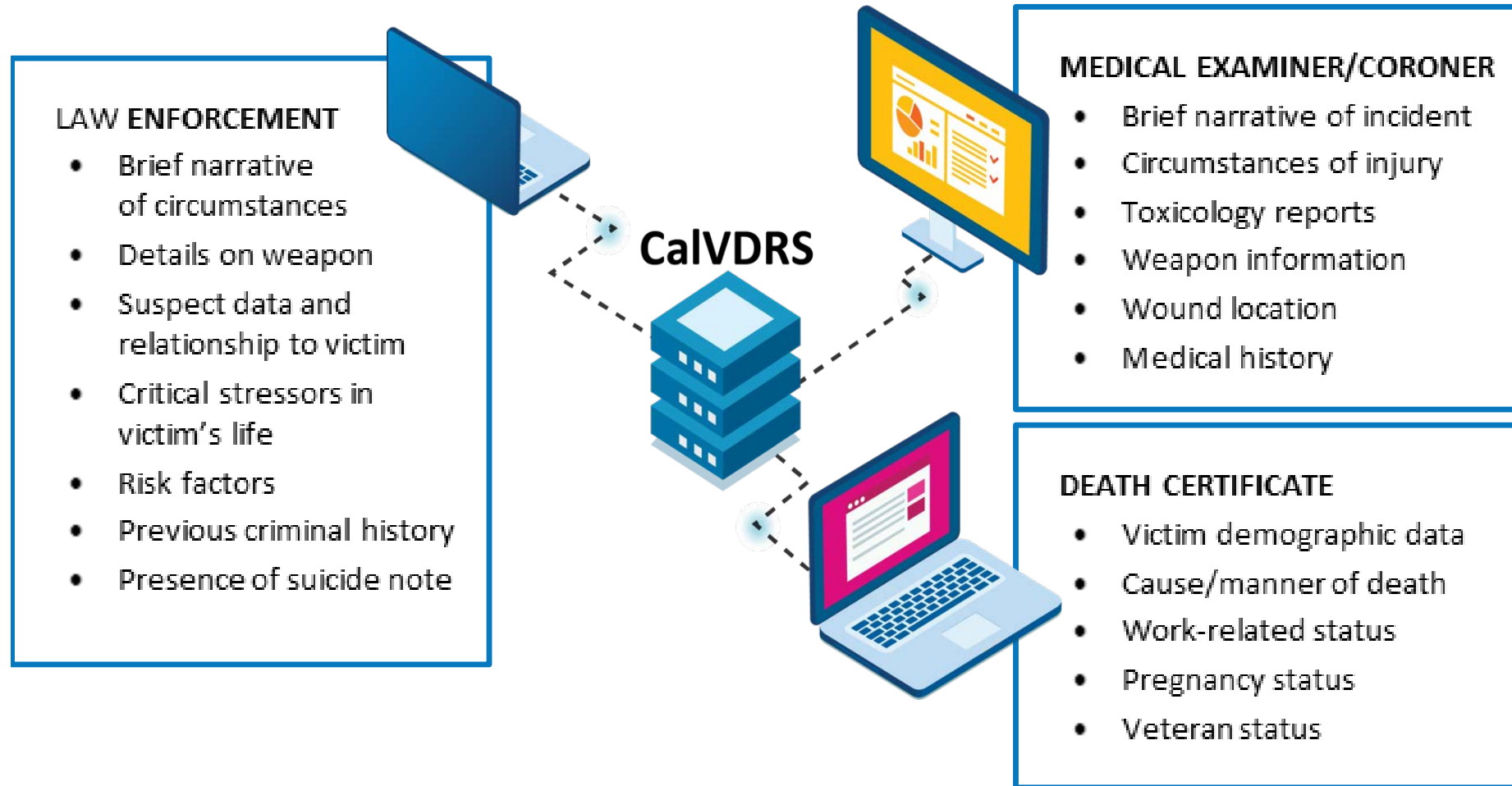
*Rates are based on counts < 20 and may be unstable

Source: CCDPH. EpiCenter: California injury data online. Data extracted, September 16, 2022.

<https://skylab4.cdph.ca.gov/epicenter>

Circumstances Surrounding Firearm Deaths

CA Violent Death Reporting System (CaIVDRS)



CalVDRS Data Limitations

- Data is not representative of the entire state, as data is not collected for all counties:
 - 2020 deaths
 - 35 participating counties representing 69% of CA's violent deaths
 - Counties are a mix of urban and rural in all regions of the state
- Circumstances may not be collected or documented in all data sources
 - Percentages should be considered a low estimate
- [https://www.cdph.ca.gov/Programs/CCDPHP/DCDIC/SACB/Pages/California-Violent-Death-Reporting-System-\(CalVDRS\).aspx](https://www.cdph.ca.gov/Programs/CCDPHP/DCDIC/SACB/Pages/California-Violent-Death-Reporting-System-(CalVDRS).aspx)

Where does firearm violence occur?

