

The Commonwealth of Massachusetts
Executive Office of Health and Human Services
Department of Public Health
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Kiame Mahaniah, MD, MBA
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Robert Goldstein, MD, PhD
Commissioner

August 12, 2026

Timothy Carroll
House Clerk
State House Room 145
Boston, MA 02133

Michael D. Hurley
Senate Clerk
State House Room 335
Boston, MA 02133

Dear Mr. Clerk,

Pursuant to Section 138 of Chapter 126 of the Acts of 2022, the Fiscal Year 2023 General Appropriations Act, please find enclosed a report from the Department of Public Health entitled "An Examination of Opioid-Related Overdose Deaths among Massachusetts Residents."

Sincerely,

A handwritten signature in black ink, appearing to be "R. Goldstein".

Robert Goldstein, MD, PHD
Commissioner
Department of Public Health

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MAURA T. HEALEY
GOVERNOR

KIMBERLEY DRISCOLL
LIEUTENANT GOVERNOR



KATHLEEN E. WALSH
SECRETARY

ROBERT GOLDSTEIN, MD, PhD
COMMISSIONER

An Examination of Opioid-Related Overdose Deaths among Massachusetts Residents

July 2025

Legislative Mandate

The following report is issued pursuant to Section 138 of Chapter 126 of the Acts of 2022, the Fiscal Year 2023 General Appropriations Act as follows:

- a) *Notwithstanding any general or special law to the contrary, the secretary of health and human services, in collaboration with the commissioner of public health, shall conduct or provide for an examination of the prescribing and treatment history, including court-ordered treatment or treatment within the criminal legal system, of persons in the commonwealth who suffered fatal overdoses in calendar years 2019 to 2021, inclusive, and annually thereafter, and shall report in an aggregate and de-identified form on trends discovered through the examination. The secretary of health and human services may contract with a nonprofit or educational entity to conduct data analytics on the data set generated in the examination; provided, however, that the executive office shall implement appropriate privacy safeguards consistent with state and federal law.*
- b) *To facilitate the examination pursuant to subsection (a), the department of public health shall request, and the relevant offices and agencies shall provide, information necessary to complete the examination from the division of medical assistance, the executive office of public safety and security, the center for health information and analysis, the office of patient protection, the department of revenue and the chief justice of the trial court, which may include, but shall not be limited to, data from the: (i) prescription drug monitoring program established in [section 24A of chapter 94C](#) of the General Laws; (ii) all-payer claims database established in [section 12 of chapter 12C](#) of the General Laws; (iii) criminal offender record information database established in [section 172 of chapter 6](#) of the General Laws; and (iv) court activity record information system established in [section 9 of chapter 258E](#) of the General Laws. To the extent feasible, the department of public health shall request data from the Massachusetts Sheriffs Association, Inc. relating to treatment within houses of correction.*
- c) *Not later than July 1, 2023, and annually thereafter, the secretary of health and human services shall publish a report on the findings of the examination including, but not limited to: (i) the overall prescription history of the individuals, including both agonist and antagonist medications for opioid use disorder; (ii) the mental and behavioral health and substance use treatment history of the individuals, including an outcome comparison of voluntary versus*

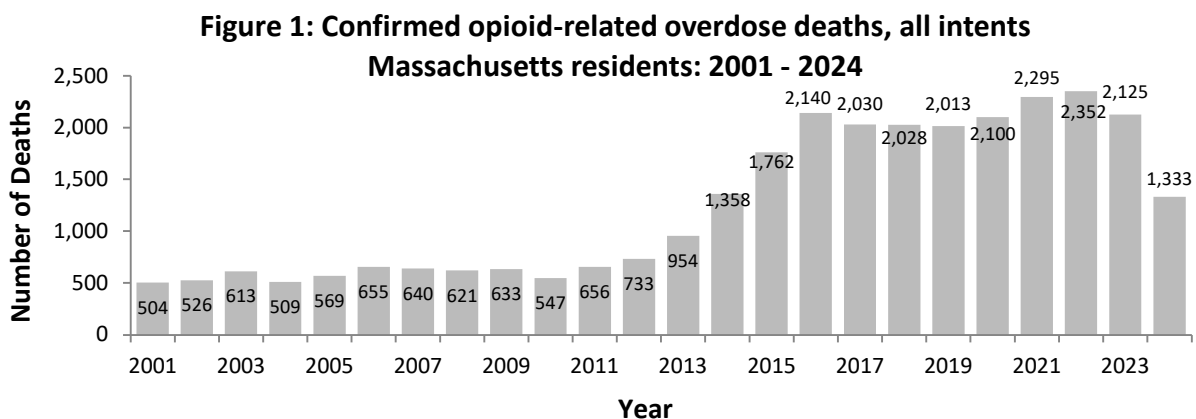
involuntary treatment, controlling for other factors; (iii) structural factors that contribute to heightened risk of overdose including, but not limited to, employment status, housing status, criminal legal involvement, income, medical comorbidities including, but not limited to, bacterial or viral infections and substance use sequelae and other demographic markers including, but not limited to, race, ethnicity, age, gender identity, sexual orientation and immigration status; (iv) trends in the substances observed in overdose events; (v) whether the individuals had attempted to enter but were denied access to mental or behavioral health or substance use treatment; (vi) whether the individuals had received past treatment for a substance overdose; and (vii) whether any individuals had been previously detained, committed or incarcerated and, if so, whether they had received treatment and treatment type during the detention, commitment or incarceration.

