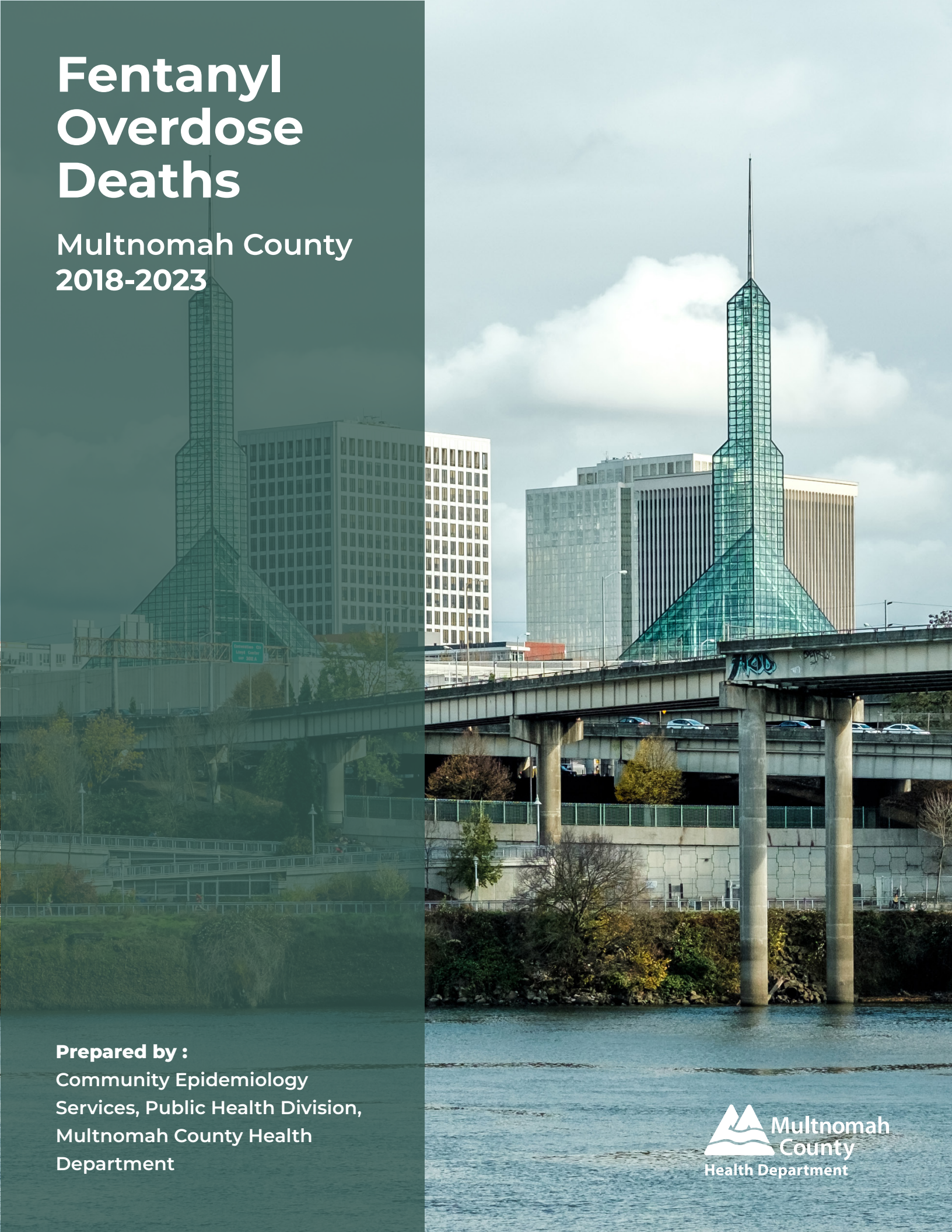
Fentanyl Overdose Deaths

Multnomah County 2018-2023



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Multnomah County
Health Department

Foreword

The following report demonstrates the ways that our community has suffered from an epidemic of fentanyl overdoses. Since 2020, an accelerating wave of non-fatal drug overdoses and deaths due to drug overdose has affected communities across the United States. A majority of overdose deaths involve opioids, particularly synthetic opioids like illicitly made fentanyl, which is often used with stimulants like methamphetamine or cocaine. Cheap fentanyl abounds in the illicit drug market and has contributed to deadly cycles of addiction and overdose.

This report shows us one way to consider who has died of fentanyl overdose in the past 5 years in Multnomah County. It describes the demographic factors that they had in common. It is important to note that no amount of data can describe what the person meant to their family and friends. Each death counted in this report represents a real person, the grief and heartbreak of those close to them, and the trauma that reverberates throughout our community as a result of their loss.

The Multnomah County Health Department offers this report as a way to provide context and inform action to prevent these deaths in the future. The report shows us that, like many health outcomes, fatal overdose from fentanyl falls unevenly on our communities. We analyzed data by race and ethnicity to understand these inequities in the hopes of being able to direct resources and support to the people who need it most. We know that highlighting racial and ethnic inequities can cause its own harms. These harms also need to be acknowledged and addressed. Any actions that result from the sharing of these data need to take into account the systemic and social influences that contribute to the inequitable outcomes, including racism, colonialism, intergenerational trauma, underfunding and poverty.

A contributing factor to the current overdose epidemic is the isolation that resulted from the COVID-19 pandemic. One antidote, then, can be fostering connection–connections within families and among neighbors, as well as maintaining connected, cohesive responses across agencies that serve the public. The deaths represented in this report, and the inequities revealed here, demand collective attention and action across our community and from people in all walks of life: parents, educators, people who are using fentanyl, people in recovery, medical professionals, public health professionals, first responders, and neighbors. The stronger our connections, the better we will be able to defend against the harms of substance use and misuse, including non-fatal overdoses and overdose deaths.

Introduction

Deaths from overdose are a significant and increasing public health problem in the United States. In 2021, there were nearly 108,000 fatal drug overdoses in the United States.[1] Provisional numbers for 2022 indicate a similar or higher number of deaths.[2] More than two-thirds of these deaths involved synthetic opioids other than methadone, mainly illicitly manufactured fentanyl (IMF).[3] Fentanyl, a powerful synthetic opioid, has been increasingly involved in overdose deaths since 2013. This increase in deaths coincided with a surge in availability of IMF and corresponds to a "third wave" of the opioid overdose epidemic, with the first being an increase in deaths due to prescription opioids in the 1990s, followed by an increase in heroin deaths in 2010 (Figure 1).[4]

In this report, we describe the trends in fentanyl-related overdose deaths in Multnomah County, Oregon, using death certificate data from 2018 through 2022 and partial, preliminary data from 2023. Analysis of death certificates is considered the gold standard for measuring drug overdose at the state and national levels; standardized certificates enable comparisons across jurisdictions.[5] However, the National Center for Health Statistics estimates that it takes an average of 4 months (16 weeks) for death certificate records from drug overdose to be ready for analysis (including toxicology testing, results, and review by a pathologist).[6] Therefore, for this report, we are primarily able to present data on deaths of Multnomah County residents occurring between 2018 and 2022. When possible, we present preliminary and partial data for 2023. The 2023 data are incomplete, and subject to change.

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[1] Drug Overdose Deaths in the United States, 2001–2021 (cdc.gov)

[2] Products - Vital Statistics Rapid Release - Provisional Drug Overdose Data (cdc.gov)

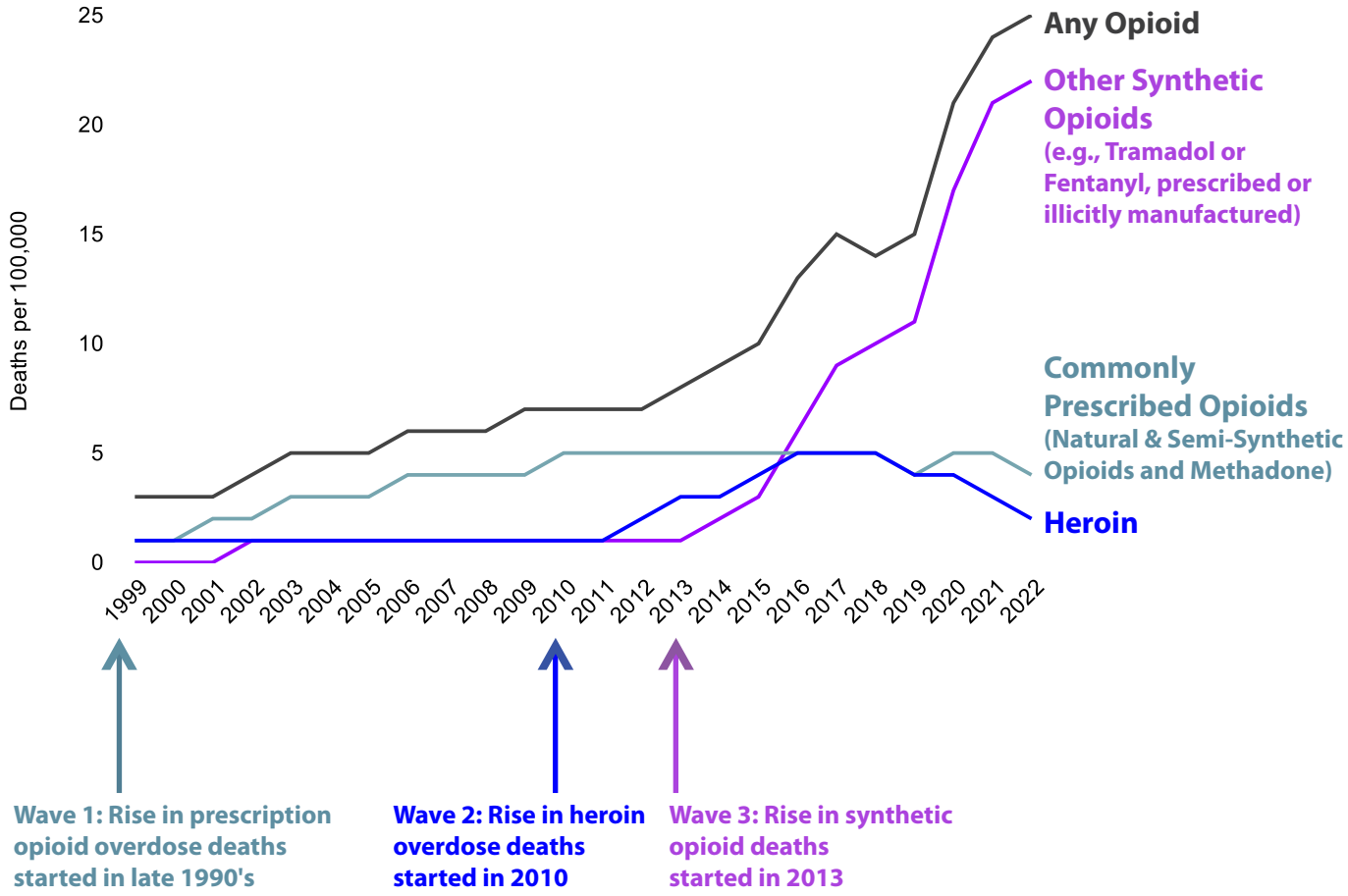
[3] Products - Vital Statistics Rapid Release - Provisional Drug Overdose Data (cdc.gov)

