



State Unintentional Drug Overdose Reporting System South Dakota Data Report

State Unintentional Drug Overdose Reporting System (SUDORS)

SUDORS is a surveillance system developed by the Centers for Disease Control and Prevention (CDC) to collect comprehensive data on unintentional and undetermined overdose deaths. SUDORS aims to enhance state surveillance of drug overdoses to inform the development of prevention efforts across the state with the goal of reducing overdose deaths. This information comes from death certificates, coroner reports, and toxicology reports. The information collected is then de-identified and entered into the National Violent Death Reporting System (NVDRS).

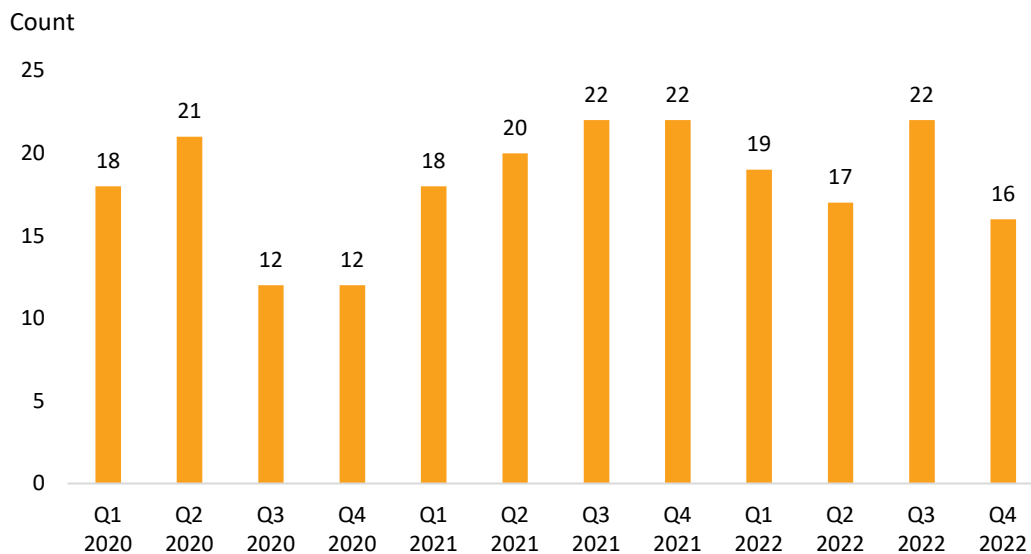
SUDORS Case Inclusion Criteria:

- Presence of any of the following underlying cause-of-death codes: X40-X44 (unintentional drug poisoning) or Y10-Y14 (undetermined intent drug poisoning)
- Acute toxicity must have caused the death (i.e., be the underlying cause of death)
- Substance types include illicit drugs, prescription and over-the-counter drugs, and dietary supplements
- Deaths that occurred in South Dakota, irrespective of residency

Unintentional and Undetermined Overdose Deaths

From 2020 to 2022, there were 219 unintentional and undetermined overdose deaths in South Dakota. There were 74 deaths in 2022, which was a 10% decrease from 82 deaths in 2021 (Figure 1).

