



## Antigen Positive Cases Data: FAQ

SEPTEMBER 25, 2020

Starting Sept. 25, 2020, the North Carolina Department of Health and Human Services will report two new measures on the NC COVID-19 Dashboard: 1) Antigen-positive cases and deaths and 2) Antigen tests completed.

This change is being made in accordance with [recently updated case classification guidelines from the Centers for Disease Control and Prevention](#). The number of antigen tests completed daily will also be reported in addition to the total number of molecular (PCR) tests completed.

### What are Molecular (PCR) and Antigen Positive Cases of COVID-19?

Both molecular (PCR) and antigen tests are diagnostic. This means they look to see if someone is currently infected with COVID-19. Each test looks for different things to determine if someone is infected.

- A molecular (PCR) test looks for the virus's genetic material.
- An antigen test is a rapid test that looks for specific proteins on the surface of the virus.

Where the test is processed may also differ.

- Molecular (PCR) tests are processed in a laboratory.
- Antigen tests are often processed at the point of care, such as in a health care provider's office.

The dashboard will provide information for cases, deaths and tests completed by the type of test used. A molecular (PCR) positive case of COVID-19 is a person who received a positive COVID-19 result from a molecular (PCR) test. An antigen positive case of COVID-19 is a person who received a positive COVID-19 result from an antigen test and does not have a positive result from a molecular (PCR) test. People are only counted as a case **once**, even if they have multiple positive tests.

Molecular (PCR) positive cases are classified as "confirmed" cases and antigen positive cases are classified as "probable" cases of COVID-19, in accordance with [CDC case classification guidelines](#). Despite the names, regardless of the test used, a person who tests positive is considered to have COVID-19. The terms "confirmed" and "probable" are used nationally to standardize case classifications for public health surveillance but should not be used to interpret the utility or validity of any laboratory test type.

North Carolina is joining 31 other states now reporting antigen-positive cases in addition to cases identified through a positive molecular (PCR) test result. For more information about different types of COVID-19 tests, [visit the Food and Drug Administration's overview of coronavirus testing basics](#).

### Why Are Antigen Positive Case Data Being Added Now?

NCDHHS is able to add information on antigen testing due to improved reporting processes. Reporting on antigen tests has been challenging, as antigen tests are typically administered at the point of care such as a clinician's office. NCDHHS is adding these data to the NC COVID-19 data dashboards to ensure it is providing the most complete picture of COVID-19 cases in North Carolina. NCDHHS has been requiring laboratories and health care providers to report antigen test results since these tests became available. State and local health departments have been following up on all cases identified through positive antigen test results since that time and taking the necessary steps to prevent further spread.

## How Are Data Impacted by Adding Antigen Positive Case and Test Data?

Antigen positive cases make up a small percent (2%) of total COVID-19 cases and deaths (0.7%) in North Carolina, to date. Antigen positive cases and deaths have now been incorporated onto North Carolina's dashboards, resulting in 4,563 antigen positive cases and 25 deaths being added to the dashboards. Table 1 below shows the total number of COVID-19 cases, as well as the number that were molecular (PCR) positive versus antigen positive cases. Table 2 shows the total number of COVID-19 deaths, as well as the number of deaths among molecular (PCR) positive cases versus antigen positive cases.

**Table 1: Total Number of Molecular (PCR) Positive Cases and Antigen Positive Cases**

Case Designation	Cumulative Number of Cases	Percent of Total Cumulative Cases
Molecular (PCR) Positive Cases	199,768	98%
Antigen Positive Cases	4,563	2%
Total Cases	204,331	100%

**Table 2: Total Number of Deaths Among Molecular (PCR) Positive Cases and Antigen Positive Cases**

Case Designation	Cumulative Number of Deaths	Percent of Total Cumulative Deaths
Deaths Among Molecular (PCR) Positive Cases	3,384	99%
Deaths Among Antigen Positive Cases	25	0.7%
Total Deaths	3,409	100%

## Where Is Antigen Data Included In North Carolina’s COVID-19 Data Dashboards?

On Sept. 25, 2020, NCDHHS began including antigen positive case and testing data on applicable dashboards. Below is a list of each of the dashboards and what data elements, if any, were impacted by this update:

