TN Department of Health

May 2026

# 2024 Drug Overdose Hospital Discharges in Tennessee

# Legislative Brief

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Dept. of Health, Authorization # N94WG0-1, electronic only, April 29, 2026. This public document was promulgated at a cost of $Electronic per copy.

# Key Takeaways

**The number and age-adjusted rate of fatal and nonfatal overdoses decreased substantially between 2023 and 2024.** The year 2024 marks the second consecutive annual decline in drug overdose deaths since Tennessee began monitoring overdose data in 2013. This decrease may be attributed to the widespread naloxone distribution, changes in the drug supply, linkage to care, and education efforts. Continued investment in overdose surveillance and prevention is needed to maintain the downward trend and save lives.

## Key Trends in Nonfatal Drug Overdoses in 2024

- **Between 2023 and 2024 drug overdose deaths decreased 31%.**
  - In 2024, 2,499 Tennessee residents died of a drug overdose.

- **Nonfatal drug overdose outpatient visits decreased by 21% between 2023 and 2024.**
  - The rate of drug overdose outpatient visits decreased for all classes of drugs. The highest reduction was observed for heroin overdoses, where a 55.7% rate decrease was observed.
  - The rate of outpatient visits for nonfatal overdoses decreased in all demographic groups.

- **Nonfatal drug overdose inpatient stays decreased 10.5% between 2023 and 2024.**
  - The rate of drug overdose inpatient stays decreased for all drug classes. Inpatient stays involving cocaine overdoses experienced the largest rate decrease, 22.0%.
  - The rate of inpatient stays for nonfatal overdoses decreased for all demographic groups.

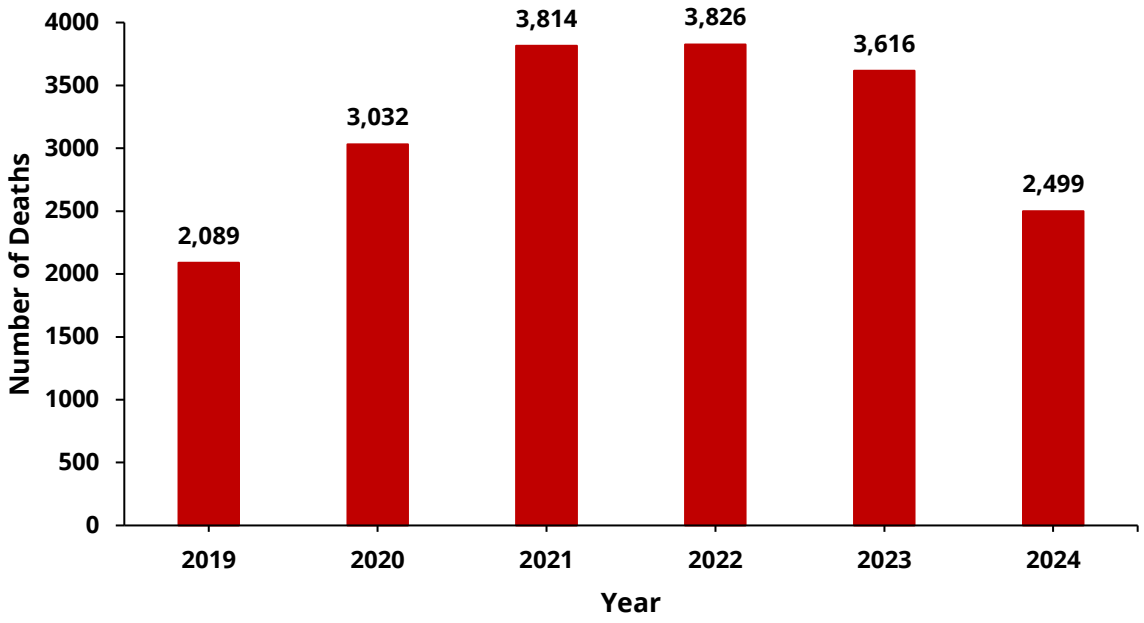
- **Most counties (79) experienced a decrease in the number of drug overdose outpatient visits between 2023 and 2024. Sixteen counties did not experience a decrease.**
  - Lawrence County experienced the largest percent decrease (51.3%) in the rate of drug overdoses treated as outpatient visits, while the largest percent increase in the rate of drug overdoses treated as outpatient visits was seen in Perry County (104.1%).

- **The cost of nonfatal overdoses is not evenly distributed across different types of drugs.**
  - Nonfatal overdoses involving stimulants incurred the highest inpatient costs while nonfatal overdoses involving benzodiazepines incurred the highest outpatient costs. In 2024, outpatient visits cost an estimated $14,304,277 and inpatient stays cost an estimated $40,150,236.

# Fatal and Nonfatal Drug Overdose Trends

In 2024, **2,499 drug overdose deaths** occurred among Tennesseans. This is a **31% decrease** from the previous year.

## Drug Overdose Deaths among TN Residents, 2019-2024




*Graph Note:*
Analysis by the Office of Informatics and Analytics, TDH (last updated March 20, 2026). Limited to TN residents. Data Source: Tennessee Death Statistical File, 2019-2024, Division of Vital Records and Statistics.