Firearm Suicide

- 78% in a house or apartment
- 75% at the decedent's home
- 7% in a motor vehicle



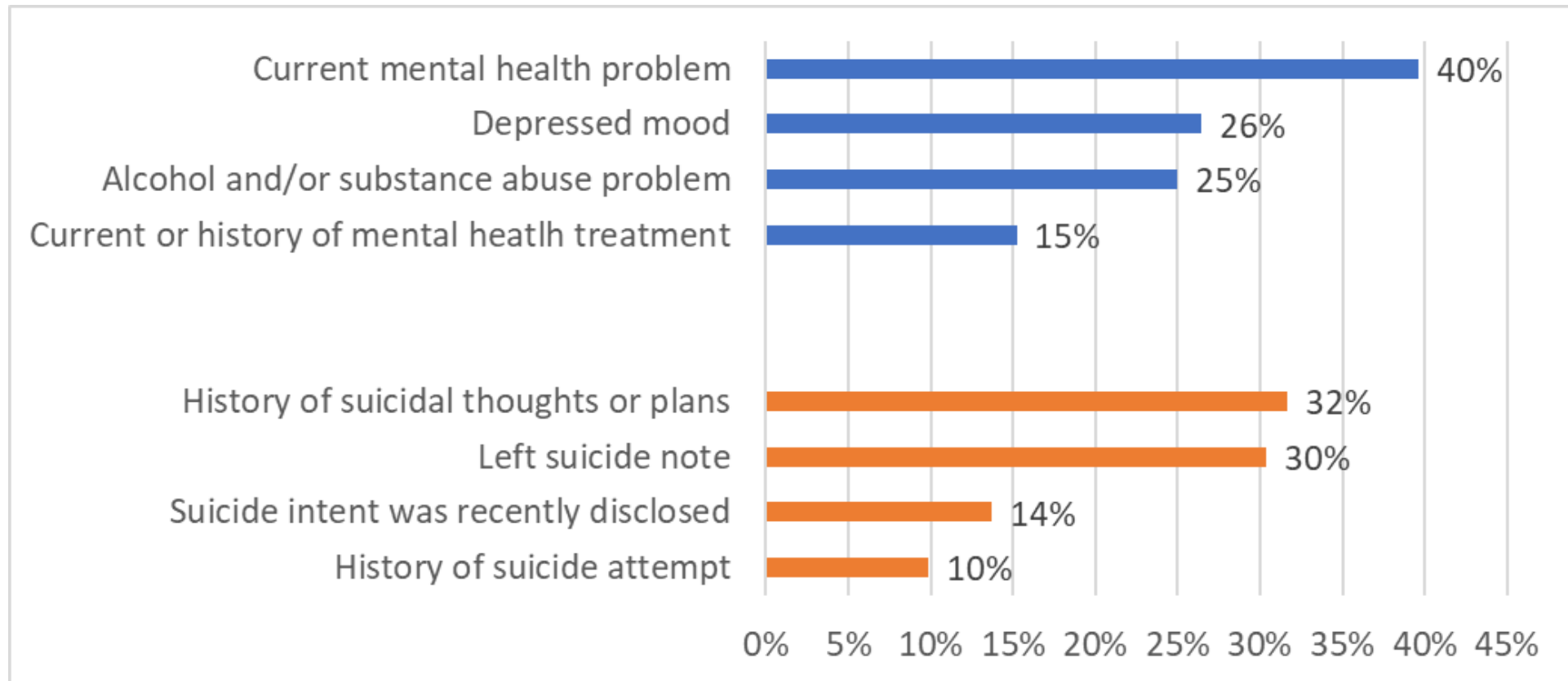
Firearm Homicide

- 35% street/road/sidewalk/alley
- 28% in a house or apartment
- 17% at the victim's home
- 15% in a motor vehicle

Source: CDPH, CalVDRS Death File, 2020.

Percentage among those with at least one known circumstance; Circumstances were available for 90% (840) of firearm suicides and 75% (744) firearm homicides in 35 CA counties

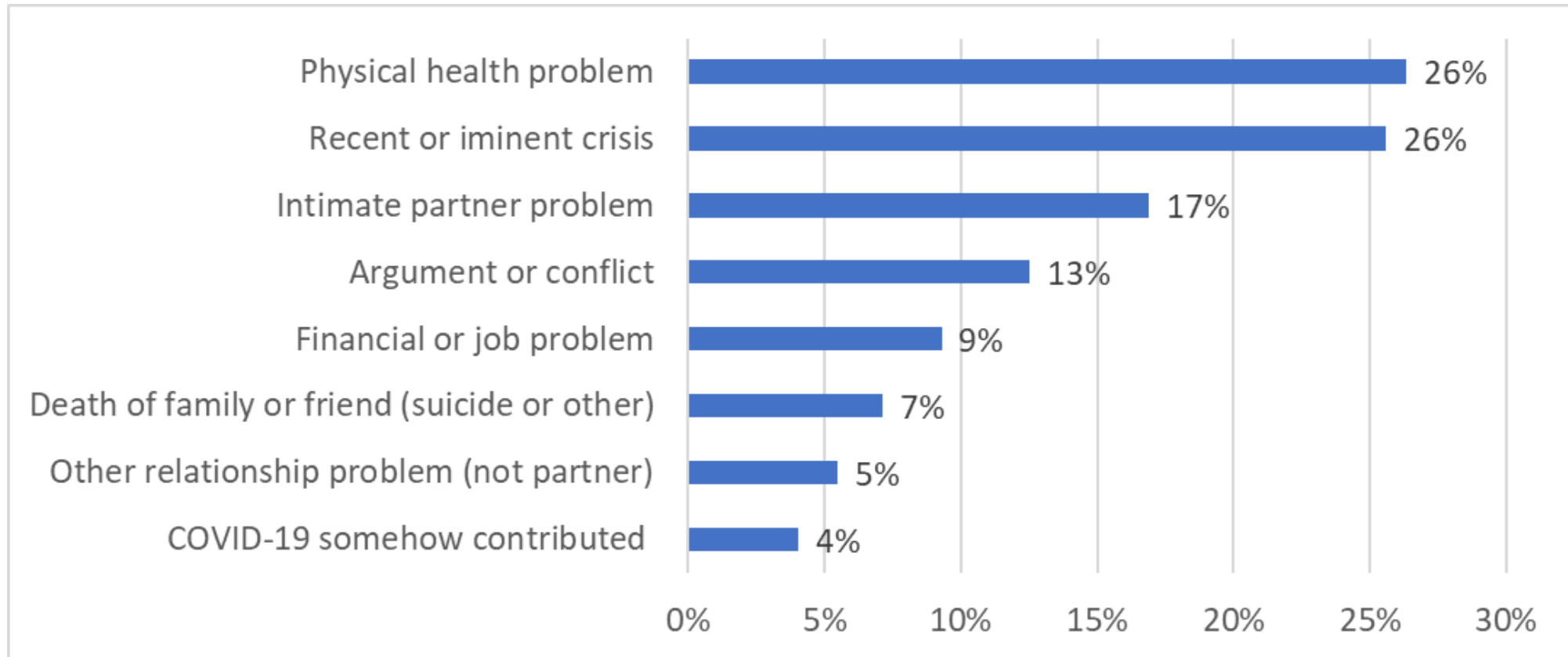
Mental Health and Suicide-Related Circumstances contributing to Firearm Suicide



