



## HEALTH ADVISORY #171 Point-of-Care Antigen Testing for SARS-CoV-2 in Nursing Homes

**TO:** West Virginia Healthcare Providers, Hospitals and Other Healthcare Facilities

**FROM:** Ayne Amjad, MD, MPH - Commissioner and State Health Officer  
West Virginia Department of Health and Human Resources, Bureau for Public Health

**DATE:** October 6, 2020

**LOCAL HEALTH DEPARTMENTS:** Please distribute to community health providers, hospital-based physicians, infection control preventionists, laboratory directors, and other applicable partners.

**OTHER RECIPIENTS:** Please distribute to association members, staff, etc.

### Overview

Antigen tests are available as point-of-care (POC) diagnostics for SARS-CoV-2. They have a rapid turnaround time, which is critical in the identification of SARS-CoV-2 infection and rapid implementation of infection prevention and control strategies. These tests can augment other testing efforts, especially in settings where reverse-transcriptase polymerase chain reaction (RT-PCR) testing capacity is limited or testing results are delayed (e.g., >48 hours). In general, these POC antigen tests have a lower sensitivity, but similar specificity, for detecting SARS-CoV-2 compared to RT-PCR tests.

This advisory pertains to antigen tests that have been granted a US Food and Drug Administration's Emergency Use Authorization (FDA EUA) to detect SARS-CoV-2. The first SARS-CoV-2 antigen tests to receive FDA EUA are authorized for testing symptomatic persons within 5-7 days of symptom onset and there are limited data on antigen test performance in asymptomatic persons. However, given the transmission of SARS-CoV-2 from asymptomatic and pre-symptomatic nursing home residents and healthcare personnel (HCP) with SARS-CoV-2 infection, the West Virginia Department of Health and Human Resources (WVDHHR) is providing considerations for the use of antigen tests for asymptomatic persons during this public health emergency.

### Reporting Requirements

On April 16, 2020, Governor Jim Justice signed an Executive Order requiring all COVID-19 lab tests to be reported electronically to WVDHHR. To meet the requirement of the Executive Order there is three options for facilities to submit test results electronically.

#### *Option 1 (Best Option)*

The West Virginia Health Information Network (WVHIN) has created an online submission form that can be filled out. The submissions will be sent directly to the State. Please contact the WVHIN to obtain access at [info@WVHIN.org](mailto:info@WVHIN.org).

#### *Option 2 (Good Option)*

If you use an electronic medical record system, the results of POC testing can be entered and submitted to the WVHIN and the results will be sent to the State system electronically. This will take coordination and configuration with WVHIN in order to complete. Please contact the WVHIN to obtain access at [info@WVHIN.org](mailto:info@WVHIN.org).

This message was directly distributed by the West Virginia Bureau for Public Health to local health departments and professional associations. Receiving entities are responsible for further disseminating the information as appropriate to the target audience.

#### **Categories of Health Alert messages:**

**Health Alert:** Conveys the highest level of importance. Warrants immediate action or attention.

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### Option 3

You can work directly with WVDHHR. You will need to complete introduction paperwork and work with Inductive Health and WVDHHR to submit files directly. Please contact Mr. Tim Clendenen with WVDHHR to set up an account and begin the testing process to be able to submit CSV files. You can reach Mr. Clendenen at [Tim.G.Clendenen@wv.gov](mailto:Tim.G.Clendenen@wv.gov).

## **Considerations for Interpreting Antigen Testing Results in Nursing Homes** (See attached [algorithm](#))

### ***Testing of symptomatic residents or HCP:***

- If an antigen test is positive, and no quality assurance issues are identified, no confirmatory test is necessary.
  - Residents should be placed in transmission-based precautions or HCP should be excluded from work.
  - Notify the local health department (LHD) immediately to conduct contact tracing, notifications, and quarantine/isolation of exposed persons.
  - If the resident or HCP is the first positive test for SARS-CoV-2 within the facility in the previous 14 days (i.e., an index case), an outbreak response should be initiated immediately with facility-wide testing.
- If an antigen test is negative, collect a confirmatory RT-PCR test immediately (e.g., within 48 hours, but preferably within 24 hours).
  - Symptomatic residents and HCP should be kept in transmission-based precautions or excluded from work until RT-PCR results return.
- If an individual has recovered from SARS-CoV-2 infection in the past 3 months and develops new symptoms suggestive of COVID-19, they should be evaluated and may need to be retested if an alternate illness etiology cannot be identified.

### ***Testing of asymptomatic exposed or potentially exposed residents or HCP in nursing homes as part of an outbreak:***

- If an antigen test is positive, no confirmatory test is necessary.
  - Residents should be placed in transmission-based precautions, and HCP should be excluded from work.
  - Notify the LHD immediately to conduct contact tracing, notifications, and quarantine/isolation of exposed persons.
- If an antigen test is negative, exposed residents should be placed in transmission-based precautions.
  - HCP should be allowed to continue to work with continued symptom monitoring.
- The facility should continue retesting every 3 to 7 days all staff and residents that tested negative (antigen or RT-PCR) until no new cases are identified for a 14-day period.
- Asymptomatic individuals who have recovered from SARS-CoV-2 infection in the past 3 months and live or work in a nursing home performing facility-wide testing should not be tested for SARS-CoV-2.

### ***Testing of asymptomatic residents or HCP in nursing homes without an outbreak, for surveillance or routine testing:***

- If an antigen test is negative, allow HCP to continue to work.
- If an antigen test is positive, collected a confirmatory RT-PCR test within 48 hours of the antigen test (preferably within 24 hours), in counties with low or moderate community activity. (See: <https://data.cms.gov/stories/s/COVID-19-Nursing-Home-Data/bkwz-xpvg>).
  - If a confirmatory test is performed, a resident or HCP should be kept in transmission-based precautions or excluded from work until RT-PCR results return.

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- If the confirmatory test is positive, residents should be placed in transmission-based precautions or HCP should be excluded from work. Initiate outbreak response facility-wide testing of all residents and HCP.
- If the confirmatory test is negative, discussion with the LHD, community incidence and time between antigen test and RT-PCR test can be utilized to interpret discordant results. Two negative RT-PCR results 24 hours apart should be required to allow HCP to return to work.
- Asymptomatic residents and HCP who have recovered from SARS-CoV-2 infection in the past 3 months and are asymptomatic should not be tested for SARS-CoV-2.

### **Outbreak Response Testing**

- COVID-19 outbreak response in a nursing home is triggered when a single resident or HCP tests positive for SARS-CoV-2. An index infection in a resident should include SARS-CoV-2 infections that originated in the nursing home and should not include:
  - Residents who were known to have COVID-19 on admission to the facility and were placed into transmission-based precautions.
  - Residents who were placed into transmission-based precautions on admission and developed SARS-CoV-2 infection within the 14-day period after admission.
- The facility should continue retesting every 3 to 7 days all staff and residents that tested negative (antigen or RT-PCR) until no new cases are identified for a 14-day period.
- Testing support for outbreaks remains available from the WVDHHR and can be coordinated through the LHD upon notification of the outbreak.

For more information, contact your LHD or the Office of Epidemiology and Prevention Services, Division of Infectious Disease Epidemiology (DIDE) at 1-800-423-1271, ext. 1; 304-558-5358, ext. 2; or the 24/7 answering service at 304-342-5151.

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