

About the Data

We thank the North Carolina Department of Health and Human Services for providing the data for this dashboard. Data come from the North Carolina Electronic Disease Surveillance System (NC EDSS) and the North Carolina Disease Event Tracking and Epidemiologic Collection Tool (NC DETECT). More information can be found at the NC DHHS site:

<https://covid19.ncdhhs.gov/dashboard/about-data> and in quoted text below.

Data for all of North Carolina can be found here: <https://covid19.ncdhhs.gov/dashboard>

About the Regional Dashboard

The WNC Regional COVID-10 Dashboard is a collaborative project of WNC Health Network, UNC Health Sciences at MAHEC and Jennifer Runkle, PHD, MSPH.

The following information about the data contained in the WNC dashboard is quoted directly from the state dashboard website, <https://covid19.ncdhhs.gov/dashboard/about-data>:

COVID-19 Cases and Deaths

How are lab-confirmed cases and deaths counted in NC?

A "COVID-19 case" or "laboratory-confirmed COVID-19 case" is a person who had a diagnostic laboratory test that was positive for COVID-19. Cases are unique persons. A person may have multiple positive test results, but one person is counted as one case.

Data on cases and deaths, including number, demographics, and county and ZIP code of residence, comes from the North Carolina Electronic Disease Surveillance System (NC EDSS). County and ZIP code case and death totals may not match the total NC cases or deaths; this could be attributed to incomplete lab information.

Because reporting COVID-19 is mandatory in North Carolina, clinicians and laboratories must report all positive COVID-19 diagnostic tests to local or state public health. North Carolina Department of Health and Human Services (NCDHHS) and all local health departments (LHD) enter COVID-19 cases and deaths into NC EDSS. This information can be entered in a few different ways.

Some laboratories report positive tests into NC EDSS through electronic laboratory reporting. These test results automatically feed into NC EDSS and populate the system with any available information on the laboratory report about the person.

However, not all laboratories currently report electronically. Positive test results from clinicians or laboratories that don't have electronic reporting are reported to local or state public health via secure fax or electronic files. These test results are manually entered into NC EDSS by NCDHHS or LHD staff.

COVID-19 deaths include people who have had a positive laboratory test for COVID-19, who died without fully recovering from COVID-19 and who had no alternative cause of death identified. Deaths are reported by hospitals and clinicians directly to the local and state health departments. Once reported, NCDHHS or LHD staff manually enter the death by date of death, into NC EDSS.

NCDHHS conducts ongoing data quality checks on NC EDSS data, including ensuring that there are no duplicate cases, and to remove cases that are not NC residents consistent with the Council of State and Territorial Epidemiology guidance. After conducting data quality checks, the data are used to calculate the COVID-19 metrics posted on the NCDHHS website.

Cases by date reported shows cases on the day they were reported. These are displayed with a 7-day rolling average as a trendline.

Cases by date of specimen collection show cases by the date the person was tested. This method is what is often used to track other communicable diseases. As new cases are reported, they are added to the date that the test specimen was collected, and so the number for previous day can change. There is typically time between when the person is tested, the test is run at a lab, and the test result is reported to state or LHD, which is represented by the grey box in the graph.

Deaths show deaths on the date the person died. Deaths are typically reported within hours or days. As new deaths are reported, they are included in the date the person died, and so previous dates can change.

Where does the demographic information come from? Why are data missing?

Any demographic information for cases or deaths that was included on the laboratory report is included. Information most commonly included is age, and occasionally gender. Additional data on demographics are obtained through case investigations by LHDs. When someone tests positive, the LHD contacts the person to obtain additional information. Some people may choose not to disclose this information to public health or are unable to be contacted. More information becomes available as case investigations are completed, but information is not available for all cases.

Demographics shows the number and percent of cases and deaths by age, gender, race, and ethnicity. All percentages for demographic data on the NCDHHS website are calculated using cases with known information on that metric (e.g. percent of cases by race is calculated among cases with data available on race).

The number of cases and deaths that are missing demographic information are displayed in the table for 'Missing Demographic Data' on the NC COVID-19 Data Dashboard.

Data Sources for the NC COVID-19 Data Dashboard

North Carolina collects data from several sources and partners to monitor the COVID-19 pandemic in North Carolina. The following data sources are used in the dashboard. New data sources may be added.