[4] Opioid Data Analysis and Resources | Opioids | CDC

[5] Methodological Complexities in Quantifying Rates of Fatal Opioid-Related Overdose - PMC (nih.gov)

[6] Timeliness of Death Certificate Data for Mortality Surveillance and Provisional Estimates (cdc.gov)

Figure 1. Opioid overdose deaths in the United States, 1999-2022 [7]



[7] Data obtained from CDC WONDER. Figure based on https://www.cdc.gov/opioids/basics/epidemic.html#three-waves

Methods

Data source

Data were obtained electronically from Multnomah County's database of vital records, which are updated weekly from the Oregon Health Authority. Dates of death were limited to January 1, 2018 to December 31, 2022 in Multnomah County residents. To examine partial data for 2023, we included data in vital records as of February 7, 2024 with any date of death occurring in 2023. Data are preliminary and partial, and are subject to change.

Causes of death

Drug overdose deaths were identified using International Classification of Diseases, 10th Revision (ICD–10) underlying cause-of-death codes X40–X44, X60–X64, X85, and Y10–Y14. Among these deaths, the following ICD–10 multiple cause-of-death codes indicate fentanyl and other synthetic opioid(s): T40.4, other synthetic narcotics. To examine co-occurrence of methamphetamine with fentanyl, the multiple cause-of-death code for psychostimulants with abuse potential (T43.6) was used. Note that a fentanyl overdose death may have additional substances present.

Race and ethnicity

In the United States, the funeral director typically fills out race and ethnicity data on death certificates from next of kin or key informant data. Death certificates in the United States comply with OMB 97 standards, which means multiple races can be selected (with a minimum of five categories: White, Black, American Indian/Alaska Native [AI/AN], Asian, and Pacific Islander) as well as Hispanic ethnicity. Studies have shown that racial misclassification exists in death certificates, especially for persons of AI/AN heritage, but has improved over time for Hispanic, Asian, and Pacific Islander populations.

Why measure race and ethnicity?

Race- and ethnicity-specific death rates are essential indicators of inequities in mortality across the various racial and ethnic populations.[8] However, race is a social construct and is an inadequate way to measure the differences between humans. The Centers for Disease Control and Prevention describe that differences between racial categories and the meaning ascribed to physical appearance or genetic differences are the result of colonization and "cultural, historical, ideological, geographical, and legal influences rooted in structural racism and white supremacy."[9] Furthermore, the use of race to identify AI/AN people does not acknowledge the political status of and federal obligations to sovereign Tribal Nations. However, using a common coding scheme used for race and ethnicity is necessary to compare data across jurisdictions to identify inequities.

One coding scheme is called "single and two or more non-Hispanic races". In this scheme, any decedent with Hispanic ethnicity counts as Hispanic. For non-Hispanic decedents, if only one race is reported, then that is the category assigned. If a person reports two or more races, they are counted in the "2 or more races" category. For mortality rate calculation to compare across categories, we used this categorization for the best alignment with denominator data, which were single and two or more non-Hispanic race denominators from the U.S. Census Bureau, obtained from the Oregon Public Health Assessment Tool (OPHAT) for 2018-2022.

This coding, however, does not align with the best practice as listed by the Urban Indian Health Institute, where it is recommended that AI/AN alone or in combination with another race (of any ethnicity) should be counted in the AI/AN category.[10] In the above classification, someone both AI/AN and another race would be counted in the "two or more" category and thus precision in measurement is lost. With these limitations in mind, we additionally used an "any mention" approach to categorizing individuals for the overall counts of overdose death. In this classification, any person can be in multiple groups, because they are listed under every racial or ethnic group they have indicated. For this scheme, the total will add up to more than 100%. This type of disaggregation is important for proper resource allocation and delivery of culturally specific interventions.[11] To provide population size context, we used race alone or in combination population proportion from American Community Survey 5-year estimates 2017-2021.

Some death certificates are missing racial and ethnic data and those remain categorized as unknown.

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[8] National Center for Health Statistics, Series 2, no 172 (8/10/16) (cdc.gov)

[9] Classification of Race and Ethnicity: Implications for Public Health* | Annual Reviews

[10] Best Practices for American Indian and Alaska Native Data Collection – Urban Indian Health Institute (uihi.org)

[11] FINAL-REL-DataDisaggregationMessage-Guide-December-2020.pdf (apiahf.org)

Sex

There are five designations for decedent sex on death certificates in Oregon: "female," "male," "undetermined" (used in cases where the "sex cannot be determined due to a medical condition"), "unknown" (used if sex "cannot be determined after verification with medical records, inspection of the body, or other sources"), and "X (non-binary)" (used for individuals whose "gender identity is not exclusively male or female").[12] In this report, the words "female" and "male" are used because all decedents included in the analysis were recorded as "female" or "male" on their death certificates.

Data analysis

Most deaths related to fentanyl are accidental—that is, there is little or no evidence that the poisoning occurred with intent to cause harm or death. A smaller proportion are from intentional self-harm (suicide) or are undetermined, meaning the information pointing to one manner of death is no more compelling than another manner of death. The current analysis focuses on deaths with accidental or undetermined intent because of the possible differences in underlying characteristics among people who died of intentional overdose. Suicide deaths from fentanyl overdose accounted for less than 2% of total deaths.

We present the number and percent of deaths by specific demographic categories. Rates for sex, age, and race (single and two or more non-Hispanic races) are calculated as the number of deaths per 100,000 residents. Ascertainment of housing status at death became reportable in 2022 by passage of Senate Bill 850, so housing status among decedents was only available for 2022 and 2023.[13] When comparing rates across groups, rates were age-adjusted to the U.S. 2000 Standard Population. To create the years of potential life lost index (YPLLI—a measure of premature death), we summed the products of the number of deaths at each age by the difference among this age and age 75 (this is the YPLL). The result of the YPLL divided by the population, multiplied by 100,000, creates the YPLL index. To include data on as many subgroups as possible, suppression of small numbers was only utilized if the count was less than 4 total observations. Note that rates based on small numbers may be unreliable, so caution should be used when interpreting these data points. We put an asterisk(*) next to estimates that may be unreliable.

We estimated that about 80% of the final fentanyl death numbers for 2023 were available at the time of analysis. Therefore, we estimated the death rate for 2023 using the denominator from 2022 multiplied by 0.8 to create the appropriate number of person-time given the lags in confirmation to serve as the denominator for 2023.

For geospatial analysis of overdose deaths, we conducted hot spot analysis (Getis-Ord GI* statistic) with unadjusted counts of death across Multnomah County (120 sq. city block hexagons) and within Portland city center (3 sq. city block hexagons) (using partial and preliminary data for 2023) using ArcGIS Pro. Getis-Ord (GI*) analysis is a statistical method used to find significant hotspots and coldspots in spatial data. It calculates Z-scores for each location based on how much their values, and the values of its neighbors, differ from the average of the jurisdiction, indicating whether a location is a hotspot (with a high positive Z-score) or a coldspot (with a high negative Z-score). This analysis helps pinpoint areas that stand out in terms of specific characteristics compared to their surroundings; in this context, areas that endured a statistically significant high or low burden of fentanyl-related mortality compared to other areas. The maps do not account for population in order to provide a representation of where the highest absolute burden of overdose deaths occurred.

[12] Sex Designation on Death Records Quick Reference (oregon.gov)

[13] https://www.oregon.gov/oha/ph/birthdeathcertificates/registervitalrecords/pages/senate-bill-850.aspx

RESULTS

In Multnomah County, 546 deaths were confirmed to be a result of fentanyl-related overdose between 2018 and 2022. In 2023, partial and preliminary data showed 322 deaths due to fentanyl-related overdose, for a total of 868 deaths between 2018 and 2023.

