Percent Positive Methodology

The percent positive is a critical measure because it gives Johnson County Department of Health and Environment (JCDHE) an indication how widespread infection is in the area where the testing is occurring—and whether levels of testing are keeping up with levels of disease transmission.

Even though there are multiple methods to calculate percent positive, the trend should be similar across all three.

There are three main ways to calculate percent positive:

**Method 1: New positives/unique tests**

This is the calculation JCDHE has been utilizing since the beginning of the COVID-19 pandemic.

When someone is tested for the first time they are counted as a unique test. But if that first test is negative and they go back for additional tests, those subsequent tests would not be counted, because it is the same person and they’ve already been counted once.

At the beginning of the pandemic, this wasn’t an issue because testing was limited and few people were taking more than one COVID-19 test.

As retests (and thus repeat negatives) have become more common, this rate will not reflect the impacts of these high retests.

**Method 2: New positives/individuals tested**

This is the new calculation JCDHE will utilize moving forward.

The number of individuals (not tests) are counted in the denominator for this calculation. This differs from Method 1 in that individuals who test negative multiple times will be counted in the denominator when calculating the percent positive; when JCDHE calculates the 14-day percent positive, these individuals are only counted once in the denominator. This means that if an individual is tested 4 times during a 14-day period, they will only be counted in the denominator one time.

**Method 3: New positives/total tests**

This is the calculation Kansas Department of Health and Environment (KDHE) utilizes.

By dividing the number of individuals who have tested positive for the first time by all tests, this rate takes in to account all retests.

With this method people may be counted multiple times during a 14-day period. Individuals can be tested multiple times in a 14-day period for several reasons including being part of a professional sports
league where they are tested daily as part of a testing protocol, or residents/staff of long-term care facilities who will be tested on a weekly basis, particularly if they are experiencing an outbreak.