North Carolina Electronic Disease Surveillance System (NC EDSS)

NC EDSS, the North Carolina Electronic Disease Surveillance System, is a component of the Centers for Disease Control and Prevention (CDC) initiative to move states to web-based health surveillance and reporting systems. NC EDSS is also part of the Public Health Information Network (PHIN). The electronic system replaced a patchwork of smaller disease-specific surveillance systems and paper-based reporting.

NC EDSS is used by the North Carolina Department of Health and Human Services, Division of Public Health (DPH), the state's 86 local and multi-county district health departments, and eight HIV/STD Regional Offices. Laboratories also report electronically to NC EDSS.

NC EDSS creates a central repository of person-based public health data. LHDs collect and enter the data

Surveillance Strategies

To get a more complete picture of COVID-19 in our state, North Carolina uses evidence-based surveillance tools, including what is known as syndromic surveillance. Syndromic surveillance refers to tools that gather information about patients' symptoms (such as cough, fever, or shortness of breath) and do not rely only on laboratory testing.

In North Carolina, as well as in other states and at the Centers for Disease Control and Prevention (CDC), public health scientists are modifying existing surveillance tools for COVID-19. These tools have been used for decades to track influenza annually and during seasonal epidemics and pandemics. These include the following:

The Influenza-Like Illness Surveillance Network (ILINet). ILINet is a network of clinical sites across the country, including in North Carolina, that is coordinated by the CDC. ILINet sites report data each week on fever and respiratory illness in their patients. They also submit samples (swabs) from a subset of patients for

laboratory testing at the North Carolina State Laboratory of Public Health. This network will now test for COVID-19 in addition to influenza.

Emergency department (ED) surveillance based on symptoms (syndromic). In North Carolina, we receive ED data in near real-time from all 126 hospitals in the state using the North Carolina Disease Event Tracking and Epidemiologic Collection Tool (NC DETECT). This is an effective way to track respiratory illness, including COVID-19. Specifically, we will use NC DETECT to track trends in respiratory illness across the state and over time.

Data on severe illnesses. Public health scientists will use a variety of sources to track hospitalizations related to COVID-19. These include data reported directly by hospitals (including current numbers of patients hospitalized with COVID-19) and more detailed data from a network of epidemiologists in the state's largest healthcare systems (including total hospitalizations and intensive care unit admissions for respiratory illness). Deaths due to COVID-19 have also been added to the list of conditions that physicians are required to report in North Carolina.

NC DETECT

The North Carolina Disease Event Tracking and Epidemiologic Collection Tool (NC DETECT) is North Carolina's statewide, electronic, real-time public health surveillance system. NC DETECT was created to provide early event detection and timely public health surveillance using a variety of secondary data sources, including data from the NC Emergency Departments (EDs). Each ED visit is grouped into syndromes based on keywords in several different fields and/or diagnosis codes.

For monitoring COVID-19, NC DETECT epidemiologists are using a syndrome called the COVID-like Illness (CLI) Syndrome. CLI Syndrome looks for ED visits with mention of COVID or fever/chills and cough or shortness of breath in the chief complaint or triage notes. Please note that CLI syndrome does NOT indicate confirmed cases of COVID-19.

Recent changes in health care seeking behavior are impacting trends in CLI syndrome and other ED data, making it difficult to draw conclusions at this time. Tracking these systems moving forward will give additional insight into illness related to COVID-19. NC DETECT was created by the DPH in collaboration with the Carolina Center for Health Informatics (CCHI) in the UNC Department of Emergency Medicine.

Influenza-like Illness Network

The U.S. Outpatient Influenza-like Illness Surveillance Network (ILINet), is a collaboration with providers, state health departments, and CDC to conduct surveillance for influenza-like illness. ILINet providers in primary care clinics and hospitals across the state send sample collected from patients with influenza-like illness to the North Carolina State Laboratory of Public Health for testing. With the current COVID-19 pandemic, ILINet has been expanded to include testing for

SARS-CoV-2 in both symptomatic and asymptomatic patients. Providers are asked to submit up to 10 samples from symptomatic patients and 10 samples from asymptomatic patients each week. For ILINet surveillance purposes symptomatic is defined as fever (>100F) and cough or sore throat. More information about ILINet can be found at www.flu.nc.gov.