Source: CDPH, CalVDRS Death File, 2020.

Percentage among those with at least one known circumstance; Circumstances were available for 90% (840) of firearm suicides in 35 CA counties

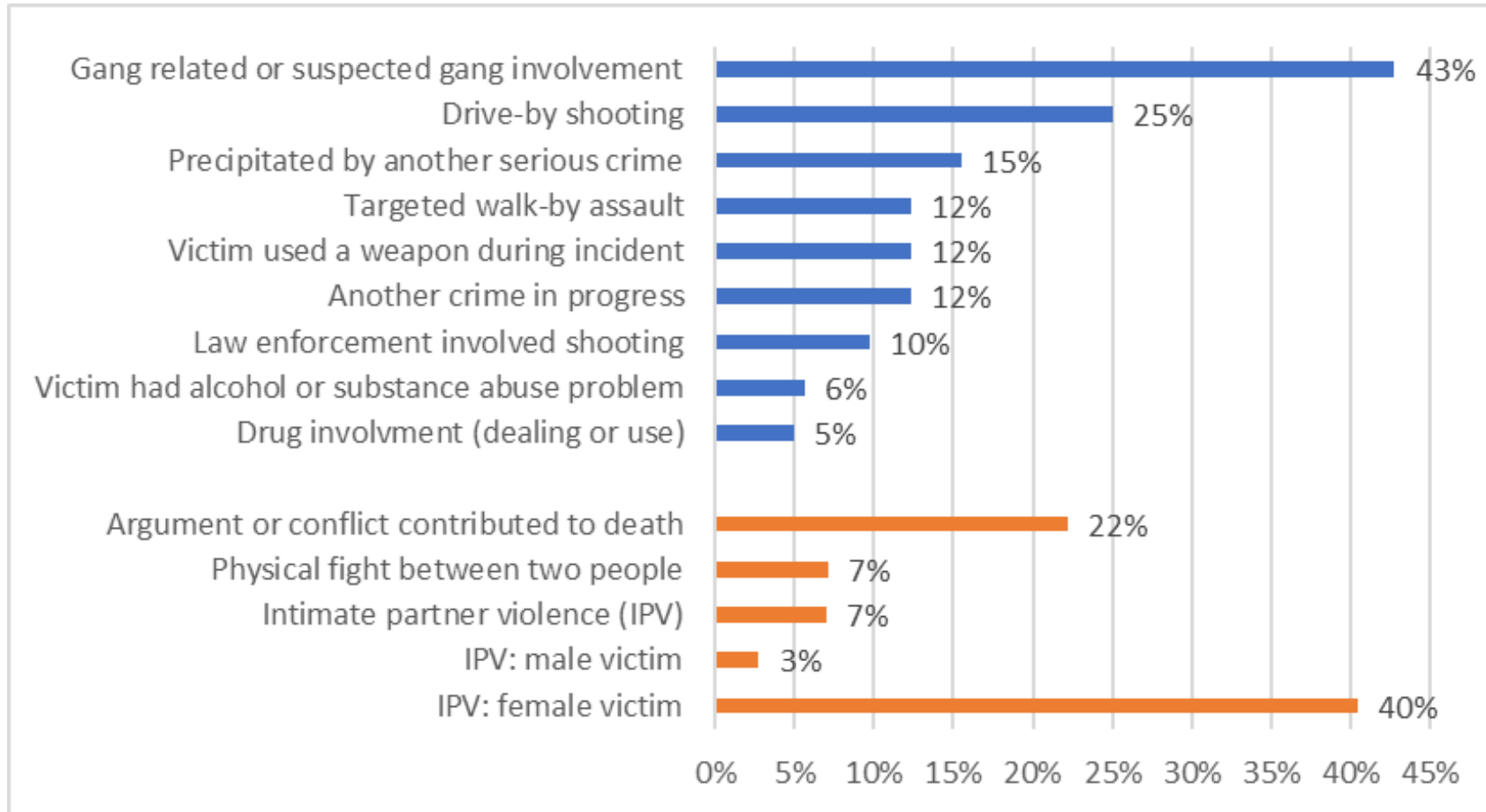
Other Circumstances contributing to Firearm Suicide



Source: CDPH, CalVDRS Death File, 2020.

