

# Domicile Unknown

Review of deaths among people experiencing  
homelessness in Multnomah County in 2022

December 2023





This report is dedicated to those who have died,  
their families and friends.

To all those working to end the epidemic of homelessness.

And to those who haven't yet found a way off the street.



## Introduction from Street Roots Executive Director Kaia Sand

At least 315 people who were unhoused died before their time in Multnomah County in 2022. Their early deaths — occurring up to three decades earlier than their housed neighbors — surface the fault lines of a profoundly unequal society.

We know about these deaths because of a commitment since 2010, when Israel Bayer, then the executive director of Street Roots, approached Dr. Paul Lewis at the Multnomah County Health Department, imploring him to begin tracking these deaths. He wasn't hard to convince, and neither was Deborah Kafoury, then a Multnomah County Commissioner, still years from becoming the Chair of the Multnomah County Board. They all saw the importance of tracking and sharing this knowledge in order to both grieve these lives and build policy that addresses the causes of these deaths.

Since then, the Multnomah County Medical Examiner's death investigators have researched every unattended or violent death to see if a person had a stable address when they died. And now, whenever they do not, the examiner adds the data field "domicile unknown."

Over the six years that I've been involved with this report, I've come to value the commitment of the Medical Examiner's staff to find the facts and the dedication of the Health Department to analyze and identify trends to ensure that people don't die in anonymity. Their research, which includes reaching out to family members and other social contacts, sketches out a fuller picture of why people die so early on the edges of society.

This year, for the first time, the report includes hospital deaths, too. That's in part because of the example our community set in creating and maintaining this report.

Beginning in 2022, the Oregon Legislature began requiring funeral directors to record "domicile unknown" on death certificates. Although this

funeral-director reporting does not include the level of research undertaken by the Medical Examiner, we nonetheless now have better information about the infections, heart disease, cancer, strokes, COVID-19, and chronic liver and respiratory illness endured by people who are unhoused. Even when people experiencing homelessness die in hospitals, they die about two decades before their time, at an average age of 58.

The production of the Domicile Unknown report allows the community to understand more about the people who are homeless and dying. This includes an understanding of what months people die, including deaths by hyperthermia and hypothermia, which over the years has informed Multnomah County's response to opening extreme weather shelters. The number of people who died of hyperthermia and hypothermia decreased this year from the previous year.

Consistently American Indian and Alaskan Native residents die at about five times the rate of their overall population, about the same rate they are homeless in Multnomah County. Black Portlanders also die at about the same rate they are unhoused – two times the rate of their overall population.

We can, and must, keep finding policy fixes. We can, and must, keep fighting for people to stay alive.

But the fact that a person dies of homelessness almost every day in Multnomah County is an indictment of something deeper, societal, and national. It is an indictment of the systems and safety nets that break and fray, or never even exist at all, leaving people to end up on our streets.

Poverty is a leading cause of death in the United States, according to [a recent study in the Journal of the American Medical Association](#) that demonstrated that poverty increases someone's risk of death by 42%, and by 71% if a person has been in poverty for 10 years.

Living so much of one's life without secure housing is deadly, vulnerable to both guns and cars, a toxic drug supply. And despair.

About a quarter of all people who died by homicide in Portland in 2022 were homeless.

The number of people who die by traffic fatalities continues to rise across our community, but people experiencing homelessness – who are excluded from many spaces – die at a rate that's 44.8% higher than the overall population. Efforts to expand daytime spaces such as the one-year-old Multnomah County Behavioral Health Resource Center must multiply. Funding approved this fall by the County Board of Commissioners to add or expand other day spaces and safer shelter options must be spent quickly and well.

Despair and suffering are, in fact, killers. Twice as many people experiencing homelessness died by suicide in 2022 compared to 2021, and this report also demonstrates the devastating impact of fentanyl.

The first year I worked on this report — 2016 — fentanyl was not associated with any deaths.

In 2020, four deaths were tracked to fentanyl, and by 2021, that number rose to 36 deaths. This year, the number skyrocketed to 91 deaths.

In other words, about the same number of people who died while experiencing homelessness for any reason in 2018 died this year with fentanyl alone as a cause of death. Fentanyl poisoning is killing people across North America.

Like a body that, under stress, feels its vulnerable spots acutely, so too does society. At a structural level, people in poverty are sacrificed in this country while many of us never face that same fate. That is the raw truth.

This report provides data, but that data is also a collective keening. We fight to solve for the future, but grieve the fact that people who suffer in our County die three decades before the rest of us do.

Know this, feel this, and refuse to accept this.

**Kaia Sand**  
Executive Director, Street Roots

# Key Findings

- In 2022, for the first time, data on deaths among people experiencing homelessness were available from two sources instead of just one: Multnomah County Medical Examiner and from vital statistics.
- 315 deaths were identified among people experiencing homelessness across the two data sources: 249 from ME and an additional 66 from vital statistics.
- Deaths among people experiencing homelessness identified by ME investigation have increased significantly between 2018 and 2022, by 29% per year.
- The average age at death among people experiencing homelessness was 49. That is nearly 30 years younger than the current U.S. life expectancy at birth.
- Nearly half of all deaths were from unintentional injury; drug overdoses accounted for 85% of those deaths, or 123 total. Methamphetamine was an underlying cause of death (with or without other drugs) in 81% of all overdoses. Fentanyl also contributed to a large proportion of overdoses deaths (74%).
- Forty-two deaths were due to assault (homicide, N=25) or self-harm (suicide, N=17). Firearms were the most common mechanism of death for homicides, while for suicide the most common mechanism was asphyxiation. Homicide numbers mirror the increase reported by the Portland Police Bureau – 94 in 2022 alone.<sup>1</sup> Death by suicide was more than double the reported number from 2021.
- Mortality risk for people experiencing homelessness compared to the general Multnomah County population, adjusting for differences in age, was nearly 6 times higher for all causes of death, 45 times for transportation-related deaths, 37 times for drug overdoses, 32 times for homicide, 18 times for suicide, and 3 times for both heart disease and COVID-19.

<sup>1</sup> <https://www.portlandoregon.gov/police/news/read.cfm?id=452715>

# Methods

## Data Source

We used two sources of data to identify deaths among people experiencing homelessness (PEH). The first was the Oregon State Medical Examiner (ME), which maintains a database of all deaths investigated under its jurisdiction. According to ORS 146.090,<sup>2</sup> the ME investigates and certifies the cause and manner of all human deaths that are:

- a. Apparently homicidal, suicidal or occurring under suspicious or unknown circumstances;
- b. Resulting from the unlawful use of controlled substances or the use or abuse of chemicals or toxic agents;
- c. Occurring while incarcerated in any jail, in a correctional facility or in police custody;
- d. Apparently accidental or following an injury;
- e. By disease, injury or toxic agent during or arising from employment;
- f. While not under the care of a physician during the period immediately previous to death;
- g. Related to disease which might constitute a threat to the public health; or
- h. In which a human body apparently has been disposed of in an offensive manner.

In December 2010, the data field “domicile unknown” was added to the ME database for Multnomah County so that deaths of individuals who may have been homeless at the time of their death could be more easily extracted. Multnomah County medicolegal death investigators make multiple attempts to identify a place of residence for decedents through scene investigation and interviews with relatives and social contacts. Investigators are encouraged to classify decedents as “homeless” using this field if they can not identify a stable residence at the time they complete their report; such cases are later reviewed as described below for final classification.

As of Jan. 1, 2022, Senate Bill 850<sup>3</sup> established mandatory reporting of housing status at death; this means that reporting is required for all deaths, not just for deaths investigated by the ME. The new requirement creates a way to document homelessness on death certificates by recording “Domicile Unknown” in the residence address. The funeral service practitioner is responsible for listing “Domicile Unknown” in the street name, rural route, etc., field for individuals who were homeless at the time of the death.<sup>4</sup> This allowed us to use death certificates as a second source of data to include deaths certified by a healthcare practitioner. For more information about why ME data was used in addition to the vital records, refer to the Appendix at the end of the document.