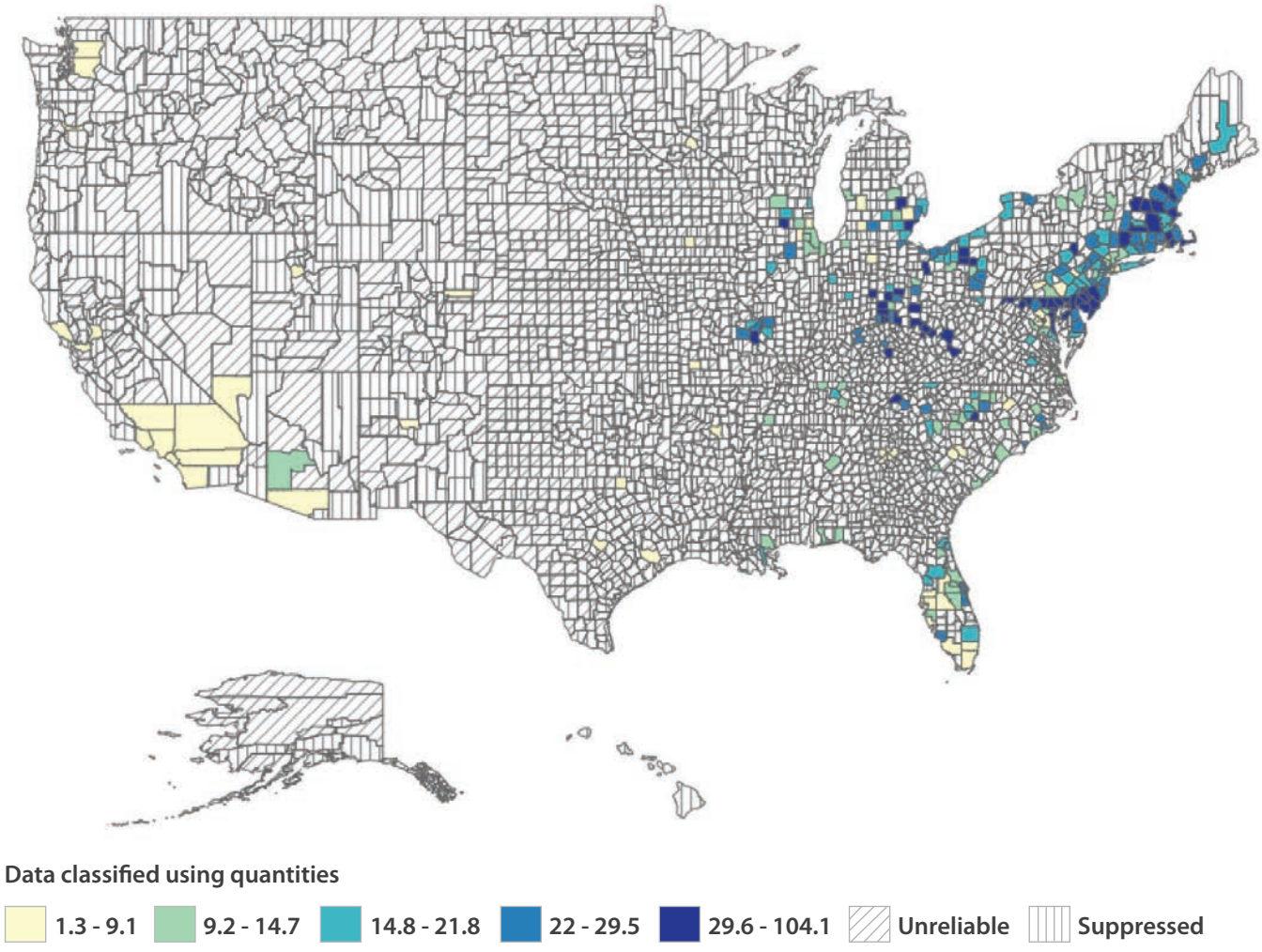
Overview by geography

Fentanyl overdose across the United States

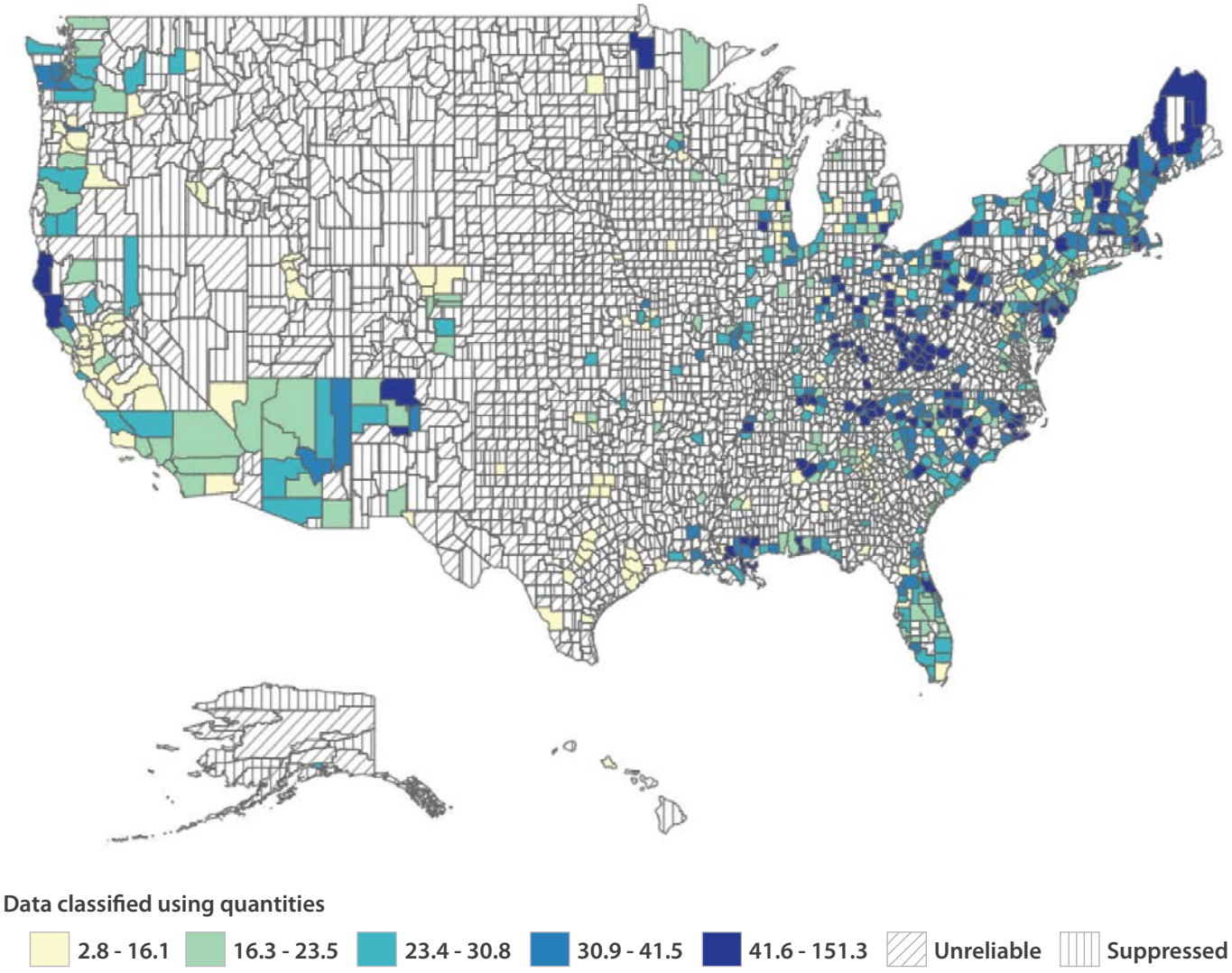
Maps 1a and 1b show the fentanyl death rate by county in the United States in 2018 and 2022.[14] In 2018, the overall fentanyl death rate for the United States was 9.6 per 100,000, and Multnomah County's rate was lower than the U.S. at 4.1 per 100,000. The map illustrates that the majority of deaths occurred on the East coast of the United States. That year, the five highest county fentanyl death rates were in West Virginia (Cabell), Maryland (Baltimore City), New Jersey (Salem), Missouri (St. Louis), and New Jersey (Cumberland). In 2022, fentanyl county death rates have trended higher, with the United States rate overall at 22.5 per 100,000, and Multnomah County higher than that at 35.2 per 100,000. In 2022, the five highest county fentanyl death rates were all in West Virginia (McDowell, Wyoming, Raleigh, Logan, & Cabell).

[14] Fentanyl death data by year and residence county obtained from CDC WONDER.

