

HEALTH MATTERS

Riverside University Health System — Public Health
Epidemiology & Program Evaluation






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The State of Fatal Gun Injuries, Riverside County, CA

Fatal gun injuries are a serious public health issue. In 2022, California had the second highest number of fatal gun injuries in the U.S. (n=3,495), accounting for 7% of all deaths in the state (CDC 2024). In Riverside County, fatal gun injuries have steadily increased from 2018-2022, resulting in 1,104 deaths including 487 homicides (44%) and 596 suicides (54%). Certain groups experience higher rates of gun injury than others. In the last 5 years, Black residents accounted for 11% of all gun injury deaths while making up 6% of the County population. Additionally, White residents accounted for 44% of gun injury deaths, but make up 37% of the County population. Males accounted for 89% of all fatal gun injuries in Riverside County. The impact of gun violence extend beyond victims and their families - affecting others in the community, houses of worship, schools, and the sense of safety of entire communities.

Riverside County Key Findings

 Guns were used in 8 out of 10 homicides (80%) between 2020 and 2022	 15% Gun-related suicide rates increased by 17% and gun-related homicide rates increased by 12% between 2018-2022	Nearly 80% <ul style="list-style-type: none"> • 81% of gun-related deaths among White residents were due to suicide • 79% of gun-related deaths among Black residents were due to homicide 	 Guns were used in more than 4 out of 10 suicides (44%) between 2020 and 2022
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Geographic and Temporal Fatal Gun Injury Trends

The number of fatal gun injuries, including homicides and suicides, increased 13% between 2018 and 2022. While the age-adjusted suicide rate has remained just above 4 deaths per 100,000 over the past five years, the homicide rate spiked 40% in 2020 during the start of the COVID-19 pandemic before falling back to pre-pandemic levels in 2021, following a national trend (Kegler 2022). The firearm-related homicide rate continued to decline in 2022 along with the suicide rate which also decreased slightly. Except for 2020, suicide deaths by firearm have continued to surpass homicides every year by an average of 30 deaths.

Figure 1. Fatal Gun Injury Rates by Type: Riverside County, 2018-2022

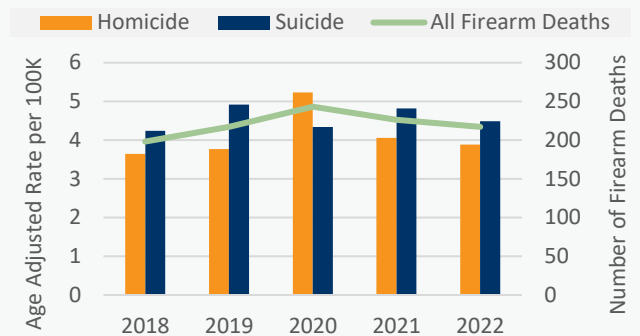
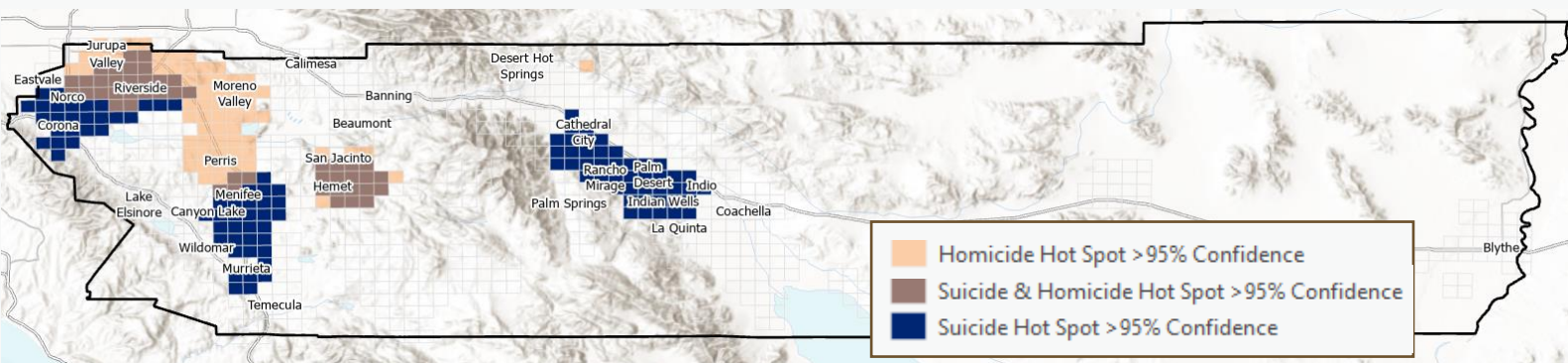


Figure 2. Hot-Spot Analysis of Firearm Deaths by Type (Homicide vs. Suicide), Riverside County, 2018 - 2022



As seen in Figure 2, there is considerable variation in fatal gun injuries across Riverside County, with notable differences observed in hot-spot locations for homicide and suicide deaths. From 2018-2022, gun-related suicide deaths were largely concentrated in the central Coachella Valley and Southwest regions, while homicides were significantly associated with areas in the Northwest region. Meanwhile, a portion of the Northwest region and a pocket in the Mid-Central region of the county experienced a significant elevation of both homicide and suicide deaths from gun injuries.

