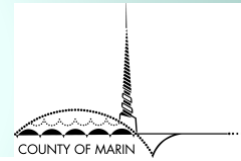


## FACT SHEET



# Deaths Uncounted: Using Local Data to Act on Unnecessary Tragedy



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Our story begins with Brigid. Brigid was raised in Marin County by a caring family who would like to share her story. She was an exceptional student and athlete, and was accepted to and attended Stanford University. During her time there, she suffered a tragic loss that eventually led to a psychotic episode and triggered a series of serious mental health struggles. This was followed by addiction, homelessness, and stints of incarceration over many years. On a cold November night after a short hospitalization, Brigid died unsheltered about five miles from where she grew up. Her death, and those of so many others like her, caused our community of homelessness and substance use service providers to take action and better serve those who struggle to be connected to and trust our services.



This photo of Brigid was shared in her memory by her family.

## Background

In Marin County in the San Francisco Bay Area, County and community-based organizations collaborate to provide services for people experiencing homelessness using a Housing First<sup>1</sup> approach. The closely connected network was alarmed by a perceived increase in deaths among people experiencing homelessness during the COVID-19 pandemic. Furthermore, many of these deaths seemed to involve substance use. Substance use disorders and overdoses have increased in the general population nationally since the beginning of 2020.<sup>2</sup>

Community members who experience homelessness are exposed to social, behavioral and environmental factors that present barriers to maintaining health and ultimately increase risk of death. These challenges have been amplified during the COVID-19 pandemic due to issues like unemployment, social isolation, and unaffordable housing. A recent cohort study following older adults experiencing homelessness in Oakland,

<sup>1</sup> "Housing First," National Alliance to End Homelessness, accessed September 28, 2022, <https://endhomelessness.org/resource/housing-first/>.

<sup>2</sup> "Mental Health, Substance Use, and Suicidal Ideation During the COVID-19 Pandemic — United States, June 24–30, 2020 | MMWR," accessed September 28, 2022, <https://www.cdc.gov/mmwr/volumes/69/wr/mm6932a1.htm>; "Overdose Detection Mapping Application Program -," accessed September 28, 2022, <https://www.odmap.org:4443/>; "Issue Brief: Nation's Drug-Related Overdose and Death Epidemic Continues to Worsen," 2022, 54.

California found higher premature mortality than the general population.<sup>3</sup> Despite its importance, deaths among unhoused individuals are often underestimated because housing status in mortality data is not reliably recorded.

The tragic observations of increased deaths and desire to use existing data in new ways led to a renewed push for the work we describe here. We aimed to find mortality rates and causes of death among people experiencing homelessness and compare the data with the county's general population by using a person-matching method. We took additional steps to identify deaths in which substances were involved. Alongside these analyses, a cross-domain group has been working together to design and implement preventive interventions in partnership with this community.

## Analyses

To find deaths among people experiencing homelessness, we matched the individuals who were unhoused and assessed for vulnerability in Marin's Homeless Management Information System with deaths in Marin residents from California's death registry. Person matching used parts of first and last name and exact date of birth. While not perfect, the Homeless Management Information System is our best source for defining the population who are currently or formerly experiencing homelessness in the county. Using this approach, we did not need to rely on assumptions made from fields in the death data like address or place of death.

In the first analysis, we compared mortality rates among adults experiencing homelessness with mortality rates among Marin's adult population. We also compared the rate of years of potential life lost between the populations. By subtracting the age at death from the commonly used standard of 75 years of age, this metric shows the burden of lives cut short due to early death.

The next analysis used final causes of death from California's death registry to find the greatest killers in this high-risk population and compare these causes with Marin's general population. Finally, to better understand the role of alcohol and other drugs in these deaths, we delved deeper into the substance-related factors by using fields beyond just the final cause: any subsequent causes and injury description, which expanded the number of deaths we could associate with alcohol and other drugs. We compared the substance-related mortality rates and proportion of deaths that are substance-related between the unhoused and general populations.

## Findings

Mortality rates among adults experiencing homelessness in Marin were 1.5 times as high as the total adult population from 2018 to 2021 (Figure 1). This means that an adult experiencing homelessness was 50% more likely to die from any cause than an average

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<sup>3</sup> "Factors Associated With Mortality Among Homeless Older Adults in California: The HOPE HOME Study | Health Disparities | JAMA Internal Medicine | JAMA Network," accessed September 28, 2022, [https://jamanetwork.com/journals/jamainternalmedicine/fullarticle/2795475?guestAccessKey=03b66138-aed6-45eb-afd0-8561cbc89e21&utm\\_source=twitter&utm\\_medium=social\\_jamaim&utm\\_term=7505183711&utm\\_campaign=article\\_alert&linkId=179163821](https://jamanetwork.com/journals/jamainternalmedicine/fullarticle/2795475?guestAccessKey=03b66138-aed6-45eb-afd0-8561cbc89e21&utm_source=twitter&utm_medium=social_jamaim&utm_term=7505183711&utm_campaign=article_alert&linkId=179163821).