### Table: Drug Overdose Deaths among TN Residents, 2019-2024

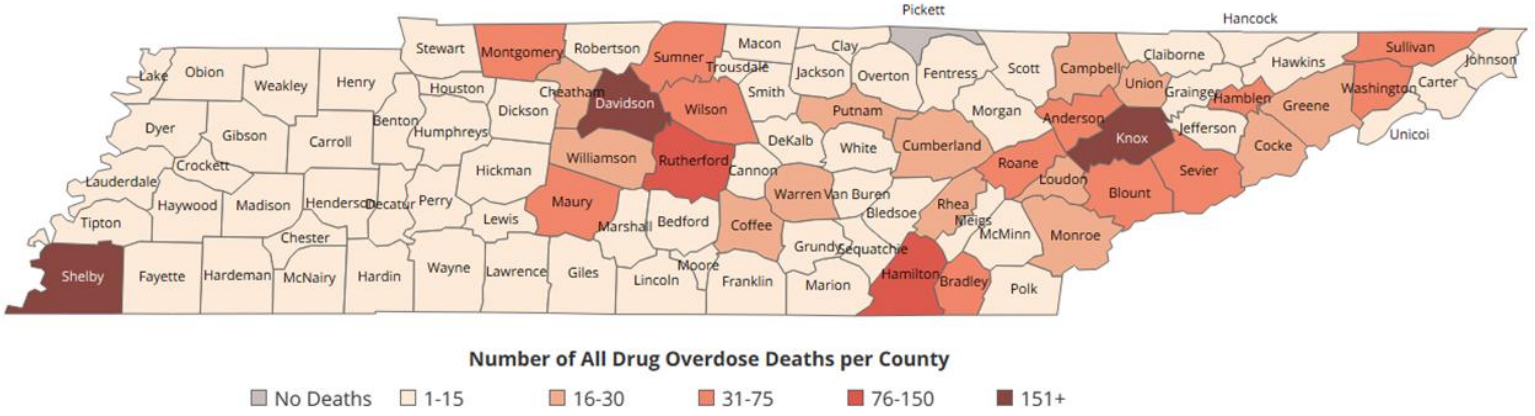
| Year | Drug Overdose Deaths |
|---|---|
| 2019 | 2,089 |
| 2020 | 3,032 |
| 2021 | 3,814 |
| 2022 | 3,826 |
| 2023 | 3,616 |
| 2024 | 2,499 |

When looking at manner of death, most overdose deaths (94.8%) were unintentional. A small percentage were intentional (3.8%), and in 1.4% of cases, the manner of death could not be determined. Fewer than 1% of overdose deaths were classified as homicide.

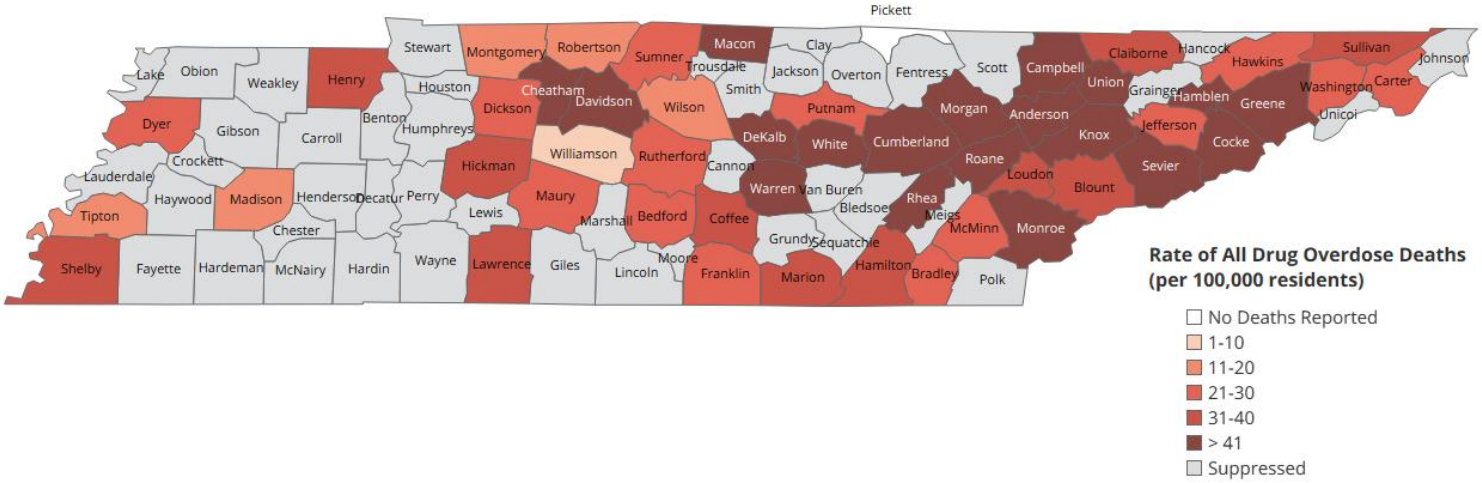
# Map: 2024 All Drug Overdose Deaths by County of Residence

In 2024, every county in Tennessee experienced a drug overdose death except for Pickett County. The maps below show the counts and age-adjusted rates by county.

