

# Updates to Overdose Emergency Department Visit Indicators

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## Overview

In 2025, IVPB updated the indicators used to monitor emergency department (ED) visits for overdoses of unintentional and undetermined intent in the North Carolina Disease Event Tracking and Epidemiologic Collection Tool ([NC DETECT](#)).

These indicators track ED visits related to acute medication/drug overdoses, including opioid overdoses.

- They do not include ED visits related to alcohol or chronic effects of substance use, unless a medication/drug overdose was also identified within the visit.

This change in the indicators:

- Identifies more ED visits due to overdose in NC DETECT.
- Aligns IVPB case definitions for overdose ED visits more closely to CDC overdose case definitions that were released in 2024.
  - Visit the “About nonfatal overdose syndromic surveillance” drop down on the [CDC Drug Overdose Surveillance and Epidemiology \(DOSE\) webpage](#) for more information on CDC overdose case definitions.
- Gives a more realistic idea of the burden of overdose in NC.

## WHAT IS SYNDROMIC SURVEILLANCE?

Syndromic surveillance systems help to detect, understand, and monitor health threats quickly, in near real time.

- These systems use syndromes, a type of indicator, to identify ED visits based on key words and phrases, as well as ICD-10-CM diagnosis codes.
- For more information, visit [Understanding Surveillance Case Definitions](#).
- NC DETECT is NC’s statewide syndromic surveillance system.
- NC DETECT is the timeliest data source available to monitor overdoses.

[Monthly Overdose ED Visit Reports](#) have been updated to use these new indicators.

## What Changed

Case definitions for NC overdose indicators were updated to be more similar to indicators the CDC uses.

Below is a comparison of what elements are included in the new NC indicators compared to the old NC indicators.

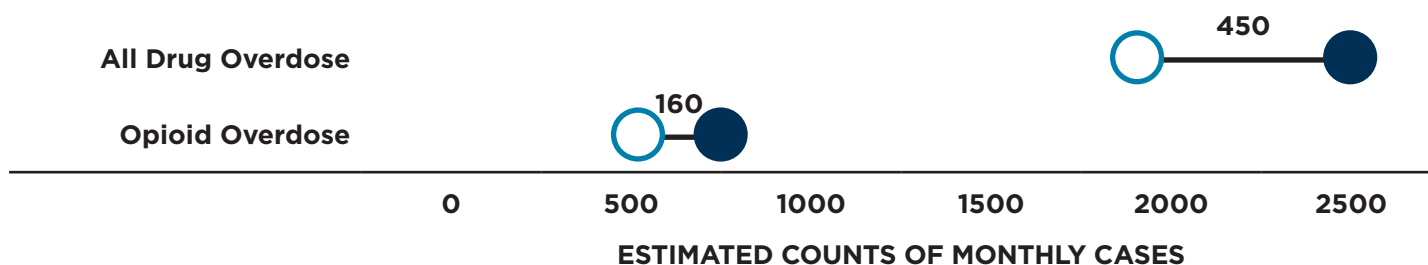
### Elements of Overdose ED Visit Indicators

	New NC Indicators	Old NC Indicators
ICD-10-CM Codes for Unintentional Overdoses	●	●
ICD-10-CM Codes for Overdoses of Undetermined Intent	●	
ICD-10-CM F-Codes for Substance Abuse with Intoxication	●	
Overdose Keywords in the Chief Complaint Field	●	

The table above shows the differences between what is included in the new NC overdose indicators and what was included in the overdose indicators NC used previously.

## New overdose indicators captures additional ED visits compared to old overdose indicators.

New indicators find about 450 more overdose cases statewide each month. However, the trend, or overall pattern in overdose ED visits over time does not change.



The figure above shows the difference in the estimated number of all drug overdoses and of opioid overdoses that were identified using the old NC indicator compared to the new NC indicator.

## Why Were the NC Overdose Indicators Updated?

The CDC released updated overdose case definitions in 2024. After validating the new CDC case definitions, IVPB decided to implement similar changes to align NC's overdose case definitions more closely to CDC's.

IVPB first tested the new case definitions against NC's data to make sure they were a good fit.

- IVPB compared the CDC indicators used to monitor overdose ED visits nationally with NC indicators in NC DETECT.
  - CDC indicators identified more cases by using overdose keywords found in the chief complaint, ICD-10-CM codes for substance abuse and overdoses of undetermined intent, and additional ICD-10-CM codes in their case definitions.
  - Including keywords can help find ED visits for overdoses that haven't been assigned an ICD-10-CM code for an overdose yet.
  - After a detailed review, most of these additional cases could be validated as overdoses and should be included.

Please reach out to us if you have any questions about the updates to the overdose ED visit indicators.

- Email us at [SubstanceUseData@dhhs.nc.gov](mailto:SubstanceUseData@dhhs.nc.gov), or
- [Schedule time](#) to chat with an IVPB epidemiologist during our Epidemiology Office Hours
- See the [custom injury data request](#) page for more details.

**FOR MORE RESOURCES:**

Visit our [Injury Data Users Toolkit](#)