Percentage among those with at least one known circumstance; Circumstances were available for 90% (840) of firearm suicides in 35 CA counties

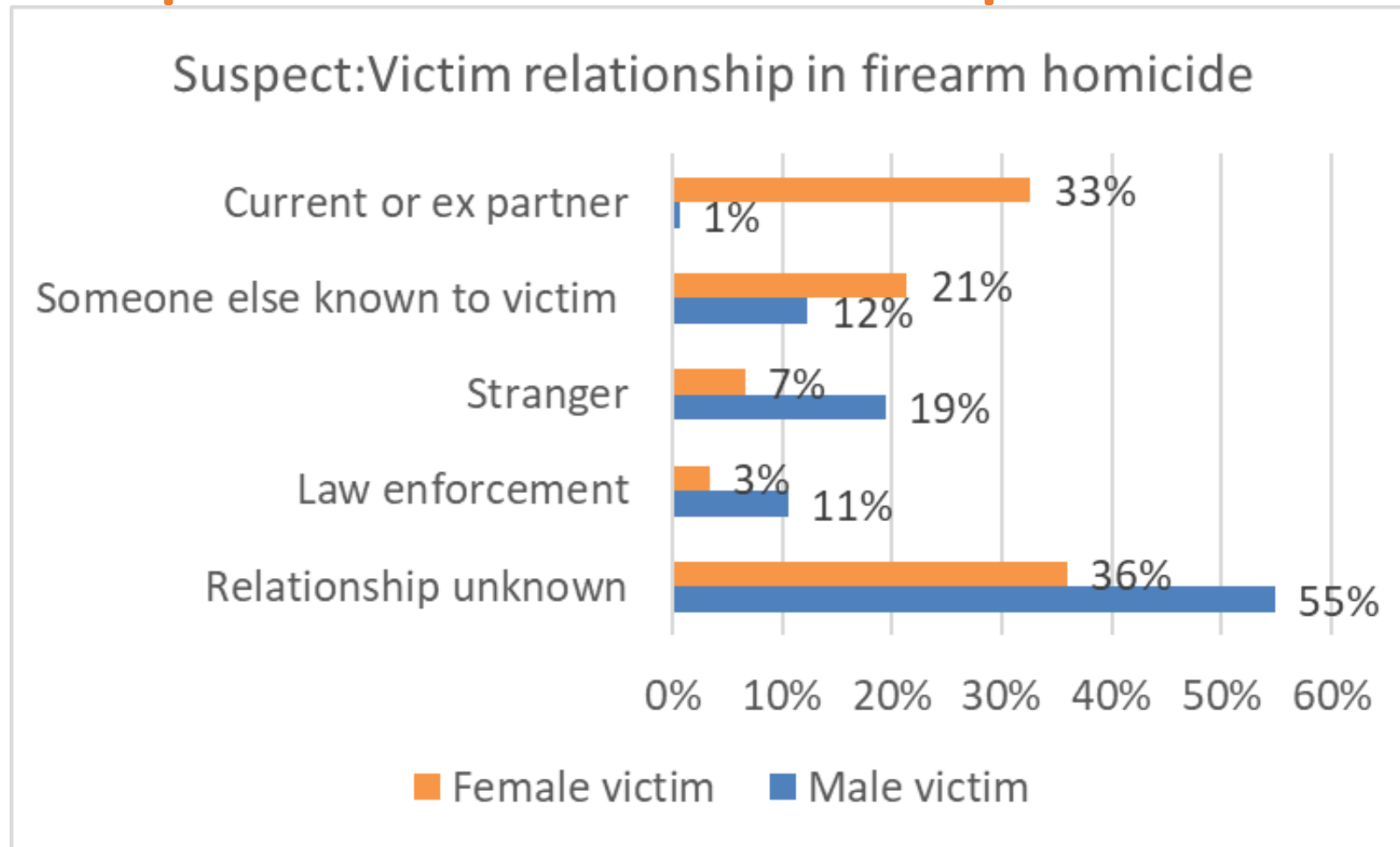
Circumstances contributing to Firearm Homicides



Source: CDPH, CalVDRS Death File, 2020.