### Count of All Drug Overdose Deaths by County of Residence, 2024



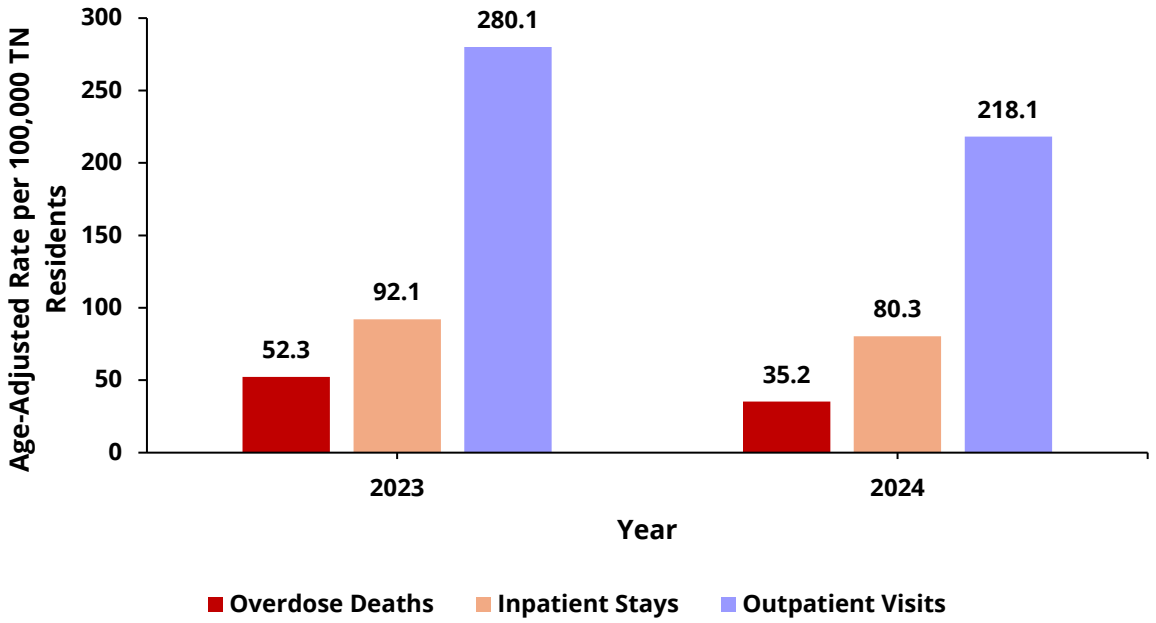

### Age-Adjusted Rates of All Drug Overdose Deaths by County of Residence, 2024




When the count is under 10, the rate becomes unstable and is suppressed. The grey coloring above shows the counties where the rate is suppressed.

# Nonfatal Drug Overdose Hospital Discharges and Deaths

## Age-Adjusted Rates for All Drug Overdose Hospital Discharges and Deaths in TN, 2023-2024




*Graph Note:*

Analysis by the Office of Informatics and Analytics, TDH (last updated March 20, 2026). Limited to TN residents. Data Source: Tennessee Death Statistical File, 2020-2024, Division of Vital Records and Statistics and Hospital Discharge Data System Data. Population data is from the Population Health Assessment Division.

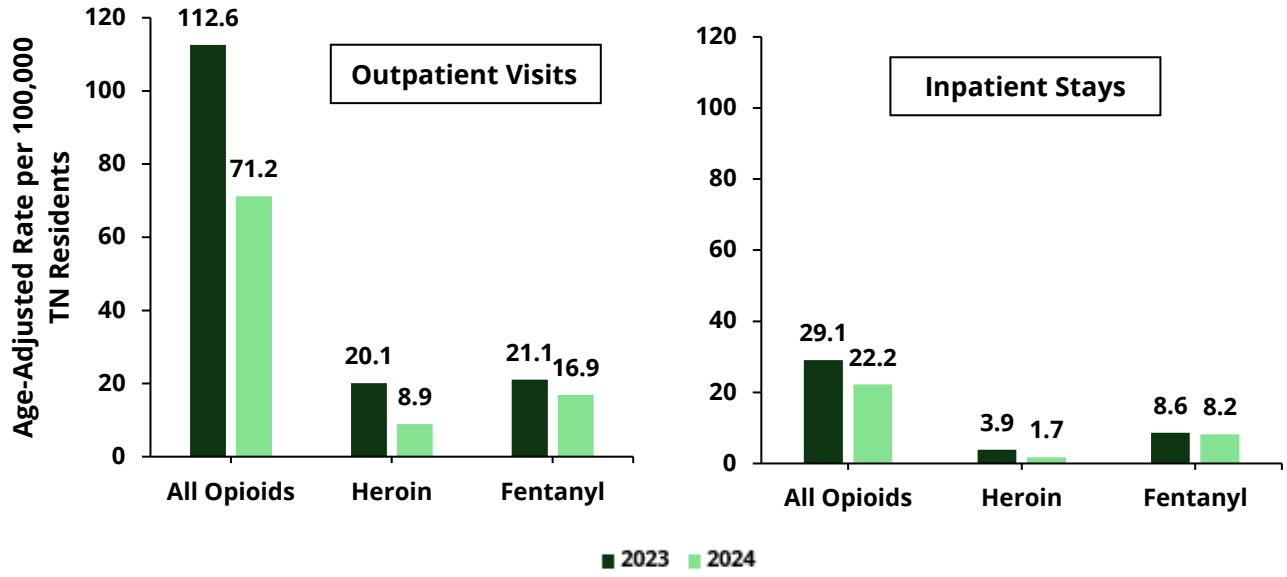
### Table: Age-Adjusted Rates for All Drug Overdose Hospital Discharges and Deaths in TN, 2023-2024

| Type | 2023 | 2024 |
|---|---|---|
| Overdose Deaths | 52.3 | 35.2 |
| Inpatient Stays | 92.1 | 80.3 |
| Outpatient Visits | 280.1 | 218.1 |

Rates of fatal and nonfatal overdoses decreased between 2023 and 2024. In 2024, there were 21,107 nonfatal drug overdose hospital discharges among Tennessee residents. The total is comprised of 6,034 inpatient stays (28.6%) and 15,073 outpatient visits (71.4%). For outpatient visits, the age-adjusted rates decreased from 280.1 in 2023 to 218.1 in 2024. For inpatient stays, the age-adjusted rates decreased from 92.1 in 2023 to 80.3 in 2024.

# Nonfatal Drug Overdose Hospital Discharges

## Age-Adjusted Rates for Opioid, Heroin, and Fentanyl Overdose Outpatient Visits and Inpatient Stays in TN, 2023-2024




*Graph Note:*
Analysis by the Office of Informatics and Analytics, TDH (last updated March 20, 2026) Limited to TN residents. Data Source: Hospital Discharge Data System. Population data is from the Population Health Assessment Division.