Marin adult. Years of potential life lost was 6 times as high among adults experiencing homelessness than Marin adults generally. People experiencing homelessness are dying at much younger ages than the general population. There is a 22-year difference between the median age at death among unhoused decedents and all Marin resident decedents (61 years vs. 83 years), a population with an older demographic and high life expectancy. Motivated by observations of the care network, one question was whether homeless deaths have increased during the pandemic. Mortality rates among people experiencing homelessness did increase in 2020 and were still elevated in 2021, compared to 2018 to 2019 (Figure 1).

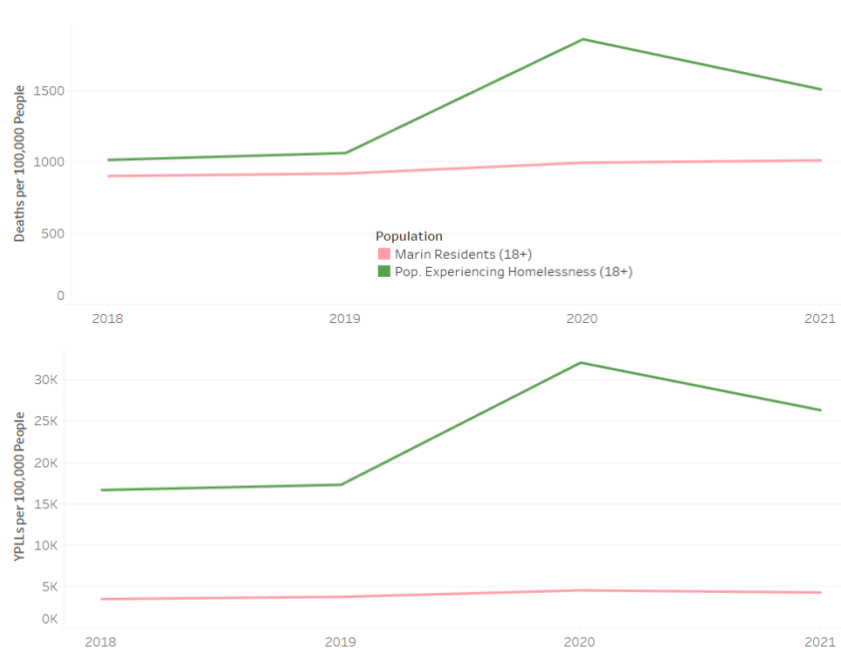
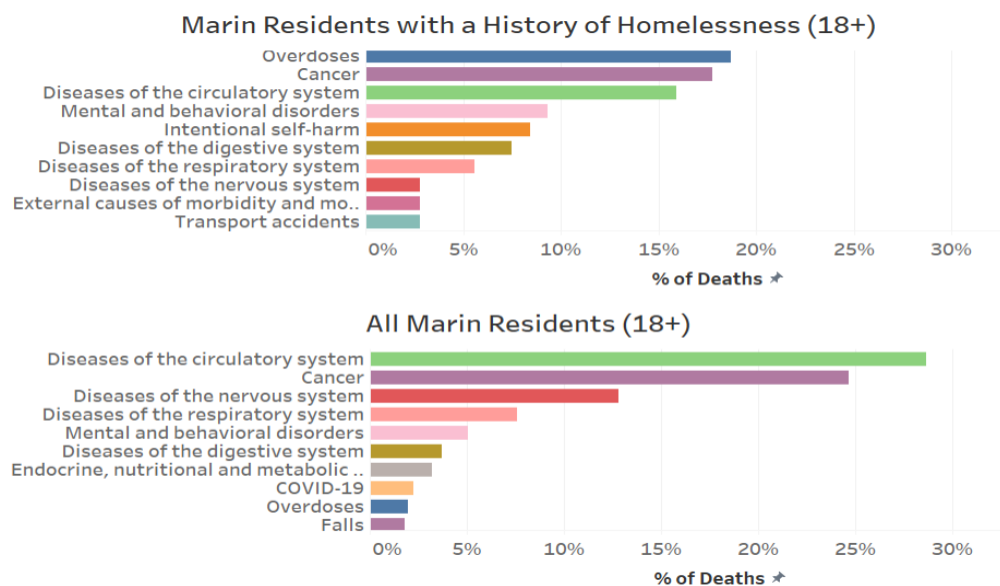


Figure 1. Mortality rates and years of potential life lost in adults experiencing homelessness and adult residents, Marin County, 2018-2021

Leading final causes of death among people experiencing homelessness from 2018 to 2021 were accidental overdoses (19%), cancer (18%), and diseases of the circulatory system (16%) (Figure 2). This differed from the general population in which the leading causes were diseases of the circulatory system (29%), cancer (25%), and diseases of the nervous system (13%).



causes were diseases of the circulatory system (29%), cancer (25%), and diseases of the nervous system (13%). Learning more about the role of health conditions and substance use can inform County and community-based partners

Figure 2. Leading causes of death using final cause in adults experiencing homelessness and adult residents, Marin County, 2018-2021