Map 1a. Fentanyl death rate by County, United States, 2018



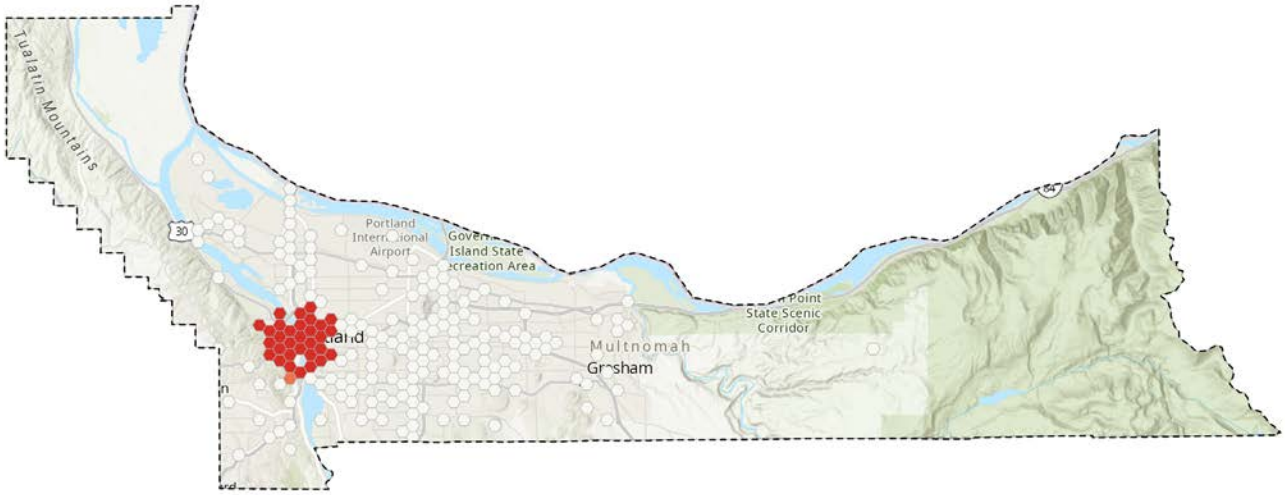
Map 1b. Fentanyl death rate by County, United States, 2022



Geography of fentanyl overdose in Multnomah County

Maps 2a and 2b (below) present geospatial analysis of fentanyl-related overdose deaths in Multnomah County. Although overdose deaths occurred across the entire county, statistically significant hotspots for overdose death occurred within Portland city center. This means that these 120-city-block areas, represented by the red hexagons, had significantly higher numbers of deaths than expected based on the average number of deaths across the entire county. Within central Portland, using partial and preliminary data from 2023, the majority of statistically significant hotspots occurred downtown, particularly in the Old Town and Pearl District neighborhoods. The red three-city-block areas in this map had significantly higher numbers of overdose deaths compared to the rest of Multnomah County.

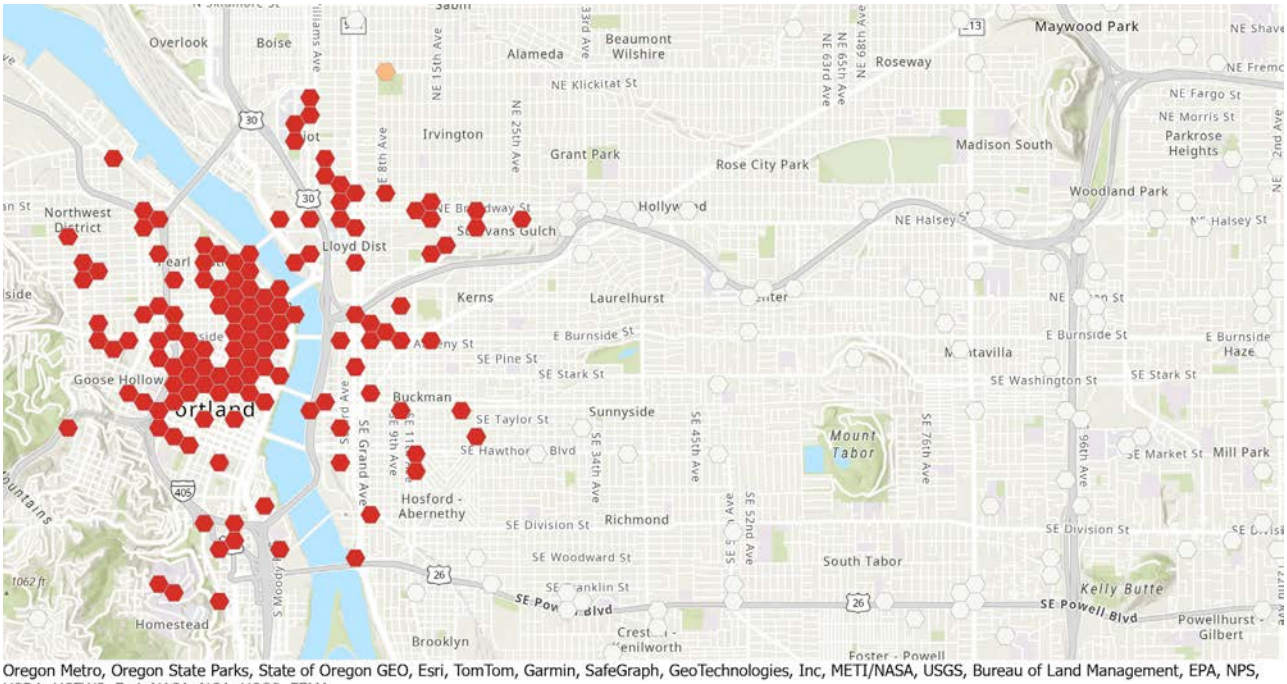
Map 2a. Hotspot analysis of fentanyl overdose deaths, Multnomah County, Oregon, 2018-2023



County of Clark, WA, Oregon Metro, Oregon State Parks, State of Oregon GEO, WA State Parks GIS, Esri, TomTom, Garmin, SafeGraph, FAO, METI/NASA, USGS, Bureau of Land Management, EPA, NPS, USFWS, Esri, NASA, NGA, USGS

Cold Spot with 99% Confidence | Cold Spot with 95% Confidence | Cold Spot with 90% Confidence | Inconclusive | Hot Spot with 90% Confidence | Hot Spot with 95% Confidence | HotSpot with 99% Confidence

Map 2b. Hotspot analysis of fentanyl overdose deaths, Central Portland, Oregon 2023



Oregon Metro, Oregon State Parks, State of Oregon GEO, Esri, TomTom, Garmin, SafeGraph, GeoTechnologies, Inc, METI/NASA, USGS, Bureau of Land Management, EPA, NPS, USDA, USFWS, Esri, NASA, NGA, USGS, FEMA

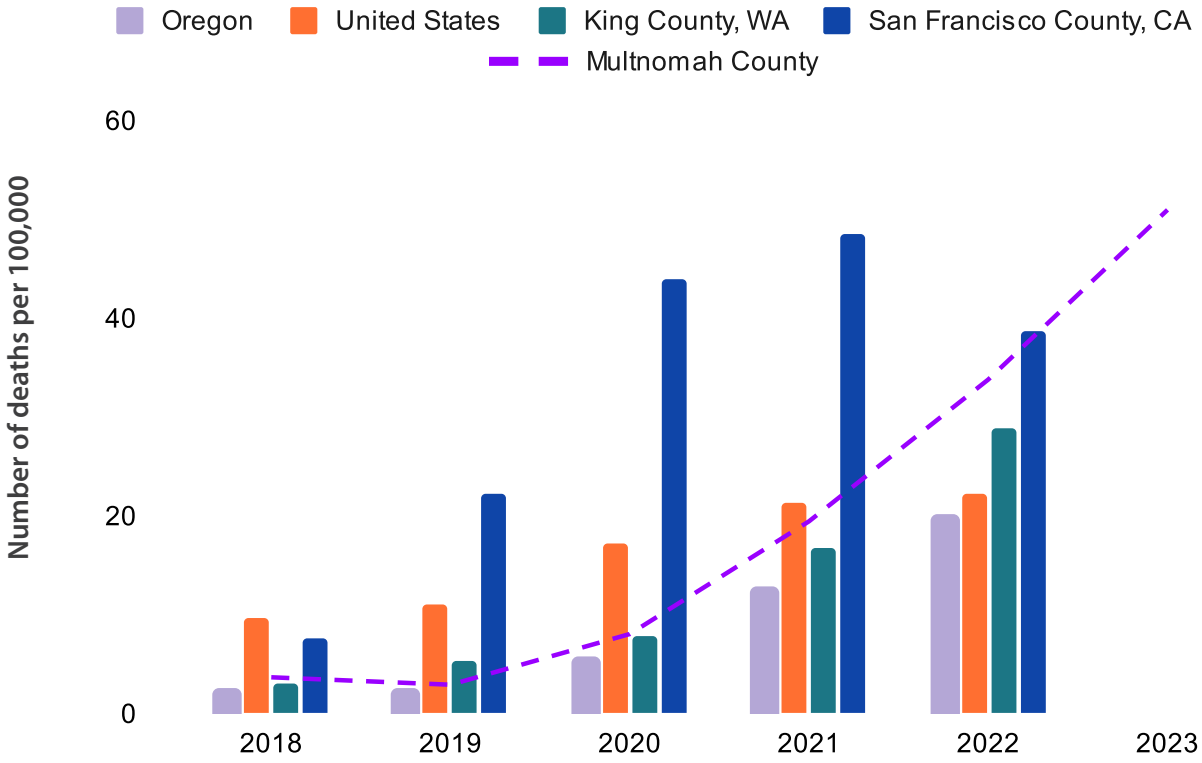
Cold Spot with 99% Confidence | Cold Spot with 95% Confidence | Cold Spot with 90% Confidence | Inconclusive | Hot Spot with 90% Confidence | Hot Spot with 95% Confidence | HotSpot with 99% Confidence

Time trends in fentanyl overdose death

Time trends in fentanyl overdose in Multnomah County compared to other jurisdictions

Figure 2 presents the rate of fentanyl overdose deaths in Multnomah County compared to Oregon, the United States, and two other West Coast jurisdictions (San Francisco County, CA, and King County, WA). Fentanyl overdose deaths started a rapid rise around the same time as the COVID-19 pandemic, but the rise varied by geography. In Multnomah County, the rate of fatal fentanyl overdoses was lower than the overall United States rate until 2022, when the rate in Multnomah County was 1.6 times higher than the United States. The rate in King County, WA, was lower than Multnomah County in 2018. Though the rate in King County briefly rose above the rate in Multnomah County in 2019, in 2022, the rate in Multnomah County was around 1.2 times higher than King County. San Francisco County, CA, has consistently had a higher fentanyl death rate compared to Multnomah County, as high as 2.5 times in 2021. The rates in both these jurisdictions were similar in 2022. The estimated rate continued to rise in 2023 for Multnomah County based on partial data.