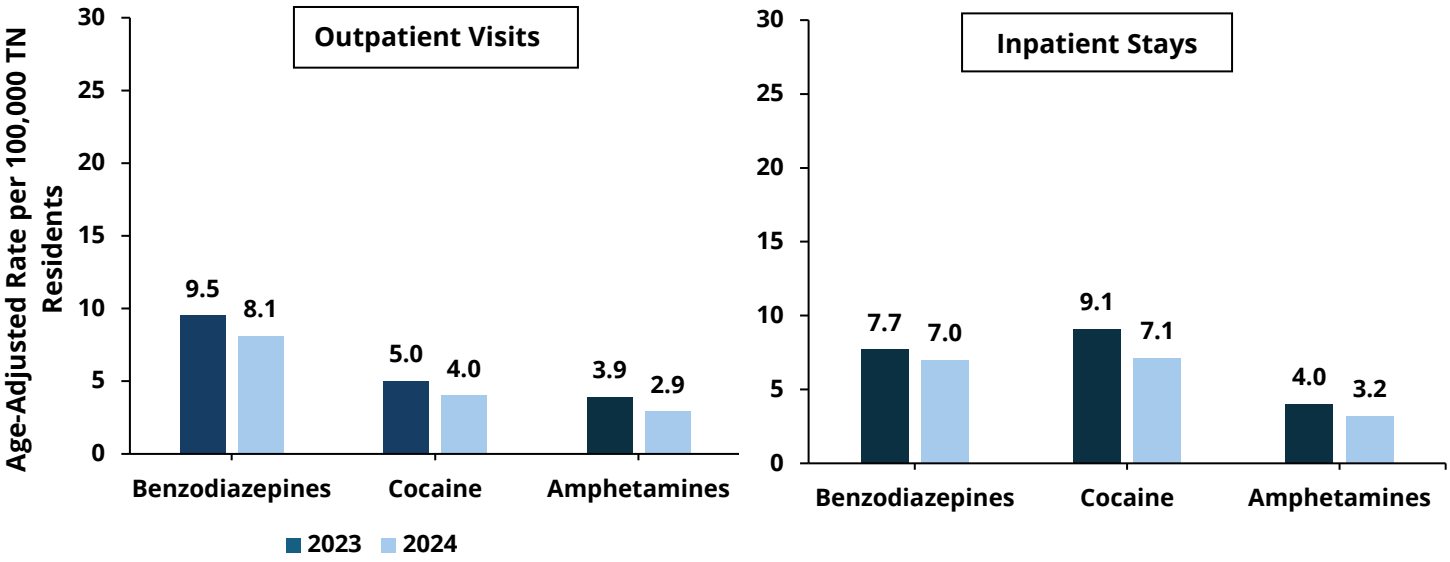
### Table: Age-Adjusted Rates of Opioid, Heroin, and Fentanyl Nonfatal Overdoses by Visit Type and Year*

| Year | All Opioid Outpatient Visits | Heroin Outpatient Visits | Fentanyl Outpatient Visits | All Opioid Inpatient Stays | Heroin Inpatient Stays | Fentanyl Inpatient Stays |
|---|---|---|---|---|---|---|
| 2023 | 112.6 | 20.1 | 21.1 | 29.1 | 3.9 | 8.6 |
| 2024 | 71.2 | 8.9 | 16.9 | 22.2 | 1.7 | 8.2 |

**Drug categories are not mutually exclusive*

In 2024, there were 6,676 hospital overdose discharges for all opioids (4,975 outpatient visits and 1,701 inpatient stays); 731 for heroin (612 outpatient visits and 119 inpatient stays); 1,731 for fentanyl (1,153 outpatient visits and 578 inpatient stays). From 2023 to 2024, rates of outpatient visits and inpatient stays decreased for all opioids. Outpatient visit rates decreased from 112.6 to 71.2 for all opioids; from 20.1 to 8.9 for heroin; and from 21.1 to 16.9 for fentanyl. Rates for inpatient stays decreased from 29.1 to 22.2 for all opioids; from 3.9 to 1.7 for heroin; and from 8.6 to 8.2 for fentanyl.

## Age-Adjusted Rates for Benzodiazepine and Stimulant Overdose Outpatient Visits and Inpatient Stays in TN, 2023-2024




*Graph Note:*

Analysis by the Office of Informatics and Analytics, TDH (last updated March 20, 2026). Limited to TN residents. Data Source: Hospital Discharge Data System. Population data is from the Population Health Assessment Division.

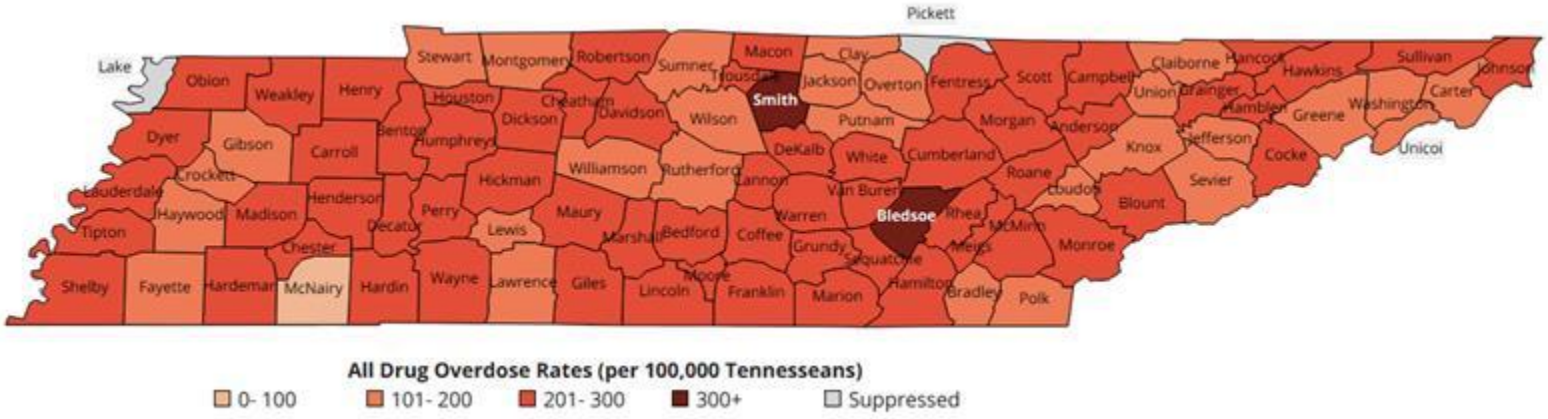
### Table: Age-Adjusted Rates of Benzodiazepine and Stimulant Overdoses by Visit Type and Year*

| Year | Benzodiazepine Outpatient Visits | Cocaine Outpatient Visits | Amphetamine Outpatient Visits | Benzodiazepine Inpatient Stays | Cocaine Inpatient Stays | Amphetamine Inpatient Stays |
|---|---|---|---|---|---|---|
| 2023 | 9.5 | 5.0 | 3.9 | 7.7 | 9.1 | 4.0 |
| 2024 | 8.1 | 4.0 | 2.9 | 7.0 | 7.1 | 3.2 |

