Using Provisional Data for Monitoring Injuries

What Are Provisional Data?

Provisional data are early numbers or datasets with the information that is available now.

- These data have not yet been fully checked.
- They don't have all the information they normally would have before being considered final.

Why Does IVPB Use Provisional Data?

Provisional data help us to predict trends, so we know when to act and how.

Having access to the most up-to-date information is critical for responding to health problems, managing resources, and planning public health prevention activities.
- Final data are the most accurate and complete, but it can take a long time to get all the information needed for the data to be considered final.
- Provisional data give helpful insights into what's going on so far.

What Are Final Data?

Final data are data that have been reviewed and have been confirmed to be correct and complete.

They have all or most of the information needed for the data to be used in public health surveillance, analysis, and reporting. This can refer to a full year of data (year-end data) or individual records that make up the data for a given year.

- **Final Record –** All available information on a single death or health event is collected.
    - A single record or group of records in the data can be considered final when the full year of data is still provisional.

- **Final Year-End Data –** Most of the information has been collected and processed for all records reported to a data system for a single year.
    - Sometimes there is information that is still unavailable after the normal data processing time has passed.
    - The year-end data are reviewed and then considered final and complete, even if some information is missing, so that the data can be used for analysis and reporting.
    - The data usually are not updated after the year-end data have been finalized.

Considerations for Using Provisional Data?

Provisional data should be used carefully because there may be missing information or delays in reporting.

- Because data are always being collected and updated, provisional data can change as new information is added.
- How complete provisional data are varies by data source, data system, and when the data are accessed.
- The quality and completeness of the information can also be different for different groups of people in the same data source.

Whenever provisional data are used a note should be included to share with audiences that the data are provisional.

- This allows people using the data to know that the data can change so they can use the data appropriately.
- For example:
  - Report Title: North Carolina Emergency Department (ED) Visits for Opioid Overdose: April 2025* Update
  - Report Footnote: *Data for 2024 - 2025 ED visits are provisional.

Provisional death certificates may have a pending cause of death code (R99) listed for a record while the death is still being investigated. This cause of death code is usually updated to a code for a specific cause of death before the data are finalized.

Example Provisional Death Certificate Record

First Name	Last Name	Sex	Age	Race/Ethnicity	Cause of Death	Description
John	Doe	Male	44	Non-Hispanic White	R99	Ill-defined and unknown cause of mortality

Example Final Death Certificate Record

First Name	Last Name	Sex	Age	Race/Ethnicity	Cause of Death	Description
John	Doe	Male	44	Non-Hispanic White	X42	Accidental poisoning by and exposure to narcotics and hallucinogens

There are Benefits and Drawbacks to Using Provisional Data.

Using provisional data gives us information more quickly.

We can use provisional data to:
- Spot changes early, before the final data are completely ready.
- See patterns that help us know when to take action, even if numbers might not be exact.

Provisional data can change and might not be complete.

The quality and completeness of the information can also vary for different groups of people and for different types of injuries.
- It takes longer to finalize data about violent deaths and overdose deaths because they need more time for investigation.
- To learn more about provisional overdose data, visit Using Provisional Overdose Data.

The quality and speed of provisional data is different across data sources and systems.
- Each data source or data system checks and finalizes data in its own way.
    - This affects how complete provisional data are and how long it takes for a full year of data to be considered final.
- IVPB allows time to pass (lag-time) before using provisional data to make sure as much information is available for each record as possible.
- Provisional data are used until the year-end data are considered final.

The chart at the top of the next page shows how long it usually takes for the data sources IVPB uses, but the timing can change each year.

Estimated Data Lag-Time in Months by Data Source
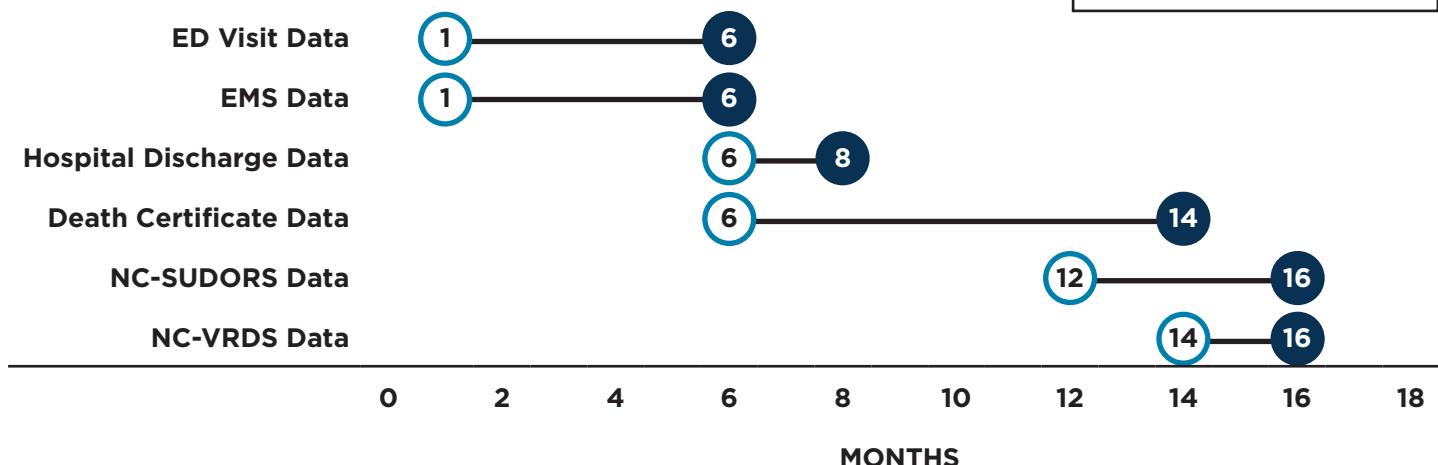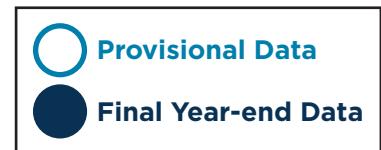
The figure above shows when data normally become available for the primary data sources IVPB uses for injury surveillance. The figure includes the number of months after an injury that provisional data are used and the number of months after the end of a calendar year before the year-end data are finalized.