Percentage among those with at least one known circumstance; Circumstances were available for 75% (744) of firearm homicides in 35 CA counties

Sex of Suspect and Relationship to Victim



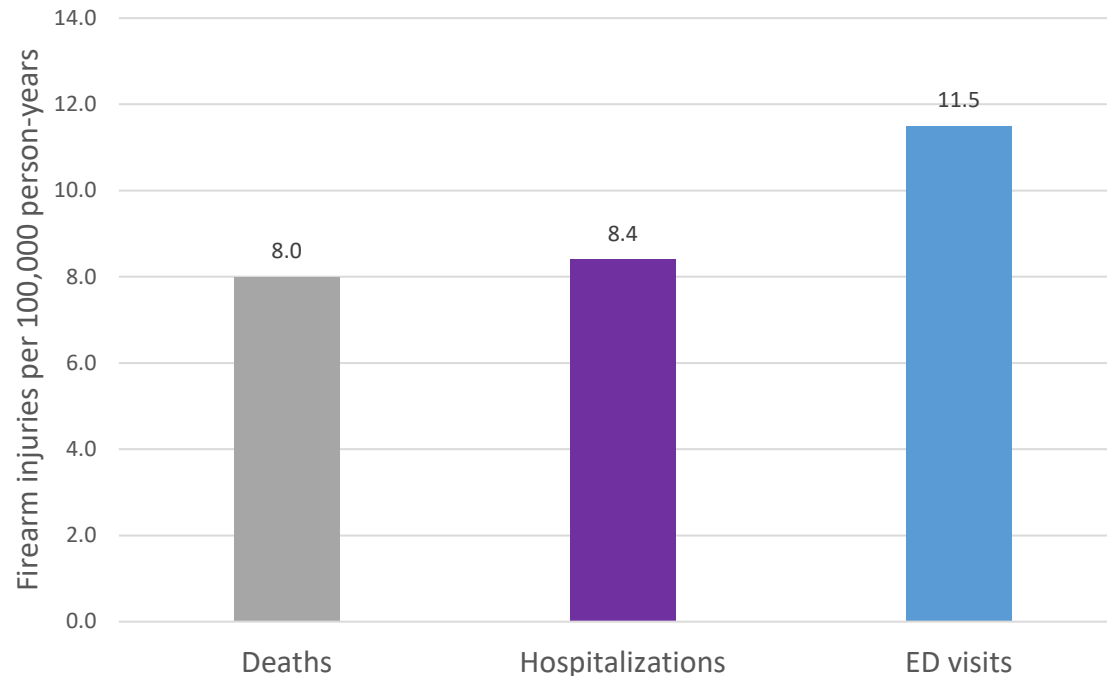
Source: CDPH, CalVDRS Death File, 2020.

Percentage among those with at least one known circumstance; Circumstances were available for 75% (744) of firearm homicides in 35 CA counties

Firearm Non-Fatal Injury

Firearm Deaths, Injuries, and Emergency Department (ED) Visits

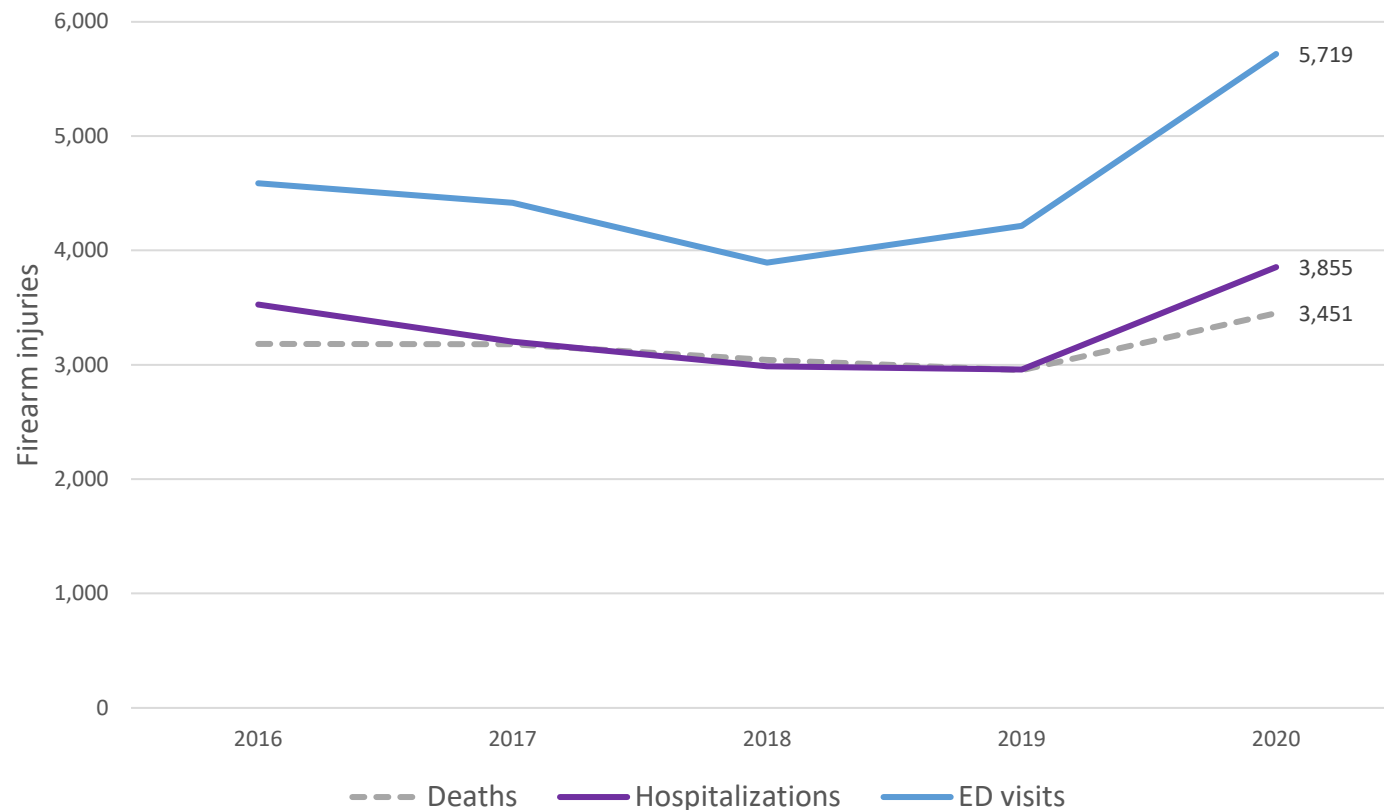
- For every firearm fatality in California, there are roughly:
 - 1.0 non-fatal firearm hospitalization
 - 1.4 non-fatal firearm Emergency Department (ED) visit



