

NC-SUDORS: Using Fatal Overdose Data to Drive Action



NC DEPARTMENT OF HEALTH AND HUMAN SERVICES
Division of Public Health

The State Unintentional Drug Overdose Reporting System (SUDORS) was developed by the Centers for Disease Control and Prevention (CDC) as a response to the opioid overdose epidemic to enable states to collect detailed overdose death information. The goal of SUDORS is to aid researchers, legislators, local health departments, and community-based organizations in the development of public health prevention strategies to reduce overdose deaths. SUDORS consistently captures over 200 variables for overdoses of unintentional or undetermined intent, and a significant benefit of SUDORS is the rich circumstance data provided. These circumstance data highlight **opportunities where intervention could save lives.**

DHHS acknowledges the diligent efforts of the NC-SUDORS data abstractors, housed at the Office of the Chief Medical Examiner (OCME) and the Injury and Violence Prevention Branch (IVPB). Their extraordinary attention to detail is imperative to this program.

NC-SUDORS Overview

The SUDORS program in North Carolina was funded by CDC in 2017 and NC-SUDORS began collecting data on fatal opioid-related overdoses in 2018.

In 2019, SUDORS programs across the nation — including North Carolina — expanded to collect data on ALL drug overdose deaths as part of CDC's Overdose Data to Action (OD2A) program.

Data from **death certificates, medical examiner reports, and toxicology testing results** for decedents* from North Carolina are abstracted and entered into NC-SUDORS.

These data aid understanding of the context in which overdose deaths occur in North Carolina.



Death Certificates

- Demographics
- Decedent residence information
- Cause of death information



Medical Examiner/Coroner Reports

- Scene evidence of drug use
- Timing and context of overdose
- Medical and social history/circumstances



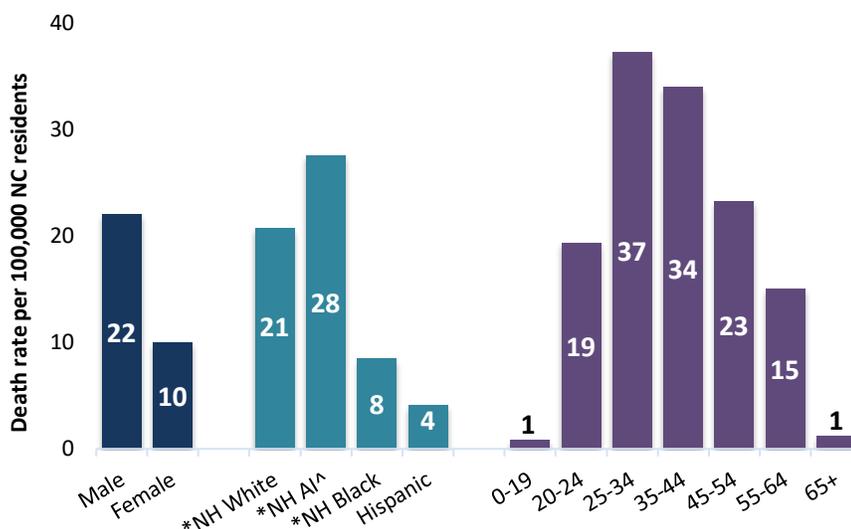
Toxicology Results

- All substances detected
- Substances that caused death
- Prescription status of substances

*A decedent is defined, for the purpose of this analysis, as a North Carolina resident who died of an overdose of unintentional or undetermined intent within North Carolina state lines. Other data systems and analyses may define a decedent differently.

Image source: CDC SUDORS workgroup call September 18, 2019

Demographic Snapshot, NC-SUDORS, 2018



Demographic data were available for 100% (n=1665) of North Carolina resident overdose deaths recorded in NC-SUDORS for 2018.

The overdose death rate for male decedents was over twice the rate for female decedents.

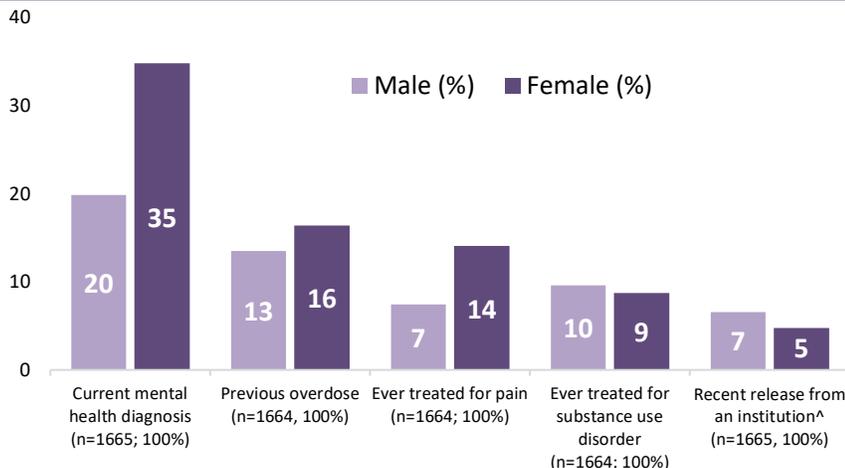
Non-Hispanic American Indians had the highest rate of overdose deaths, followed by Non-Hispanic Whites.