Figure 2. Fentanyl overdose deaths per 100,000 population, Multnomah County compared to Oregon, United States, and two west coast jurisdictions, 2018-2023*[15]



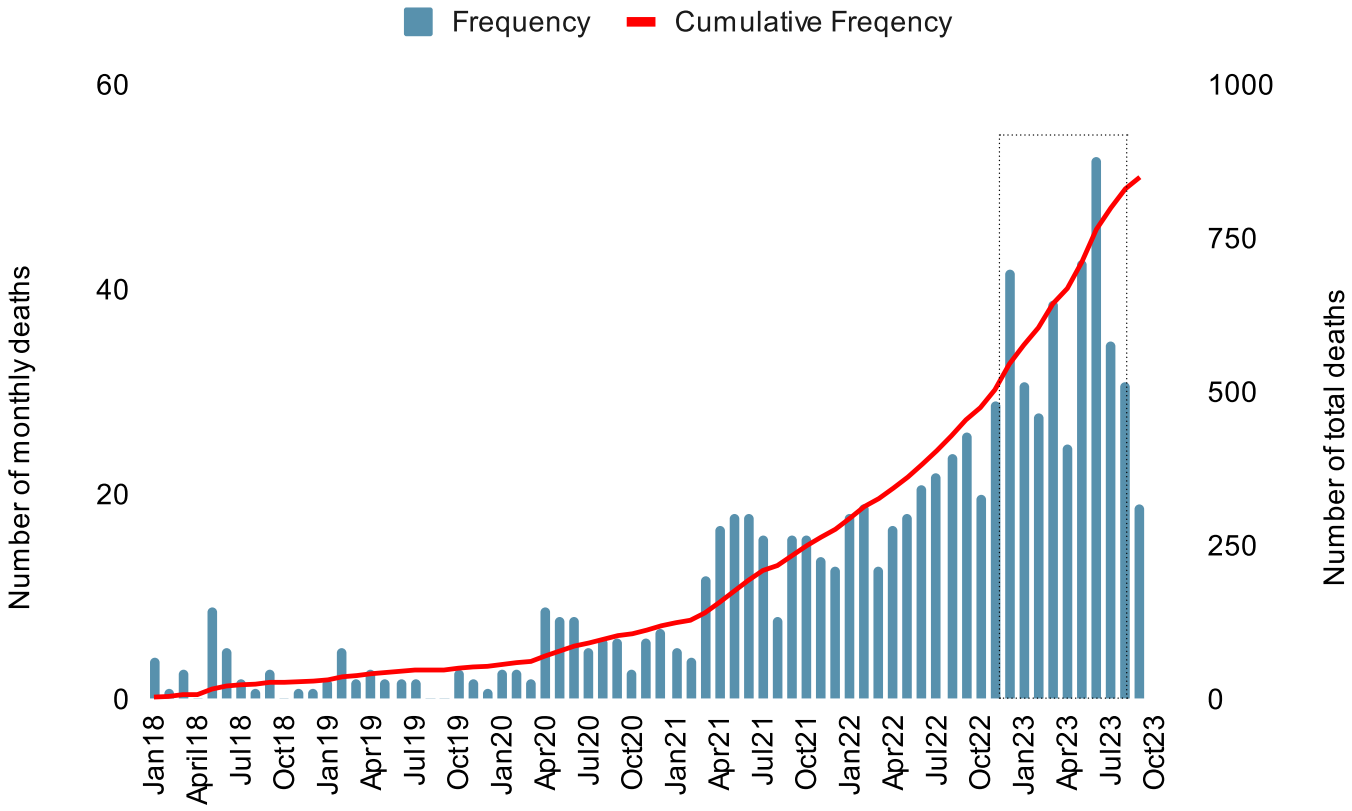
*2023 data for Multnomah County is provisional and partial, based on local analysis of vital records data. Similar data from other jurisdictions are not available. See methods for details on 2023 rate estimate.

Monthly time trends in fentanyl overdose deaths

Figure 3 provides the number of deaths due to fentanyl overdose by month with a line showing the cumulative frequency. Deaths per month averaged around 2 in 2018-2019, but in 2020 the average increased to 6 deaths; in 2021, it increased to 13 deaths; and in 2022, the monthly number of deaths increased to 22. The drop off seen in the last few months of 2023 is due to a data lag, so likely this number will increase. In fact, for data that are mostly complete (January-August 2023), the average deaths per month increased to 36.

[15] Data for US, Oregon, San Francisco County, and King County derived from CDC WONDER

Figure 3. Fentanyl overdose deaths, Multnomah County by month, 2018-2023*
(The dotted line box indicates provisional and partial data for this time period.)



Average monthly fentanyl deaths by year

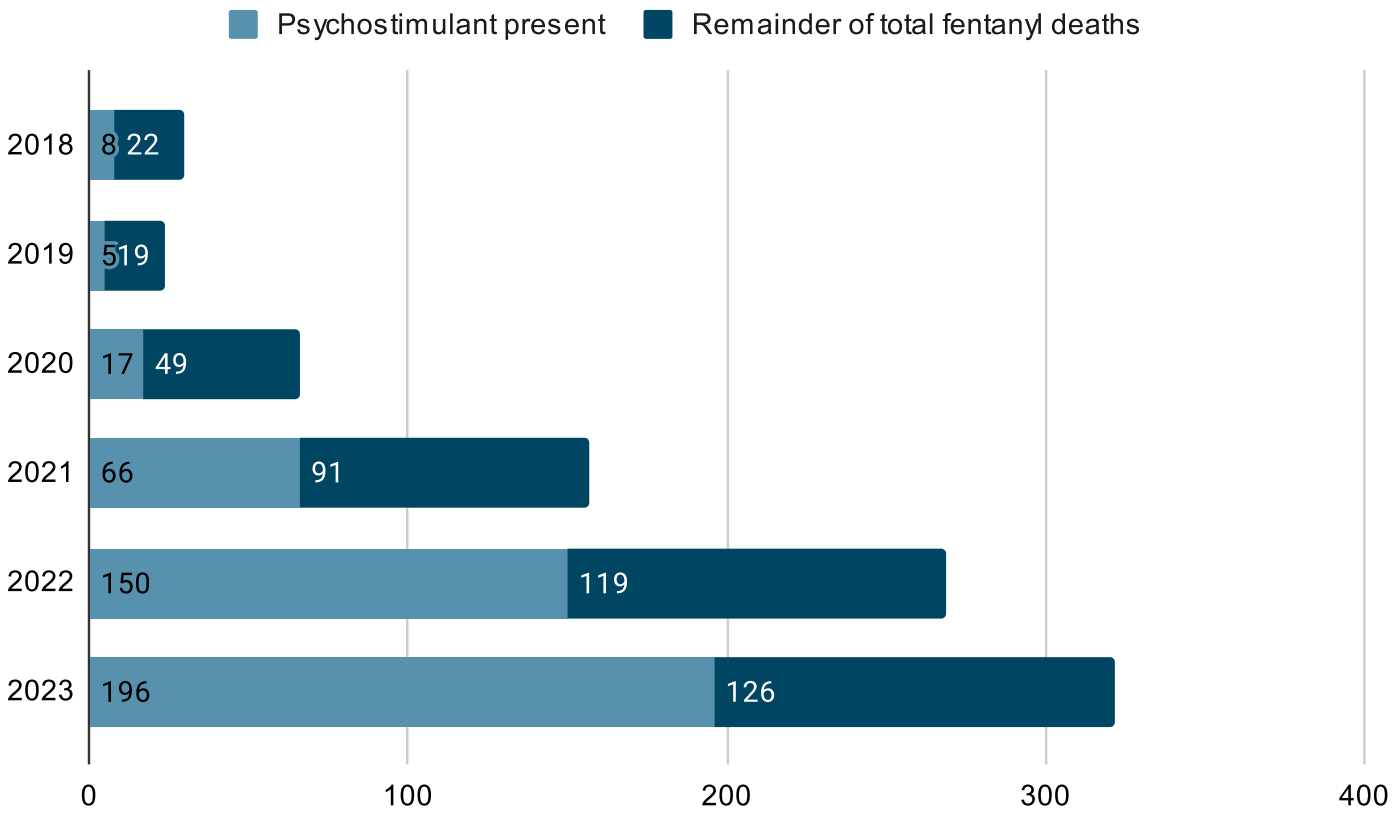
2018	2019	2020	2021	2022	2023*
3	2	6	13	22	36

**2023 data is provisional and partial and therefore subject to change*

Co-occurring fentanyl and methamphetamine overdoses

Deaths that involved both fentanyl and another substance, primarily methamphetamine (a psychostimulant), increased over time (Figure 4 below). In 2018, 8 of 30 deaths (27%) had both fentanyl and psychostimulants, but this increased to 150 of 269 (56%) in 2022 and 196 of 322 (61%) in 2023.

Figure 4. Proportion of fentanyl overdose deaths with co-occurring psychostimulant (primarily methamphetamine) by year (2018-2022)



Demographics

Table 1 presents the demographic characteristics of fentanyl overdose deaths in Multnomah County between 2018 and 2023. Three-quarters (74%) of decedents were male, and the majority were between 18 and 44 years of age (N=493; 57%). The largest proportions of deaths were among White decedents (N=672; 77%). However, deaths among Black/African American (N=123; 14%) and American Indian/Alaska Native (N=48; 6%) people exceeded the population proportion, highlighting a disproportionate impact on those communities. Deaths among persons of Hispanic ethnicity (N=79; 9%) were less than the population proportion in Multnomah County (12%).

