Utah homeless mortality report

August 2024

Utah Department of Health & Human Services

Executive summary

This report provides a one-year summary of mortality among people experiencing homelessness in Utah. The time period analyzed was January 1, 2023–December 31, 2023. Prior to this report, no official report like this has been produced in the state of Utah. We hope this report honors those who died while experiencing homelessness by raising awareness of their tragic loss of life. We also intend that this report will provide data to inform policy and service provider programs on how to improve the health of those experiencing homelessness.

Our team at the Utah Department of Health and Human Services (DHHS) Office of the State Epidemiologist analyzed mortality data from the DHHS Office of Vital Records and Statistics (OVRS) to understand demographic mortality characteristics, mortality rates, and leading causes of death for people experiencing homelessness in Utah. We compared these findings to those who were identified as not experiencing homelessness at the time of death in Utah. Throughout the report we will refer to those who were identified as not experiencing homelessness at the time of death as the general population.

People experiencing homelessness in Utah are dying at a higher rate and at much younger ages than the general population.
Many of these deaths are preventable.

Key findings

- There were **216 deaths identified in people experiencing homelessness** in Utah in 2023 and **21,816 deaths recorded in Utah's general population**.
- People experiencing homelessness had **10 times the rate of death** compared to the general population in Utah.
- On average, people experiencing homelessness were **16 years younger** at their time of death than the general population. The mean age of death among people experiencing homelessness was 56 years of age, compared to 72 years of age in the general population.
    - People experiencing homelessness aged 35–44 had a higher rate of death than those in the general population who were older than age 65.

People experiencing homelessness had **10 times** the rate of death compared to the general population in Utah.

- **Accidents**, **suicides**, and **homicides** made up a much larger percentage of deaths in people experiencing homelessness (50%) compared to the general population (11%).
- **Chronic diseases** such as heart disease, diabetes, and pulmonary disease were a leading cause of death for both people experiencing homelessness and those in the general population. However, chronic disease accounted for 33% of deaths among people experiencing homelessness compared to 59% of deaths in the general population.
- People experiencing homelessness are **disproportionately affected** by our **country's substance use epidemic**. Substance use related deaths, which were mostly accidental, accounted for 35% of deaths in people experiencing homelessness compared to only 5% of deaths in the general population.

Recommendations

Providing people with housing is an immediate way to prevent premature death.[1] Expanding housing options for those experiencing homelessness is critical. We, in partnership with the Office of Homeless Services within the Department of Workforce Services, suggest the following actions to help prevent deaths among people experiencing homelessness:

Support the development of **low barrier housing options** for those experiencing homelessness. These housing options should include medical respite care and housing that includes wraparound services and case management.

Support low barrier **primary healthcare** and **substance use treatment** service options that are skilled in serving not only the general population but those who are experiencing homelessness to make sure all Utahns have access to treatment.

Convene an **advisory group** of healthcare funders and providers, managed care plans, and stakeholders to evaluate and fund best practices in delivering healthcare to people experiencing homelessness in urban, suburban, and rural communities.[2]

Improve collaboration between organizations that provide **harm reduction** services and homeless services to better improve access to naloxone, fentanyl and xylazine test strips, syringe services, and other life-saving harm reduction tools.

Establish a **homelessness mortality review** process to better understand the circumstances that contribute to these deaths and identify strategies to prevent further fatalities.

About this report

Homelessness is a growing problem in Utah. The number of people experiencing homelessness in Utah has increased over the past two years. The 2023 annual Point-In-Time count found that there were 3,687 people experiencing homelessness on the night of the count.[3] A total of 29,579 people accessed homeless services in 2023, according to the Utah Homeless Management Information System. Mortality rates, mortality demographic characteristics, and causes of death in people experiencing homelessness in Utah were unknown. This report begins to fill those knowledge gaps and compares 2023 mortality statistics of people experiencing homelessness in Utah to the general population in Utah.