Fatal overdose rates were **highest among adults aged 25-44**, and were lowest among those 19 and younger and 65 and older.

*NH: Non-Hispanic. ^aAI: American Indian (Pacific Islander, Other, Unknown, and Asian rates are not reported due to 5 or fewer deaths)

Source: NC-SUDORS, 2018

Healthcare System Intervention Opportunities*, NC-SUDORS, 2018



Opportunities for intervention exist **every time** a patient interacts with a medical provider in the healthcare system.

47% of 2018 NC-SUDORS decedents had at least one documented interaction with a healthcare provider[§] prior to his or her fatal overdose.

35% of female and 20% of male decedents were known to have at least one current mental health diagnosis at the time of fatal overdose. When accounting for undiagnosed or undocumented mental health conditions, this value is likely higher.

*Circumstance data were known for 100% (n=1664-1665) of 2018 NC-SUDORS decedents

[^]Deaths that occurred within a month of the decedent being released from or admitted to an institutional setting (includes jail, prison, detention facility, hospital, psychiatric hospital, etc.)

[§]NC-SUDORS interactions include documentation of ≥ 1 visit with a healthcare provider in the above categories

Source: NC-SUDORS, 2018

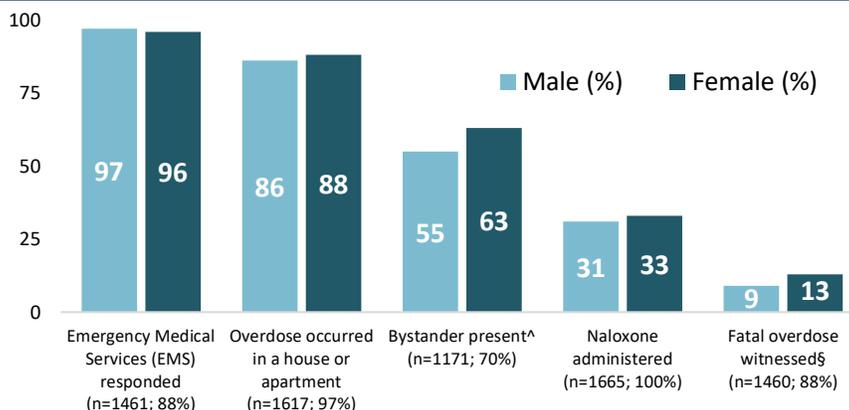
Overdose Location and Response*, NC-SUDORS, 2018

NC-SUDORS also captures overdose location and response details; these data can be used to inform and guide overdose prevention efforts.

Although a bystander[^] was known to be present 58% of the time, **naloxone was only administered 31% of the time**.

Naloxone and directions for use should be provided to individuals at risk of overdose, their family, and friends. Access to naloxone is critical.

Only 10% of all fatal overdoses were witnessed[§]. Overdose prevention efforts should include harm reduction concepts, such as "Never use alone!" messaging.



*Availability of known circumstance data varied from 70-100% of 2018 NC-SUDORS decedents; percentages calculated based on total known for each variable.

[^]A bystander is an individual who was physically nearby, either during or shortly preceding a drug overdose, who potentially had an opportunity to intervene and respond to the overdose.

[§]A witness is an individual, aged 11 years or older, who witnessed the decedent use the substance(s) that resulted in his/her overdose.

Source: NC-SUDORS, 2018

Additional Resources

[North Carolina's Opioid Action Plan \(OAP\)](#)

Developed with community partners, this action plan focuses on prevention, reducing harm and connecting to care.

[North Carolina Safer Syringe Initiative](#)

All registered syringe service programs in NC provide naloxone. Click here for a list of locations, hours, and counties served.

[Naloxone in North Carolina](#)

Offers general information about naloxone, how to establish a standing order, and where to locate naloxone locally.

[North Carolina Harm Reduction Coalition](#)

Provides technical assistance on overdose prevention and naloxone distribution to community based organizations, law enforcement, and local health departments. Click here to learn more.



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