Table 1. Fentanyl overdose death demographics (2018-2022)

	Fentanyl overdose (n=868)		Multnomah County Population* (n=810,011)	
Sex	**Count**	**Percent**	**Count**	**Percent**
Female	228	26%	402,744	50%
Male	640	74%	407,267	50%
Age (years)	**Count**	**Percent**	**Count**	**Percent**
0-17	14	2%	150,425	19%
18-44	496	57%	349,270	43%
45-64	315	36%	200,593	25%
65+	43	5%	109,753	13%
Race (alone or in combination)	**Count**	**Percent****	**Count**	**Percent**
American Indian/Alaska Native	48	6%	21,633	3%
Asian	28	3%	81,980	10%
Black/African American	123	14%	61,162	8%
Native Hawaiian/Pacific Islander	4	<1%	9,427	1%
White	672	77%	664,300	82%
Missing	21	2%	*n/a*	*n/a*
Ethnicity	**Count**	**Percent**	**Count**	**Percent**
Hispanic	79	9%	97,948	12%
Non-Hispanic	789	91%	712,063	88%
Year	**Count**	**Percent**	**Count**	**Percent**
2018	30	3%	*n/a*	*n/a*
2019	24	3%	*n/a*	*n/a*
2020	66	8%	*n/a*	*n/a*
2021	157	18%	*n/a*	*n/a*
2022	269	31%	*n/a*	*n/a*
2023***	322	37%	*n/a*	*n/a*

* American Community Survey 2021 5-year population estimates
** People can be in more than one group, so the sum of all categories will be greater than 100%
*** Provisional and partial

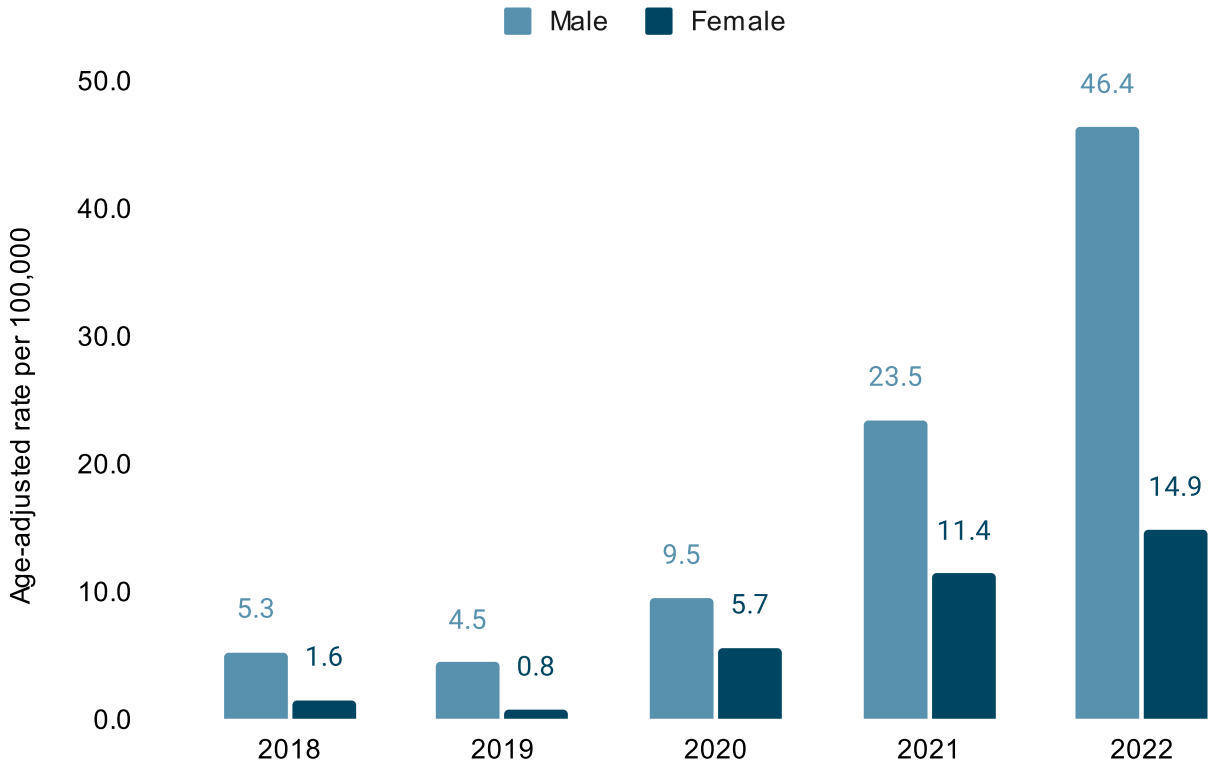
Fentanyl overdose by housing status

In 2022, 53 of 269 (20%) of fentanyl overdose deaths occurred in persons likely houseless (domicile unknown), and provisionally in 2023, the proportion rose to 79 of 322 (25%) (data not shown).

Fentanyl overdose by sex

The fentanyl overdose death rate among males was higher than females in all years. In 2021, the rate — after adjusting for age differences — was twice as high among males compared to females (rate ratio (RR) 2.1 [95% confidence interval (CI) 1.7, 2.5]) and in 2022 the rate was three times as high among males compared to females (RR 3.1 [95% CI 2.7, 3.5]) (Figure 5). Since these two confidence intervals do not overlap, the data suggest that the overdose death gap between males and females has widened.

Figure 5. Age-adjusted rate per 100,000 of fentanyl overdose deaths by sex and year (2018-2022)***



* The rate among females in 2019 is based on 4 observations; rates based on less than 5 total observations may be unreliable and should be interpreted with caution.
** Age-adjusted to the U.S. 2000 standard population

Fentanyl overdose by age

In all years except 2019 and 2020, 35- to 44-year-olds had the highest fentanyl overdose death rate compared to other age groups (Figure 6 below). Rates were higher for all age groups in 2021 and 2022.

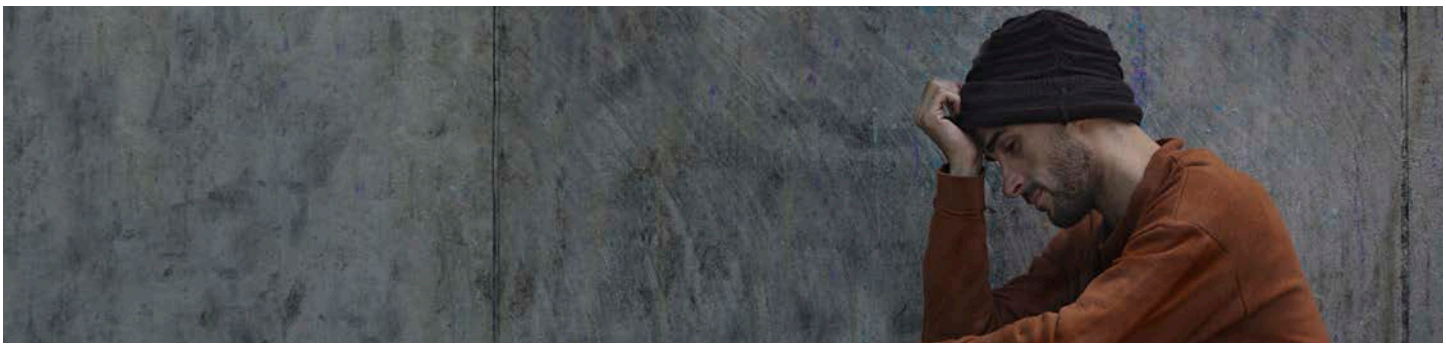
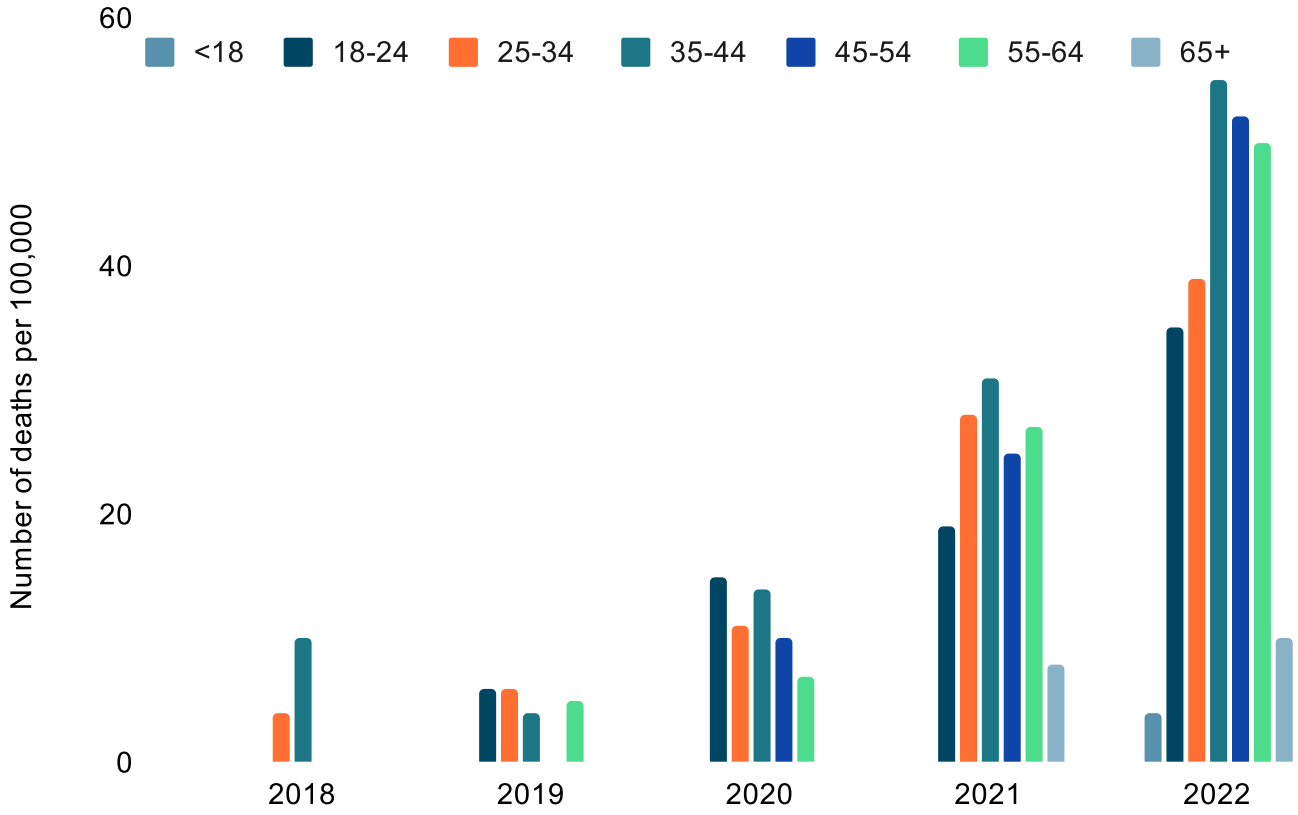