Figure 1: Unintentional and Undetermined Overdose Deaths by Quarter, 2020-2022



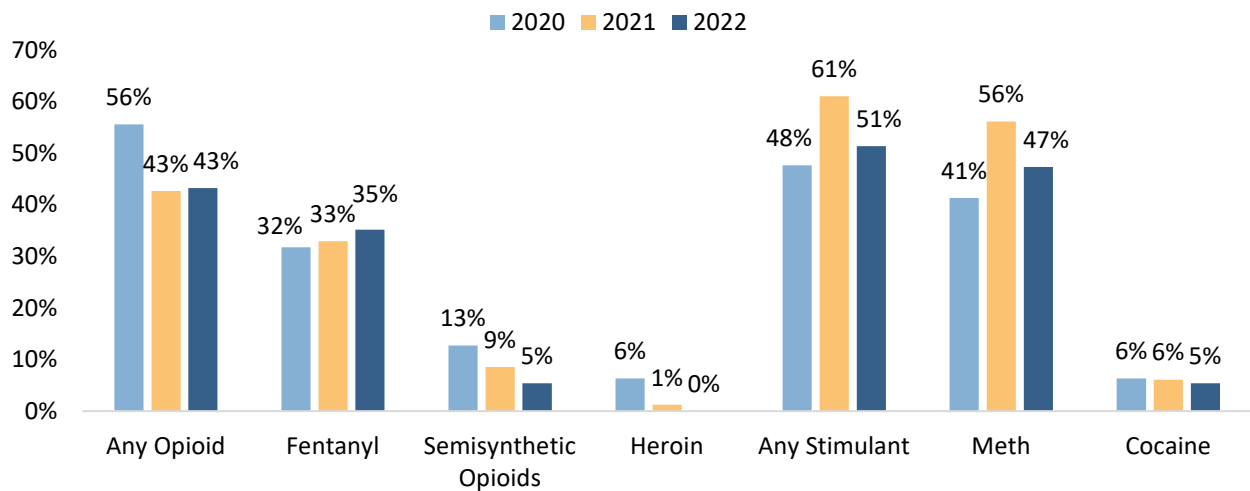
Overdose Death Manner and Type

Of the 219 overdose deaths, 98% were unintentional (accidental) overdoses and 2% were of undetermined intent. The SUDORS data is further categorized into overdose types, such as substance use/misuse, overmedication, took prescribed dosage, decedent unintentionally took a drug or wrong dosage, other, and unknown. The type of overdose isn't always known, but the most common overdose category was overdose related to substance use/misuse at 77%.

Substance(s) Listed as Cause of Death

A substance can be listed on the death certificate as being involved with the cause of death. Some deaths may be attributed to more than one substance. Figure 2 represents the percentage of deaths by substance(s) attributed to the cause of death. From 2020-2022, the largest proportion of deaths involved a stimulant (54%), followed by an opioid (47%). During all three years, methamphetamine was the most common stimulant and fentanyl was the most common opioid involved in unintentional and undetermined overdose deaths. (Note: semisynthetic opioids include oxycodone, hydrocodone, hydromorphone, and oxymorphone)

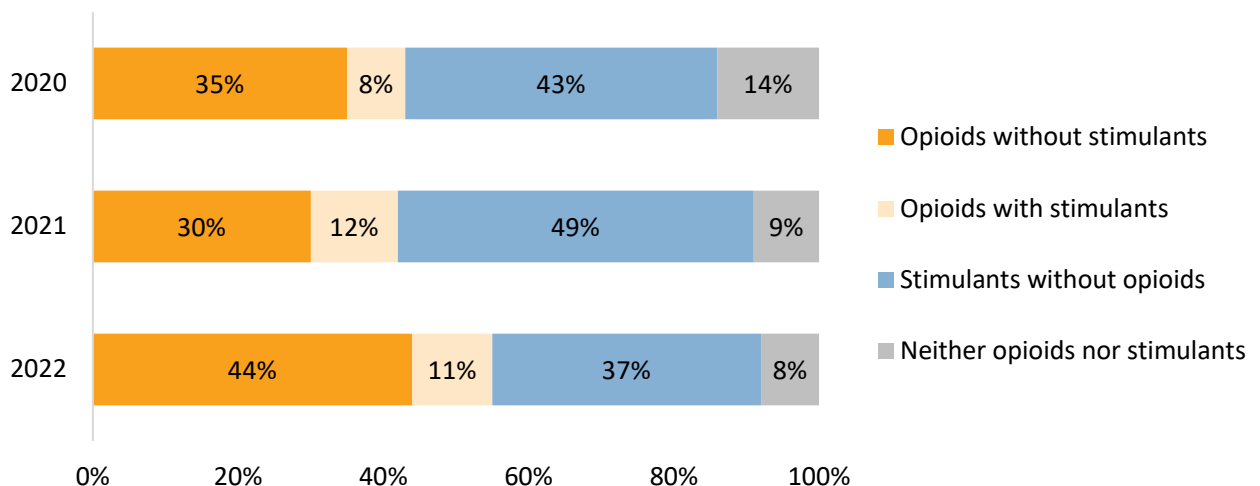
Figure 2: Deaths by Substance(s) Listed as Cause of Death



Opioid and Stimulant Involvement

Opioids and stimulants account for the largest proportion of overdose deaths in South Dakota. Figure 3 shows the different combinations of opioid and stimulant involvement in deaths. In 2022, the largest proportion of deaths were related to opioids without any stimulants (44%), followed by stimulants without any opioids (37%). The previous two years, 2020 and 2021, stimulants without any opioids made up the largest proportion of deaths.

