

Overview: Measuring Percent Positive

There are several ways to calculate and track percent positive. The CDC defines the different ways in the following URL: <https://www.cdc.gov/coronavirus/2019-ncov/lab/resources/calculating-percent-positivity.html>. The Douglas County Health Department measures percent positive using two of the CDC methods, people over people and test over test.

Comparing percent positive by person (people over people) and percent positive by test (test over test)

A weekly calculation of percent positive using the people over people method will result in a higher percent positive, while the percent positive using the test over test method will result in a lower percent positive. This is because testing capacity has increased to the point where repeated testing is becoming more commonplace. **For percent positive by test, a person is counted each time they have a test performed. Therefore, if they get multiple positive or negative results, they are counted each time as they are tested.** This makes the weekly percent positive by test appear lower as there are many repeat tests included in the denominator of the calculation. **By contrast, the weekly percent positive by person only includes each person once across the duration of the pandemic. Therefore, the denominator of percent positive by person is smaller as it only includes each person once, no matter how many times they have been tested.**

The methodology used for the graphic below is the test over test method.

Weekly percent of positive tests over total tests
By test report date compared to specimen collection date

This graph shows two trendlines that show the weekly percentage of all positive tests for COVID-19 by both the date that the test was reported and by the date that the test was collected. The weekly average percent positive trendline (by both test report date and by test collection date) is an indicator for monitoring COVID-19 trends. Increasing trends in the weekly percent positive (by test) trend line could indicate an increase in COVID-19 infections.

In this graph, people are included each time they are tested. **If people tested positive or negative more than once, they are included and counted each time, on the date the test was reported and on the date the test was collected.** Tracking by test provides a daily view of test positivity and is a more recent method used by other groups.

Data source: These data are from the Nebraska Electronic Disease Surveillance System (NEDSS). Data in this graph include all Nebraska residents tested in and out-of-state. This figure includes data on diagnostic, confirmatory polymerase chain reaction (PCR) tests and antigen tests for the virus that causes COVID-19. No antibody test results are included in this figure.

The data in this chart are positive tests for COVID-19 extracted from NEDSS. People with negative test results are reported electronically or entered manually into the NEDSS electronic laboratory module. We strive for transparency and accuracy in our data. As individual results are processed into the live system and investigated by public health, there may be corrections to the status and details of cases that result in changes to these data.