Firearm injury data presented are from 2016-2020. For methods, see <https://skylab4.cdph.ca.gov/epicenter/>.

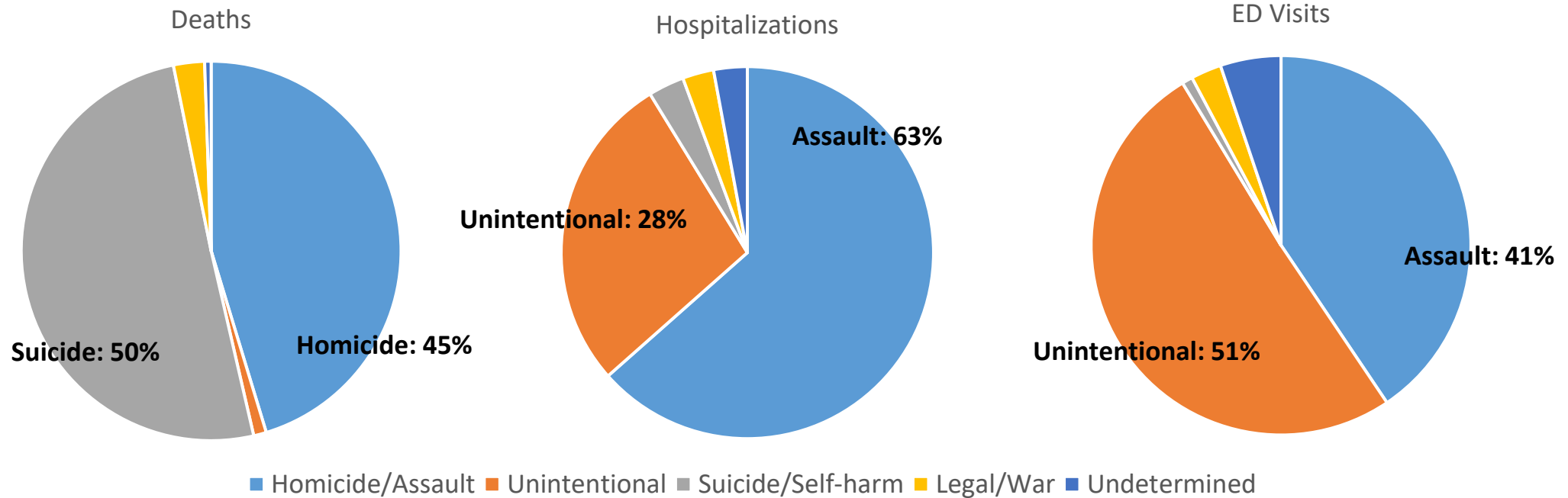
Non-Fatal Firearm Injuries – Trends

- Non-fatal firearm injuries declined slightly from 2016 to 2018, then increased sharply from 2019 to 2020



