Tennessee Opioid Summary

Opioid-Involved Overdose Deaths

In 2017, there were 1,269 overdose deaths involving opioids in Tennessee—a rate of 19.3 deaths per 100,000 persons, which is higher than the national rate of 14.6 deaths per 100,000 persons.

The greatest increase in opioid deaths was seen in cases involving synthetic opioids (mainly fentanyl): a rise from 77 deaths in 2012 to 590 in 2017. Deaths involving heroin also increased dramatically in the same 5-year period: from 50 to 311 deaths. There were 644 deaths involving prescription opioids in 2017, a decrease from 739 in 2016 (Figure 1).

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

Opioid Pain Reliever Prescriptions
In 2017, Tennessee providers wrote 94.4 opioid prescriptions for every 100 persons (Figure 2). This was the third highest prescribing rate in the country and 1.5 times greater than the average U.S. rate of 58.7 prescriptions. Still, this represents a 25-percent decline in the state’s opioid prescribing rate since 2013 (CDC).

The rate of overdose deaths involving opioid prescriptions rose steadily after 1999 to 11.1 deaths per 100,000 persons (Figure 2), but in 2017 it declined to 9.6 deaths per 100,000 persons.

![Figure 2. Tennessee rate of overdose deaths involving prescription opioids and the opioid prescribing rate. Source: CDC and CDC WONDER.](image)

**Neonatal Abstinence Syndrome (NAS)**

NAS or neonatal opioid withdrawal syndrome (NOWS) may occur when a pregnant woman uses drugs such as opioids during pregnancy. A recent national study showed a fivefold increase in the incidence of NAS/NOWS between 2004 and 2014, from 1.5 cases per 1,000 hospital births to 8.0 cases per 1,000 hospital births. That is one baby born with NAS/NOWS every 15 minutes in the United States. During the same period, hospital costs for NAS/NOWS births increased from $91 million to $563 million, after adjusting for inflation (Figure 3).
The Tennessee Department of Health (TDH) requires that all cases of NAS/NOWS be reported within 30 days of diagnosis. In 2017, there were 1,090 cases of NAS/NOWS reported, representing 1.35% of all live births, and a 16 percent increase from 936 cases in 2013. Of the cases reported in the state in 2017, nearly 1 in 3 occurred as a result of exposure to diverted prescription opioid medications (TN Department of Health, 2018).

Figure 3. NAS/NOWS Incidence Rate and Hospital Costs for Treatment in the United States. Source: T N.A. Winkelman, et al., 2018.

**HIV Prevalence and HIV Diagnoses Attributed to Injection Drug Use (IDU)**
U.S. Incidence: In 2016, 9 percent (3,480) of the 39,589 new diagnoses of HIV in the United States were attributed to IDU. Among males, 6.3 percent (2,530) of new cases were transmitted via IDU or male-to-male contact and IDU. Among females, 2.3 percent (950) were transmitted via IDU (CDC).

U.S. Prevalence: In 2016, 991,447 Americans were living with a diagnosed HIV infection—a rate of 306.6 cases per 100,000 persons. Among males, 19.9 percent (150,466) contracted HIV from IDU or male-to-male contact and IDU while 21 percent (50,154) of females were living with HIV attributed to IDU (CDC).

State Incidence: Of the new HIV cases in 2016, 715 occurred in Tennessee. Among males, 6.6 percent of new HIV cases were attributed to IDU or male-to-male contact and IDU. Among females, 8.1 percent of new HIV cases were attributed to IDU (Figure 4) (AIDSVu).

State Prevalence: In 2015, an estimated 16,425 persons were living with a diagnosed HIV infection in Tennessee—a rate of 297
cases per 100,000 persons. Of those, 11 percent of male cases were attributed to IDU or male-to-male contact and IDU. Among females, 13.5 percent were living with HIV attributed to IDU (AIDSVu).

Hepatitis C (HCV) Prevalence and HCV Diagnoses Attributed to Injection Drug Use¹

- **U.S. Incidence**: In 2016, there were an estimated 41,200 new cases of acute HCV² (CDC). Among case reports that contain information about IDU, 68.6 percent indicated use of injection drugs (CDC).

- **U.S. Prevalence**: An estimated 2.4 million Americans are living with HCV based on 2013-2016 annual averages (CDC).

- **State Incidence**: There were approximately 150 new cases of acute HCV (2.3 per 100,000 persons) reported in Tennessee in 2016 (CDC).

- **State Prevalence**: In Tennessee, there are an estimated 69,800 persons living with Hepatitis C (2013-2016 annual average), a rate of 1,380 cases per 100,000 persons (HepVu).

Additional Resources

- Tennessee Department of Health, *Prescription Drug Overdose*, and *Neonatal Abstinence Syndrome*

- Centers for Disease Control and Prevention, *Opioid Overdose*
FY2018 NIH-funded projects related to opioid use and use disorder in Tennessee: 3

Find treatment in Tennessee (SAMHSA)

Notes

1. 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.

2. Actual acute cases estimated to be 13.9 times the number of reported cases in any year.