Heat-Related Illnesses and Mortality, Riverside County, CA

Introduction:

On average, deaths due to heat-related illness are reported more than any other weather hazard in the United States (U.S.) every year.¹ In California, warmer months and excessive heat waves contribute towards heat-related mortality (deaths) and morbidity (illnesses) each year.¹ Heat-related illnesses consist of heat stroke, heat exhaustion, rhabdomyolysis, heat syncope, heat cramps, and heat rash.² Older adults, young children, and those with health conditions are more likely to become victims to Heat-related illnesses.³ The following brief is intended to raise awareness of heat-related illness (HRI) and heat-related mortality (HRM) affecting Riverside County Residents.

Key Findings:

- Black/African Americans experience significantly higher rates of HRI ED visits (35.5 per 100,000 population) on a yearly average.⁴
- HRI emergency department (ED) visits was higher between June and August every year from 2016 – 2020 with the greatest burden, 32.7% (n = 2,732), falling on the Coachella Valley.⁴
- Rate of HRI was consistent among both sexes with a gradual decline during 2020, possibility due to the COVID-19 pandemic.⁴

***Figure 1. Rate of Heat-Related Illness ED Visits by Sex Assigned at Birth Among Riverside County Residents, 2016 – 2020***


*Transgender/gender non-conforming data unavailable.

***Figure 2. Percent of Heat-Related Illness ED Visits by Place of Hospitalization Among Riverside County Residents, 2016 – 2020***

Heat is the leading cause of weather-related deaths in the U.S. Under-resourced communities are at higher risk of heat-related deaths due to higher temperatures and limited resources. Between 2000-2019, the average crude death rate among Black/African Americans was .27 per 100,000 population in California. In 2020 alone, the rate of HRM among Black/African Americans was higher when compared to other racial/ethnic groups in Riverside County (2.8 per 100,000 population). In addition, 72% of HRM were among males (n = 147), while 28% of HRM were among females (n = 54) between 2016 – 2021.


*Gender reported as stated on death certificate
In the U.S., deaths attributed to natural heat exposure continues to be a public health concern. Older adults (ages 65 years and older) are more susceptible to HRI, and if not properly treated could lead to HRM. Among Riverside County residents the average rate of HRM by age group shows that adults 65 years and older experience higher rates of HRM (3.0 per 100,000 population) with an age-adjusted rate of (7.5 per 100,000 population) between 2016 – 2021. The average rate of HRM among place of residence was highest among two Riverside County regions, East (20.5 per 100,000 population) and Coachella Valley (19.5 per 100,000 population) between 2016 – 2021. HRM continues to impact people throughout Riverside County, especially during summer months where average temperatures range between 96°F - 102°F.

**Figure 7.** Overall Average Rate of Heat-Related Mortality Among Riverside County Residents by Age Group, 2016 - 2021

**Figure 8.** Overall Average Rate of Heat-Related Mortality by Riverside County Region, 2016 - 2021

**Figure 9.** Heat-Related Mortality by Community (Census Designated Place) of Residence and Region, 2016 - 2021


### Heat-Related Illnesses

**Prevention Tips & Resources:**

Heat-related illness is preventable when the right precautions are taken. For instance, keeping cool during warmer months by wearing lightweight/light colored clothing, staying in air-condition places as much as possible, drinking fluids regularly and not waiting until you are thirsty, keeping pets hydrated, check local news for extreme heat alerts and safety tips such as local cooling shelters throughout Riverside County.

**For more information:** [Community Action Partnership of Riverside County](https://www.capriverside.org/)
REFERENCES


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