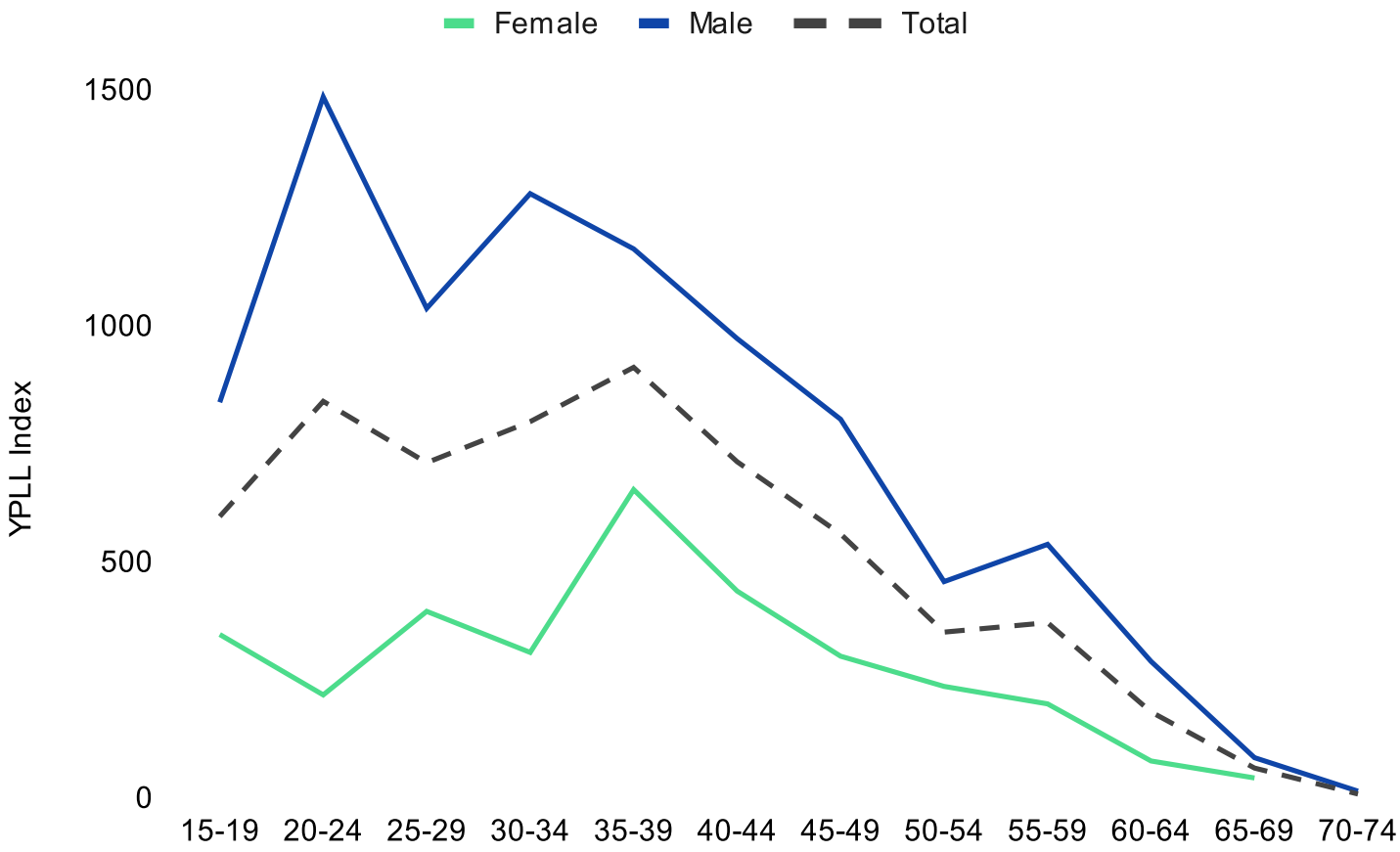
Figure 6. Rates of fentanyl overdose deaths by age group and year (2018-2022)



Years of potential life lost due to fentanyl overdose

Figure 7 displays the years of potential life lost index (YPLLI) for males and females. For males, there is a peak of premature death at ages 20-24, and again at 30-34. For females, the peak of premature deaths occurs in the 35-39 years category.

Figure 7. Years of potential life lost index (YPLLI) for fentanyl overdose deaths per 100,000 population by sex, 2018-2022



Fentanyl overdose by race and ethnicity

Figure 8 displays the age-adjusted death rates by single and two or more non-Hispanic races for fentanyl overdose deaths in 2022. The overall highest burden of overdose deaths occurred among the White Non-Hispanic group (n=173), followed by Black non-Hispanic (n=31). However, the highest rate was among the American Indian/Alaska Native decedents, with an age-adjusted rate of nearly 162 per 100,000, followed by Black non-Hispanic, with a rate of 67 per 100,000.

Figure 8. Age-adjusted rate of fentanyl overdose deaths by race and ethnicity (single non-Hispanic races), 2022