Figure 3: Deaths by Opioid and Stimulant Involvement



High-Risk Populations

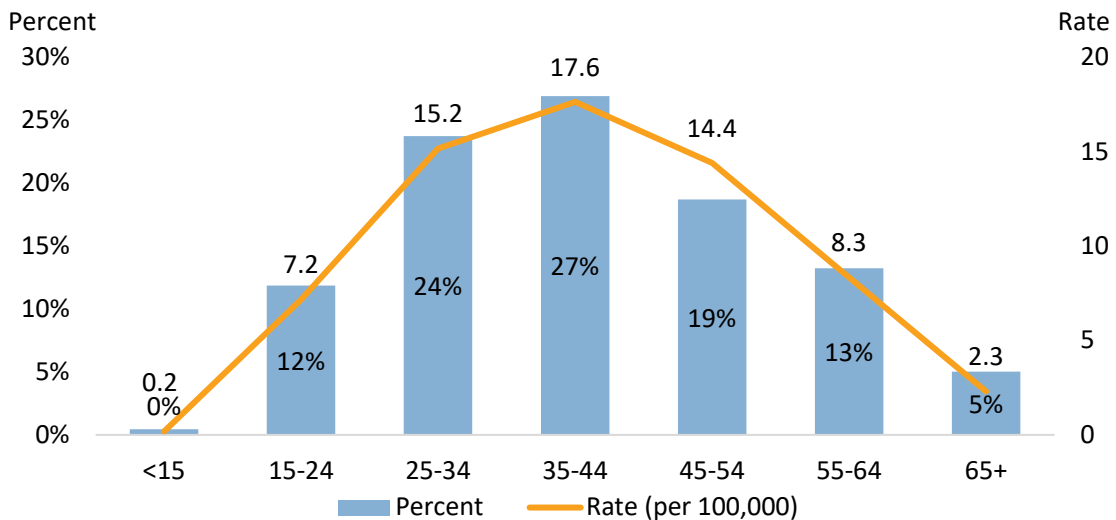
Sex

Overall, males made up the largest proportion of unintentional and undetermined overdose deaths compared to females. From 2020-2022 males made up 59% of overdose deaths and had a rate of 9.4 deaths per 100,000. Females made up 41% of overdose deaths and had a rate of 6.8 deaths per 100,000.

Age

Overdoses impact many different age groups. Individuals aged 35 to 44 years were at the highest risk for unintentional and undetermined overdose deaths compared to all other ages (Figure 4).

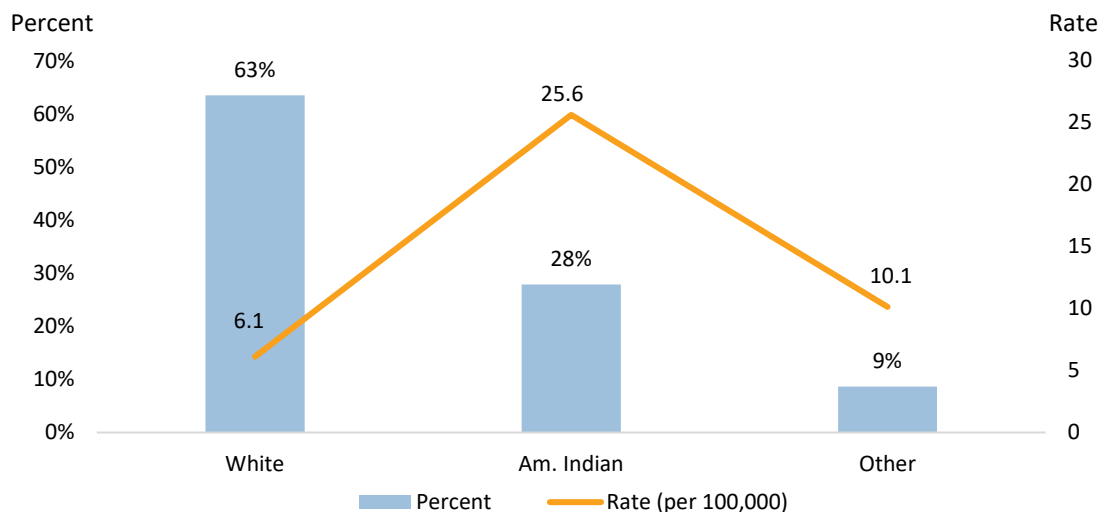
Figure 4: Unintentional and Undetermined Overdose Deaths by Age Group, 2020-2022



Race

From 2020-2022, 63% of unintentional and undetermined overdose deaths were White, 28% were American Indian, and 9% Other (Black, Asian, or unknown). American Indians died of overdose deaths at a rate four times higher than Whites (25.6 vs. 6.1 per 100,000) (Figure 5).