The reports shall be filed with the clerks of the house of representatives and senate, the house and senate committees on ways and means, the joint committee on mental health, substance use and recovery, the joint committee on public health and the joint committee on health care financing.

Introduction

Opioid-Related Overdose Death Overview

Fatal drug overdoses, driven in Massachusetts by opioids, remain a persistent public health problem. From 2019 through 2023, 90% of all drug overdoses were opioid related in Massachusetts. In 2024, 1,333 Massachusetts residents died of a confirmed opioid-related overdose.



Section 138 of Chapter 126 Overview

Section 138 of Chapter 126 of the Acts of 2022 (Section 138) requires an examination of the prescribing and treatment history, including court-ordered treatment or treatment within the criminal legal system, of persons in the Commonwealth who suffered fatal overdoses.

To help with this examination, the legislation specifies six agencies that shall provide data:

1. Division of Medical Assistance
2. Executive Office of Public Safety and Security
3. Center for Health Information and Analysis
4. Office of Patient Protection
5. Department of Revenue
6. Chief Justice of the Trial Court

It specifies that we include four datasets/databases:

1. Prescription Monitoring Program
2. All-Payer Claims Database
3. Criminal Offender Record Information Database

4. Court Activity Record Information System.

It goes on to specify that to the extent feasible, the Department of Public Health (DPH) shall request data from the Massachusetts Sheriffs Association, Inc. relating to treatment within county Houses of Correction.

Additionally, it directs reporting on this examination, including, but not limited to, seven areas:

1. the overall prescription history of the individuals, including both agonist and antagonist medications for opioid use disorder.
2. the mental and behavioral health and substance use treatment history of the individuals, including an outcome comparison of voluntary versus involuntary treatment, controlling for other factors.
3. structural factors that contribute to heightened risk of overdose including, but not limited to, employment status, housing status, criminal legal involvement, income, medical comorbidities including, but not limited to, bacterial or viral infections and substance use sequelae and other demographic markers including, but not limited to, race, ethnicity, age, gender identity, sexual orientation, and immigration status.
4. trends in the substances observed in overdose events.
5. whether the individuals had attempted to enter but were denied access to mental or behavioral health or substance use treatment.
6. whether the individuals had received past treatment for a substance overdose.
7. whether any individuals had been previously detained, committed or incarcerated and, if so, whether they had received treatment and treatment type during the detention, commitment, or incarceration.

The examinations required by Section 138 are a natural extension of work that was initially conducted pursuant to Chapter 55 of the Acts of 2015, as amended by Chapter 133 of the Acts of 2016, and which is presently conducted using the Public Health Data Warehouse (PHD) pursuant to Chapter 111, Section 237 of the General Laws^{1,2,3}. As such, DPH has decided that we can best carry out these examinations by using and expanding the already existing PHD⁴.

This is the third report made pursuant to Section 138.

¹ [Massachusetts Department of Public Health. \(2016, September 15\). *An Assessment of Opioid-Related Deaths in Massachusetts \(2013 – 2014\)*. Mass.gov.](#)

² [Massachusetts Department of Public Health. \(2017, August 16\). *An Assessment of Fatal and Nonfatal Opioid Overdoses in Massachusetts \(2011 – 2015\)*. Mass.gov.](#)

³ [Massachusetts Department of Public Health. \(2019, November\). *Impact of the Opioid Epidemic on High-Risk Populations and Maternal Health: Results from the Public Health Data Warehouse*. Mass.gov.](#)

⁴ [Massachusetts Department of Public Health. \(2023, January 19\). *Modernizing the Public Health Data Warehouse: Tracking Public Health Trends 2021*. Mass.gov.](#)

Analysis #1: Examination of the overall prescription history of the individuals, including both agonist and antagonist medications for opioid use disorder

Updated results for this analysis are not available in this year's report, as 2023 death data were not ready within the PHD. However, information through 2022 can be found in last year's report: <https://www.mass.gov/lists/public-health-data-warehouse-phd-publications>.

Analysis #2: Examination of the mental and behavioral health and substance use treatment history of the individuals, including an outcome comparison of voluntary versus involuntary treatment, controlling for other factors.