**Drug class categories are not mutually exclusive*

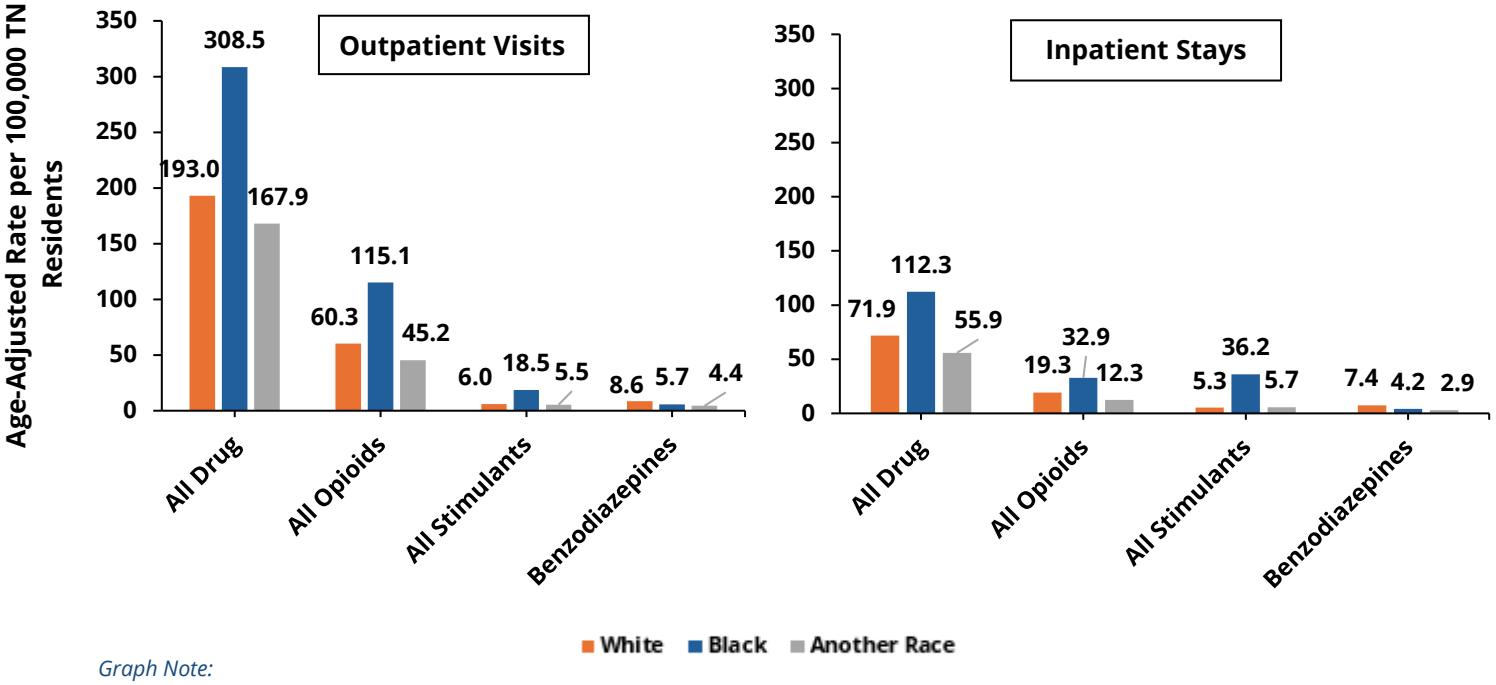
In 2024, there were 1,144 hospital overdose discharges for benzodiazepine overdoses (593 outpatient visits and 551 inpatient stays). There were 823 cocaine overdoses (539 outpatient visits and 284 inpatient stays) and 421 amphetamine overdoses (194 outpatient visits and 227 inpatient stays). The age-adjusted rates decreased for benzodiazepine, cocaine, and amphetamine outpatient and inpatient overdoses between 2023 and 2024.

# Map of Age-Adjusted Rates for Outpatient Visits related to All Drug Overdoses in TN by County of Residence, 2024




The above map shows age-adjusted rates per 100,000 residents for outpatient visits related to all drug overdoses in 2024 by Tennessee county of residence. The rates ranged from 100.0 in McNairy County to 365.2 in Bledsoe County for all drug overdose outpatient visits. Bledsoe and Smith counties had the highest rates for all drug overdose outpatient visits in 2024 (300 or higher).

## Age-Adjusted Rates for All Drug, Opioid, Stimulant, and Benzodiazepine Overdose Outpatient Visits and Inpatient Stays by Race among TN Residents, 2024




*Graph Note:*

Analysis by the Office of Informatics and Analytics, TDH (last updated March 20, 2026). Limited to TN residents. Data Source: Hospital Discharge Data System. Population data is from the Population Health Assessment Division.