2 [https://www.oregonlegislature.gov/bills\\_laws/ors/ors146.html](https://www.oregonlegislature.gov/bills_laws/ors/ors146.html)

3 <https://www.oregon.gov/oha/PH/BIRTHDEATHCERTIFICATES/REGISTERVITALRECORDS/Pages/Senate-Bill-850.aspx>

4 <https://www.oregon.gov/oha/PH/BIRTHDEATHCERTIFICATES/REGISTERVITALRECORDS/Documents/Death/JobAid%20SB850-FH.pdf>

# Definition of “experiencing homelessness”

As defined by SB 850, and based on the U.S. Department of Housing and Urban Development definition, a homeless individual is defined as: An individual who lacks a fixed, regular, and adequate nighttime residence; An individual with a primary nighttime residence that is a public or private place not designed for or ordinarily used as a regular sleeping accommodation for human beings, including a car, park, abandoned building, bus or train station, airport, or camping ground; An individual living in a supervised publicly or privately operated shelter designated to provide temporary living arrangements (including hotels and motels paid for by Federal, State, or local government programs for low-income individuals or by charitable organizations, congregate shelters, and transitional housing); An individual who resided in a shelter or place not meant for human habitation and who is exiting an institution where that individual temporarily resided.

## Review of Death Data

### **Data source 1: Medical Examiner (ME) data**

We extracted case information for all investigated deaths under Multnomah County jurisdiction during 2022 from the Medical Examiner database MDILog (Occupational Research & Assessment Inc. Big Rapids, Mich.). Four-hundred-and-twenty-one deaths were selected for review based on whether they were 1) flagged as domicile unknown or homeless; 2) had an indication of homelessness in the address field (“transient,” “homeless,” etc.); 3) had no residential address information listed; or 4) a shelter was listed as the place where death occurred. One reviewer assessed death narrative reports, supplemental information and address information for each case to determine which investigations supported the classification of homeless using the definition listed above. Unclear cases were investigated for more information using both vital records (see Source 2, below) and the Homeless Management Information System (HMIS) database. If vital records classified the decedent as domicile unknown in the residential address, or if there was evidence of housing instability or homelessness in HMIS, then we classified them as likely homeless at death.

### **Data source 2: Vital Records (VR)**

Data were obtained electronically from Multnomah County’s database of vital records, which are updated by the Oregon Health Authority. We selected records where the place of death was within Multnomah County, the residential street address was listed as “domicile unknown,” and the signer of the death certificate was a certifying physician, nurse practitioner, or physician assistant.

Note: dDeaths certified by a medical examiner were excluded, since they are captured more robustly in data source 1 (see also limitations at the end of this report).

## Combining data

To facilitate data analysis, we combined data from source 1 into source 2 into one file by using the ME case number (MDILog#), which is documented in vital records as “dmerecordnum” (medical examiner record number). The final number of records in the analytic set was 315.

# Race and ethnicity coding

Typically, funeral directors gather information on race and ethnicity from next of kin or close informant interviews, and these data are typically more robust than the available Medical Examiner data. Although misclassification of race and ethnicity on death certificates occurs, especially for persons of American Indian or Alaska Native ancestry, it is low for White and Black populations and has decreased over time for the Hispanic and Asian and Pacific Islander populations.<sup>5</sup> We categorized decedents using a rarest race algorithm. If a person only had a primary race or ethnicity listed, then that race is what is represented for them. If a person had three or more races listed then they were classified as “multiracial.” If a person had two races listed then they were assigned to the rarest group based on region-specific population data (i.e., American Community Survey [ACS] Public Use Microdata Sample [PUMS]) for Multnomah County. The rarest groups in Multnomah County per ACS PUMS data are (rarest to least rare):

1. Native Hawaiian, Pacific Islander
2. American Indian, Alaska Native
3. Black, African American
4. Asian
5. Hispanic
6. White
7. Unknown

Because the rarest group may be different across geography and time, race data obtained from this method may not be comparable. (For example: In the State of Oregon, “Black, African American” is the second-rarest group, while it is the third-rarest group in Multnomah County.) Similarly, this approach may result in overestimates of death among the rarest groups when denominator data do not use this method of classification.<sup>6</sup>

# Cause and manner of death

The certifier of death is the physician or medical examiner who completes the cause-of-death section of the certificate that also includes details about the circumstances surrounding death. Manner of death is one of the items that must be reported on the death certificate, and it is a classification of death based on the circumstances surrounding a particular cause of death. Typically, the five manners used are as follows:

- Natural (relating solely to aging or disease process)
- Accident (injury or poisoning-caused death, no evidence of intent to harm)
- Suicide (injury or poisoning with intent to harm self or cause death)
- Homicide (act committed by another person)
- Undetermined (information pointing to one manner not more compelling than information pointing to another)<sup>7</sup>

5 [https://www.cdc.gov/nchs/data/series/sr\\_02/sr02\\_172.pdf](https://www.cdc.gov/nchs/data/series/sr_02/sr02_172.pdf)

6 <https://sharedsystems.dhsoha.state.or.us/DHSForms/Served/le7721a.pdf>

7 <https://name.memberclicks.net/assets/docs/MANNEROFDEATH.pdf>

Causes of death in vital records are coded using the ICD-10 classification (International Statistical Classification of Diseases).<sup>8</sup> The following coding schemes were used to classify deaths:

- Drug poisoning (overdose): underlying cause of death X40-44, X60-64, Y10-14, and X85
- Opioid overdose: drug poisoning, plus any multiple cause of death (MCOD) code T40.0-T40.4, T40.6
- Psychostimulants with abuse potential: drug poisoning, plus MCODE T43.6
- Synthetic opioid (fentanyl): drug poisoning, plus MCODE T40.4
- Extreme weather (heat or cold): X30-X31
- Pedestrian or cyclist involved in transport accident: V01-V19
- Heart disease: I00-I09
- COVID-19: U07
- Assault (homicide): X85-Y09
- Intentional self-harm (suicide): X60-X84

Other categories displayed reflect the National Center for Health Statistics (NHC) 113 leading causes list.<sup>9</sup>

## Estimating the total houseless population

Although the exact number of PEH is unknown, the best estimate we have is based on data from the 2022 Point in Time Count Report. The 2022 report found that 5,228 people were counted as experiencing homelessness on the night of January 26, 2022.<sup>10</sup>

## Estimating risk

To compare rates of mortality in people experiencing homelessness compared to Multnomah County residents, we used two denominators:

1. The 2022 Point in Time estimate
2. Census estimates for Multnomah County for 2022 from Oregon Public Health Assessment Tool (OPHAT) by age

Rates were age-adjusted to the year 2000 projected U.S. Population. The same definitions listed above were used to classify deaths for all Multnomah County residents.

## Mapping

To map where deaths occurred, we used address information corresponding to the location of the original injury leading to death. This information is available only for ME-certified deaths, and some fields had an unknown incident location and were excluded from the map.

8 <https://www.who.int/standards/classifications/classification-of-diseases>

9 <https://www.cdc.gov/nchs/nvss/leading-causes-of-death.htm>

10 <https://multco-web7-psh-files-usw2.s3-us-west-2.amazonaws.com/s3fs-public/2022%20Point%20In%20Time%20Report%20-%20Full.pdf>



## Trends over time

To assess the trend in absolute numbers of deaths over time, we used Joinpoint regression. Joinpoint takes count or rate data and determines where lines are best connected together. For count data, a poisson regression is run with the year as the independent variable. Joinpoint determines the annual percent change and if this value is statistically significant from zero at the  $p=0.05$  level. We used Joinpoint 5.0.2 for this regression analysis. Only ME data was used for this analysis, because we lack an estimate of hospital deaths for people experiencing homelessness prior to 2022.

Frequencies and means were tabulated using SAS 9.4 (SAS Institute, Cary, N.C.). Age-adjustment calculations were performed using Microsoft Excel (2019).

## Data suppression

To protect the privacy of decedents, demographic data were suppressed or combined into subgroups if cell counts were less than three.



# John Ellstrom

Born Sep. 14, 1967. Died May 8, 2022. Age 54.

## A difficult childhood leads to years on the streets.

John Ellstrom died on Mother’s Day 2022, struck by the driver of an SUV while walking on the Morrison Bridge near the Interstate 5 ramp. He was 54.