Availability of Data for Injury Surveillance by Data Source

○ Provisional Data   **● Final Year-end Data**

Death Data

6 months
Dec 2025 data used after Jun 2026

14 months
Jan-Dec 2025 data available after Feb 2027

Death Certificate Data

There is a longer wait for final death certificate data than other data sources because it takes time to investigate deaths, finish death certificates, and enter updated data into the system.

Coding of death certificates currently takes longer in NC than in most other states. This is because of system changes as well as delays in autopsy reporting and pathology reviews for legal purposes.

- It can take as **long as 14 months** from the end of the calendar year before a full year of data are considered final.
  - For deaths that occur in January, that is as long as 26 months before they are included in a final year-end data set.
- IVPB waits **about 6 months after a death occurs** before using provisional data to make sure most records have been assigned a specific cause of death code.
  - IVPB gets provisional death certificate data from the State Center for Health Statistics (SCHS) every month.
  - Provisional datasets include all deaths that have been reported so far.
  - Although a death may be reported in the provisional data set, important details like the cause of death code may not be available yet.

14 months
Dec 2025 data used after Feb 2027

16 months
Jan-Dec 2025 data available after Apr 2027

NC Violent Death Reporting System (NC-VDRS)

NC-VDRS uses information from several different sources to help us understand violent deaths. It takes time to gather and review all the details.

- There is a **delay of about 16 months** from the end of the calendar year before NC-VDRS data are ready.
- Provisional data can be used **once the most important information is added to the system**, like manner of death, weapon type, and victim demographics.
  - This timeline depends on when data become available from the data sources that are used to populate NC-VDRS.
  - Information on the circumstance surrounding the death takes the longest to collect since these fields are based on both medical examiner and law enforcement reports.
  - Toxicology data and information on firearm type also take longer to finalize.

12 months
Dec 2025 data used after Dec 2026

16 months
Jan-Dec 2025 data available after Apr 2027

NC State Unintentional Drug Overdose Reporting System (NC-SUDORS)

NC-SUDORS uses information from several different sources to help us understand unintentional and undetermined overdose deaths. It takes time to gather and review all the details.

- There is a **delay of about 12 months** from the end of the calendar year before these data are ready.
- Provisional data can be used **once the most important information is added to the system**.
  - This timeline depends on when data become available from the data sources that are used to populate NC-SUDORS.

Non-Fatal Data

6 months
Dec 2025 data used after Jun 2026

8 months
Jan-Dec 2025 data available after Aug 2026

Hospital Discharge Data

- It takes **about 6 to 8 months** from the end of the calendar year before a full year of hospital discharge data is considered final.
  - For hospitalizations early in the year, that could be a delay of as long as 20 months before records are available in a final year-end dataset.
- Provisional data are used **after about 6 months** to be sure the information is as complete as possible for most of the provisional hospitalization records.
  - IVPB gets updated provisional data on hospital discharges from the NC Healthcare Association every 3 months (quarterly) via the NC SCHS.
  - These updates include all reported information for hospitalizations that have occurred so far for that year.

○ **1 months**
Dec 2025 data used after Jan 2026

● **6 months**
Jan-Dec 2025 data available after Jun 2026

Emergency Department (ED) Visit Data from North Carolina Disease Event Tracking and Epidemiologic Collection Tool (NC DETECT)

ED visit data from NC DETECT are among the timeliest data available for injury surveillance.

- It usually takes **about 6 months** after a full year of ED visits occur before ED data are considered final.
- Provisional ED visit data are used **after about 1 month** to be sure the information is as complete as possible.
  - ED visit data are also the most complete provisional data among the data sources IVPB uses.
  - Provisional data are available to authorized users within the NC DETECT data portal in near real-time.
  - IVPB gets updated provisional data on ED visits from NC DETECT each month.
  - Once all of the information for a record is entered into the system, it is unlikely the provisional ED visit data will change.

○ **1 months**
Dec 2025 data used after Jan 2026

● **6 months**
Jan-Dec 2025 data available after Jun 2026

Emergency Medical Services (EMS) Data from NC DETECT

Like ED visit data, EMS data are available much faster than other data sources for injury surveillance.

- It usually takes **about 6 months** after a full year of EMS responses before EMS data are considered final.
- Provisional EMS visit data are used **after about 1 month** to be sure the information is as complete as possible.
  - IVPB gets updated provisional EMS data from NC DETECT each month.
  - Provisional data are also available to authorized users within the NC DETECT data portal in near real-time.

FOR MORE RESOURCES:
Visit our Injury Data Users Toolkit