Figure 5: Unintentional and Undetermined Overdose Deaths by Race, 2020-2022



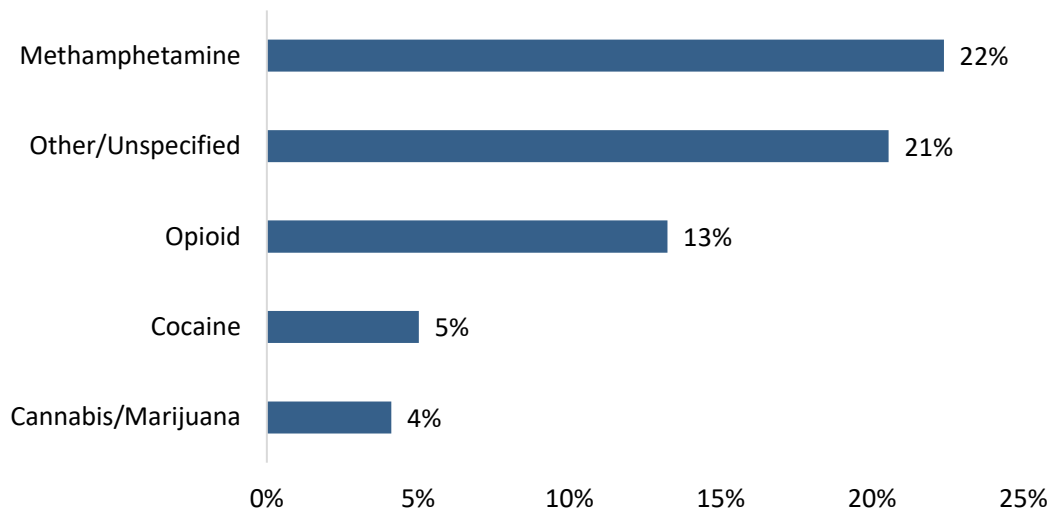
Overdose Death Circumstances

This section includes the circumstances surrounding overdose deaths documented in coroner reports. Persons who died by overdose may have had multiple circumstances, and it was possible that other circumstances could have been present and not diagnosed, known, or reported.

Substance Use History

Based on information in the coroner report, 56% of overdose deaths reported a known substance use history. Of these deaths with a known substance use history, 22% had a history of methamphetamine use, 21% had an other/unspecified substance use history, and 13% had a history of opioid use. Unspecified substance use history indicates they had a known substance use/drug use history, but no specific substance/drug was reported. An individual could have a substance use history for multiple types of drugs.

Figure 6: Substance Use History by Type of Substance, 2020-2022



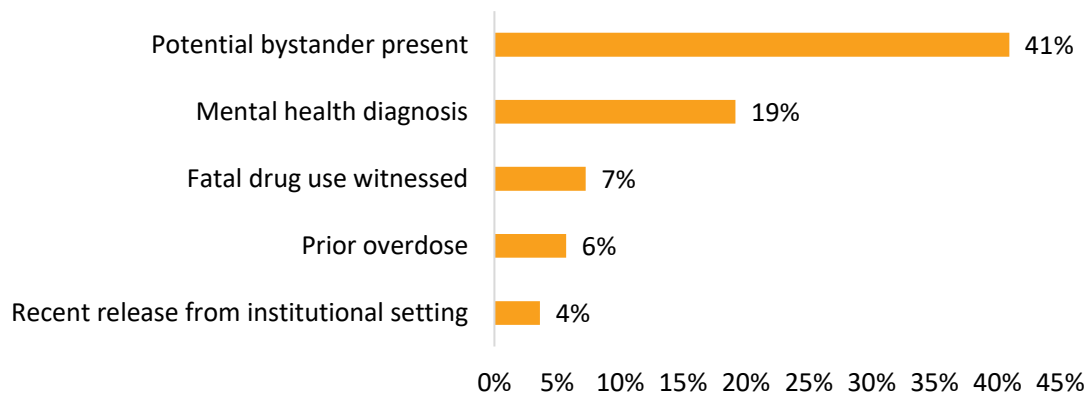
Evidence of Drug Use

Based on scene or witness evidence, 51% of cases had any evidence of drug use. Of these cases, 25% had evidence of illicit drug use and 24% had evidence of prescription drug use. Evidence of illicit drugs can include witness report, counterfeit pills, substance (powder, crystal, tar), and other drug paraphernalia. Evidence of prescription drugs can include witness report, prescription bottle, pills/tablets, and patch. The most common routes of drug administration were ingestion, injection, and smoking. It is important to note that these categories are not mutually exclusive in that multiple forms of evidence can be present.

Opportunity for Intervention

Certain circumstances could indicate that there was an opportunity for intervention. Of the deaths with a coroner report available, 60% had at least one potential opportunity for intervention. A potential bystander was present in 41% of deaths, indicating there may have been an opportunity to provide life-saving actions at the time of the overdose. A bystander is someone physically nearby either during or shortly preceding a drug overdose. Figure 7 shows the percentage of deaths that had a circumstance that might have provided an opportunity for intervention.