Growing up in the Northwest with a brother and sister, John was smart to the point of being “nerdy,” his sister, Tamara, recalls. He loved sci-fi, reading and learning. And he was athletic, skilled at water skiing, snow skiing and swimming — competing in meets across the region.

But his childhood was also marked by severe trauma. John’s birth mother neglected and abandoned him, and he was raised in foster and adoptive homes where he endured emotional and sexual abuse. He escaped his memories with drug use, leading his adoptive family to disown him, sending him onto the streets.

“If you ask me, he tried to go to places and get help, but a lot got in the way,” his sister said. “Alcohol and drugs, but also mental illness and never getting the proper help he needed.”

Two years before he died, John turned a critical corner. He had been sober for a year, was renting a place to live, and had started college classes to study engineering. He visited his sister, and they took a special trip to the California coast.

They had remained close throughout their lives — for years she was the only family member speaking to him — and did what she could to support him. They relished spending time together on the beach.

Then John relapsed, and with no intervention for his mental health and substance use disorders, he wound up back in Portland. On the street.

“He needed a place where he could’ve stayed and gotten help,” she said.



John and his sister on a visit two years before his death.



# Results

In 2022, we identified a total of 315 deaths among people experiencing homelessness (Table 1): 249 from our review of ME data and 66 from vital records. These deaths were accidental, homicidal, suicidal, and undetermined categories, as determined by statute.<sup>11</sup> Among deaths categorized as natural (N=121), physicians certified slightly more than half (55%).

**Table 1**  
Deaths among PEH by manner and signer of death certificate

Manner of Death	Medical Examiner N (%)	Health Care Provider* N (%)	Total N (%)
Natural	55 (45)	66 (55)	121 (38)
Accident	146 (100)	0 (0)	146 (46)
Homicide	26 (100)	0 (0)	26 (8)
Suicide	17 (100)	0 (0)	17 (5)
Undetermined	5 (100)	0 (0)	5 (2)
<b>TOTAL</b>	<b>249 (79)</b>	<b>66 (21)</b>	<b>315 (100)</b>

\*Physician, physician assistant or nurse practitioner

<sup>11</sup> [https://www.oregonlegislature.gov/bills\\_laws/ors/ors146.html](https://www.oregonlegislature.gov/bills_laws/ors/ors146.html)

Table 2 presents the distribution of total deaths by select demographic categories. Males made up more than three-quarters of decedents. By rarest race algorithm, 64% of decedents were white, 9% were Black or African/American, 7% were Hispanic, 5% were American Indian or Alaska Native, and 3% were Asian or Pacific Islander. Twelve percent of death records had no information on race or ethnicity of the decedent. The average age at death was 49; by group, persons aged 50-59 years made up the highest proportion of the total (N=81, 26%) followed by 25-39 years (N=74, 23%). For deaths certified by a healthcare provider, the average age at death was 58 years (data not shown).

**Table 2**

**Demographic characteristics of deaths among PEH, 2022**

<b>Sex</b>	<b>Number</b>	<b>Percent</b>
<b>Male</b>	245	78
<b>Female</b>	70	22
<b>Race/Ethnicity</b>		
<b>White</b>	202	64
<b>Black/African American</b>	29	9
<b>Hispanic</b>	21	7
<b>American Indian/Alaska Native</b>	15	5
<b>Asian/Pacific Islander</b>	10	3
<b>Missing/unknown/other</b>	38	12
<b>Mean age (range)</b>	49 (0-79)	n/a
<b>Age group (years)</b>		
<b>&lt;= 24</b>	10	3
<b>25-39</b>	74	23
<b>40-49</b>	68	22
<b>50-59</b>	81	26
<b>60-69</b>	59	19
<b>70+</b>	23	7
<b>TOTAL</b>	315	100

# Angela C. Boyd

Born May 22, 1974. Died April 4, 2022. Age 47.

## Accomplished and creative: Truly loved her work

Angela C. Boyd died after being struck by a hit-and-run driver on the 4600 block of S.E. Powell Boulevard late on April 4, 2022. She was 47. Born in California, she attended Oregon City High School and earned a bachelor's degree in journalism and communications from the University of Oregon with an emphasis in advertising, marketing, and fine and applied arts.

Angela was an artist and a mother, working in television commercials, music videos, fashion shows and feature films, and also for print publications. She was a highly sought-after wardrobe/photo stylist with a wide range of collaborators, who, her family says, "truly loved her work."

She also loved adventure, traveling widely even as she always returned to the Pacific Northwest and its beloved rivers, beaches and forests.

But for reasons her family still can't understand, Angela's life spiraled downward. After career complications and the loss of a beloved pet, a change in her personality left her living on the street, mostly in the Sellwood area.

After the hit-and-run, Angela's belongings were found in the bushes alongside Powell. But the driver who Portland Police say struck her — and their late-model dark gray Subaru Impreza/Crosstrek with black wheels and a rooftop carrier — have never been found.

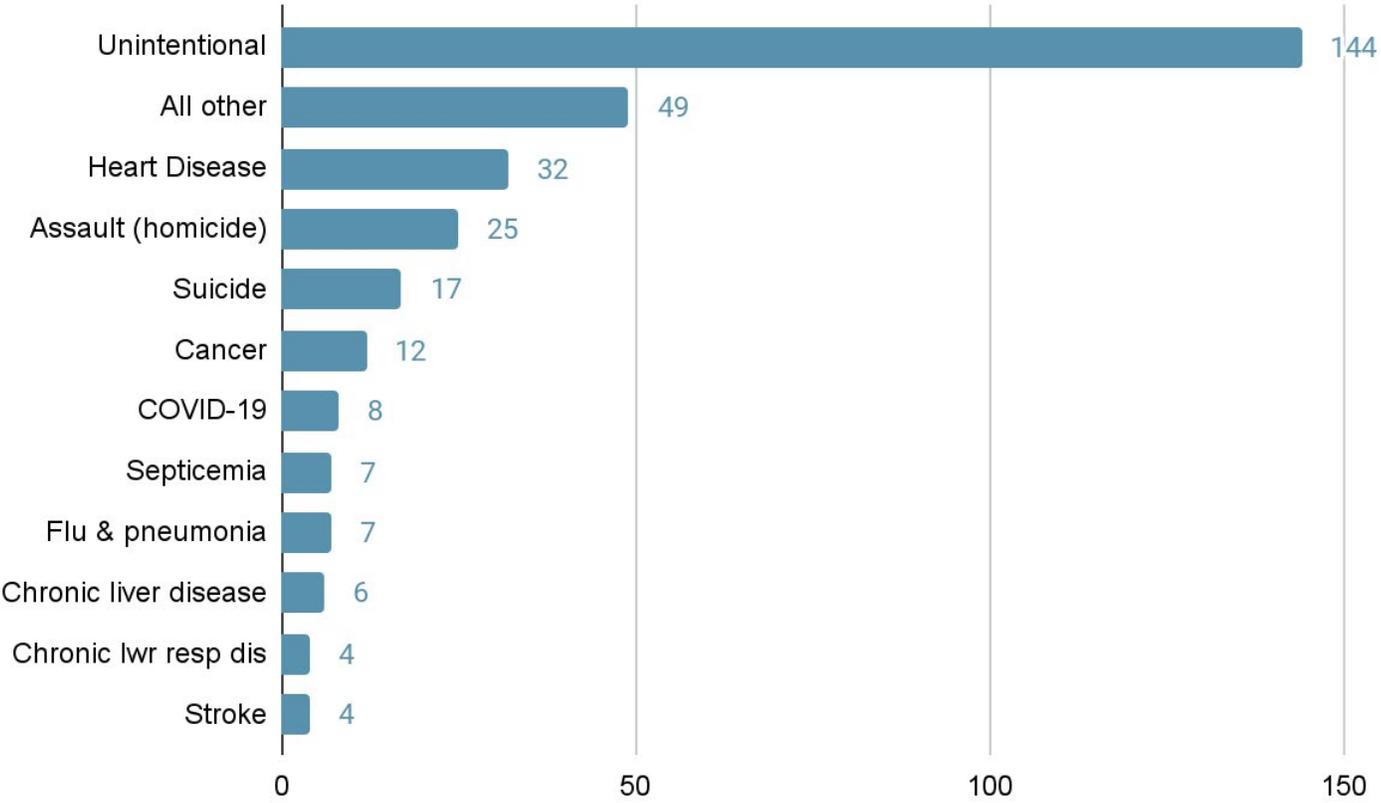
Three weeks after her death, Portland Police released [this video \(https://youtu.be/iTbccPdg-aU\)](https://youtu.be/iTbccPdg-aU) of the vehicle as it fled east with extensive front-end damage.