DPH continues to work on this analysis, however updated results for this analysis were not available in time to include in this year's report. However, prior results can be found in last year's report: <https://www.mass.gov/lists/public-health-data-warehouse-phd-publications>.

Analysis #3: Structural factors that contribute to heightened risk of overdose including, but not limited to, employment status, housing status, criminal legal involvement, income, medical comorbidities including, but not limited to, bacterial or viral infections and substance use sequelae and other demographic markers including, but not limited to, race, ethnicity, age, gender identity, sexual orientation, and immigration status

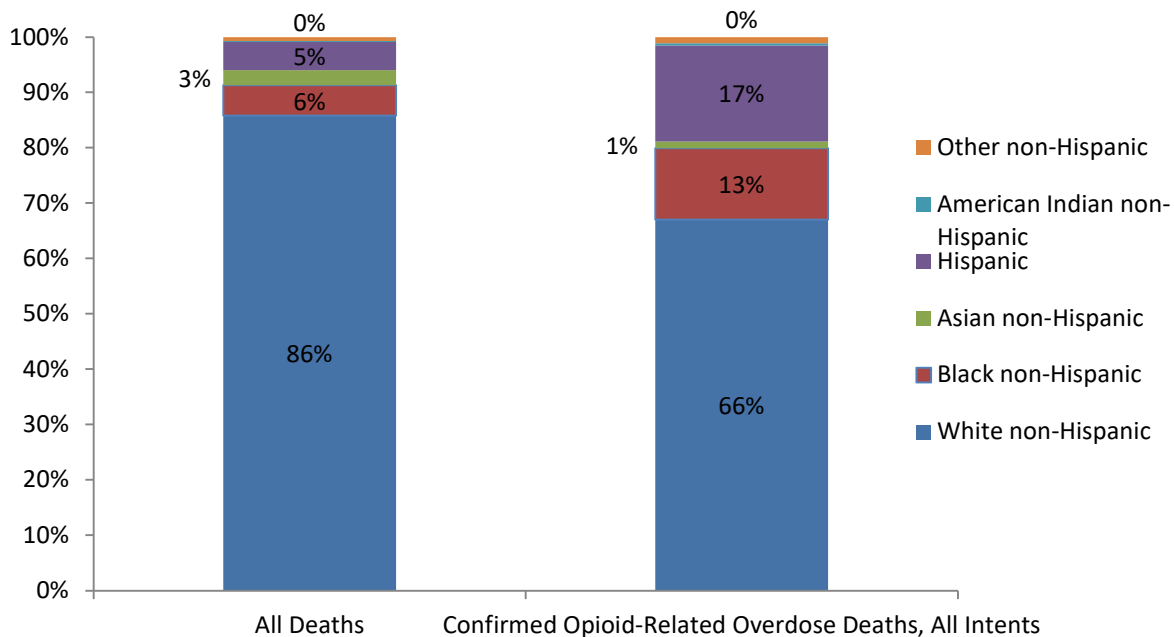
Several analyses that DPH is already conducting relate to structural and demographic factors that contribute to a heightened risk of overdose. We present key findings related to these structural and demographic factors below.

Race and Hispanic Ethnicity

When we look at opioid overdose deaths by race and Hispanic ethnicity, we see concerning trends that underscore the on-going responsibility to meet the needs of people of color who are disproportionately affected by substance use disorder, including addressing treatment needs and the social determinants of health.

- While Black non-Hispanic residents account for 5% of all deaths in Massachusetts in 2023, they account for 13% of opioid-related overdose deaths. Similarly, Hispanic residents account for 5% of all deaths in Massachusetts, but 17% of opioid-related overdose deaths.

Figure 2: Opioid-related overdose deaths by race and Hispanic ethnicity, Massachusetts Residents: 2023