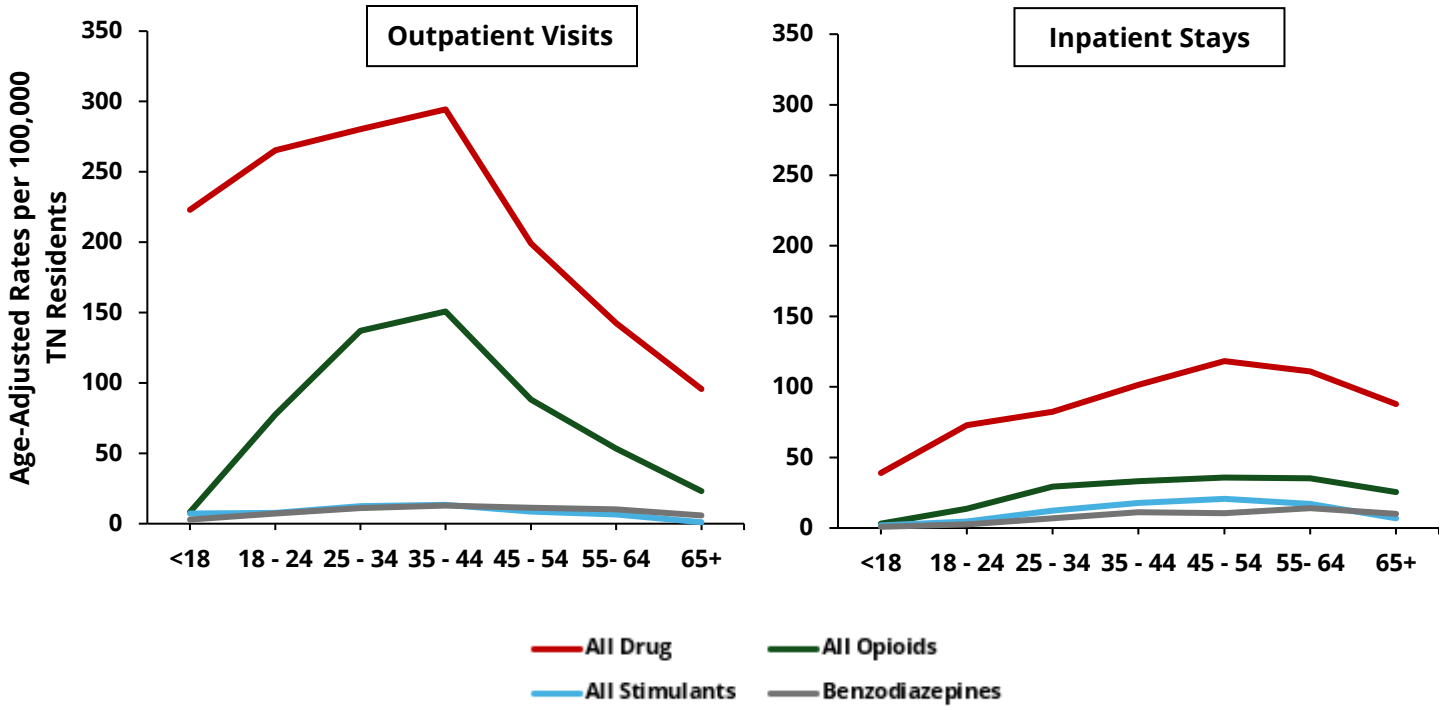
### Table: Age-Adjusted Rates of Outpatient Visits and Inpatient Stays among TN Residents by Race*

| Visit Category | Another Race | Black | White |
|---|---|---|---|
| All Drug Outpatient Visits | 167.9 | 308.5 | 193.0 |
| All Opioid Outpatient Visits | 45.2 | 115.1 | 60.3 |
| All Stimulant Outpatient Visits | 5.5 | 18.5 | 6.0 |
| Benzodiazepine Outpatient Visits | 4.4 | 5.7 | 8.6 |
| All Drug Inpatient Stays | 55.9 | 112.3 | 71.9 |
| All Opioid Inpatient Stays | 12.3 | 32.9 | 19.3 |
| All Stimulant Inpatient Stays | 5.7 | 36.2 | 19.3 |
| Benzodiazepine Inpatient Stays | 2.9 | 4.2 | 7.4 |

**The 'Another Race' category includes all races other than Black and White. Those races were combined due to small numbers.*

In 2024, White Tennesseans accounted for 69.1% (14,595) of all drug overdose hospital discharges, Black Tennesseans made up 23.6% (5,001), and other or unknown races accounted for the remaining 7.8% (1,658) discharges. Outpatient visits were the most common type of discharge for both White (10,294) and Black (3,649) Tennesseans.

## Age-Adjusted Rates for All Drug, Opioid, Stimulant, and Benzodiazepine Overdose Outpatient Visits and Inpatient Stays by Age among TN Residents, 2024

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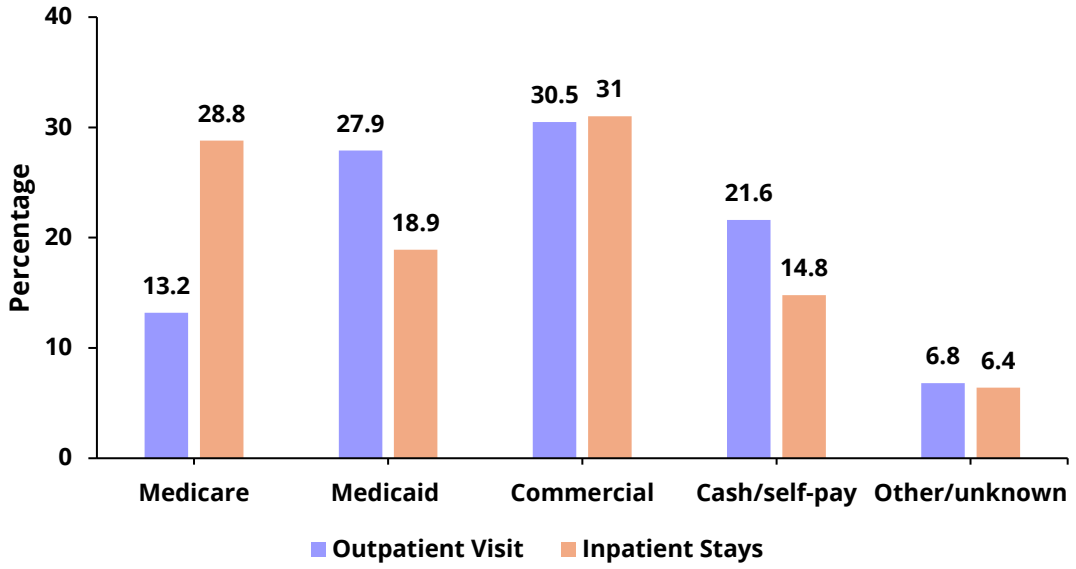
Analysis by the Office of Informatics and Analytics, TDH (last updated March 20, 2026). Limited to TN residents. Data Source: Hospital Discharge Data System. Population data is from the Population Health Assessment Division.