Now, more than 19 months later, her children, parents and brother still have no suspects or answers. Just their hope that Angela is at peace after the difficult last years of her once-happy and accomplished life.



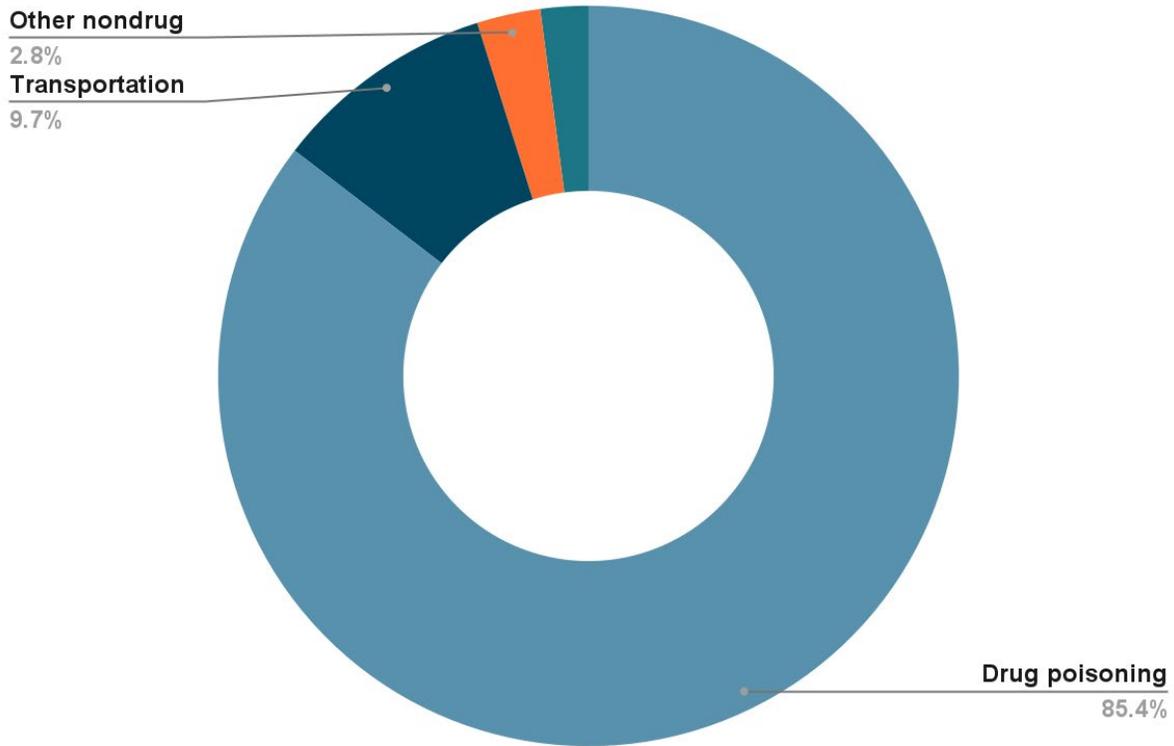


Figure 1 shows the causes of death among people experiencing homelessness. Unintentional injuries made up the largest proportion of deaths (N=144, 46%). Heart disease accounted for 10% of the total (N=32), and assault (homicide) accounted for 8% of the total deaths (N=25).



**Figure 1. Leading causes of death (N=315)**

Figure 2 presents the distribution of the unintentional injury category (N=144). The majority of deaths in this category came from drug poisoning (overdose) (N=123, 85%), followed by transportation crashes (N=14, 10%).



**Figure 2. Distribution of unintentional injuries (N=144)**

Deaths from drug overdose are presented in more detail in Table 3. Each death could have more than one type of drug, so the sum of each category will be more than the total. Psychostimulants with abuse potential (mainly methamphetamine) and synthetic opioids (mainly fentanyl) were the most commonly listed drugs.