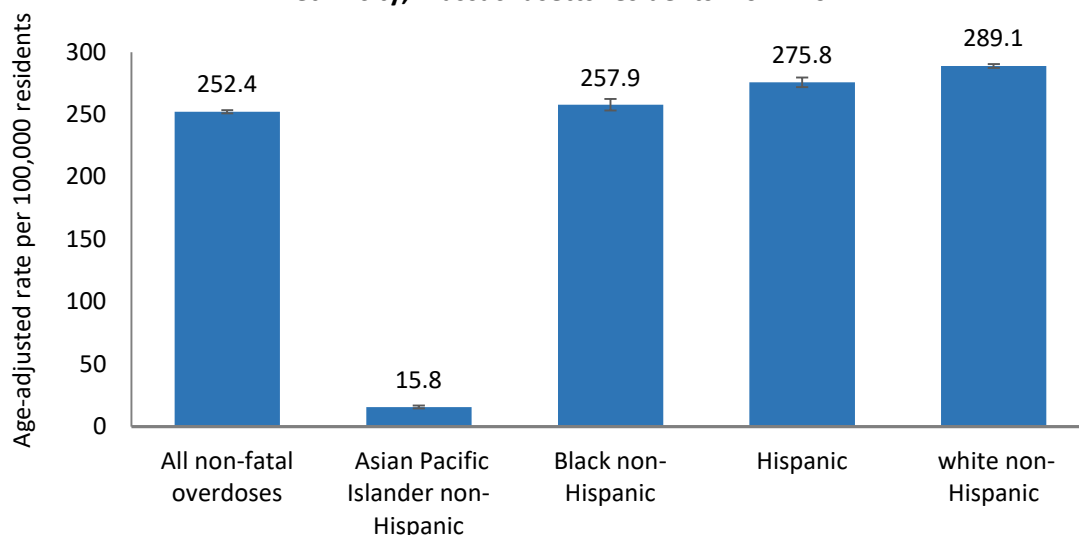
- [Historically](#), Black non-Hispanic residents had lower rates of opioid-related overdose deaths compared to White non-Hispanic residents. However, by Fiscal Year 2024 (July 2023–June 2024), the opioid-related overdose death rate among Black non-Hispanic residents was 1.6 times greater than that of White non-Hispanic residents. This disparity was driven by rate increases among Black non-Hispanic residents, while rates among White non-Hispanic residents remained steady and eventually declined since 2019. Notably, from Fiscal Year 2023 to 2024, Black non-Hispanic residents saw an opioid-related overdose death rate decrease (30%) for the first time since 2018.
- In Fiscal Year 2020, the rate of opioid-related overdose death was similar for White non-Hispanic, Black non-Hispanic, and Hispanic residents, but by Fiscal Year 2022, the rate was 1.5 times higher for Hispanic residents compared to White non-Hispanic residents. From Fiscal Year 2022 to 2023, this disparity decreased slightly, with opioid-related overdose death rates 1.3 times greater among Hispanic residents compared to White non-Hispanic Residents.
- While the relative difference in the rate between American Indian non-Hispanic residents and White non-Hispanic residents has been variable over time (likely due to the small number of deaths among American Indian non-Hispanic residents), it is important to note that this group has consistently had the highest rate of opioid-related overdose deaths over time. In Fiscal Year 2024, their opioid-related overdose death rate was 2.8 times greater than rates among White non-Hispanic residents.

- More information can be found on the Massachusetts Department of Public Health's Community Profile dashboard, which can be accessed at: <https://www.mass.gov/info-details/bureau-of-substance-addiction-services-bsas-dashboard>.

Public health reporting of non-fatal opioid overdose (NFO) is complex and only includes events where a patient receives medical services, such as ambulance trips, emergency department visits, or hospitalization. Data systems do not capture NFOs where a person does not seek medical treatment, such as when non-medical personnel administer naloxone successfully. Prior work estimates that up to 50% of patients refuse emergency medical service transport after overdose reversals⁵. The data below characterizes Massachusetts (MA) residents who experienced at least one documented NFO from 2013 through 2022.

- From 2014 through 2022, the highest rate of NFO among MA residents was among White non-Hispanic residents, at 289.1 NFOs per 100,000 residents, followed by Hispanic residents at 275.8 per 100,000 and Black non-Hispanic residents at 257.9 per 100,000. The rate of 15.8 per 100,000 among Asian/Pacific Islander non-Hispanic residents was 16 times lower than the statewide rate.

Figure 3. Age-adjusted rate of non-fatal overdose per 100,000 by race* and Hispanic ethnicity, Massachusetts residents: 2014-2022



*Rates for American Indian and Alaska natives are not calculated as they are combined with 'Other' race in the PHD. 600 records with missing race Hispanic ethnicity are excluded.

Opioid use disorder (OUD) is a chronic condition characterized by ongoing use of opioids

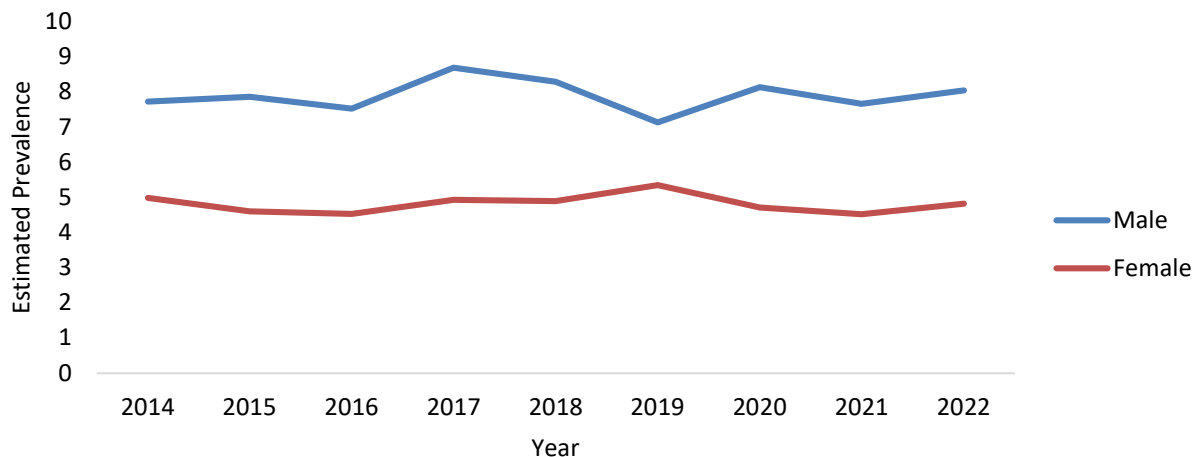
⁵ Kim, JK et al., 2019. "Factors associated with help seeking by community responders trained in overdose prevention and naloxone administration in Massachusetts", Drug and Alcohol Dependence, Volume 204, 2019, 107531, ISSN 0376-8716, <https://doi.org/10.1016/j.drugalcdep.2019.06.033>