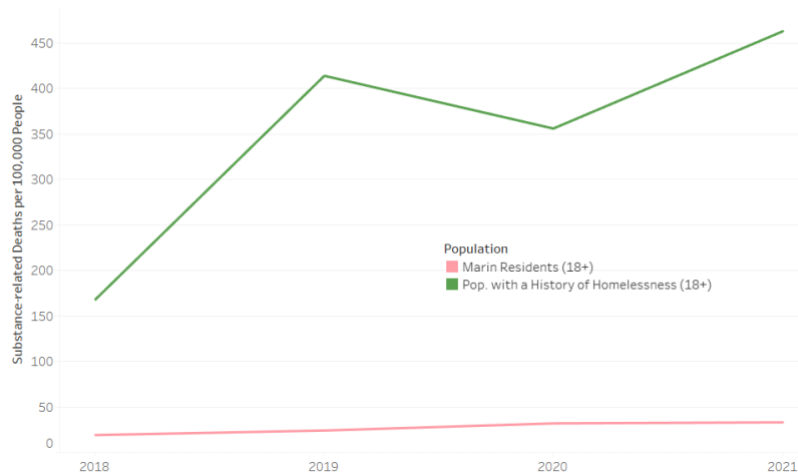


Figure 3. Substance-related deaths using final cause, subsequent cause, and injury description in adults experiencing homelessness and adult residents, Marin County, 2018-2021

in providing services which address the conditions and prevent death in this vulnerable population.

Using the more thorough process to capture deaths related to substance use, we found that the ratio of the substance-related mortality rate among people experiencing homelessness to the general population was 12 (Figure 3). This means that adults experiencing homelessness were an astounding 12 times as likely to have drugs or alcohol as a

contributing factor of death than adults in the general population from 2018 to 2021. While accidental overdoses caused about a fifth of deaths during this time period, the more sensitive analysis showed that alcohol and other drugs played a role in 26% of deaths in this population (Figure 4). This is compared to 3% in the general adult population. From these data, we cannot say whether the difference is attributed to higher substance use disorders among people experiencing homelessness or higher likelihood of death when using substances. However, survey data from Marin's homeless Point-in-Time count<sup>4</sup> revealed an increase in reported alcohol and other drug use from 28% in 2019 to 49% in 2022.

### Action

The gravity of these findings could not be clearer to people who are experiencing homelessness and those who directly provide services to them. For this reason, when increases in deaths were observed, response efforts included these voices. The grief felt by the homelessness service providers at Brigid's death and the deaths of others stimulated a variety of collaborative actions including these analyses. The network of providers took action including brainstorming root causes of death based on

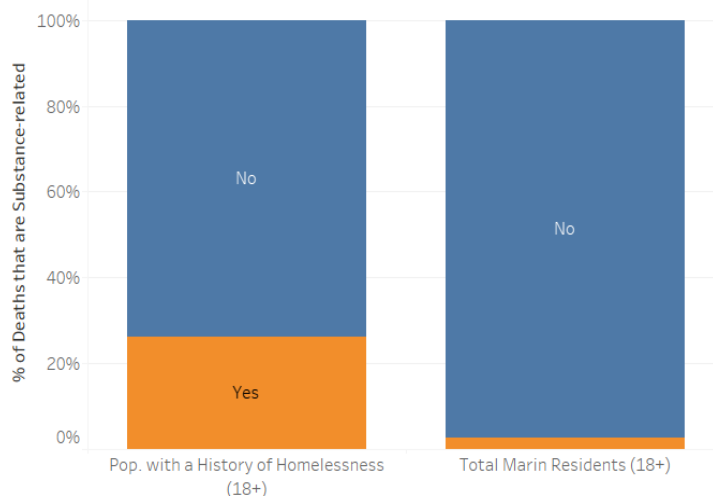


Figure 4. Proportion of deaths that are substance related in adults experiencing homelessness and adult residents, Marin County, 2018-2021

<sup>4</sup> "Point In Time Count | Homelessness in Marin," accessed September 28, 2022, <https://housingfirst.marinhhs.org/point-time-count>.

knowledge of specific cases, hosting listening sessions, increasing social connection through group activities, increasing availability of Medications for Addiction Treatment, and expanding naloxone distribution.

These deaths are no longer uncouneted in Marin. These data are changing the narrative. They are changing how existing programs prioritize limited resources. They are used in policy discussions in our system of care. We cannot look away from the tragic loss of each individual life of a person who experiences homelessness or uses drugs - both highly stigmatized and targeted groups in our society. We cannot unsee the patterns of preventable loss of lifespan and vitality that so disproportionately impact this group. While these actions represent progress, the data imply we have a long road ahead to stand for equity and prevent unnecessary tragedy. Our hope is that by sharing our findings, the community-wide conversation around how we best fulfill our mission and live our values will be enriched.

Marin is one of over 3,000 counties in the United States. These data, and similar findings in other local communities, provide a small glimpse into the immense problem of threats to health, well-being, and life among people experiencing homelessness nationally. With additional resources, collaborative energy and research attention, we can do better to support the people who need it the most.

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