State Unintentional Drug Overdose Reporting System (SUDORS)

Drug Overdose Deaths Remain at Historically High Levels in the United States
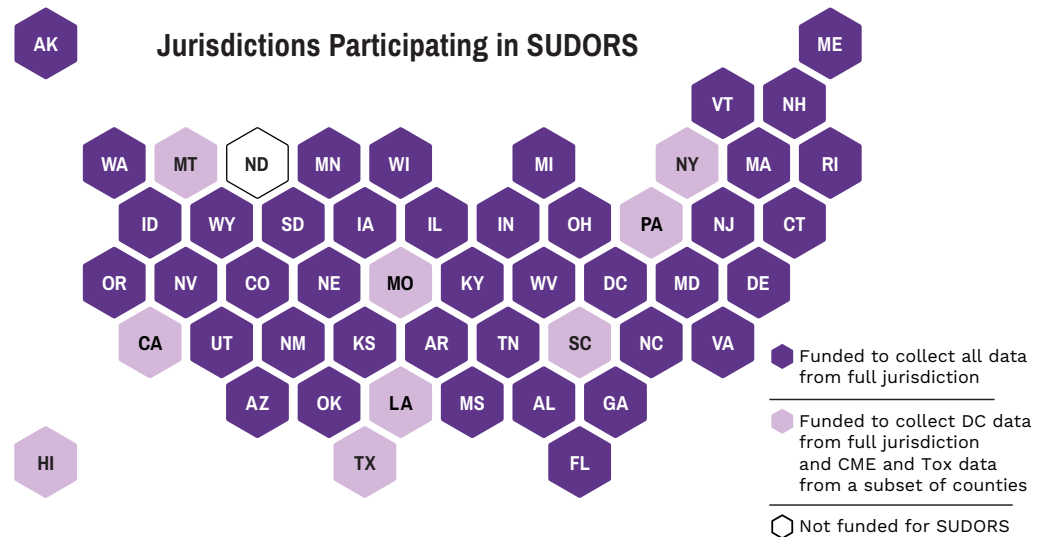
Drug overdose deaths are a leading cause of injury-related death in the United States. Timely and comprehensive surveillance and evidence-based prevention and response strategies remain essential for reducing overdose deaths.

SUDORS Provides Comprehensive Information on Drug Overdose Deaths

In 2016, the **State Unintentional Drug Overdose Reporting System (SUDORS)** began as part of CDC's Enhanced State Opioid Overdose Surveillance (ESOOS) program, to provide comprehensive data on opioid overdose deaths. In 2019, SUDORS expanded to collect data on **all drug overdose deaths** in 47 states and the District of Columbia as part of CDC's Overdose Data to Action (OD2A) program. In 2023, SUDORS expanded again to include **49 states and the District of Columbia as part of CDC's** OD2A in States **program**. Each of these 50 funded jurisdictions collects and abstracts data on unintentional and undetermined intent drug overdose deaths from 3 required sources: **1) death certificates (DC); 2) coroner/medical examiner (CME) reports (including scene evidence, witness reports, and autopsy reports); and 3) postmortem toxicology (Tox) reports** for entry into a web-based CDC platform that is shared with the National Violent Death Reporting System (NVDRS).

The overall goal of SUDORS is to inform overdose prevention and response efforts by:

1. providing a **better understanding of the circumstances** that surround overdose deaths,

2. identifying **specific substances causing or contributing** to overdose deaths, as well as **emerging and polysubstance** overdose trends, and

3. improving fatal overdose data **timeliness and accuracy.**

Jurisdictions Participating in SUDORS

Funded to collect all data from full jurisdiction

Funded to collect DC data from full jurisdiction and CME and Tox data from a subset of counties

Not funded for SUDORS

SUDORS Incorporates Multiple Data Sources

Data abstracted from death certificates, coroner/medical examiner reports, and postmortem toxicology reports yield more than 600 data elements. Examples of data elements captured from each source are:

Death Certificates

- Demographics
- County and state where overdose occurred
- Cause and manner of death
- Other significant conditions contributing to death
- How overdose occurred
- Place of death (e.g., hospital, home)
- Date of death

Coroner/Medical Examiner Reports

- History of prior overdoses
- Treatment for substance use disorders
- Prescription drug misuse or illicit drug use history
- Routes of drug use (e.g., injection, smoking)
- Presence of bystanders
- Naloxone administration

Postmortem Toxicology

- All drugs detected
- Drugs contributing to death
- Date specimens were collected

SUDORS Data Are Unique

Multiple methods are used to identify drug overdose deaths.

Jurisdictions can use relevant **ICD-10 cause of death codes** (X40–X44 and Y10–Y14), for unintentional and undetermined intent overdose deaths, respectively), scans of the **text-based cause of death information**, and reviews of **coroner/medical examiner reports** to identify unintentional and undetermined intent drug overdose deaths.

SUDORS includes data on the drugs that caused death as well as additional drugs detected.

The comprehensive postmortem toxicology information in SUDORS offers a more thorough picture of **what drugs were being used** at the time of death, and of **polysubstance use**, than is available elsewhere.

SUDORS data can capture newly emerging drugs.

SUDORS captures information on **specific drugs** rather than just drug classes (for example, methamphetamine rather than psychostimulants with abuse potential). Additionally, the SUDORS system is **flexible, allowing for new drugs to be added in real-time** as SUDORS staff identify them on toxicology reports. Together, these capabilities mean that SUDORS data can quickly capture newly emerging drugs.

Data on circumstances and scene evidence provide the context surrounding overdose death.

SUDORS data go beyond toxicology and demographics to provide a look into the **life of the decedent** (for example, medical history, substance use disorder treatment history, and criminal justice involvement) and describe **how the overdose death occurred**.

SUDORS narratives provide the who, what, where, when, and why of the overdose death.

SUDORS staff write a **complete description for each overdose death detailing all components** (such as cause of death, circumstances, and toxicology) in one place. These narratives provide additional context for understanding the overdose and supporting information on circumstances captured within the system. For example, if there is an indication of "previous drug overdose" in the system, the narrative might provide context about the timing of the previous overdose, drug(s) involved, and any treatment received. These narratives lend themselves to in-depth qualitative analyses of the context and circumstances of overdose deaths, which can inform prevention efforts.

SUDORS Data Can Be Used for Action

SUDORS data lend themselves to multiple different types of analyses because of the richness of the data and the different types of information that are collected.

For example, analyses might focus on **trends** in deaths involving specific drugs over time, comparisons of **circumstances surrounding overdoses** between time periods or across decedent demographics, or **qualitative assessments of overdose** context using incident narrative text data. As a result, SUDORS data can be used for action in the following ways:

Educating partners about location-specific circumstances and risk factors.

Alerting health providers, public health professionals, coroner and medical examiner offices, and other partners of newly emerging drug threats.

Informing drug overdose prevention and response planning and strategies using toxicology and circumstance data.

Evaluating the impact of overdose prevention and response efforts.

State and local jurisdictions are increasingly better informed by systems like SUDORS, which presents comprehensive information on the characteristics and circumstances surrounding drug overdose deaths to inform prevention and response efforts. Find more information about SUDORS and CDC-published reports on the CDC SUDORS webpage, SUDORS Data Dashboard, Drug Overdose MMWR Articles Webpage, and Journal Articles Webpage.

Learn more about CDC's Overdose Data to Action in States program
www.cdc.gov/drugoverdose/od2a/state

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