We created this report because of two main factors. First, the Utah Department of Health and Human Services (DHHS) identified understanding the health of Utahns experiencing homelessness as a priority issue in 2023. This was in response to the increasing presence and awareness of people experiencing homelessness throughout Utah and the realization that there are likely significant health disparities in people experiencing homelessness that are unrecognized and understudied. We believe that when we identify medical issues that affect this population, our community can better establish life saving interventions and actions. Second, homeless service providers, homeless advocates, media partners, and Utah's continuums of care continue to request information about mortality within Utah's people experiencing homelessness.

Homelessness is a relatively simple concept to understand: an individual or family does not have a home or an adequate place to live. However, understanding why this occurs is a much more complex social and societal question. Our report does not explore the question of why individuals, families, or other groups experience homelessness. Rather, we are evaluating mortality within people experiencing homelessness and want to understand the following:

1. Demographic mortality characteristics
2. Mortality rates
3. Leading causes of death

Throughout this report we compare deaths in people experiencing homelessness with deaths in the general Utah population. We hope that by producing this report those who requested to know more about mortality in people experiencing homelessness in Utah will begin to have their questions answered and policymakers and service providers can use this as a tool when they want to make informed data driven decisions. We also hope and intend this report will honor those who passed away by bringing awareness of their deaths through the data we have collected and analyzed.

This report is not meant to replace other efforts underway in Utah that honor and count deaths among those experiencing homelessness, such as local community homeless persons candlelight vigils. Instead this report should complement these efforts.

About the data

In September 2022, the Utah DHHS Office of Vital Records and Statistics (OVRS) added a question for all deaths that asked if the individual was experiencing homelessness at the time of death. This report analyzed the OVRS mortality data between January 1, 2023 and December 31, 2023. Crude and age adjusted mortality rates, rate ratios, and confidence intervals were calculated using 2023 Point-In-Time count data and 2022 American Community Survey (ACS) U.S. Census Bureau data.

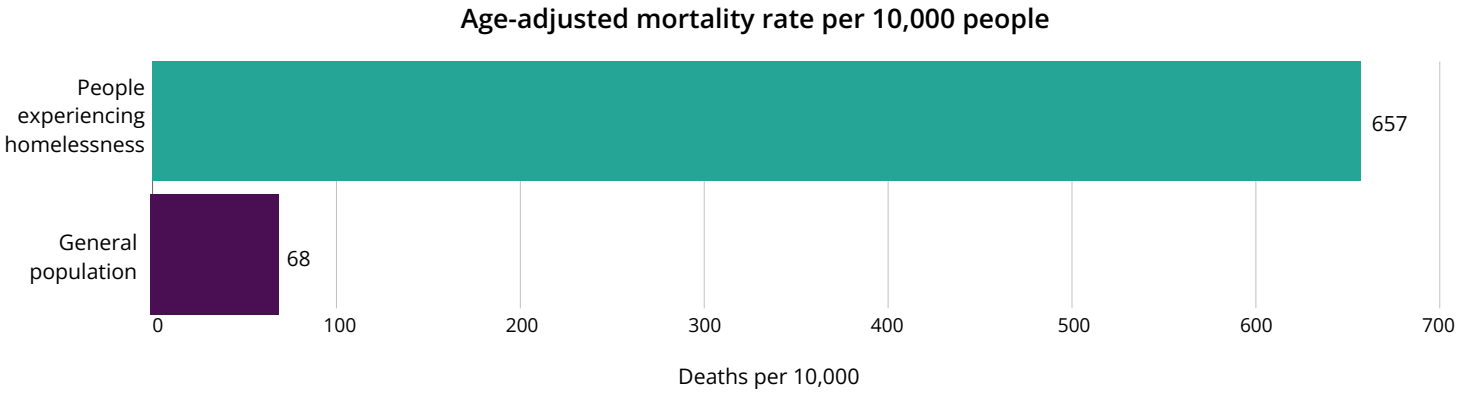
In this report we use the following statistical terms:

- **Counts:** Counts are the actual number of deaths that were identified.
- **Rates:** Rates correct for the differences in population size and can show a more accurate death burden when comparing different groups.
- **Age adjusted rates**: Age adjusted rates correct for the differences in age and show a more accurate death burden when comparing different groups.
- **Rate ratios**: Rate ratios show the differences in rates between two different groups. In this report we compare the rate in people experiencing homelessness to that in the general population.

