

Drug Overdose Deaths in Rural and Urban Indiana Counties (2019-2022)



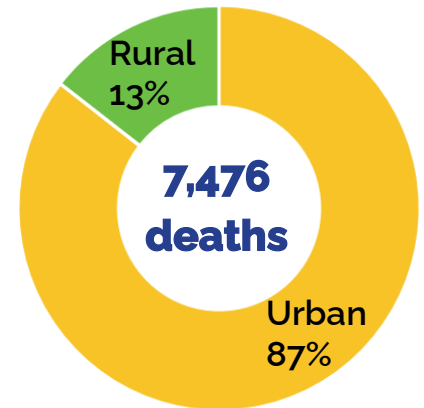
April 2024

Background

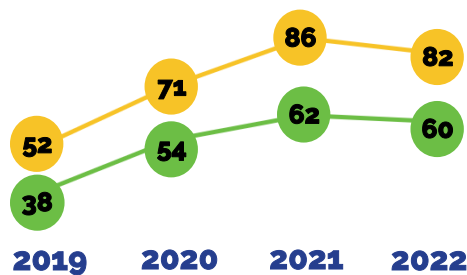
The Indiana Department of Health collects data about drug overdose deaths using the State Unintentional Drug Overdose Reporting System (SUDORS). SUDORS synthesizes death certificates, coroner or medical examiner reports and toxicology reports. This produces detailed decedent demographics and circumstances surrounding fatal drug overdoses of unintentional and undetermined intent. SUDORS complements existing drug overdose surveillance by providing additional details and qualitative data.

While both urban and rural counties have been affected by substance use disorder, investigating the differences between drug overdose deaths in rural and urban counties can help better inform prevention and treatment efforts.

This report reflects fatal drug overdose rates calculated based on IDOH Division of Vital Records mortality data as well as finalized SUDORS data for 7,476 drug overdose deaths in Indiana from 2019 through 2022. Using Economic Research Service's [2023 Rural-Urban Continuum Codes](#), 48 of Indiana's 92 counties were categorized as rural. For this report, deaths were categorized based on the county where the overdose occurred.



Trends over Time by Age-Adjusted Rate



Age-adjusted overdose death rates per 100,000 persons for **urban** and **rural** counties (IDOH Vital Records)

According to [Centers for Disease Control and Prevention \(CDC\)](#), drug overdose deaths in Indiana have been increasing for more than two decades, with more than 15,000 fatal overdoses since 1999.

[IDOH Division of Vital Records mortality data](#) reveal that from 2019 to 2022, the age-adjusted overdose death rate in urban counties was consistently higher than that of rural counties. During this time period, the overdose death rate in urban and rural counties increased.*

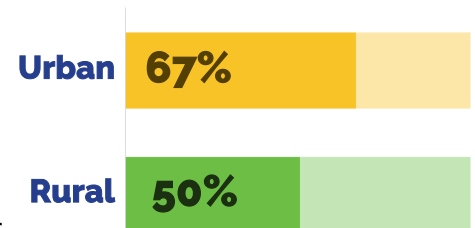
Among the 7,476 total overdose deaths from 2019 to 2022 captured in SUDORS, 87% occurred in urban counties, while 13% occurred in rural counties. Statewide, the count of overdose deaths in SUDORS increased by 41% from 2019 (1,484) to 2022 (2,097).

History of Substance Use

A higher percentage of urban decedents (67%) had evidence of substance use disorder (SUD) than rural decedents (50%). Decedents were coded to have SUD if they were perceived by themselves or others to have a problematic pattern of substance use that caused impairment. Individuals with SUD are at greater risk of fatal overdose, and they may benefit from increased access to prevention, treatment, and harm reduction services.

A higher percentage of decedents in urban counties had evidence of prior prescription opioid use than in rural counties (9% vs. 5%, respectively). Similarly, a higher percentage of urban decedents had evidence of prior heroin use than rural decedents (17% vs. 8%, respectively).