Tennessee residents aged 35-44 years had the highest rates of outpatient visits for all drugs (294.4), opioids (150.8), stimulants (13.4), and benzodiazepine overdoses (12.9). For inpatient stays, overdose rates were highest among those aged 45-54 years for all drug (118.3), opioids (35.8), stimulants (20.7), and age 55-64 for benzodiazepines (14.1). The table on the next page shows age adjusted rates in table form.

## Table: Age-Adjusted Rate of Outpatient Visits and Inpatient Stays among TN Residents by Age

| Visit Category | <18 | 18 - 24 | 25 - 34 | 35 - 44 | 45 - 54 | 55 - 64 | 65+ |
|---|---|---|---|---|---|---|---|
| All Drug Outpatient Visits | 223.0 | 265.3 | 280.3 | 294.4 | 199.1 | 142.4 | 95.7 |
| All Opioid Outpatient Visits | 8.3 | 77.4 | 137.0 | 150.8 | 88.2 | 53.3 | 23.2 |
| All Stimulant Outpatient Visits | 7.3 | 7.6 | 12.4 | 13.4 | 8.5 | 6.6 | 1.0 |
| Benzodiazepine Outpatient Visits | 2.9 | 7.1 | 11.2 | 12.9 | 11.4 | 10.2 | 5.9 |
| All Drug Inpatient Stays | 39.0 | 73.0 | 82.3 | 101.5 | 118.3 | 111.0 | 88.0 |
| All Opioid Inpatient Stays | 3.1 | 13.7 | 29.3 | 33.1 | 35.8 | 35.3 | 25.4 |
| All Stimulant Inpatient Stays | 1.8 | 4.6 | 12.3 | 17.7 | 20.7 | 17.0 | 7.0 |
| Benzodiazepine Inpatient Stays | 0.9 | 2.6 | 7.0 | 11.2 | 10.4 | 14.1 | 9.9 |

## Drug Overdose Hospital Discharges by Primary Payer Type in TN, 2024




*Graph Note:*

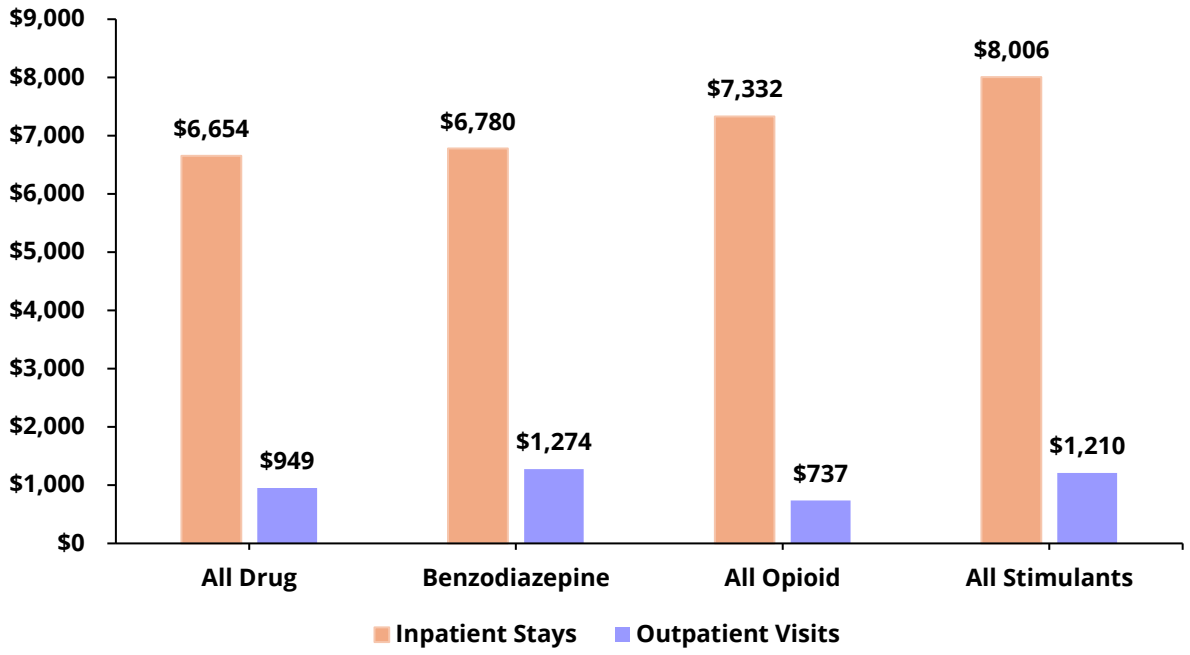
Analysis by the Office of Informatics and Analytics, TDH (last updated March 20, 2026). Limited to TN residents. Data Source: Hospital Discharge Data System.

### Table: Percent of Hospital Discharges by Primary Payer Type

| Visit Type | Medicare | Medicaid | Commercial | Cash/self-pay | Other/unknown |
|---|---|---|---|---|---|
| Outpatient Visits | 13.2 | 27.9 | 30.5 | 21.6 | 6.8 |
| Inpatient Stays | 28.8 | 18.9 | 31.0 | 14.8 | 6.4 |

In 2024, among all drug overdose outpatient visits, Commercial (30.5%), Medicaid (including TennCare) (27.9%), and Cash/self-pay (21.6%) were the most common primary payers billed for all drug overdose visits, followed by Medicare (13.2%). For inpatient stays related to all drug overdoses, the most common primary payer was Commercial (31.0%), followed by Medicare (28.8%) and Medicaid (18.9%).