despite harmful consequences and clinical impairment. Individuals with OUD are at a high risk of experiencing an opioid-related overdose.

Sex

- Male residents of Massachusetts continue to have a higher estimated prevalence of OUD than female residents. In 2022, the estimated prevalence for male residents was 1.7 times that for female residents.

Figure 4: Estimated prevalence of opioid use disorder by sex, Massachusetts Residents



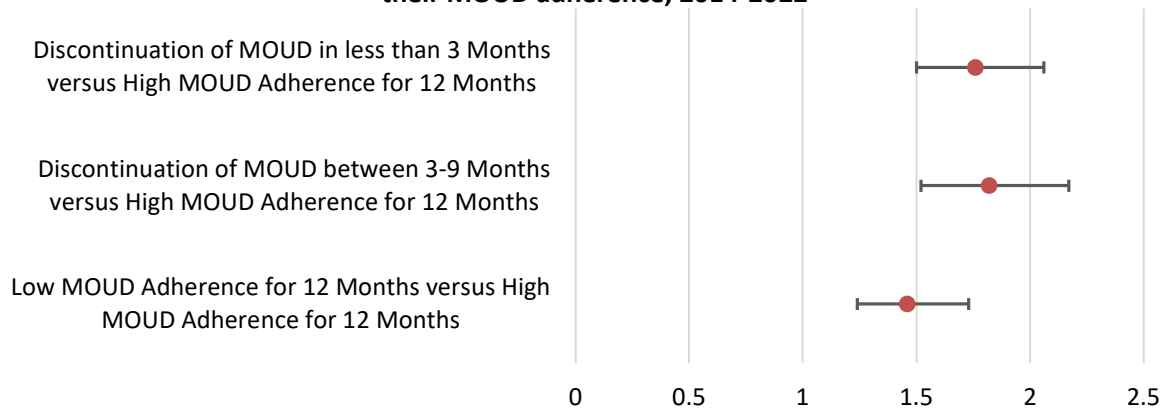
Age

- Youth ages 13-26 with high adherence to buprenorphine had the lowest risk of opioid overdose compared to all other youth with OUD. Most prior research in this area has focused on adults. This is important because youth often are ambivalent about being on MOUD for their OUD and tend to discontinue MOUD^{6,7}. These findings show that youth may benefit from staying on MOUD.

⁶ Buchholz C, Bell LA, Adatia S, et al. Medications for Opioid Use Disorder for Youth: Patient, Caregiver, and Clinician Perspectives. J Adolesc Health Off Publ Soc Adolesc Med. 2024;74(2):320-326. doi:10.1016/j.jadohealth.2023.08.047

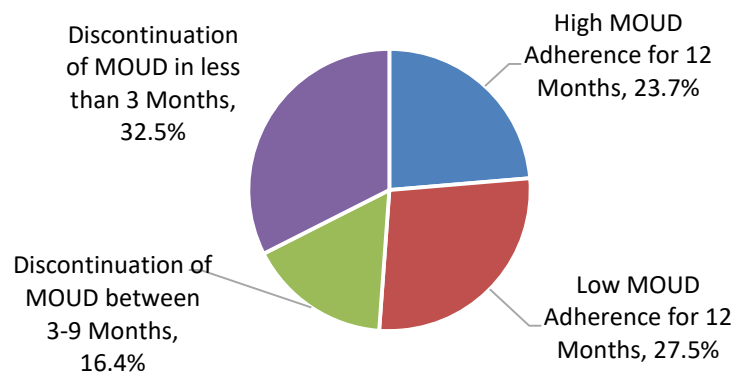
⁷ Bagley SM, Schoenberger SF, dellaBitta V, et al. Ambivalence and Stigma Beliefs About Medication Treatment Among Young Adults With Opioid Use Disorder: A Qualitative Exploration of Young Adults' Perspectives. J Adolesc Health Off Publ Soc Adolesc Med. 2023;72(1):105-110. doi:10.1016/j.jadohealth.2022.08.026

Figure 5: Opioid overdose risk among Massachusetts youth ages 13-26 by their MOUD adherence, 2014-2022



- Fewer than one in four youth with OUD had high MOUD adherence. The most common pattern of medication use was for youth to stop their MOUD in less than 90 days. Youth with high adherence to buprenorphine had the lowest risk of opioid overdose and all-cause hospitalization compared to all other youth with OUD.