- [Summary dashboard page:](#)
  - **Daily Cases:** Antigen positive cases have been included in the daily case totals on the “Daily Cases” chart.
  - **Daily Tests:** Tests have been broken out to show molecular (PCR) vs. antigen tests completed starting with data on Sept. 22, 2020 on the “Daily Tests” chart. For dates prior to Sept. 22, 2020, test totals cannot be broken out according to test type due to data limitations in the process previously used for laboratory reporting of test totals.
  - **County Maps by Cases:** Antigen positive cases have been added to the “County Map by Cases (Molecular (PCR) and Antigen)” map.
  - **County Cases and Deaths:** Antigen positive cases have been added to the “County Cases and Deaths (Molecular (PCR) and Antigen)” section of the dashboard page.
  
- [Cases dashboard page:](#)
  - **Daily Cases:**
    - Antigen positive cases have been included in the daily case totals on the “CASES by Date Reported” chart starting with data on May 20, 2020. Data have been added to both state- and county-level views of the chart.
    - Antigen positive cases have been added to the “CASES by Date of Specimen Collection” chart with cases broken out in a stacked bar chart format displaying molecular (PCR) vs. antigen positive cases. Data have been added to both state- and county-level views of the chart.
    - Deaths among antigen positive cases have been added to the “DEATHS by Date of Death” chart. Data have been added to both state- and county-level views of the chart.
  - **Demographic Data:**
    - The breakout of demographic totals for cases and deaths by molecular (PCR) vs. antigen positive cases is still under development. Totals will include both molecular (PCR) and antigen cases and deaths.
  
- [Testing dashboard page:](#)
  - **Total Tests Reported:** Tests have been broken out to show molecular (PCR) vs. antigen tests completed starting with data on Sept. 22, 2020 on the “Total Tests Reported” chart.
  - Antigen tests have **not** been added to the “Positive Tests as a Percent of Total Tests” chart, “Percent Positive by County” map, or “Testing Turnaround Time” chart. Antigen tests are excluded from percent positivity calculations at this time, but NCDHHS will be evaluating including them in calculations in the future. Antigen tests are excluded from testing turnaround calculations because antigen tests are designed to be rapid and are typically resulted within an hour or less. Including these tests in testing turnaround time calculations may artificially decrease testing turnaround times for molecular (PCR) test results, which are the most widely used tests today.
  
- [Hospitalizations dashboard page:](#)
  - Data on the hospitalizations dashboard page are not impacted by adding antigen positive case and testing data.
  
- [Contact Tracing dashboard page:](#)
  - Data on the Contact Tracing dashboard page are not impacted by adding antigen positive case and testing data.

## NC DEPARTMENT OF HEALTH AND HUMAN SERVICES

- [PPE dashboard page:](#)
  - Data on the Contact Tracing dashboard page are not impacted by adding antigen positive case and testing data.
- [Outbreaks and Clusters dashboard page:](#)
  - Antigen positive cases and deaths have been added to the total cases and deaths on “Congregate Living Settings” and “Child Care and School Settings.” The breakout of molecular (PCR) vs. antigen positive cases and deaths is not available at this time.
- [Reports dashboard page:](#)
  - The Reports page has not been impacted by antigen positive case and testing data.
- [About the Data dashboard page:](#)
  - New Cases by Specimen Date have been renamed to Molecular (PCR) Positive Cases by Specimen Date on the “Daily Metrics” tab, which has been renamed the “Daily Cases and Deaths Metrics” tab.
  - Total Antigen Positive Cases by Specimen Date have been added to the “Daily Cases and Deaths Metrics” tab.
  - A new tab for downloadable data has been added named “Daily Testing Metrics.” This tab includes testing data from the prior named “Daily Metrics” tab. The NC Daily Tests will no longer be populated, yet will be included to calculate Completed Tests. New columns displaying the total number of “Molecular (PCR)” and “Antigen” test totals are included and populated starting with data from Sept. 22, 2020.
  - Antigen positive cases have been included in totals on the “County Cases and Deaths” tab.
  - Antigen positive cases have been included in totals on the “ZIP Code Cases and Deaths” tab.
  - Antigen positive cases have been included in totals on the “Demographics” tab.