

Revised April 2020

Massachusetts: Opioid-Involved Deaths and Related Harms

Drug-Involved Overdose Deaths

In the U.S., there were 67,367 drug overdose deaths reported in 2018, 4.1% fewer deaths than in 2017.

- The age-adjusted rate declined by 4.6% to 20.7 per 100,000 standard population.¹ The decline follows an increasing trend in the rate from 6.1 in 1999 to 21.7 in 2017.
- Opioids were involved in 46,802 (a rate of 14.6) overdose deaths in 2018—nearly 70% of all overdose deaths.
- Deaths involving synthetic opioids other than methadone (including fentanyl and fentanyl analogs) continued to rise with more than 28,400 (a rate of 9.9) overdose deaths in 2018.
- The number of deaths involving prescription opioids declined to 14,975 (a rate of 4.6) in 2018 and those involving heroin dropped to 14,996 (a rate of 4.7).²

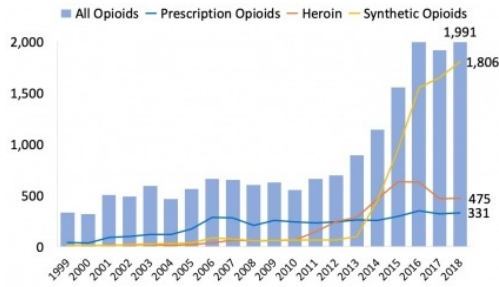


Figure 1. Number of drug and opioid-involved overdose deaths in Massachusetts. Drug categories presented are not mutually exclusive, and deaths may have involved more than one substance.. Source: CDC WONDER, 2020.

In Massachusetts, about 88% of drug overdose deaths involved at least one opioid in 2018—a total of 1,991 deaths (a rate of 29.3).

- Among opioid-involved deaths, those involving heroin or prescription opioids remained steady with a respective 475 (a rate of 7.0) and 331 (a rate of 4.7) deaths in 2018.³
- Fatalities involving synthetic opioids other than methadone (mainly fentanyl and fentanyl analogs) increased to 1,806 (a rate of 26.8) in 2018 and were involved in more than 90% of all opioid-involved deaths (Figure 1).

Opioid Prescriptions

In 2018, Massachusetts providers wrote 35.3 opioid prescriptions for every 100 persons. This was among the lowest prescribing rates in the country and less than the average U.S. rate of 51.4 prescriptions.⁴

Neonatal Abstinence Syndrome (NAS)/Neonatal Opioid Withdrawal Syndrome (NOWS)

NAS or NOWS may occur when a woman uses opioids during pregnancy. To date, there is no

standard in NAS/NOWS provider and hospital coding practices.⁵ As a result, there is variability in the rates reported by states.

- The national incidence rate of NAS/NOWS in 2016 was 7 cases per 1,000 hospital births.⁶⁻⁷
- The highest rates were reported among American Indian/Alaska Native (15.9 per 1,000 births) and White Non-Hispanic (10.5 per 1,000 births) individuals.
- In 2016, hospital costs for NAS/NOWS births totaled \$572.7 million, after adjusting for inflation.⁸
- The incidence rate of NAS/NOWS in Massachusetts in 2017 was 13.7 cases per 1,000 hospital births and is the most recent data available.⁶⁻⁷

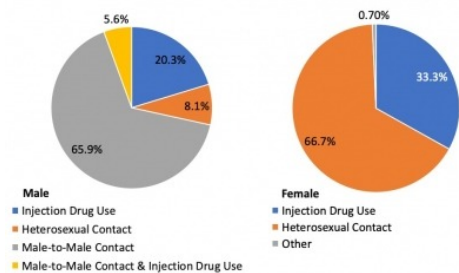


Figure 2. Massachusetts: Estimated percent of male vs. female with new HIV diagnoses, by transmission category, 2017. Percentages may not add up to 100% due to rounding.
Source: CDC NCHHSTP, AtlasPlus.