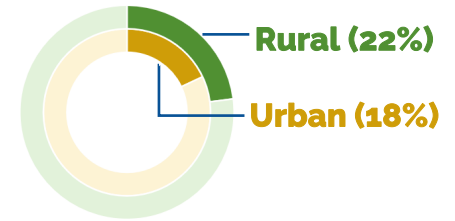
Decedents with History of Substance Use Disorder



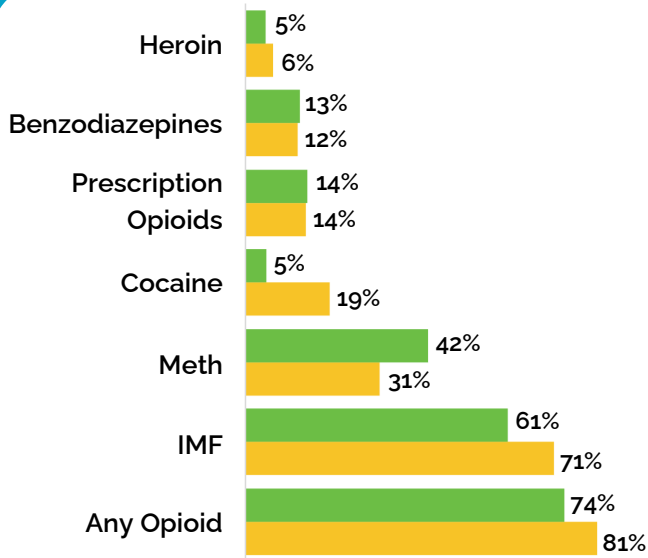
Percentage of decedents with SUD in **urban** and **rural** counties.

Causes of Death

While opioids remain the leading cause of fatal drug overdoses, opioids are not the only factor in the ever-evolving drug epidemic. According to the [Indiana Drug Overdose Dashboard](#), there has been an increase in non-opioid drug overdose deaths from 2019 to 2022 involving cocaine (78% increase) and other psychostimulants (87% increase) from 2019 to 2022. Approximately 1 in 5 rural decedents (22%) died from a non-opioid overdose, compared to about 1 out of 6 urban decedents (18%). As such, comprehensive drug overdose prevention approaches that address all types of people who use drugs are necessary.



Percentage of rural and urban decedents who died from a non-opioid overdose.



Percentage of cases listing certain drugs as a cause of death in rural (top) and urban (bottom) counties.

A Closer Look

Urban-rural comparisons of the substances listed as causes of death revealed diverging substance use and toxicology trends.** Rural counties had a higher percentage of cases listing methamphetamine (meth) as a cause of death, compared to urban counties. Conversely, urban counties had a higher percentage of overdose deaths involving any opioid, illicitly manufactured fentanyl (IMF), and cocaine. Both types of counties had similar percentages of cases involving prescription opioids, benzodiazepines, and heroin.

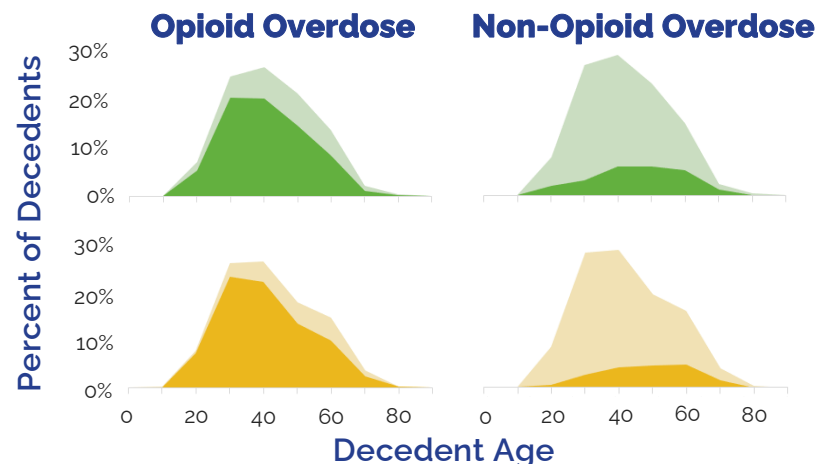
80%

of all decedents had any opioid listed as a cause of death.

Trends in Age

Most fatal overdoses were among those ages 18 to 64 (96%). Over half of all fatal overdoses were among those 25-44 years old (54%). This was similar for both rural and urban counties.

Older individuals made up a higher proportion of non-opioid fatal overdose decedents. The average age of opioid overdose decedents was 40 in both urban and rural counties. In contrast, the average age for non-opioid overdoses was higher in both urban (47) and rural (45) counties.



Age density graphs for fatal opioid (left) and non-opioid (right) overdoses in rural (top) and urban (bottom) counties.

For additional drug overdose data:

[in.gov/health/overdose-prevention/overdose-surveillance/](https://www.in.gov/health/overdose-prevention/overdose-surveillance/)

Additional Notes:

* Due to variation in SUDORS participation across counties, age-adjusted rates were calculated with IDOH Vital Records data for more representative findings. Rates were calculated using the 2000 Standard Million Population, U.S. Bureau of the Census. All other data presented are from SUDORS.

** This analysis only highlights certain substances and is not fully comprehensive of all substances related to fatal drug overdoses.

