

ADVISORY: Test-based Strategies for Preventing Transmission of the Virus that Causes COVID-19 in Skilled Nursing Facilities



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TO:	Health Alert Network
FROM:	Rachel Levine, MD, Secretary of Health
SUBJECT:	ADVISORY: Test-based Strategies for Preventing Transmission of the Virus that Causes COVID-19 in Skilled Nursing Facilities
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This transmission is a Health Advisory: provides important information for a specific incident or situation; may not require immediate action.

HOSPITALS: PLEASE SHARE WITH ALL MEDICAL, PEDIATRIC, NURSING AND LABORATORY STAFF IN YOUR HOSPITAL; **EMS COUNCILS:** PLEASE DISTRIBUTE AS APPROPRIATE; **FQHCs:** PLEASE DISTRIBUTE AS APPROPRIATE **LOCAL HEALTH JURISDICTIONS:** PLEASE DISTRIBUTE AS APPROPRIATE; **PROFESSIONAL ORGANIZATIONS:** PLEASE DISTRIBUTE TO YOUR MEMBERSHIP; **LONG-TERM CARE FACILITIES:** PLEASE SHARE WITH ALL MEDICAL, INFECTION CONTROL, AND NURSING STAFF IN YOUR FACILITY

- Universal testing of residents and staff is one strategy to help inform infection prevention and control in skilled nursing facilities.
- Consider four key principles when using testing in skilled nursing care facilities.
 - Testing should not supersede existing infection prevention and control (IPC) interventions.
 - Testing should be used when results will lead to specific IPC actions.
 - The first step of a test-based prevention strategy should ideally be a point prevalence survey (PPS) of all residents and all HCP in the facility.
 - Repeat testing may be warranted in certain circumstances.
- Facilities should develop a plan for testing and post-testing intervention to include:
 - Logistics of resident and staff testing
 - Cohorting plan to include designated Red, Yellow, and Green zones, respective of testing result and exposure status.

Nursing home populations are at high risk for infection, serious illness, and death from COVID-19. Testing is one strategy to help inform prevention and control in the facility. The Department has developed these guidelines to expand upon [CDC Considerations for Use of Test-Based Strategies for Preventing SARS-CoV-2 Transmission in Nursing Homes](#). If you have questions about this guidance, please contact DOH at 1-877-PA-HEALTH (1-877-724-3258) or your local health department.

KEY TERMS:

Testing or test: Laboratory tests that detect SARS-CoV-2, the virus that causes COVID-19, using reverse transcription polymerase chain reaction (RT-PCR) testing are referred to here as testing or test.

SARS-CoV-2 infection: A term used throughout this document to indicate any person with a positive PCR test for SARS-CoV-2, regardless of whether they have symptoms or are asymptomatic. Persons with symptoms and a positive test are said to have COVID-19.

Healthcare personnel (HCP): Include, but are not limited to, emergency medical service personnel, nurses, nursing assistants, physicians, technicians, therapists, phlebotomists, pharmacists, students and trainees, contractual staff not employed by the healthcare facility, and persons not directly involved in patient care but who could be exposed to infectious agents that can be transmitted in the healthcare setting (e.g., clerical, dietary, environmental services, laundry, security, engineering and facilities management, administrative, billing, and volunteer personnel).

Consider the following four key principles when using testing in nursing homes:

1. Testing should not supersede existing infection prevention and control (IPC) interventions.

Testing conducted at nursing homes should be implemented *in addition to* existing infection prevention and control measures recommended by the DOH, including visitor restriction, cessation of communal dining and group activities, monitoring all HCP and residents for signs and symptoms of COVID-19, and universal masking as source control. See [PA-HAN-497](#) for more details about infection prevention and control and [PA-HAN-500](#) for guidance about specimen collection.

2. Testing should be used when results will lead to specific IPC actions.

For example, test results can be used to:

- Cohort exposed residents to separate those with SARS-CoV-2 infection from those without detectable SARS-CoV-2 infection at the time of testing to reduce the opportunity for further transmission.
- Determine the SARS-CoV-2 burden across different units or facilities and allocating resources.
- Identify HCP with SARS-CoV-2 infection for work exclusion.
- Enable HCP to return to work after being excluded for SARS-CoV-2 infection.
- Discontinue transmission-based precautions for residents with resolved SARS-CoV-2 infection.

3. The first step of a test-based prevention strategy should be a point prevalence survey (PPS), ideally, of all residents and all HCP in the facility.

Testing of residents

Testing of residents should be aligned with consideration for testing capacity in the following order of priority:

1. Facility-wide PPS of all residents should be considered in facilities with suspected or confirmed cases of COVID-19. Early experience from nursing homes with COVID-19 cases suggests that when residents with COVID-19 are identified, there are often asymptomatic

residents with SARS-CoV-2 present as well. PPS of all residents in the facility can identify infected residents who can be cohorted on a pre-specified unit or transferred to a COVID-specific facility. If undertaking facility-wide PPS, facility leadership should be prepared for the potential to identify multiple asymptomatic residents with SARS-CoV-2 infection and make plans to cohort them.

- If testing capacity is not sufficient for facility-wide PPS, performing PPS on **units with symptomatic residents** should be prioritized.
 - If testing capacity is not sufficient for unit-wide PPS, testing should be prioritized for **symptomatic residents and other high-risk residents**, such as those who are admitted from a hospital or other facility, roommates of symptomatic residents, or those who leave the facility regularly for dialysis or other services.
2. In facilities that do not have known cases of COVID-19, test 20% of residents weekly to identify early transmission. If any testing from the sample population is positive, the facility should plan to do facility-wide testing.