New HIV Diagnoses⁹ and Prevalence Attributed to Injection Drug Use (IDU)

- **U.S. New Diagnoses:** In 2017, 9.7% (3,690) of the 38,226 new HIV diagnoses were attributed to IDU. Among males, 8.6% (2,655) of new diagnoses were transmitted via IDU or male-to-male sexual contact and IDU. Among females, 14.2% (1,035) of new diagnoses were transmitted via IDU.¹⁰
- **U.S. Prevalence:** In 2017, more than 1 million Americans were living with a diagnosed HIV infection—a rate of 367.7. Among males, 16.4% (125,274) contracted HIV from IDU or male-to-

male sexual contact and IDU. Among females, 20.8% (49,288) were living with HIV attributed to IDU.¹⁰

- **State New Diagnoses:** Of the new HIV diagnoses in 2017, 596 occurred in Massachusetts—a rate of 10.1. Among males, 25.9% of new HIV diagnoses were attributed to IDU or male-to-male sexual contact and IDU. Among females, 33.3% were attributed to IDU (Figure 2).¹⁰
- **State Prevalence:** In 2017, 20,374 persons were living with a diagnosed HIV infection in Massachusetts—a rate of 345.4. Of those, 25.5% of male cases were attributed to IDU or male-to-male sexual contact and IDU. Among females, 30.2% were living with HIV attributed to IDU.¹⁰

Hepatitis C (HCV) Incidence and Prevalence Attributed to IDU¹¹

- **U.S. Incidence:** In 2017, there were an estimated 44,700 new cases of acute HCV. Among case reports that contained information about IDU, 86.6% indicated IDU prior to onset of acute, symptomatic HCV.¹²
- **U.S. Prevalence:** An estimated 2.4 million Americans are living with HCV (based on 2013-2016 annual average).¹²
- **State Incidence:** There were approximately 327 new cases of acute HCV (a rate of 4.8) reported in Massachusetts in 2017.¹⁰
- **State Prevalence:** In Massachusetts, there are an estimated 38,100 persons living with HCV (a rate of 710 based on 2013-2016 annual average).¹³

References

1. Rates are age-adjusted per 100,000 standard population unless otherwise noted.
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3. Centers for Disease Control and Prevention, National Center for Health Statistics. Multiple Cause of Death 1999-2018 on CDC WONDER Online Database released in 2020. Data are from the Multiple Cause of Death Files, 1999-2018, as compiled from data provided by the 57 vital statistics jurisdictions through the Vital Statistics Cooperative Program. (2020 February 14) Retrieved from <http://wonder.cdc.gov/mcd-icd10.html>
4. Centers for Disease Control and Prevention. U.S. Opioid Prescribing Rate Maps. (2019, October 3). Retrieved from <https://www.cdc.gov/drugoverdose/maps/rxrate-maps.html>

5. Lind JN, Ailes EC, Alter CC, et al. Leveraging Existing Birth Defects Surveillance Infrastructure to Build Neonatal Abstinence Syndrome Surveillance Systems—Illinois, New Mexico, and Vermont, 2015–2016. *MMWR Morb Mortal Wkly Rep* 2019;68:177–180.
6. Healthcare Cost and Utilization Project (HCUP). Neonatal Abstinence Syndrome (NAS) Among Newborn Hospitalizations. (2019, December 12) Retrieved from <https://www.hcup-us.ahrq.gov/faststats/nas/nasquery.jsp?>
7. Comparisons with earlier estimates are difficult because of the ICD-10-CM transition in 2015.
8. Strahan AE, Guy Jr. GP, Bohm M, et al. Neonatal Abstinence Syndrome Incidence and Health Care Costs in the United States, 2016. *JAMA Pediatrics*. 2020;174(2):200-202.
9. The term refers to people diagnosed with HIV infection, regardless of the stage of disease at diagnosis.
10. Centers for Disease Control and Prevention. National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention (NCHHSTP) AtlasPlus. (2020, January 30). Retrieved from <https://gis.cdc.gov/grasp/nchhstpatlas/main.html>.
11. Not all states collect or report data on the incidence or prevalence of Hepatitis C or on how Hepatitis C is transmitted. When available, the data will be included.
12. Centers for Disease Control and Prevention. Surveillance for Viral Hepatitis—United States, 2017. 2019, November 14. Retrieved from <https://www.cdc.gov/hepatitis/statistics/2017surveillance/index.htm>
13. HepVu. Local Data: Massachusetts. Retrieved from <https://hepvu.org/state/Massachusetts/>

April 3, 2020