Death rates

There were 216 deaths in people experiencing homelessness identified in Utah in 2023. This is compared to 21,816 deaths in Utah's general population. When corrected for population size and the age of the populations, people experiencing homelessness had 10 times the rate of death compared to the general population (CI: 8.4–11.0). See appendix, Table 1.

People experiencing homelessness had **10 times** the rate of death compared to the general population in Utah.



Death by age

The mean age of death was 56 years among people experiencing homelessness and 72 years in the general population, revealing a 16 year difference in mean age of death between the two groups.

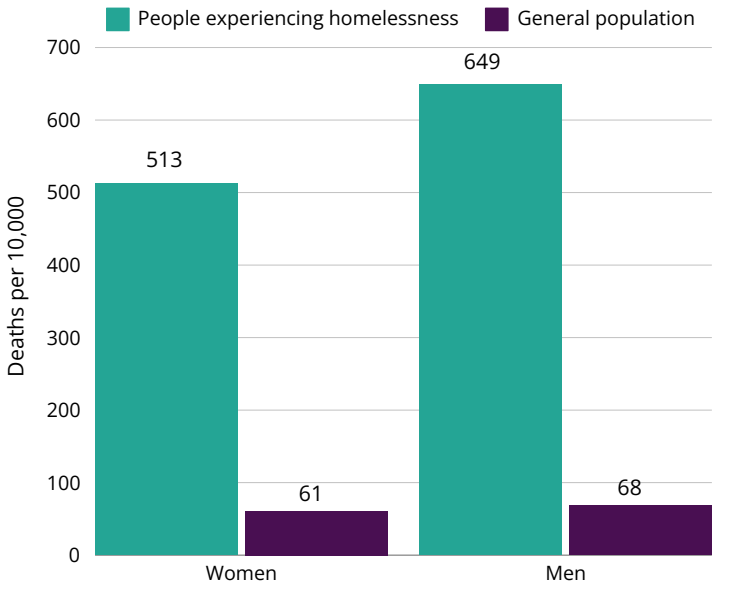
On average, people experiencing homelessness were **16 years younger** at their time of death than the general population.

Mortality rates increased in both groups as they aged, however, high rates of death were seen in people experiencing homelessness even in younger age groups. In fact, the most extreme differences in the rate of death were seen in younger people. People experiencing homelessness aged 25–44 had 22 times the rate of death when compared to the same age people in the general population. This resulted in people experiencing homelessness between 35–44 years of age having a higher rate of death than those in the general population who were age 65+. See appendix, Table 2.

Death rate by sex/gender

Women experiencing homelessness had 8 times the rate of death when compared to women in the general population. Men experiencing homelessness had 10 times the rate of death when compared to men in the general population. See appendix, Table 3.

Crude mortality rate per 10,000 people by sex/gender



Death rate by race/ethnicity

The Utah Homelessness Council's 2023 Statewide Collaboration for Change: Utah's Plan to Address Homelessness reports, "the racial and ethnic makeup of people experiencing homelessness shows that while Utah is predominately White, Black, Indigenous, and People of Color experience homelessness at disproportionately higher rates across the state."[4]

We expected to find similar disparities when analyzing mortality data for people experiencing homelessness. However, our report found that the number of deaths among people experiencing homelessness in all race and ethnicity groups other than White non-Hispanic were too limited to perform statistical analyses. Due to this, it was not possible to draw conclusions related to the relationship between race or ethnicity and death rates in people experiencing homelessness. As more data is gathered in the coming years we will provide conclusions around race and ethnicity.

