**COVID-19 Surveillance Testing Preparation**

**Updated May 18, 2020**

A key component to mitigating the spread of COVID-19 is testing. On May 11, Vice President Pence and President Trump both urged states to universally test all nursing home residents and staff and recommend that it occur by the end of May. The CDC has placed “high priority” on COVID-19 testing for any individual who has symptoms AND works in a healthcare facility or congregate living setting or resides in LTC or other congregate living facilities. The CDC placed “priority” for COVID-19 testing on any person without symptoms who has been prioritized by health departments for surveillance or screening of asymptomatic individuals.

On May 18, IDPH outlined the options and protocol for surveillance testing on their LTC Webinar. They indicated a commitment to offer surveillance testing to LTC providers including nursing homes, residential care facilities, ICF/MR/ID, and assisted living programs.

Types of Tests

Diagnostic Testing: Diagnostic testing refers to molecular (also known as PCR) or antigen tests or both. Molecular tests detect the presence of viral RNA and are highly accurate. Antigen tests detect the presence of viral proteins that are part of the virus and are often faster and simpler tests to run. Antigen tests with a positive test are highly accurate, but there is a chance of false negatives since the antigen tests are not as sensitive as Molecular tests.

Serological or Antibody tests detect antibodies to the virus and are used to detect a past infection. A negative serology result may mean that a person has not been infected, or that an infection occurred but the body’s immune system was not strong enough to make antibodies, or that there have not been enough time for antibodies to develop which can take 1-2 weeks after someone is infected. Serology testing cannot be used for diagnostic testing, nor is it clear how long antibodies remain present in the body after the infection has been cleared. It is also unknown whether these antibodies confer immunity to the infection. However, serology tests can play a critical role by helping identify individuals who have antibodies and have developed an adaptive immune response which may potentially be used to determine, with other clinical data, how far the pandemic has progressed and whether these individuals may be less susceptible to infection.

Specimen Collection

Diagnostic Testing: Specimens can either be collected through a **Nasopharyngeal (NP) swab** or a nasal swab. The NP swab collection is more invasive and must be performed by someone experienced in the procedure, but it is the preferred method testing by the CDC. NP swab collection requires inserting the NP swab through the nostril parallel to the palate to contact the nasopharynx and absorb secretions. The nasal swab specimen collection is permitted by the CDC, and is less invasive, faster, and can be performed by almost anyone. (Oropharnyngeal Swabs (OP) swabs may be used if there is a shortage of the NP swabs.)

For the nasal swab specimen collection, the nasal swab is inserted into the nostril about 2 cm and rotated several times against the nasal wall and leaving in place for 10-15 seconds, then repeated on the other nostril with the same swab. Nasal swab collection can minimize use of PPE since it can be self-administered.

Serological or Antibody Testing: Collection is done through a blood draw.

PPE for Specimen Collection

Nasal Swab Collection: If collecting nasal specimens, a healthcare provider should maintain proper infection control and use an N95 or higher-level respirator (or facemask if a respirator is not available), eye protection, gloves, and a gown when collecting specimens. If observing a patient self-administer a nasal swab collection and not within 6 feet of patient, follow standard precautions, gloves are recommended, and a face mask is recommended at all times while in healthcare facility.

NP Swab Collection: Maintain proper infection control and use N95 or higher-level respirator (or a facemask if a respirator is not available), eye protection, gloves, and a gown, when collecting specimens. Preferable to collect in an exam room with the door closed and personnel in room limited to only those necessary for essential patient care and procedure support.

\*Note-other state departments of public health have stated that gloves need to be changed in between each test collection but that testers only need to change their gown, masks, eye protection if they become soiled or are not functioning properly. This is consistent with CDC PPE optimization strategies.

Availability of Testing Types in Iowa

Diagnostic Testing: Diagnostic testing using NP swab collection may be utilized on LTC staff and residents. Nasal swab collection will only be offered to team members, not residents.

Serological or Antibody Testing: Serological or antibody testing is available for staff.

