Title: Disparities in Mortality Among People Experiencing Homelessness, Marin County, CA (2018–2021)

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Background: Lack of stable housing and chronic homelessness have been associated with increased rates of premature mortality in high-income countries. In 2017, Marin County, California implemented an outcomes-focused coordinated homelessness care system that incorporates health and social services, called Whole Person Care. The COVID-19 pandemic has presented unique social and economic challenges more likely to hit unhoused populations. We examined whether unhoused Marin residents had an increased rate of mortality related to specific causes of death as compared to the population-at-large.

Methods: We used California's Vital Statistics Records (VRBIS) for mortality data and Marin County's Homeless Management Information System (HMIS) for information on the unhoused population. Inclusion criteria for persons currently or formerly experiencing homelessness is completion of the Vulnerability Index-Service Prioritization Decision Assistance Tool, which is used to determine eligibility for support interventions. Individuals were matched across VRBIS and HMIS using a deterministic name and date-of-birth match. Drug- and alcohol-related deaths were identified using ICD-10 code of drug- or alcohol-poisoning or a text search in the VRBIS record injury description for terms frequently used in substance-related deaths. We conducted an unadjusted logistic regression to compare the odds of specific causes of death between the two populations.

Results: Mortality rates among Marin County residents between 2018–2021 were higher in the unhoused population and increased over time. In the unhoused population, deaths due to cancer, unintentional injuries, and heart disease were among the leading causes of death and increased in frequency from 2018–2021. Deaths in the unhoused population were 3.97 (95% CI: 2.50, 6.30) times as likely to be due to unintentional injury than in the population-at-large. Additionally, deaths in the unhoused population were 12.42 (7.97, 19.34) times as likely to be drug- or alcohol-related than in population-at-large. Due to small numbers in the unhoused population, we were unable to establish trends in drug- and alcohol-related deaths.

Conclusion: Marin County's unhoused population had a higher and increasing rate of mortality compared to the population-at-large and a much higher likelihood of dying due to unintentional injuries or drug- and alcohol-related causes. Unhoused residents had a lower likelihood than the population-at-large for deaths reported as due to cancer or heart disease. Strategies focused on substance use may have the highest yield in reducing significant disparities in mortality for people experiencing homelessness in Marin County.