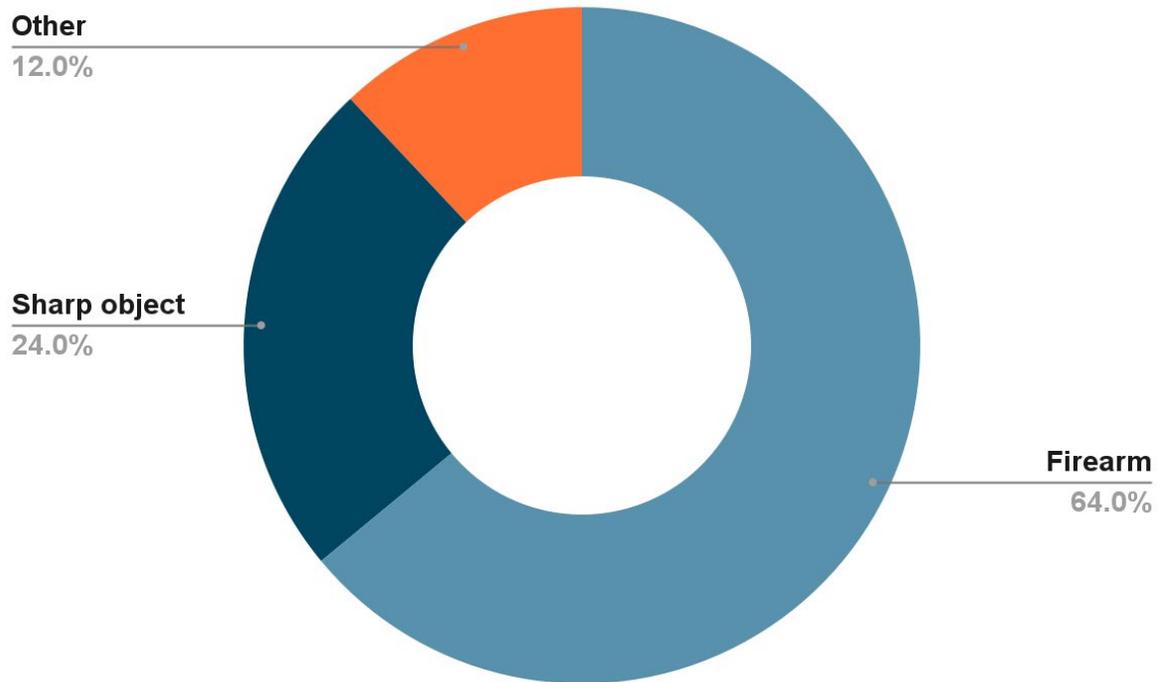
**Table 3**

**Specific drug type for 123 drug poisoning (overdose) deaths**

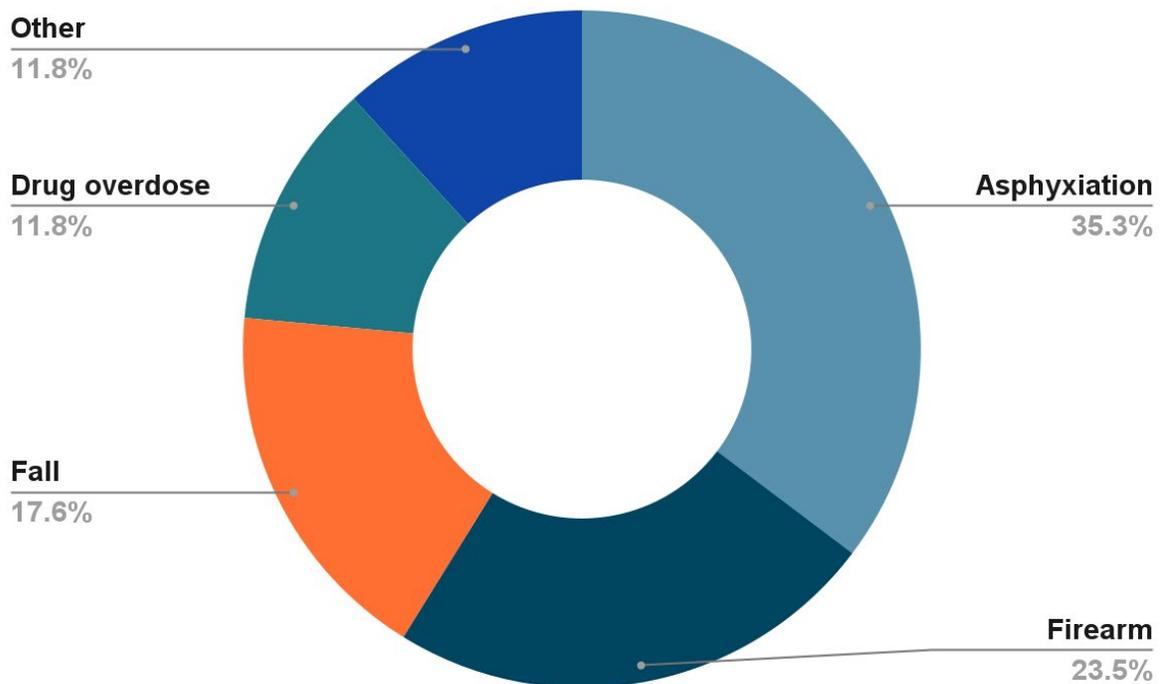
Drug category	Number (%)
Psychostimulants with abuse potential*	100 (81%)
Opioids	98 (80%)
Synthetic opioids (mainly fentanyl)	91 (74%)
Opioid + psychostimulant	78 (63%)
Heroin	19 (15%)
Cocaine	10 (8%)

\*Mainly methamphetamine

Figures 3 and 4 list the mechanisms of death for the 42 total assault (homicide) and suicide deaths. Firearms were the most common mechanism for homicide (64%), while asphyxiation was the most common mechanism for suicides (35%), followed by firearms (24%).

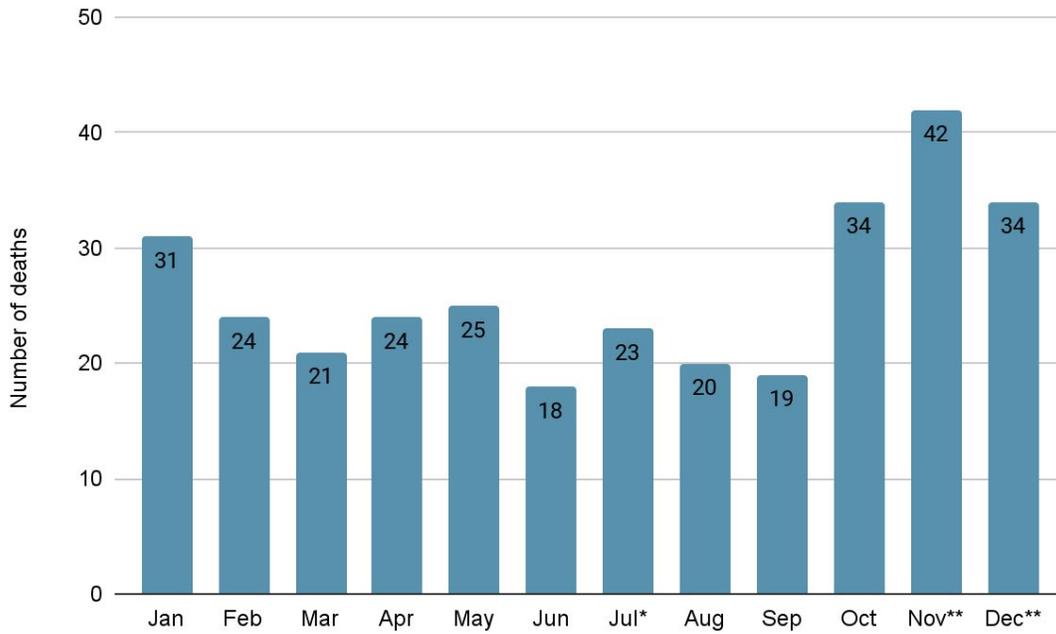


**Figure 3. Mechanism of assault (homicide) deaths (N=25)**



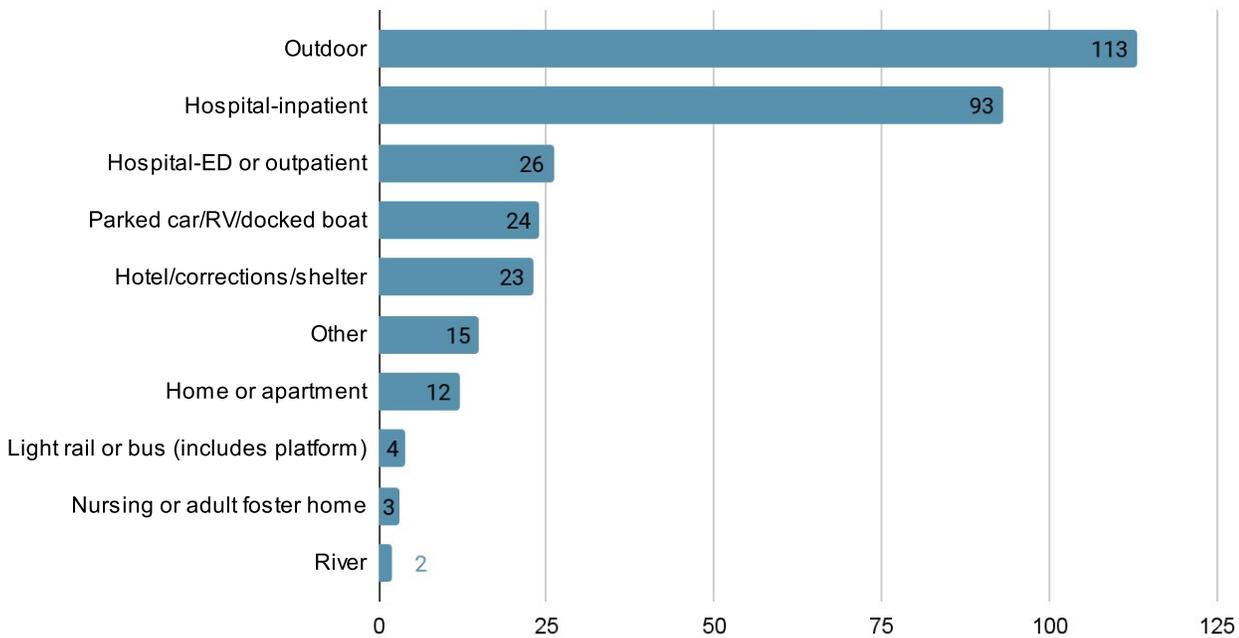
**Figure 4. Mechanism of intentional self-harm (suicide) deaths (N=17)**

Figure 5 shows the distribution of deaths by month. On average, 26 people died each month, with a minimum of 18 in June and a maximum of 42 in November. There were three total deaths due to heat (\*) and cold (\*\*), which are shown by asterisks in the month labels where the death occurred.