Options for Requesting and Securing Surveillance Testing

1. Facility-Based Testing: LTC providers may contact their constancy emergency management and/or county public health contacts to request surveillance testing for staff and/or residents. The supplies will be sent to the facility for collection.
2. Strike Teams: Strike teams will be sent to counties designated by the state to perform surveillance testing. Strike team testing is open to all LTC provider types in the county where the strike team is testing.
3. County Public Health Led Testing: Providers may coordinate with local county public health to establish testing at the local county level. The county will determine who may be tested and what type of testing will be conducted.
4. Test Iowa: Test Iowa is available for LTC staff at any Test Iowa site. The Test Iowa Assessment includes a new option for “LTC Staff” which guarantees testing access for staff.

Costs of Testing

The state of Iowa covers the cost of testing and the testing supplies for the above options.

Medical Orders for Testing

IDPH recommends that the facility medical director serve as the ordering provider for surveillance testing for residents and staff to ensure the facility receives the results.

Consent

Testing is voluntary so staff or residents could refuse. This should be documented.

Key Preparations for Testing Implications

All staff who test positive will need to remain home from work until they meet the [CDC Guidelines for return to work](https://www.cdc.gov/coronavirus/2019-ncov/hcp/return-to-work.html). For asymptomatic staff, that is 10 days from the date of the positive test. The [LAI Process Map for Return to Work](https://www.leadingageiowa.org/assets/UPDATED2B%20Employee%20Return%20to%20Work%20Criteria.pdf) outlines the criteria for symptomatic and asymptomatic individuals. The CDC also recommends that providers have a plan to meet staffing needs while infected healthcare providers are excluded from work. The CDC also points to strategies to [mitigate healthcare personnel staffing shortages](https://www.cdc.gov/coronavirus/2019-ncov/hcp/mitigating-staff-shortages.html). Members are encouraged to clearly articulate their status on the RMCC surveys related to staffing and PPE supply as well as within the CDC LTC COVID-19 module report.

Providers will also want to have multiple plans for cohorting residents depending on the outcome of the tests and the potential scope of infections. Providers should be prepared for the potential to identify multiply asymptomatic residents who are COVID-19 positive and have plans to cohort them. Keep in mind the [blanket waivers](https://www.cms.gov/files/document/summary-covid-19-emergency-declaration-waivers.pdf) which are available to better facilitate quarantining and cohorting. If creating new space for resident rooms, remember to seek approval from the state fire marshal’s office and DIA as outlined in the physical environment waiver process [here](https://dia.iowa.gov/document/covid-19-waivers-health-facilities).

Finally, remember that diagnostic testing is a moment in time so a person’s COVID-19 status may change with subsequent exposure or through time after the test following incubation of the virus.

How Often Can I Surveillance Test?

IDPH stressed that surveillance testing represents a snapshot in time since the virus may not be detected while in the incubation period and someone may be exposed later. Rather than relying on frequent testing to stop the spread of the virus, IDPH stated that strong Infection Prevention and Control Practices are the best weapon. IDPH did not specifically answer how often providers may conduct surveillance testing but inferred that it would not be available for frequent implementation.

Additional References:

* <https://www.cdc.gov/coronavirus/2019-nCoV/lab/guidelines-clinical-specimens.html>
* <https://www.cdc.gov/coronavirus/2019-ncov/downloads/OASH-nasal-specimen-collection-fact-sheet.pdf>
* <https://www.cdc.gov/coronavirus/2019-ncov/downloads/OASH-COVID-19-guidance-testing-platforms.pdf>
* <https://www.fda.gov/medical-devices/emergency-situations-medical-devices/faqs-testing-sars-cov-2>
* <https://www.cdc.gov/coronavirus/2019-ncov/covid-data/serology-surveillance/index.html>
* <https://www.cdc.gov/coronavirus/2019-ncov/hcp/nursing-homes-testing.html>
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* <https://www.cdc.gov/coronavirus/2019-ncov/hcp/ppe-strategy/index.html>
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