Figure 6: MOUD adherence among Massachusetts youth with OUD ages 13-26, 2014-2022



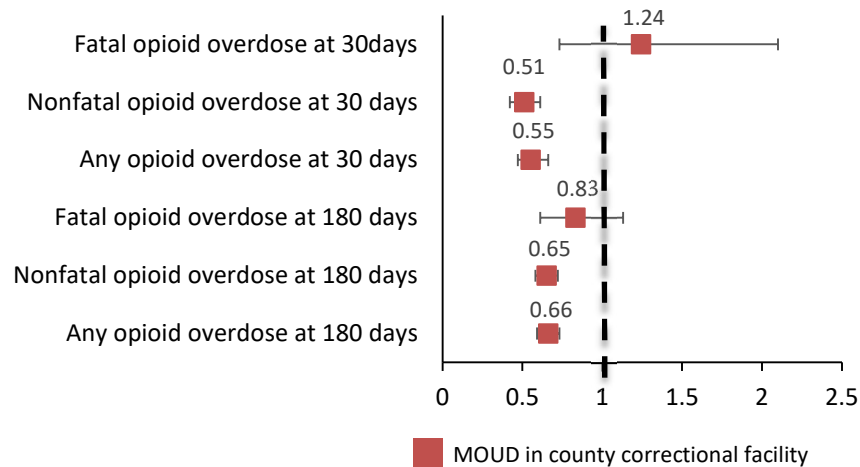
Incarceration

After release from incarceration, people are at particularly high risk for opioid overdose due to a complex combination of reduced opioid tolerance, stress and anxiety, lack of social support, and struggling to meet basic needs such as housing.

To evaluate the Chapter 208 of the Acts of 2018 (CARE ACT) MOUD pilot program, we conducted an analysis that included all individuals with an opioid use disorder (OUD) who were incarcerated at a participating county correctional facility between September 2019 and December 2020 and released before July 2021, ensuring at least 6 months of post-release data.

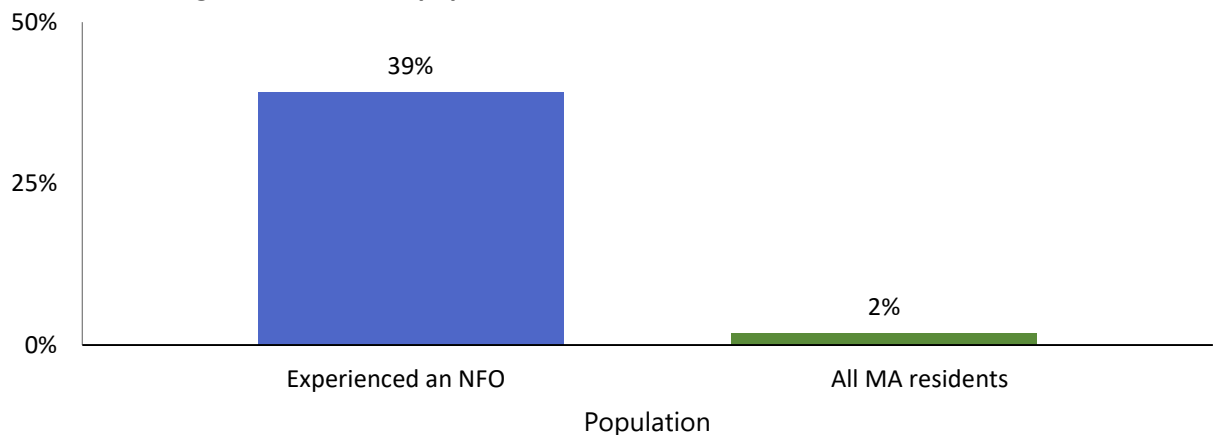
- People who received MOUD while incarcerated in a Massachusetts county correctional facility had 49% lower odds of experiencing an NFO and 45% lower odds of experiencing any opioid-related overdose (non-fatal or fatal) within 30 days of release from incarceration compared with people who did not receive MOUD while incarcerated. These reductions decreased when looking out to 180 days post-release, but remained significant.
- There was no significant difference in the odds of experiencing a fatal opioid-related overdose in either the first 30 or the first 180 days by MOUD receipt status. However, the number of fatal opioid-related overdoses in the MOUD group was small (n<11).

