



## The Impact of Rapid ID NOW COVID-19 Testing

### COVID-19

COVID-19 is a contagious respiratory virus that has become a global pandemic. People exposed to the virus may become symptomatic usually within 2-14 days<sup>1</sup> while others may never exhibit symptoms, but still be able to transmit the virus. Testing is essential in curbing the cases of COVID-19 as it can help in isolation and contact tracing. **Data is now showing that mild to moderate cases do not have virus that is infectious after 9 days so the CDC is allowing people to return to work after 10 days of symptoms.**<sup>2</sup>

### ID NOW™ COVID-19

ID NOW works by isothermal amplification. Rather than having to heat and cool DNA to amplify it like RT-PCR, there is an enzyme that is able to nick it to open it up. Eliminating the heating/cooling has allowed the test to take place in 13 minutes or less. Since the test is CLIA-waived showing it is easy-to-use, it can be brought to near patient so testing can be done in a variety of settings and give results on the spot so the patient can know what to do before leaving. As of July, there has been over 6.4 million tests deployed in the United States to help with this effort.

### HOW THE TEST WORKS

The assay is approved for nasal, nasopharyngeal swabs, and throat swabs. To run the assay, the proper sample is collected and the swab is eluted in the blue vial. The blue vial contains reagents that break apart the virus and expose the RNA. A transfer cartridge moves a portion to the test base where any viral RNA gets converted to DNA and templates allow for the amplification and identification of a unique region of the virus.

### PUBLICATIONS

An interim analysis released by Abbott showed a positive percent agreement (PPA) of  $\geq 94.7\%$  and negative percent agreement (NPA) of  $\geq 98.6\%$  in an urgent care study compared to laboratory based testing. Meanwhile, the Everett Clinic study showed 91.3% PPA and 100% NPA. There have been independent studies showing lower sensitivity, but when applying the CDC definition of when the person is shedding infectious virus, the NYU study went from 55% sensitivity to 100%.<sup>3</sup>

<sup>1</sup> <https://www.cdc.gov/coronavirus/2019-ncov/symptoms-testing/symptoms.html>

<sup>2</sup> <https://www.cdc.gov/coronavirus/2019-ncov/hep/duration-isolation.html>

<sup>3</sup> Basu A et al. Performance of Abbott ID NOW COVID-19 rapid nucleic acid amplification test using nasopharyngeal swabs transported in viral transport media and dry nasal swabs in a New York City Academic Institute. *JCM* **58**: e01136-20.