## Annual Cost by Drug and Discharge Type, 2024




*Graph Note:*
Analysis by the Office of Informatics and Analytics, TDH (last updated March 20, 2026). Limited to TN residents. Data Source: Hospital Discharge Data System.

### Table: Cost of Outpatient Visits and Inpatient Stays by Drug Type among TN Residents

| Drug Category | Inpatient Stays | Outpatient Visits |
|---|---|---|
| All Drug | $6,654 | $949 |
| Benzodiazepine | $6,780 | $1,274 |
| All Opioid | $7,332 | $737 |
| All Stimulants | $8,006 | $1,210 |

The above graph presents the median cost of an overdose by drugs involved in the overdose. These categories are not mutually exclusive, as a patient may overdose simultaneously on two or more of the substances presented above, and would be included in both estimates. Nonfatal stimulant overdoses were the most expensive for inpatients ($8,006, IQR: $5,032.38-$13,869.41). Benzodiazepine overdoses were the most expensive for outpatients ($1,274, IQR: $833.44-$1,979.34).

# Conclusion

The number and age-adjusted rate of fatal and nonfatal overdoses decreased between 2023 and 2024. This year marks the second consecutive annual decline in drug overdose deaths since Tennessee began monitoring overdose data in 2013. This decrease may be attributed to the widespread naloxone distribution, changes in the drug supply, linkage to care, and education efforts. Continued investment in overdose surveillance and prevention is needed to maintain the downward trend and save lives.

Tennessee experienced a reduction in nonfatal overdoses related to all types of drugs from 2023 to 2024. Opioids are still involved in the majority of nonfatal overdoses. Racial disparities remain with Black Tennesseans experiencing higher rates of overdose compared to White Tennesseans. Primary payer types remain mixed. There is a need to further evaluate how insurance status may be a barrier or facilitator to starting treatment after an overdose event.

In 2024 outpatient visits cost an estimated $14,304,277 and inpatient stays cost an estimated $40,150,236. Continued overdose surveillance and prevention can reduce those costs and protect, promote, and improve the health and well-being of all people in Tennessee.

# Drug Overdose Data and Prevention Resources in Tennessee

## Data Resources

- The **Office of Informatics and Analytics (OIA)** offers a variety of reports on its Facts & Figures page on the TDH website, see https://www.tn.gov/health/odsurveillance.html
- OIA also hosts a public facing dashboard displaying fatal and nonfatal overdose data, prescribing trends, and social determinants of health data, see https://www.tn.gov/health/odsurveillance.html
- For any data related questions, please email: tdh.analytics@tn.gov
- TDH has curated a **TDH Health Data Portal** website. This platform allows you to search, explore, download, and share public health data, see https://healthdata.tn.gov/
- For data not available in this report or on the TDH website, please submit a request through the **TDH Data Request System** on the TDH Health Data Portal, see https://healthdata.tn.gov/stories/s/puqi-g78j

## Resources for Treatment and Prevention

- The **Overdose Response Coordination Office (ORCO)** supports TDH's overdose prevention and response efforts, oversees grant-funded activities, and cultivates and expands partnerships to strengthen the state's public health response to the overdose crisis. ORCO oversees public health interventions across the continuum of care including provider education, community overdose prevention education, coordinating overdose monitoring and response, peer navigation to treatment and recover resources from local health departments and emergency departments. For more information on ORCO programs and efforts see, https://www.tn.gov/health/orco.html
- **For Peer Navigation:** The Tennessee Department of Health **RISE (Recovery, Information, Support, and Engagement) Navigators** help individuals connect to appropriate treatment and social services in Tennessee. Navigators are embedded in settings such as hospitals, correctional facilities, EMS agencies, and select local health departments across Tennessee. To find a RISE Navigator near you, see https://www.tn.gov/health/orco.html
- **Finding Treatment:** Find Help Now is a national platform where individuals can locate substance use disorder treatment options in their communities. See https://findhelpnow.org/tn.
- **Getting Treatment Referrals:** The Tennessee REDLINE is a 24/7/365 resource for substance use disorder treatment referrals. Anyone can call or text 800-889-9789 for confidential referrals.
- **Getting Mental Health Resources:** For 24/7 mental health, substance use, or emotional crisis support, individuals can contact the 988 Suicide and Crisis Lifeline by calling or texting

988, or by chatting at 988lifeline.org. Trained crisis counselors are available to help individuals in crisis or those concerned about a loved one.

- **Overdose Prevention Training:** For overdose prevention training, tools, and resources, the **Regional Overdose Prevention Specialists (ROPS)** are located throughout the state. They can help to answer questions on overdose prevention and tools such as naloxone and testing strips. To learn more about ROPS work or to contact your local ROPS, see https://www.tn.gov/behavioral-health/substance-abuse-services/prevention/rops.html.
- **Using Naloxone:** Naloxone, commonly known as Narcan, is a lifesaving medication used to reverse the effects of opioids. TDMHSAS has developed resources about overdose and naloxone for both individuals and agencies: https://www.tn.gov/behavioral-health/substance-abuse-services/prevention/naloxone-training-information.html. Naloxone may also be available at your local health department, see https://www.tn.gov/health/health-program-areas/localdepartments.html
- **Raising Prevention Awareness in Your Community:** In counties and communities across Tennessee, substance use prevention coalitions are working to reduce use or misuse of harmful and potentially lethal substances, such as prescription drugs, alcohol, and tobacco. These local efforts, funded by the State of Tennessee since 2008, help to spread the word about the dangers and consequences of substance use. To connect with a local coalition, see https://www.tn.gov/behavioral-health/substance-abuse-services/prevention/anti-drug-coalition.html.
- **Syringe Services Programs (SSPs):** SSPs offer a range of resources to support people at all stages of substance use, including substance use education, overdose prevention support, and connections to health care. Many staff have lived experience and understand what people are going through, creating a nonjudgmental space to get support. Visit tinyurl.com/TNSSPs to learn more and to find all active locations.