Manner of death

Manner of death is a way to categorize deaths. Utah follows national standards and categorizes five manners of death: natural, accident, suicide, homicide, and undetermined (or "could not be determined").[5] Our report found that people experiencing homelessness died in different manners than the general population. The majority of deaths in both people experiencing homelessness and the general population were classified as natural.[6] However, accidents, suicides, and homicides accounted for 50% of deaths within people experiencing homelessness and only 11% of deaths in the general population.

Percentage of deaths caused by accidents, suicides, and homicides

People experiencing homelessness

General population

Cause of death

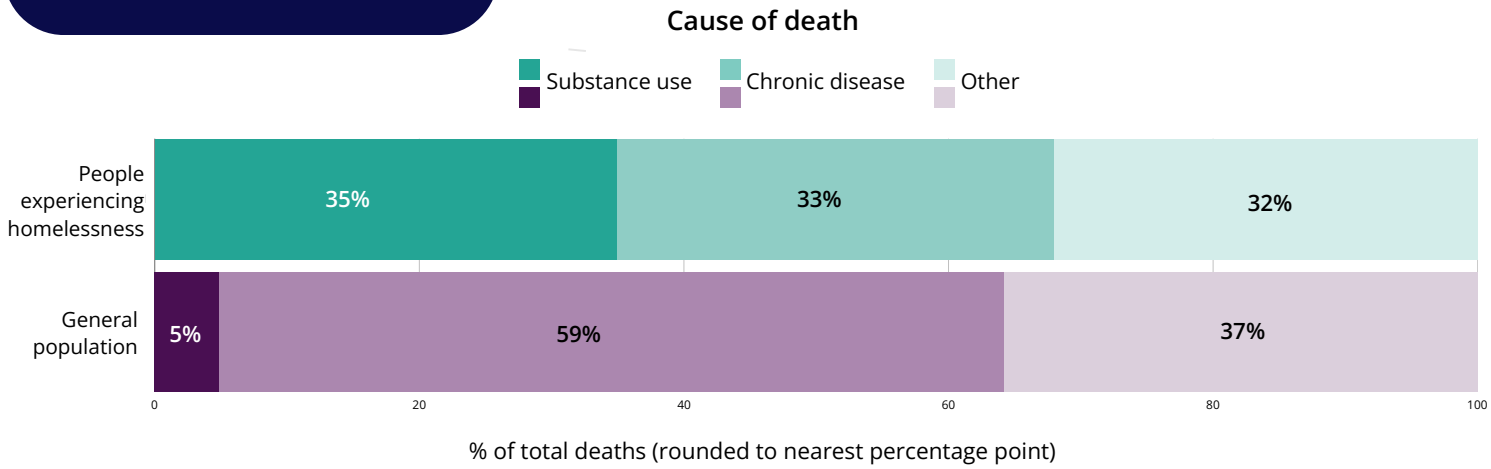
Cause of death was found based on the underlying cause of death International Classification of Diseases, 10th Revision (ICD-10)[7] code listed in OVRS death data. Determining the cause of death was done using the underlying cause of death ICD-10 code, as is standard for the field.

The leading causes of death among people experiencing homelessness were substance use related and chronic diseases.[8,9] Substance use related deaths accounted for 35% of all deaths within people experiencing homelessness and 5% of deaths in the general population. It is worth noting that most of these recorded substance use related deaths were accidents. These deaths represent the effect of a number of societal factors, and reflect the impact of the ongoing substance use epidemic occurring throughout the country.

People experiencing homelessness are **disproportionately affected** by the national **substance use epidemic**.

Chronic diseases such as heart disease, diabetes, and pulmonary disease were **leading causes of death** among both people experiencing homelessness and the general population.