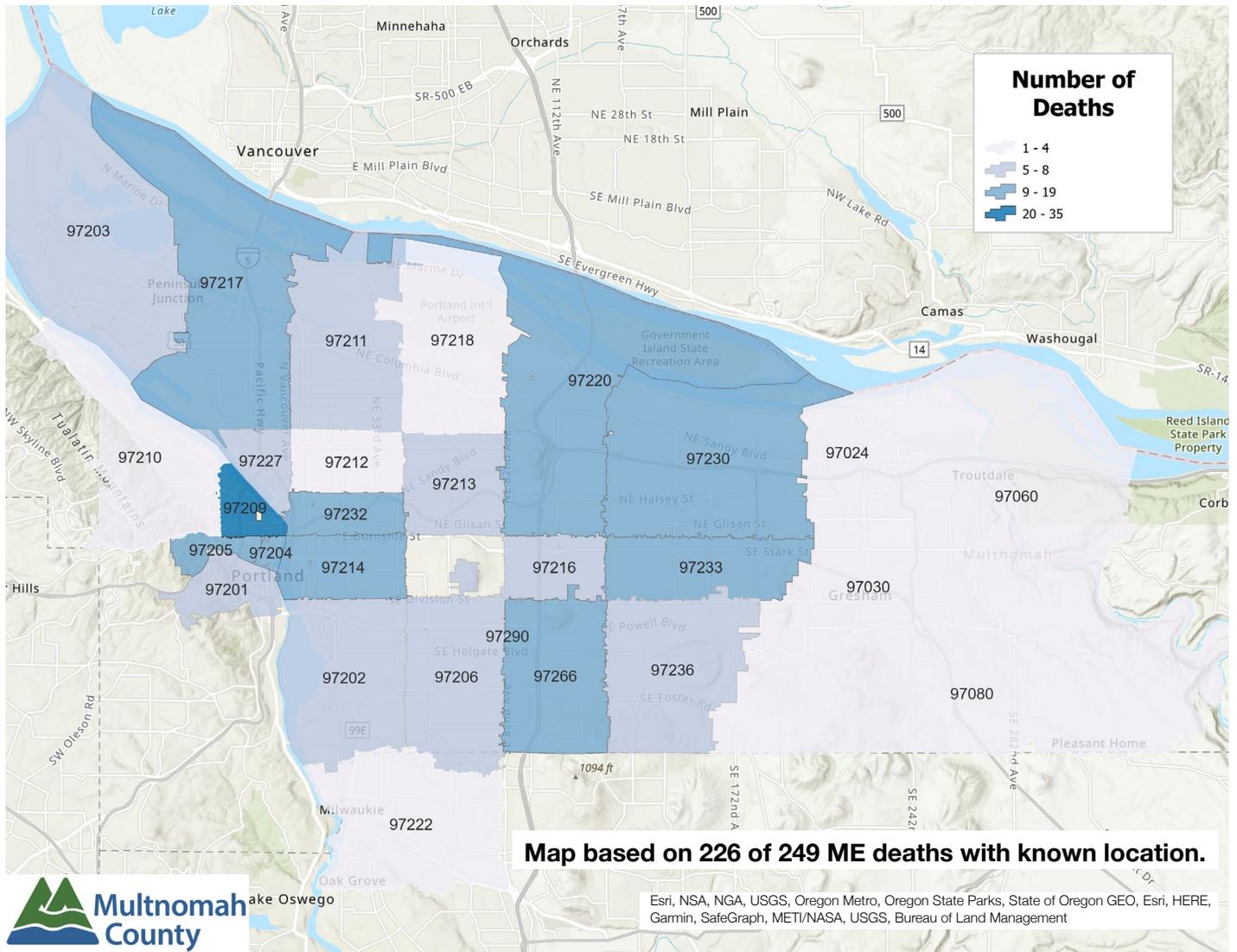
**Figure 5. Deaths by month**

Figure 6 shows deaths by place. The most common place was outdoors (N=113, 36%) followed by inpatient hospital (N=93, 30%).



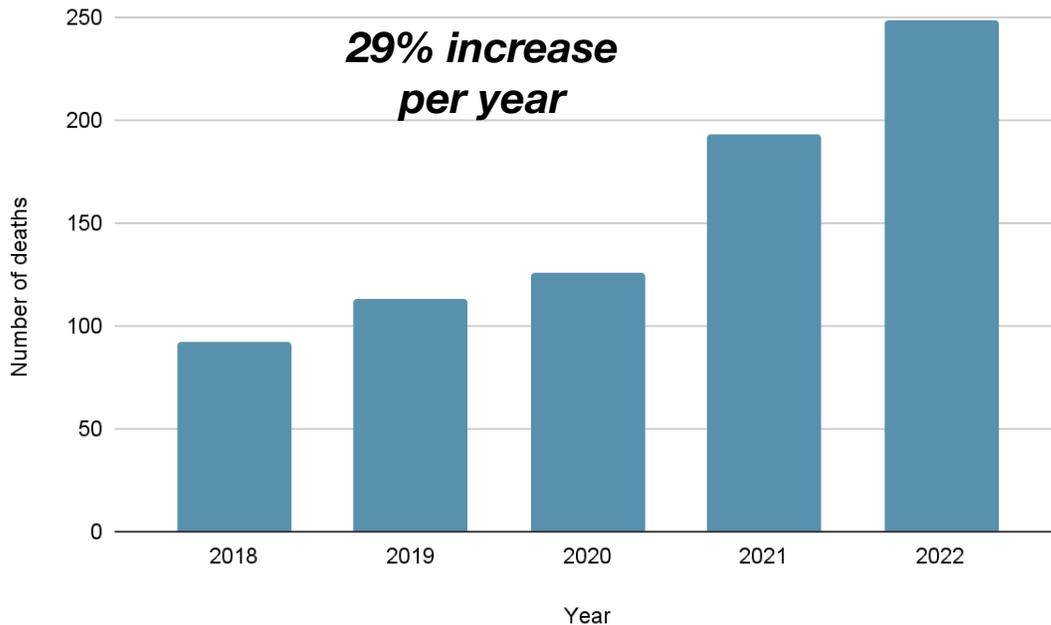
**Figure 6. Deaths by place of occurrence**

Figure 7 shows the distribution of deaths by ZIP code of original injury location. This data is available only for deaths certified by the medical examiner, with darker colors indicating a higher number of deaths. As seen in prior reports, deaths have a larger concentration in the downtown Portland core, North/Northeast Portland, and near the other east-west and north-south arterials of Interstates 84 and 205. For this year, the ZIP code with the highest total overall deaths was 97209 (Pearl District/Old Town), followed by the 97220 (Parkrose), 97214 (Inner SE), 97205 (Goose Hollow), 97217 (Kenton/North Portland), and 97233 (Centennial/East Portland).



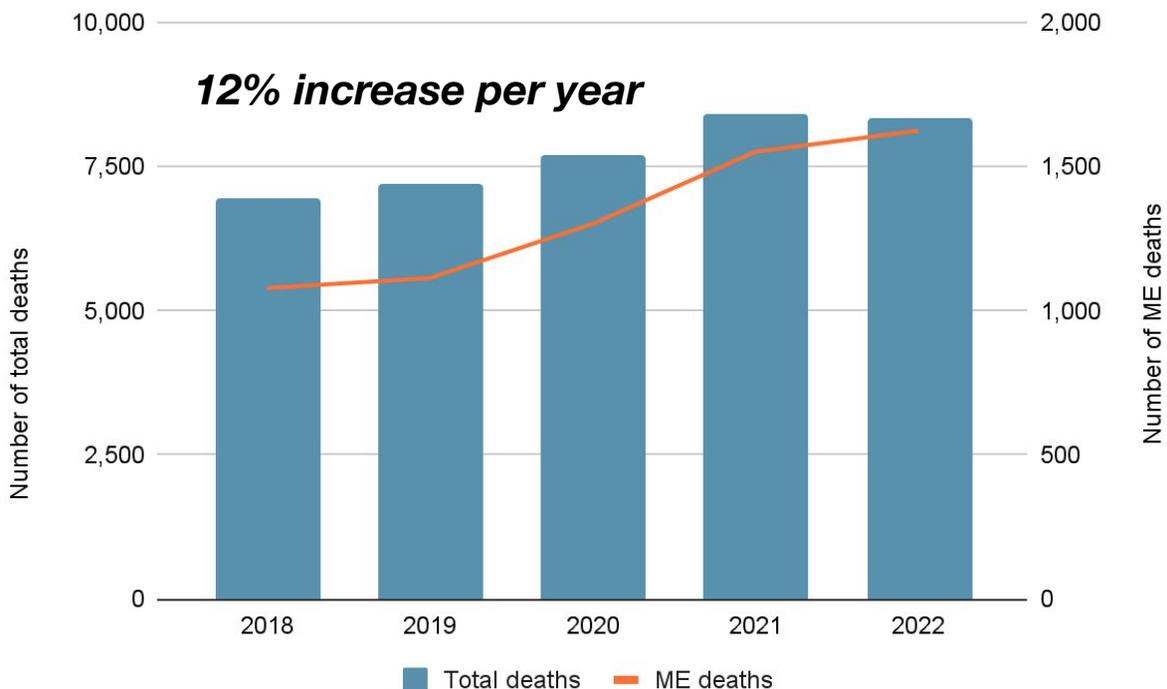
**Figure 7. Deaths by ZIP code of original injury (limited to ME deaths only)**

By absolute numbers, ME domicile unknown deaths in recent years have ranged from 92 in 2018 to this year's value of 249 (Figure 8). The Joinpoint regression analysis of these data show a significant annual percent change of 29% per year.



