National Institute on Drug Abuse
Advancing Addiction Science

Revised April 2020

Tennessee: 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]

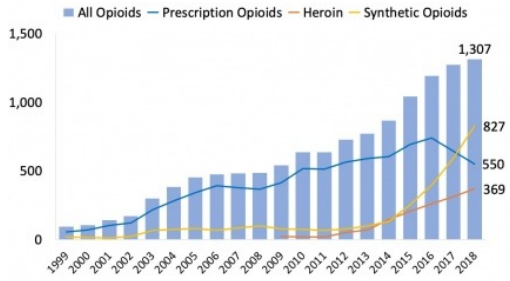

Figure 1. Number of overdose deaths involving opioids in Tennessee, by opioid category. Drug categories presented are not mutually exclusive, and deaths may have involved more than one substance. Source: CDC WONDER, 2020.

In Tennessee, drug overdose deaths involving opioids totaled 1,307 in 2018 (a rate of 19.9).

- Deaths involving synthetic opioids other than methadone (mainly fentanyl and fentanyl analogs) increased from 590 (a rate of 9.3) in 2017 to 827 (a rate of 12.8) in 2018 (Figure 1).
- Heroin-involved deaths are also trending up with 369 deaths (a rate of 5.7) in 2018.
- Prescription opioids have declined over the past 2-years from 739 deaths (a rate of 11.1) in 2016 to 550 (a rate of 8.2) in 2018.[3]

Opioid Prescriptions

In 2018, Tennessee providers wrote 81.8 opioid prescriptions for every 100 persons. This was the third highest prescribing rate in the country and more 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 Tennessee in 2017 was 16.4 cases per 1,000 hospital births and is the most recent data available.[6-7]

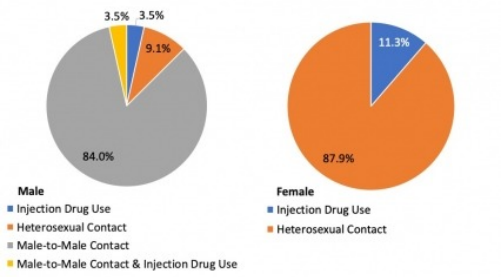

Figure 2. Tennessee: Estimated percent of male vs. female with new HIV diagnoses, by transmission category, 2017. Percentages may not add up to 100% due to rounding.
Source: CDC NCHHSTP, AtlasPlus.

New HIV Diagnoses[9] 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, 731 occurred in Tennessee—a rate of 13.0. Among males, 7.0% of new HIV diagnoses were attributed to IDU or male-to-male sexual contact and IDU. Among females, 11.3% were attributed to IDU (Figure 2).[10]
- **State Prevalence:** In 2017, 16,612 persons were living with a diagnosed HIV infection in Tennessee—a rate of 295.0. Of those, 10.7% of male cases were attributed to IDU or male-to-male sexual contact and IDU. Among females, 13.0% were living with HIV attributed to IDU.[10]

Hepatitis C (HCV) Incidence and Prevalence Attributed to IDU[11]

- **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 142 new cases of acute HCV (a rate of 2.1) reported in Tennessee in 2017.[10]
- **State Prevalence**: In Tennessee, there are an estimated 69,100 persons living with Hepatitis C (a rate of 1,370 based on 2013-2016 annual average).[13]

References

1. Rates are age-adjusted per 100,000 standard population unless otherwise noted.
2. Hedegaard H, Miniño AM, Warner M. Drug overdose deaths in the United States, 1999–2018. NCHS Data Brief, no 356. Hyattsville, MD: National Center for Health Statistics. 2020.
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: Tennessee. Retrieved from https://hepvu.org/state/Tennessee/

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