Importantly, we found that chronic diseases such as heart disease, diabetes, and pulmonary disease were almost as common a cause of death among people experiencing homelessness as substance use related deaths (33% for chronic disease vs. 35% for substance use). Chronic diseases accounted for 33% of deaths in people experiencing homelessness and 59% of deaths in the general population. This should serve as a reminder that routine primary healthcare access and preventive healthcare measures need to be considered life saving for all Utahns. Primary care focuses on overall health and wellness, including prevention, diagnosis, and treatment of health conditions and diseases. Strengthening access to routine primary care is a strong strategy for addressing not only chronic disease mortality but also substance use related mortality.[10]



It is important to recognize that all of these deaths are multifactorial and therefore no single action is likely going to prevent these deaths. Deaths due to substance use related causes are likely associated with many factors. Studies have found that substances are often used to cope with the circumstances of experiencing homelessness.[11] Examples of this include using stimulants (methamphetamine, cocaine) to stay awake to protect one's belongings from being stolen or to protect themself from physical or sexual assault. Others include using a depressant (alcohol, benzodiazepines, opioids such as heroin or fentanyl) to help one sleep while living on the streets or in crowded environments.

In addition, it is important to recognize that studies have found that people experiencing homelessness face more barriers when accessing substance use treatment than the general population,[12] perhaps leading to a higher proportion of substance use related mortality. Even when treatment is available data shows that substance use treatment compliance is higher for those who have housing than those without.[13]

A specific area we wanted to evaluate was deaths related to cold and heat exposures, as recent interventions have been put in place to combat these deaths. We found that the number of deaths in people experiencing homelessness related to either cold or heat exposure were fewer than 11, therefore we are unable to report the exact number due to the risk of identifying the individual. We will monitor these deaths at DHHS and plan to report numbers in the future when data from multiple years can be combined. While these mortality numbers represent the most extreme outcomes to exposure, we understand that exposure causes many negative health outcomes that this report does not capture.

County of death

We evaluated the location of death at a county level and found that the highest mortality rates for people experiencing homelessness were among Tooele, Utah, Salt Lake, and Weber counties. These counties also had the highest counts of death among people experiencing homelessness. All other counties that recorded deaths among people experiencing homelessness had too few deaths to make reliable conclusions. We will monitor deaths in these counties and plan to report numbers in the future when data from multiple years can be combined.

These rates should be considered estimates as data related to the county of death can reflect a small number of deaths and therefore could be easily influenced by year-by-year changes and the accuracy of the Point-In-Time count in each county. However, this information is useful to understand overall mortality trends across a county.

It should also be noted that this data only records in which county the death took place. The data does not show which county a person resided in before their death. It is likely that some of the recorded deaths among people experiencing homelessness were individuals who lived in lesser populated counties but traveled to more populated counties before their death to receive medical care or other care.

Recommendations

People experiencing homelessness in Utah are dying at a higher rate and at much younger ages than the general population. Many of these deaths are preventable.

Providing people with housing is an immediate way to prevent premature death.[1] Expanding housing options for those experiencing homelessness is critical. We, in partnership with the Office of Homeless Services within the Department of Workforce Services, suggest the following actions to help prevent deaths among people experiencing homelessness:

- Support the development of low barrier housing options for those experiencing homelessness. These housing options should include medical respite care and housing that includes wraparound services and case management.
- Support low barrier primary healthcare and substance use treatment service options that are skilled in serving not only the general population but those who are experiencing homelessness to make sure all Utahns have access to treatment.

- Convene an advisory group of healthcare funders and providers, managed care plans, and stakeholders to evaluate and fund best practices in delivering healthcare to people experiencing homelessness in urban, suburban, and rural communities.[2]
- Improve collaboration between organizations that provide harm reduction services and homeless services to better improve access to naloxone, fentanyl and xylazine test strips, syringe services, and other life-saving harm reduction tools.
- Establish a homelessness mortality review process to better understand the circumstances that contribute to these deaths and identify strategies to prevent further fatalities.