Figure 7: Odds of opioid overdose post release



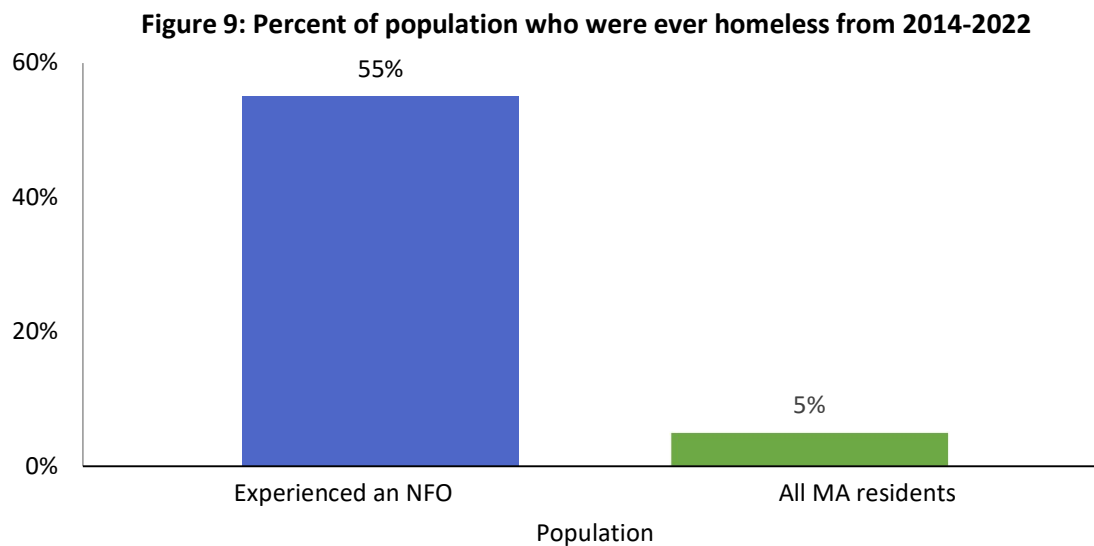
- Over a third (39%) of residents who experienced an NFO had been incarcerated from 2014 through 2022, compared to 2% of all MA residents during the same period.

Figure 8: Percent of population who were ever incarcerated from 2014-2022



Housing Status

- More than half (55%) of residents who experienced an NFO had experienced homelessness from 2014 through 2022, compared to 5% of all MA residents during the same period.

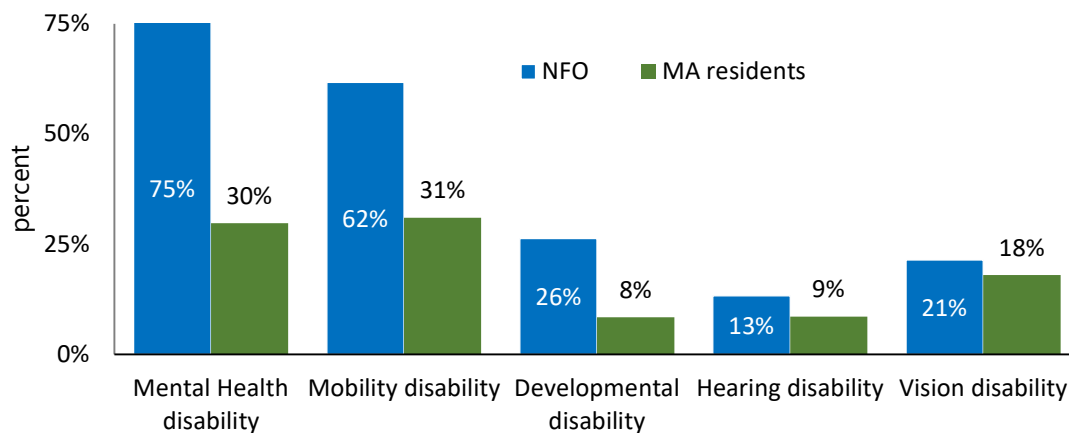


Disability

People with disabilities are likely to experience structural ableism and barriers to accessing health care, which may hamper their ability to seek medical help and manage health issues, including chronic pain and substance use disorder.

- Among residents who experienced an NFO from 2014 through 2022, 75% had a mental health disability diagnosis, which is 2.5 times higher than the 30% of MA residents. Sixty-two percent had a mobility disability diagnosis, double the 31% of all MA residents. Twenty-six percent had been diagnosed with developmental disabilities, more than three times the rate of all MA residents in the PHD (8%). Thirteen percent of residents experiencing an NFO had a hearing disability diagnosis, nearly double the 9% of MA residents in the PHD. Twenty-one percent had vision disabilities, slightly higher than the 18% of all MA residents in the PHD.

Figure 10. Non-fatal overdose among Massachusetts residents by disability status: 2014-2022



*Note, prevalence of MA residents from 2011-2021

Analysis #4: Trends in the substances observed in overdose events.