Fatal Gun Injury Disparities by Demographic Profile

Age Groups

From 2018-2022, males accounted for 89% (n=975) of all fatal gun injuries. The largest percentage of fatal gun injuries occurred among those aged 25-44 (n=425). Notably, among older age groups gun suicides were most common, while among younger age groups, gun homicides were most common (Fig. 3).

Race / Ethnicity

From 2018 to 2022, decedents identified as Hispanic / Latinx made up 39% (n=425) of all fatal gun injuries while making up 46% of the county's population. While Hispanic residents had the highest overall number of gun-related homicide deaths (n=283), the homicide rate was highest among Black residents (13/100K), nearly 7 times higher than the rate for White residents and 3 times higher than Hispanic/Latinx residents. Meanwhile, White residents had the highest number (n=398) and rate (among stable rates) of gun-related suicides. Furthermore, among White residents, 81% of all gun-related deaths were suicides (398/491) and among Black residents 79% of all gun-related deaths were homicides (99/125). Rates for several race/ethnicities are unstable due to a small number of events.

Figure 3. Fatal Gun Injuries by Type and Age Group: Riverside County, 2018-2022

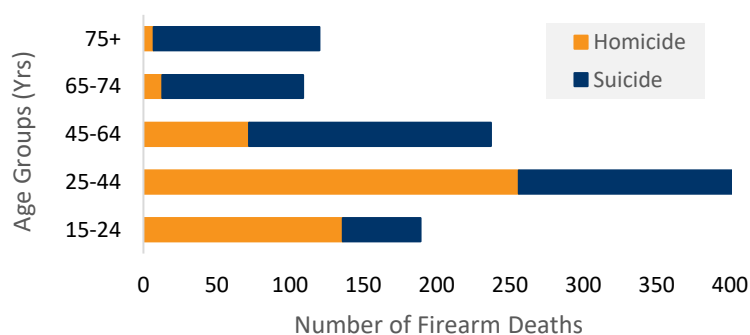
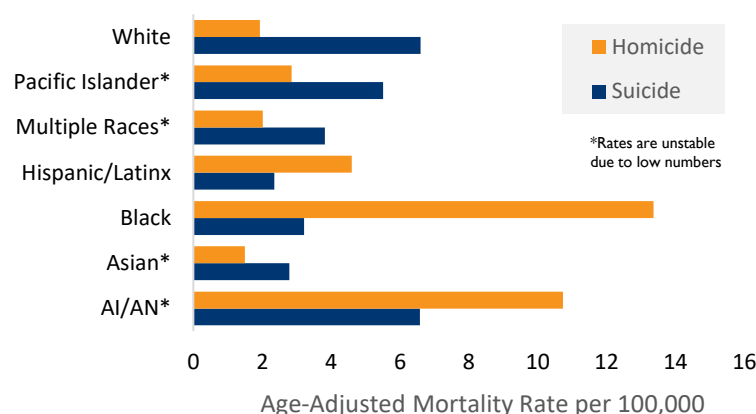


Figure 4. Fatal Gun Injury Rates (5-yr Avg.) by Type and Race/Ethnicity: Riverside County, 2018-2022



Next Steps

This current report serves as an introduction to fatal gun injuries in Riverside County. Fatal gun injuries affect people in all stages of life. Potential future reports and analyses on this topic can include non-fatal gun injury and the relationships between socioeconomic factors, geography, and demographics for both injury and mortality to better address gun violence prevention.

Suggested Citation: Meconis, K., Ruedas, G. (June 2024). An Overview of Firearm Mortality. Riverside University Health System -Public Health. Epidemiology and Program Evaluation.

References

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- Kegler SR, Simon TR, Zwald ML, et al. (2022). Vital Signs: Changes in Firearm Homicide and Suicide Rates — United States, 2019–2020. MMWR Morb Mortal Wkly Rep 2022;71:656–663. DOI: <http://dx.doi.org/10.15585/mmwr.mm7119e1>.
- California Department of Public Health (CDPH), Center for Health Statistics and Informatics (CHSI). (2018-2022). California Integrated Vital Records System (Cal-IVRS). California Comprehensive Death File (CCDF). [Data set]. Accessed May 16, 2024.