**Figure 8. Joinpoint regression trend over time in total ME domicile unknown deaths, 2018 - 2022**

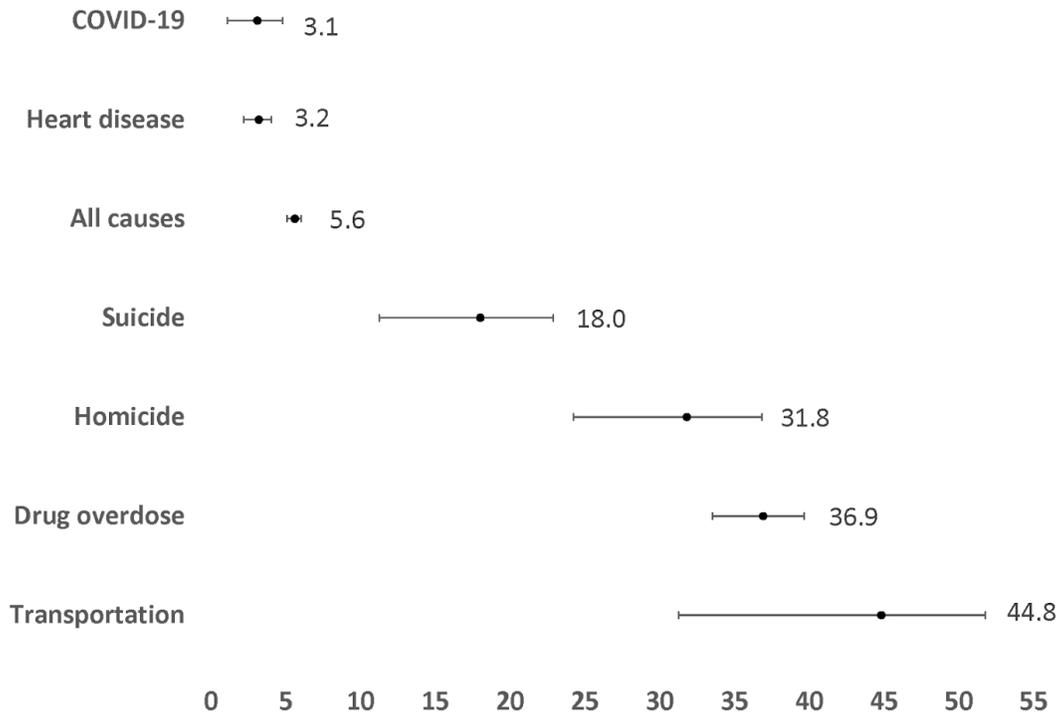
Deaths among the entire population of Multnomah County also rose over this time period, and the proportion of ME deaths has risen as well. Figure 9 shows the number of occurrence deaths (deaths that happened in Multnomah County only) and the proportion that are assigned as Medical Examiner deaths in the vital records. A Joinpoint regression analysis shows that the annual percent change is significant at 12.2% per year.



**Figure 9. Total deaths and Medical Examiner deaths occurring in Multnomah County**

# Mortality risk comparisons to the general population

In 2022, people experiencing homelessness were 44.8 times more likely to die from a transportation-related injury, 36.9 times more likely to die from a drug overdose, 31.8 times more likely to die from homicide, 18 times more likely to die from suicide, 3.2 times more likely to die from heart disease, and 3.1 times more likely to die from COVID-19 compared to the general population of Multnomah County (Figure 10). They were 5.6 times more likely to die from any cause (total mortality)



**Figure 10. Age-adjusted mortality rate ratios (with 95% confidence intervals) comparing deaths among people experiencing homelessness to deaths among Multnomah County residents**



# Jeremy Hofmann

Born Aug. 26, 1973. Died Aug. 25, 2022. Age 48.

## An independent spirit, a tragic turning point

Jeremy Hofmann would push every button on the elevator just to see where they went. If there was a flight of stairs, he wanted to see what was up there. He hated carrying a wallet, hated having a bank card, hated following the rules.

He loved baseball, golf and God. He loved life, his sister remembers. But he couldn't master it.

He walked hours across Portland and the metro area because he couldn't figure out TriMet. Jeremy was struck by a driver Aug. 25, 2022 while walking on Highway 99 East, near Milepost 20 in Canby. He was airlifted to an area hospital, where he died, just one day before his 49th birthday.

Police used Jeremy's fingerprints to identify him. Fingerprints also allowed the hospital to reach his sister, Stephanie, a medical assistant in oncology, who said she had a strange feeling all day.

Growing up in Gladstone, her younger brother was the perfect playmate, tearing around outside, pretending they were in the Old West, and inside, playing house. They had wonderful neighbors, loving parents and "a beautiful childhood."

They were told to be home before the streetlights came on. One night, when Jeremy didn't come home on time, their dad discovered him at a neighbor's, being sexually assaulted by an older boy. Their dad was so angry, he lashed out at Jeremy. The perpetrator was later charged, and several other families came forward with children who'd been abused.

But Stephanie and Jeremy were told not to talk about it, the shame and stigma a deeply buried secret. In high school Jeremy began smoking pot. By his senior year, he'd moved onto meth. Stephanie doesn't know whether it was the drugs that affected his brain, or a mental illness. But she knows the abuse was at the core.

“He received counseling and he was loved and cared for,” Stephanie recalls. “But it stayed inside him and turned him to drugs.”

There were periods of great pain, when he went to prison, needed a restraining order, or couldn't be found for their father's funeral. But there was healing, too, when he returned to be with his dying mother or graduated from CityTeam Portland's two-year program. He had a sponsor and went to 12-step meetings. “He thrived there,” Stephanie said. He would go out onto Portland's streets with a bucket of warm water and soap and wash the feet of the homeless, “because Jesus told him to.”

He loved being sober and met the love of his life at CityTeam, a Pennsylvania transplant named Mary. But he still couldn't do life.

Jeremy was struck on Highway 99 that August morning when Oregon State Police say he ran in front of a car. The 20-year-old driver was on her regular 4:30 a.m. commute to work.

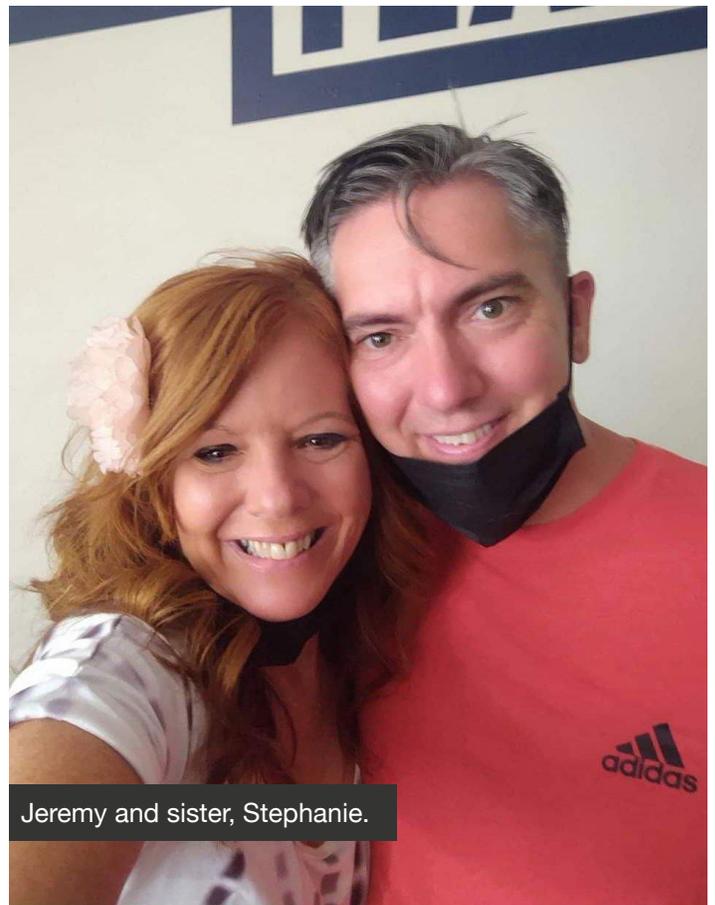
The young driver's mother later contacted Stephanie, who then got in touch with the driver herself. The two women struck up an unlikely friendship, with Stephanie calling the young woman often and sending her gifts, including on Jeremy's birthday, and at Thanksgiving and Christmas.