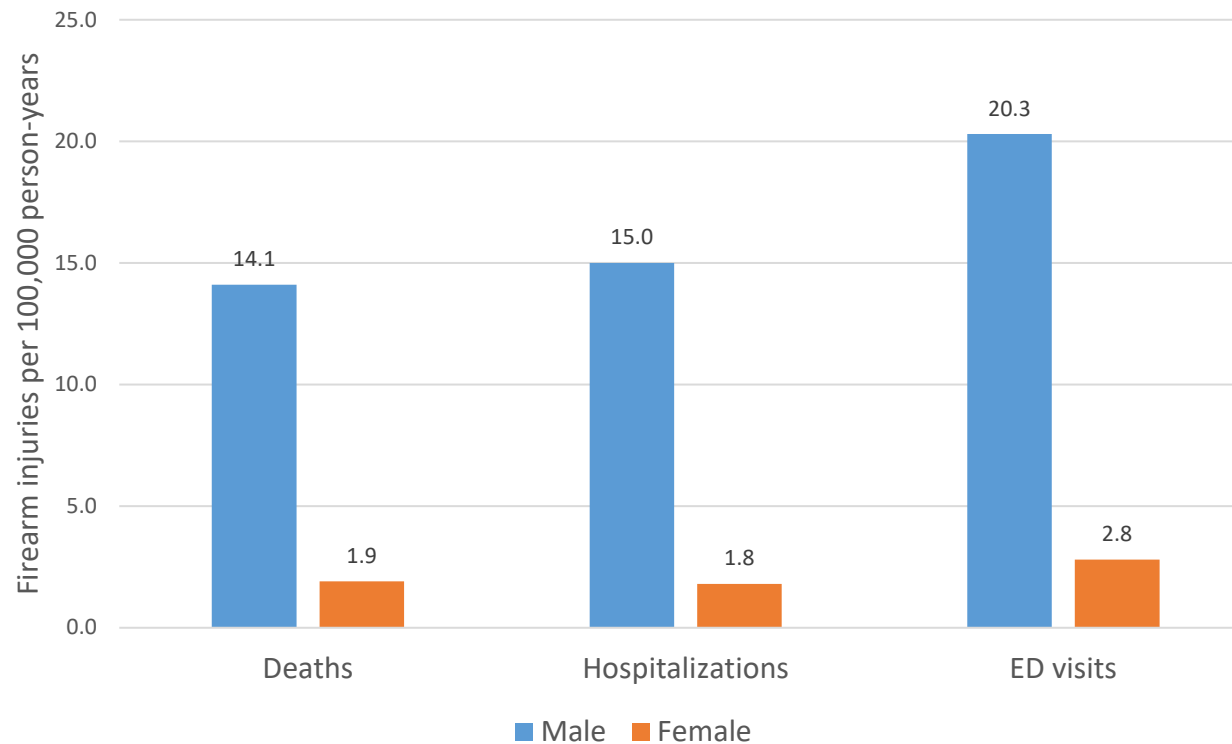
Non-Fatal Firearm Injuries – Cause

- Non-fatal firearm injuries are mainly due to assault and *possibly* unintentional causes



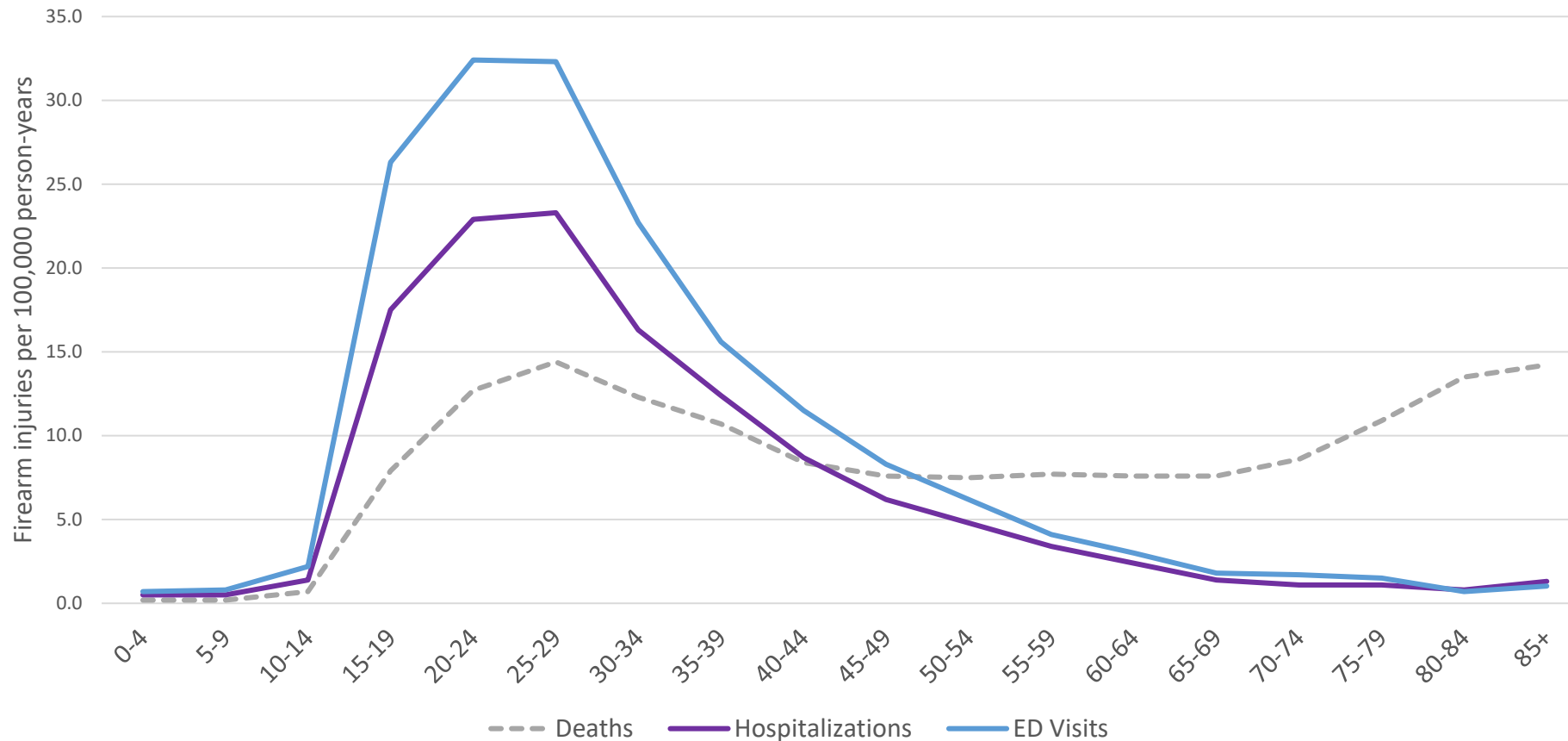
Non-Fatal Firearm Injuries – Sex

- Males are roughly 8 times more likely than females to be victims of non-fatal firearm injuries