Report limitations

This report is not able to give insight into deaths that occurred outside of the reported timeframe. This report is also not able to show a history of homelessness but only shows if the person was experiencing homelessness at the time of death, based on information reported by the OVRS or from other entities that certified the death, such as funeral homes. For example, if an individual had experienced homelessness for 5 years but had recently moved into housing, this report would have accurately marked that individual as not experiencing homelessness at the time of death. Similarly, those living at respite and end of life care facilities such as the Inn Between would generally have been marked as not experiencing homelessness at their time of death and thus not included in the mortality data among people experiencing homelessness.

While feedback for this report was solicited from continuums of care that often have representation from those who have experienced homelessness, this report lacks formal insights and perspectives from people who have experienced homelessness. We recognize the importance of these perspectives and are making plans to include them in future people experiencing homelessness mortality reports.

Data in this report is based on OVRS mortality data. There was not a standardized definition of homelessness when this data was collected. Individuals were not trained to identify people experiencing homelessness and therefore may have interpreted the meaning of homelessness differently. We are currently addressing this by providing a definition of homelessness and training to individuals who gather this data.

Another weakness of this report is that sex and gender were compared to each other. The 2023 Point-In-Time count collected self reported gender. The 2022 ACS U.S. Census Bureau data collected sex. The DHHS Office of the Medical Examiner (OME) generally uses sex at birth unless a decedent had transitioned (had gender affirming procedures) and the sex listed on their state-issued identification matched their transitioned gender. In this case, the OME would list a decedent's transitioned gender under sex in the death record.

Acknowledgements

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References and notes

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6. Note: Natural deaths are due solely or nearly totally to disease and/or the aging process.

7. Note: ICD-10 codes are often used by healthcare systems as billing codes and are used to facilitate insurance payments and reimbursements. Public health and other research groups often use ICD-10 codes to track disease and health-related condition trends.

8. Note: Substance use related death were identified by the following ICD-10 codes: X40-X44, X60-X64, X85, Y10-Y14, F11.0-F11.9, F12.0-F12.9, F13.0-F13.9, F14.0-F14.9, F15.0-F15.9, F16.0-F16.9, F17.0-F17.9, F18.0-F18.9, F19.0-F19.9, F10.3-F10.9, F10.0, F10.1, F10.2, G62.1,G31.2, G72.1,I42.6, K29.2, K70.0-K70.4, K70.9, K85.2, K86.0, Q86.0, P04.3, X45, Y15. X65

9. Note: Chronic disease deaths were based off of CDC's top 10 leading causes of death (https://www.cdc.gov/nchs/data/databriefs/db456-tables.pdf#4). The following ICD-10 codes were used to identify chronic disease deaths: I00–I09, I11, I13, I20–I51, C00–C97, I60–I69, J40–J47, G30, E10–E14, K70,K73–K74, N00–N07, N17–N19, N25–N27

10. Note: In 2017, DHHS's Targeted Adult Medicaid program expanded Medicaid coverage to adults without dependent children earning up to 5% of the federal poverty level and who are chronically homeless, involved in the justice system through probation, parole, or court ordered treatment needing substance abuse or mental health treatment, or are needing substance abuse treatment or mental health treatment. https://medicaid.utah.gov/targeted-adult-medicaid-program/

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Appendix

Table 1. Overall mortality rate per 10,000 people

Category	People experiencing homelessness	General population	Mortality rate ratio	95% confidence interval
Unadjusted	586	65	9	7.9–10.4
Age adjusted	657	68	10	8.4–11.0

Table 2. Crude mortality rate per 10,000 people by age

Category		People experiencing homelessness	General population	Mortality rate ratio
Overall		586	65	9
Age	0–17	33	5	7
	18–24	92	6	14
	25–34	225	10	22
	35–44	446	20	22
	45–54	603	33	18
	55–64	1010	74	14
	65+	2542	400	6

Table 3. Crude mortality rate per 10,000 people by sex/gender

Category	People experiencing homelessness	General population	Mortality rate ratio
Overall	586	65	9
Male	649	68	10
Female	513	61	8