Data on post-mortem toxicology results for people who died of an opioid-related overdose are available online at:

<https://www.mass.gov/info-details/bureau-of-substance-addiction-services-bsas-dashboard>.

Analysis #5: Whether the individuals had attempted to enter but were denied access to mental or behavioral health or substance use treatment.

There are no data sources available that include information on people who were denied access to mental or behavioral health or substance use treatment.

Analysis #6: Whether the individuals had received past treatment for a substance overdose.

By linking Emergency Medical Services (EMS), Hospitalization, Death, and BSAS records through the PHD, we can find who has received medical treatment for a past opioid-related overdose and who has received any treatment within the BSAS system.

- From 2019 through 2022, a total of 8,530 Massachusetts residents died of an opioid-related overdose and had a record in the PHD. Of these:

- 48% (4,065) had a record of enrollment in opioid-related BSAS treatment in the PHD prior to their fatal opioid-related overdose. This number decreased yearly, from 51% in 2019 to 46% in 2022. We defined opioid-related BSAS treatment as a treatment episode where the person's substance at enrollment (primary, secondary, or tertiary) included an opioid.
- 44% (3,769) had medical treatment for at least one prior opioid-related overdose before their fatal opioid-related overdose. This number decreased slightly from 46% in 2019 to 43% in 2022.

Figure 11: Enrolled in opioid-related BSAS treatment prior to fatal opioid overdose, Massachusetts Residents (n=8,530)

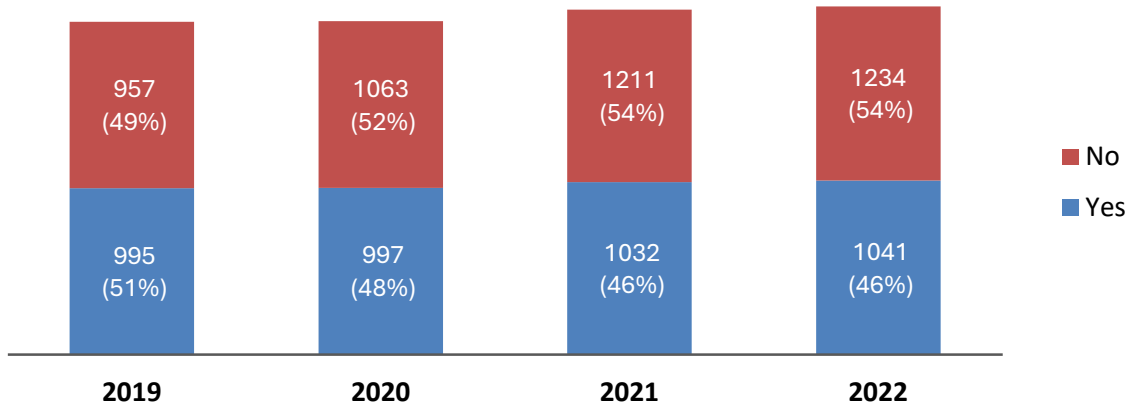
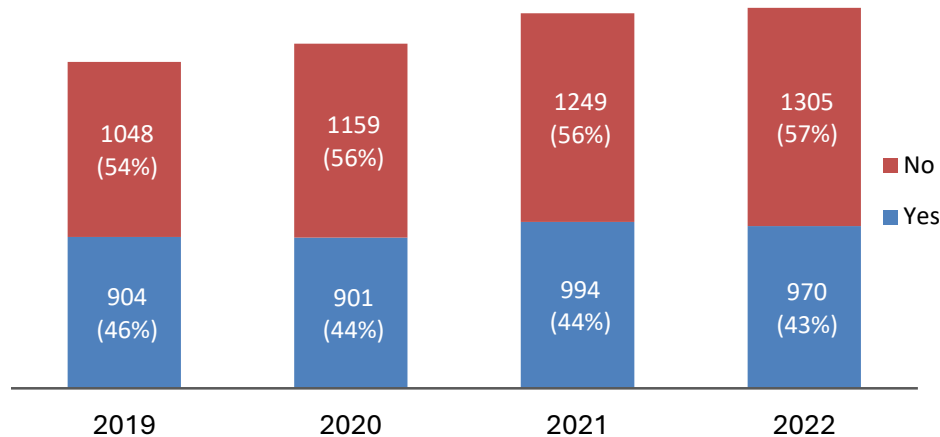


Figure 12: Medical treatment for nonfatal opioid overdose prior to fatal overdose, Massachusetts residents



Analysis #7: Whether any individuals had been previously detained, committed, or incarcerated, and, if so, whether they had received treatment and treatment type during the detention, commitment, or incarceration.

Please see the legislative report: [Outcomes of the Medications for Opioid Use Disorder \(MOUD\) in Correctional Facilities Pilot Program](#) for a detailed report on this analysis.