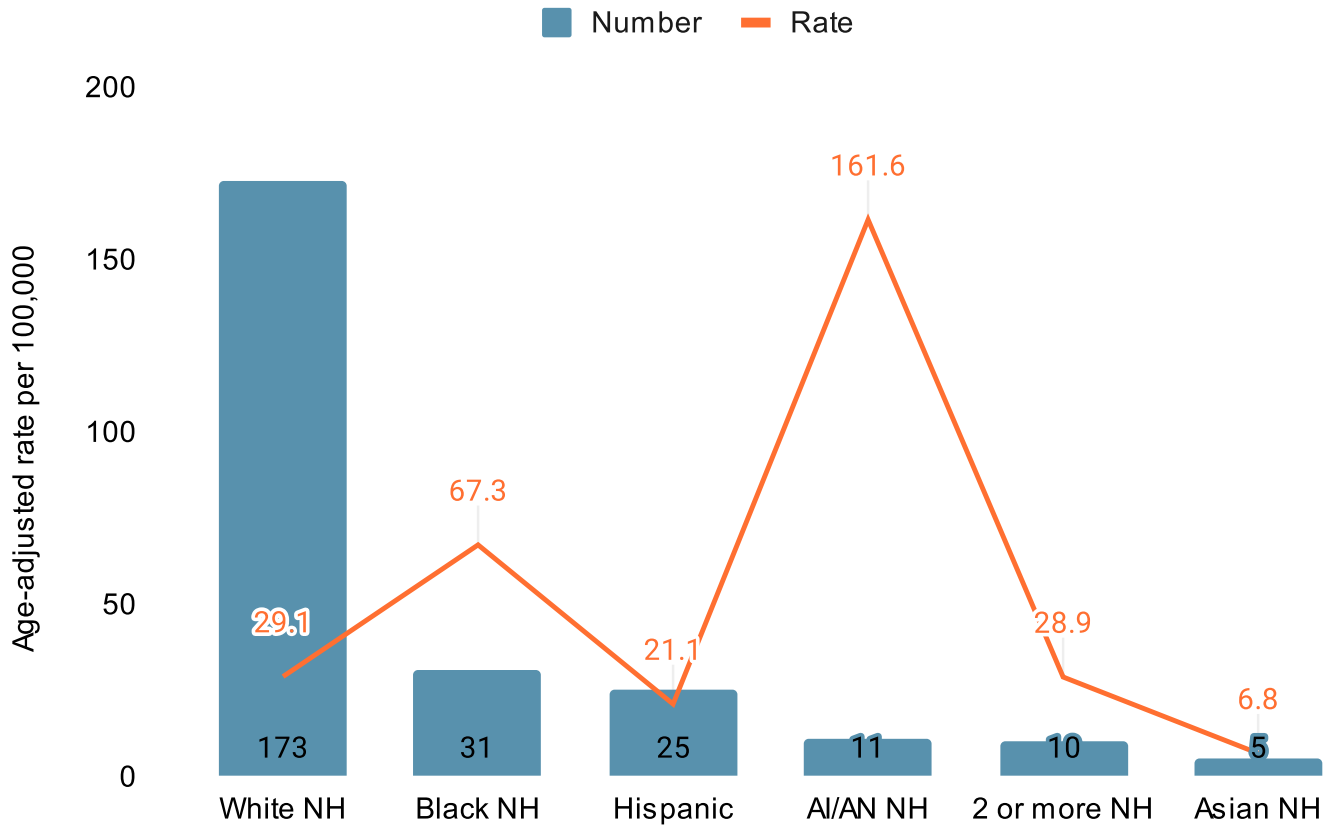
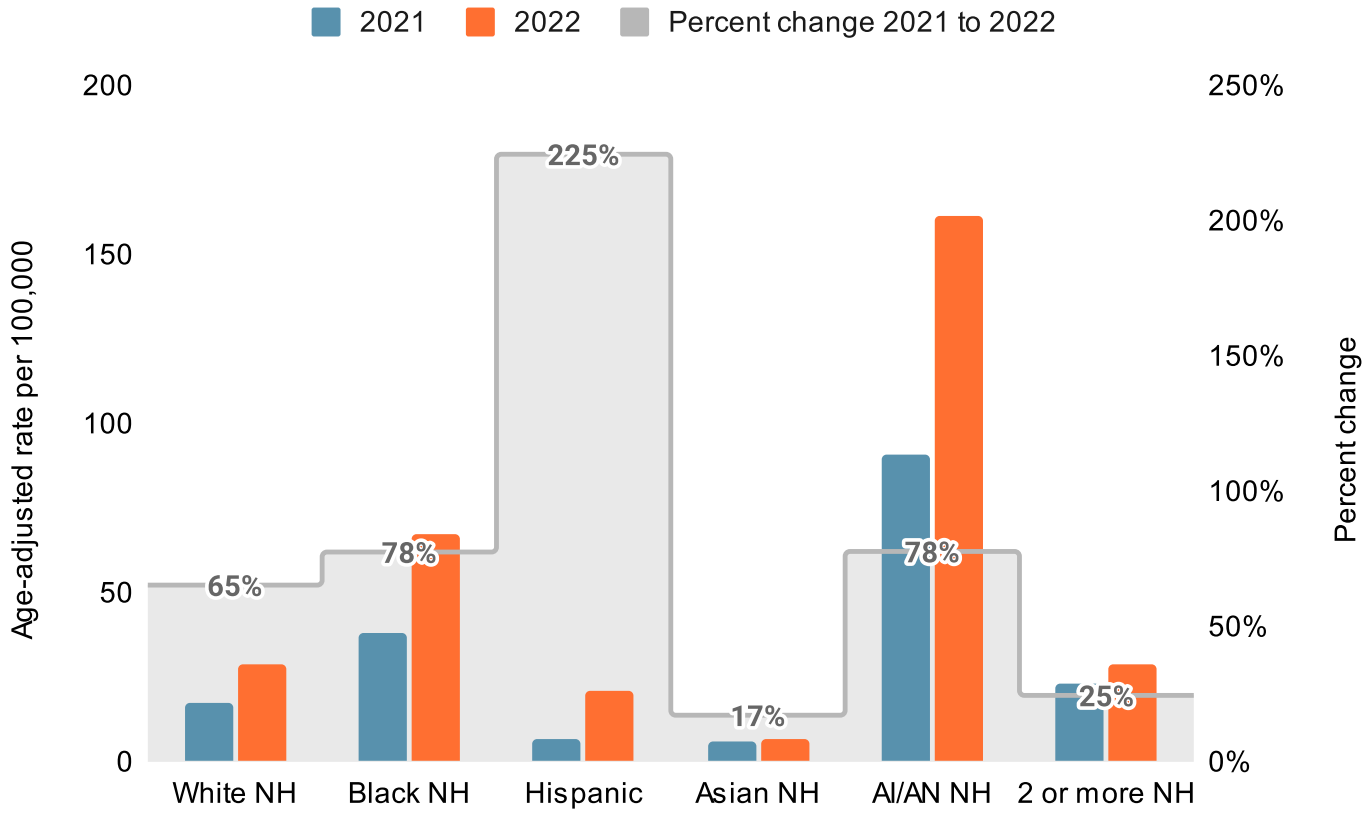


Figure 9 presents the change in fentanyl-involved deaths from 2021 to 2022 within racial/ethnic categories. This shows that the rate of fentanyl overdose deaths among Hispanic persons increased by 225% between 2021 and 2022, while the rate among non-Hispanic Blacks and non-Hispanic American Indian/Alaska Native both increased by 78%. Due to small numbers, calculation of rates in 2021 and 2022 was not possible for the Native Hawaiian and Pacific Islander classification.

Figure 9. Age-adjusted rate of fentanyl overdose by race and ethnicity (single and two or more non-Hispanic races), 2021-2022



Discussion

This report describes the characteristics of people who died between 2018 and 2023 due to fentanyl-related overdose in Multnomah County. We show a dramatic rise in fentanyl-related overdose deaths over time. In 2018, the fentanyl-related overdose death rate in Multnomah County was lower than the fentanyl-related overdose death rate across the United States. Although Multnomah county did not have the highest fentanyl-related death rate among U.S. counties at any point, deaths in the county surpassed the national average in 2022. The data for 2023 are incomplete due to lags in confirmation of cause of death, but provisional and partial estimates show a higher rate than 2022.

In Multnomah County, the majority of fentanyl overdose deaths in 2022 were among White men aged 35 to 44 years. Although overdoses rose among women, the gap between men and women widened as overdoses among men accelerated in 2021 and 2022. The highest overall number of overdoses were among White residents and the highest number of overdoses in a community of color were among Black residents of Multnomah County. When accounting for population sizes, the rate of overdose was much higher for American Indian/Alaska Native and Black/African American communities compared to other communities. Additionally, the rate of overdose deaths more than doubled between 2021 and 2022 for people with reported Hispanic ethnicity, suggesting a trend towards an increasing inequity. However, we will need to re-examine whether this trend continued in 2023 when data are finalized. Approaches to overcome systemic barriers to prevention and treatment, as well as tailored substance use treatment and prevention interventions, may help address the needs of these unique groups.[16, 17]

Co-use of fentanyl with other drugs, especially methamphetamine, was very common in 2022. Co-use of fentanyl with methamphetamine can triple the odds of an overdose compared to use of methamphetamine alone.[18] This so-called "fourth wave" of the overdose crisis is driven by fentanyl and illicitly manufactured opioids, but with the key involvement of stimulants (mainly methamphetamine and cocaine). A recent study found that the proportion of stimulant involvement in fentanyl overdose deaths rose in virtually every state between 2015 and 2021.[19] The combination of a stimulant with a depressant is dangerous, as it places stress on multiple body systems, including cardiovascular and respiratory, and thus can increase risk of death by respiratory suppression or cardiac arrest.[20] Additional research is important to identify those most at risk for a combined stimulant and opioid overdose.

The factors that lead to fatal overdose are numerous and complex. Effectively responding to the rise in deaths requires a multifaceted approach that considers causes that are upstream from the overdose itself. Culturally specific social supports can decrease drug use initiation and mitigate the harms of isolation exacerbated by the COVID-19 pandemic. Interventions that can support people living with substance use disorder include those that promote housing stability and access to mental health care, and facilitate addiction treatment through peer-navigation. Finally, increasing naloxone availability, increasing access to fentanyl test strips for people who are not intentionally using fentanyl, and supporting ways to help people avoid using drugs alone, can decrease the likelihood that an overdose causes death.

A critical lesson learned from the racial inequities in outcomes during the COVID-19 pandemic is the need to ensure that supplies reach groups that are at highest risk. In this instance, for example, this would include listening to and working closely with Tribal Nations, the Urban Native, Black/African American, and Latinx communities, and culturally specific community based organizations to widen the availability of access points for treatment and to develop culturally specific prevention programs.

This analysis is subject to limitations. First, this analysis only includes people who died of fentanyl overdose. Although it may provide insights on people who use fentanyl or experience non-fatal overdose, there may be differences that we are not able to analyze here. Second, ICD-10 codes do not allow us to distinguish between prescribed fentanyl and illicitly manufactured fentanyl, so it is not possible to understand the source of fentanyl that caused the overdose. Third, we excluded intentional overdoses from the analysis because of the possibility of differing underlying characteristics among people who died as a result of suicide. Because of the small numbers of people who died from intentional overdose, we are not able to compare them to people who died of unintentional overdose. Finally, the categorizations of race and ethnicity that we used have both strengths and limitations. To align the categories with denominators to produce rates, we used a method that can obscure information on decedents with more than one race. To address this, we also presented data that shows each decedent in any racial/ethnic group that they identified with.

Between 2018 and 2022, over 500 people in Multnomah County died from a fentanyl-related overdose. Each year, the number of deaths has increased. Coordinated, multi-agency action is needed to slow and reverse this trend by connecting with our communities to prevent substance use initiation, support addiction treatment, provide support in recovery and protect people at high risk of fatal overdose.

[16] Mixed Methods Evaluation of Satisfaction with Two Culturally Tailored Substance use Prevention Programs for American Indian/Alaska Native Emerging Adults - PMC (nih.gov)
[17] Racial/ethnic differences in receipt of naloxone distributed by opioid overdose prevention programs in New York City - PubMed (nih.gov)
[18] Association of Methamphetamine and Opioid Use With Nonfatal Overdose in Rural Communities - PMC (nih.gov)
[19] Charting the fourth wave: Geographic, temporal, race/ethnicity and demographic trends in polysubstance fentanyl overdose deaths in the United States, 2010–2021 - Friedman - 2023 - Addiction - Wiley Online Library
[20] Prevalence and Correlates of Heroin-Methamphetamine Co-Injection Among Persons Who Inject Drugs in San Diego, California, and Tijuana, Baja California, Mexico - PubMed (nih.gov)