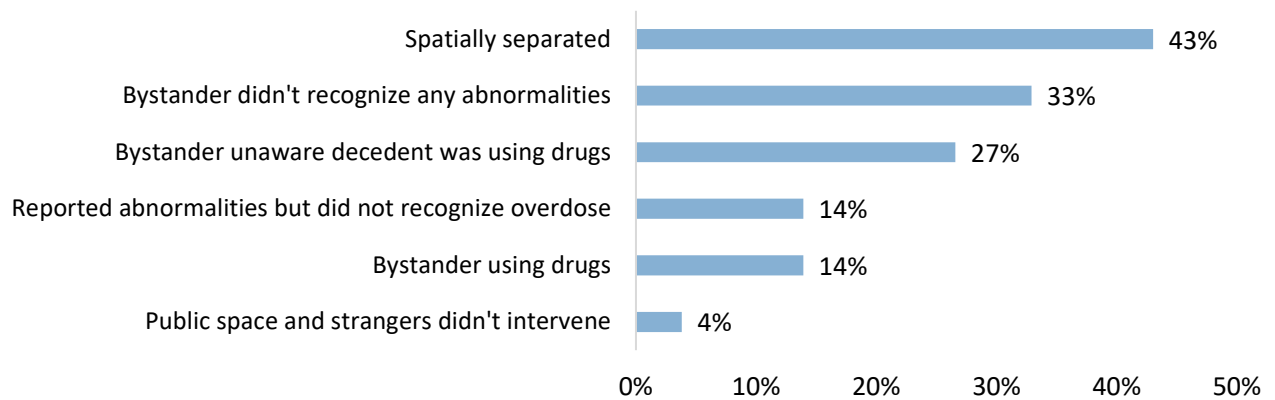
Figure 7: Overdose Deaths by Circumstances, 2020-2022



Bystander Response

Multiple bystanders could be present during or shortly preceding an overdose. Of the deaths where a bystander was present, most bystanders knew the decedent. The most common type of bystander was a partner or ex-partner (37%). Other bystanders included friend/roommate (29%), family (28%), and other/unknown types of bystanders (16%). Some common responses of a bystander to an overdose include calling 911, performing CPR, and transporting to medical care. Sometimes bystander response can be delayed, or no lifesaving responses were made. There could be multiple reasons for no response or delayed response. The most common reason for no response or a delayed response was the bystander being spatially separated from the decedent. Figure 8 shows the reasons for a delayed response or no response from a bystander.

Figure 8: Reasons for Delayed or No Response from a Bystander, 2020-2022



Location of Injury and Death

During 2020-2022, most unintentional and undetermined overdoses occurred in a house/apartment (79%). Other places where overdoses occurred include hotel/motel (5%), street/highway/sidewalk (3%), facilities (hospital, jail, shelters) (3%), natural areas (field, river, woods) (3%), and other/unknown areas (7%). Of the 219 SUDORS cases, 48% of the deaths occurred in the decedent's home, 22% occurred at the emergency department/hospital, 11% occurred in another residence (ex: friend's house) and 18% occurred in another location. Almost 60% of overdose deaths occurred in a residence and less than a quarter of decedents are transported to the emergency department/hospital for care before being pronounced deceased.

Overdose Prevention

Drug addiction is a complex disease but there are treatments available to help individuals successfully manage daily life. For people, or loved ones, struggling with addiction, call the South Dakota Resource Hotline at 1-800-920-4343. The Resource Hotline offers free and confidential support that is available 24 hours a day. Trained staff can answer all kinds of questions and help get you and your family on the path to recovery. For more information and data around opioids or overdoses, visit the Avoid Opioid website <https://www.avoidopioidsd.com/>.



Conclusion and Acknowledgements

The data in this report represents information about unintentional and undetermined overdose deaths, collected through the State Unintentional Drug Overdose Reporting System (SUDORS) on deaths that occurred in South Dakota. Data presented in this report may differ from other reports due to when the data was pulled from the NVDRS and how the data was analyzed. This report does not provide a complete description of every single factor that could have led to a person's death due to drug overdose. The purpose of collecting and presenting this data was to increase knowledge around overdose deaths and to support prevention programs by identifying potential opportunities to intervene and prevent overdoses. The contents of this report were solely the responsibility of the authors and does not necessarily represent the official views of the Centers for Disease Control and Prevention.

Thanks to our partners and contributing staff for making this work possible.