“I feel so much forgiveness,” Stephanie said. “He is in a better place. He doesn't have to be at the point of not having food and not having money. That he is happy now, I have no doubt.”

Stephanie held his memorial in late November that year, in the Gladstone neighborhood where he grew up. Nearly 60 people attended, including CityTeam colleagues, neighbors who knew him as a child, and people who loved him. Stephanie sent everyone home with a tree covered with bluebirds, for happiness — and hope.



Mary, Jeremy, Stephanie and Brittany after he completed the CityTeam program.



Jeremy and sister, Stephanie.

## Discussion

At least 315 individuals died without a stable residence in Multnomah County in 2022. The majority of these deaths were preventable. In fact, the average age at death was 49, which is nearly 30 years lower than the average U.S. life expectancy in 2022.<sup>12</sup> Nearly 80% of these deaths in 2022 were investigated by the Medical Examiner. Deaths that meet criteria for medical examiner investigation are often premature by definition. However, even the average age for domicile unknown deaths certified by a healthcare provider was 58 years – still much younger than the average U.S. life expectancy of 78.

Deaths due to drug overdose, mainly methamphetamine and fentanyl, continue to account for a large proportion of deaths among people experiencing homelessness. People experiencing homelessness were nearly 37 times more likely to die from a drug overdose compared to the overall County population. Among all Multnomah County residents, deaths attributable to synthetic opioids (including fentanyl) rose 77% between 2021 and 2022, from 158 deaths to 280 deaths.<sup>13</sup> Multnomah County isn't the only jurisdiction experiencing this crisis; in Los Angeles County in 2020-21, overdose mortality was 39 times greater among people experiencing homelessness when compared to all Los Angeles County residents.<sup>14</sup> Housing is a crucial social determinant of health, and as such, its lack is associated with a spate of significant inequities, including mental health concerns, physical health problems, trauma, greater overall mortality, and substance use disorders.<sup>15</sup> The intersection of homelessness and substance use is complex, but can be partially explained by noting that people experiencing homelessness have higher rates of mental health disorders, are more isolated when they use drugs, and have less access to care.<sup>16</sup> Further, people experiencing homelessness may use substances in ways that allow them to survive on the streets – for example, to stay alert.

People experiencing homelessness have high exposure to traffic-related injuries and deaths due to high exposure both from living near road environments and from consistent exposure resulting from being outside the majority of their days and nights. Multnomah County's analysis of 2020-2021 traffic deaths demonstrated that a quarter of decedents were likely experiencing homelessness at the time of their death.<sup>17</sup> The current analysis showed 14 deaths from pedestrian or cyclist traffic crashes. These deaths accounted for 10% of the total unintentional injury deaths. Further, people experiencing homelessness had a risk of death from a transportation-related crash that was nearly 45 times that of the general Multnomah County population.

12 <https://www.cdc.gov/nchs/data/vsrr/vsrr031.pdf>

13 Centers for Disease Control and Prevention, National Center for Health Statistics. National Vital Statistics System, Provisional Mortality on CDC WONDER Online Database. Data are from the final Multiple Cause of Death Files, 2018-2021, and from provisional data for years 2022-2023, as compiled from data provided by the 57 vital statistics jurisdictions through the Vital Statistics Cooperative Program. Accessed at <http://wonder.cdc.gov/mcd-icd10-provisional.html> on Nov 28, 2023 6:44:37 PM

14 [http://publichealth.lacounty.gov/chie/reports/Homeless\\_Mortality\\_Report\\_2023.pdf](http://publichealth.lacounty.gov/chie/reports/Homeless_Mortality_Report_2023.pdf)

15 <https://nhchc.org/wp-content/uploads/2019/08/nhchc-opioid-fact-sheet-august-2017.pdf>

16 <https://multco-web7-psh-files-usw2.s3-us-west-2.amazonaws.com/s3fs-public/Substance%20Use%2C%20Fentanyl%20and%20Overdose%20FAQ.pdf>

17 [https://multco-web7-psh-files-usw2.s3-us-west-2.amazonaws.com/s3fs-public/Revised\\_Final\\_MultCo%20traffic%20deaths%202020\\_2021\\_0.pdf](https://multco-web7-psh-files-usw2.s3-us-west-2.amazonaws.com/s3fs-public/Revised_Final_MultCo%20traffic%20deaths%202020_2021_0.pdf)

## Limitations

Despite the strengths of this analysis, some limitations should be considered. First, we estimated the denominator for people experiencing homelessness from the 2022 Point in Time Count. The report cautions that people enter and leave homelessness continuously throughout the year at potentially differing rates, making a count on one night likely higher or lower than any other date. Since we based mortality rates on these values, the rate ratios we present in Table 4 should be considered a best estimate. Second, just as there is uncertainty about the “true” number of people experiencing homelessness on any given night, there is uncertainty about the true number of deaths in people experiencing homelessness [see also Appendix]. Finally, in the risk calculations, some of the categories had fairly small sample sizes. For example, there were eight total COVID-19 deaths and 14 total transportation-related deaths. Rates based on smaller numbers can be unreliable, due to random error, so caution should be used when interpreting these results.

## Conclusions

At least 315 people experiencing homelessness died in Multnomah County in 2022. There are multiple intersecting causes leading to homelessness, including lack of affordable housing, racial injustice, lack of social support systems, substance use and abuse, mental health challenges, and a lack of access to health care, both physical and behavioral. This report represents the intersection of these drivers. This year, the number of deaths investigated by the ME is higher than previous reports. Additionally, with the reporting requirement of housing status at death from SB 850, we have data on additional 66 people who died under hospital care, further contextualizing deaths among people experiencing homelessness.

Drug overdoses, traffic injuries, and homicides were major contributors to mortality among people experiencing homelessness in 2022. Reductions in mortality among people experiencing homelessness must address these areas. However, even non-accidental deaths were higher among people experiencing homelessness compared to the overall population, demonstrating the importance of both chronic disease prevention (illustrated by heart disease mortality rates) and communicable disease prevention (illustrated by COVID-19 disease rates). Housing, as well as the social, economic and environmental factors that underlie the causes of excess deaths among people experiencing homelessness, must be considered to develop policies that can save lives and prevent premature death.



## Appendix

We primarily used local Medical Examiner data for the final count of deaths in this report. We supplemented the data with deaths occurring under hospital care through Vital Statistics data. Vital Statistics data also provide deaths certified by the Medical Examiner, but we found that the number of deaths among people experiencing homelessness recorded as Medical Examiner deaths in the Vital Statistics data was lower than the number identified directly through Medical Examiner reports. This may be because of differences in the way data are recorded. For example, a local death investigator may indicate that the decedent was experiencing homelessness at the time of death and leave the residence address blank in Medical Examiner data. However, funeral directors often complete death certificate data – when funeral directors follow up with next of kin, they may choose to list their own residence on the death certificate. We found at least one instance of this occurring in our analysis. Because of this discrepancy, we determined that the Medical Examiner data was a richer and more accurate data source for this report.

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