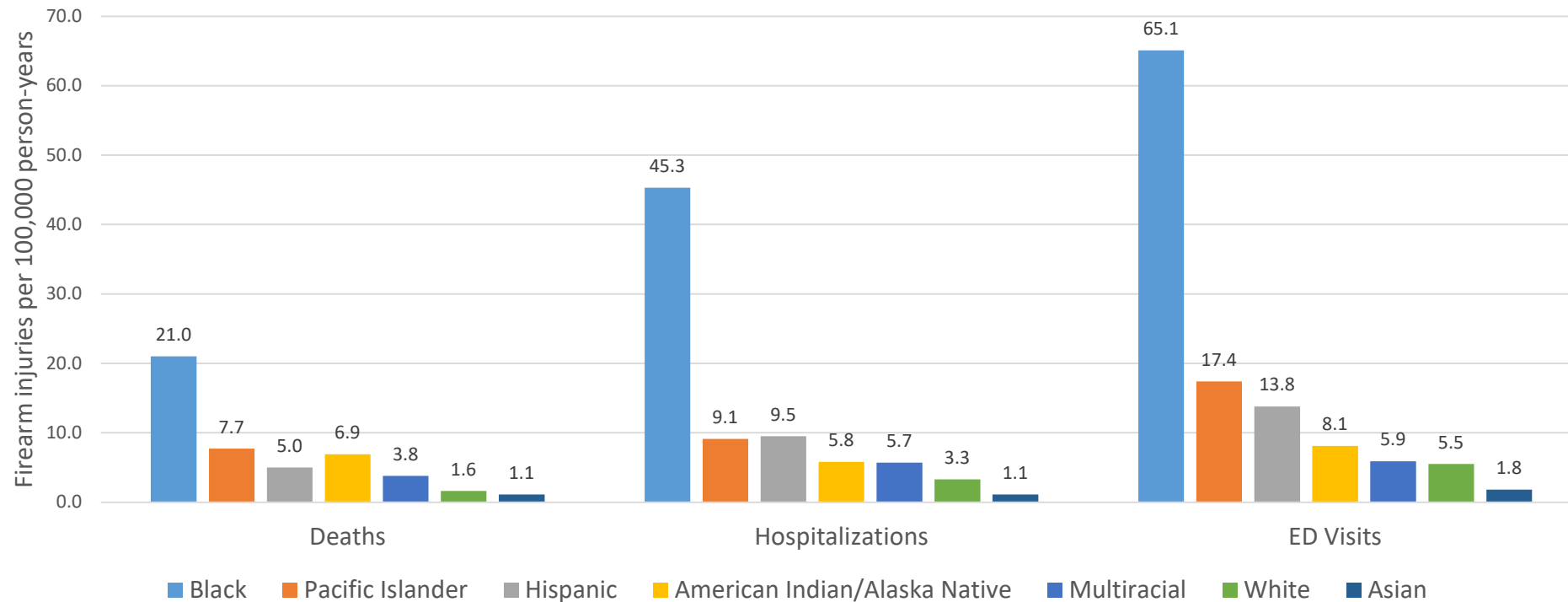
Non-Fatal Firearm Injuries – Age

- Risk of non-fatal firearm injury peaks in the 20's then declines



Non-Fatal Firearm Injuries – Race/Ethnicity

- Risk of non-fatal firearm injury greatest for Californians who are Black



* firearm injury data by race/ethnicity limited to 2019-20 due to changes in race/ethnicity coding.

Firearm Storage Practices

Firearm Storage

- Easy access to a loaded firearm may contribute to firearm injuries through unintentional or impulsive discharge.
- Safe storage practices, including keeping firearms stored unloaded and locked, are associated with reductions in the risk of firearm injuries, especially unintentional and suicide/self-harm injuries and especially among youth.

Firearm Storage

- According to BRFSS data collected from 2017 to 2019, 1 in 5 Californian adults reported keeping a firearm in the house.
- Among Californians with a firearm in the house, 1 in 10 reported storing it in the least safe way – loaded and unlocked.
- Unsafe firearm storage was more common among:
 - Older adults
 - Males
 - Veterans
 - Those without children in their household

Full report available at:

www.cdph.ca.gov/Programs/CCDPHP/DCDIC/SACB/CDPH%20Document%20Library/Violence%20Prevention%20Initiative/CAHouseholdFirearmStorage2017-2019_ADA.pdf

Firearm Violence Prevention

EpiCenter

California Injury Data Online



Home

Deaths

Hospitalizations

ED Visits

- Query and visualize California injury data
 - Injury data:
 - Deaths
 - Hospitalizations
 - Emergency Department visits
 - Query:
 - Victim demographics
 - Injury classification
 - Location
 - Time
 - Treatment (for non-fatal injuries)
 - Visualize:
 - Custom table
 - Time series
 - Bar chart

<https://skylab4.cdph.ca.gov/epicenter>

What is the Violence Prevention Initiative (VPI)?

- CDPH focuses on preventing multiple forms of violence
- The VPI is a coordinated cross-program response that elevates violence as a departmental priority
- Integrates and aligns efforts across multiple CDPH programs
- Frames the public health governmental role in addressing violence
- Emphasizes the primary prevention approach, working “upstream” to address underlying causes to prevent violence from happening in the first place
- <https://www.cdph.ca.gov/Programs/CCDPHP/DCDIC/SACB/Pages/ViolencePreventionInitiative.aspx>

Thank you!

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