Testing of nursing home HCP

Testing of staff should be aligned with consideration for testing capacity in the following order of priority:

1. PPS of **all HCP** should be considered in facilities with suspected or confirmed cases of COVID-19. Early experience suggests that, despite HCP symptom screening, when COVID-19 cases are identified in a nursing home, there are often HCP with asymptomatic SARS-CoV-2 infection present as well. HCP likely contribute to introduction and further spread of SARS-CoV-2 within nursing homes.
2. In facilities that do not have known cases of COVID-19, test 20% of staff weekly to identify early transmission. If any testing from the sample population is positive, the facility should plan to do facility-wide testing.

CDC recommends **HCP with COVID-19 be excluded from work**. Follow [PA-HAN-501](#) for Return-to-Work Guidance. Facility leadership should have a plan for meeting staffing needs to provide safe care to residents while infected HCP are excluded from work. If the facility is in Crisis Capacity and facing staffing shortages, see CDC guidance on [Strategies to Mitigate Healthcare Personnel Staffing Shortages](#) for additional considerations.

4. Repeat testing may be warranted in certain circumstances.

Initial PPS should be prioritized; repeat testing should be aligned with consideration for testing capacity. After initial PPS has been performed for residents and HCP (baseline) and the results have been used to implement resident cohorting and HCP work exclusions, nursing homes may consider retesting under the following circumstances:

Retesting of residents

- Retest any resident who develops symptoms consistent with COVID-19.
 - Consider retesting all residents who previously tested negative at some frequency shortly (e.g., 3 days) after the initial PPS, and then weekly to detect those with newly developed infection; consider continuing retesting until PPSs do not identify new cases.
 - **DO NOT DELAY TESTING** of symptomatic individuals until the next scheduled facility-wide testing event.

- If testing capacity is not sufficient for retesting all residents, retest those who frequently leave the facility for dialysis or other services and those with known exposure to infected residents (such as roommates) or HCP.
- Use retesting to inform decisions about when residents with COVID-19 can be moved out of COVID-19 wards. See [PA-HAN-502](#) for additional information.

Retesting of nursing home HCP

- Retest any HCP who develop symptoms consistent with COVID-19.
- Retest to inform decisions about when HCP with COVID-19 can return to work. Follow [PA-HAN-501](#) for Return-to-Work Guidance.
- Consider retesting HCP at some frequency based on community prevalence of infections (e.g., once a week).

If testing capacity is not sufficient for retesting all HCP, consider retesting HCP who are known to work at other healthcare facilities with cases of COVID-19.

Facilities Should Develop a Plan for Testing and Post-Testing Intervention

Planning for Testing Logistics:

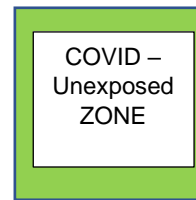
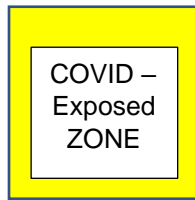
- Which asymptomatic residents will be tested? (all *symptomatic* residents should be tested)
- Which HCP should be tested?
- Which laboratory will provide collection materials and process specimens? Ideally, laboratories reporting results within 1-2 days should be used. Longer turn-around-times severely limits the utility of testing asymptomatic persons.
 - While testing can be completed at the state public health laboratory where timely commercial testing is not available, the large scope of the pandemic will require facilities to use their own resources to obtain testing results more rapidly.
 - Facilities should develop relationships with commercial laboratories for testing (including acquisition of supplies).
 - Facilities who cannot acquire testing supplies or who want to perform an initial PPS using the state public health laboratory should contact RA-DHCOVIDTESTING@pa.gov with the facility name in the subject.
- Who will obtain patient agreement and how will it be documented? DOH recommends using the same process as would be used for influenza testing or other related laboratory tests.
- Who will perform specimen collection?
- What PPE will be worn during testing and how often will it be changed?
 - The DOH recommends staff collecting swabs wear gowns, gloves, eye protection and respirators or facemasks, if respirators are not available. Gowns, eye protection and respirators or facemasks should be changed if coughed or sneezed upon or if otherwise soiled. Gloves must be changed between each test with hand hygiene performed with each glove change.
- What shipping supplies and refrigeration are needed?

Post-Testing Actions to Prevent Transmission:

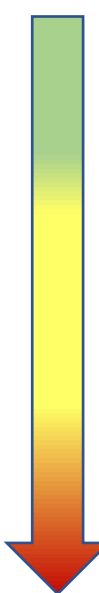
For resident testing:

- Residents need to be cohorted to separate units in three zones, based on test results.
 - **COVID + test (Red Zone):** residents with a positive SARS-CoV-2 PCR test and still within the parameters for transmission-based precautions

- **COVID – test potentially exposed (Yellow Zone):** residents with a negative SARS-CoV-2 PCR test who remain asymptomatic but are within 14 days of possible exposure to COVID-19
- **Unexposed (Green Zone):** any resident in the facility who was not tested and is thought to be unexposed to COVID-19



- The three types of residents listed above should not share common areas such as communal bathrooms and showers with other types of residents. The three zones should remain separate on the unit.
- Staff should be designated by zone *as much as possible* to minimize risk to exposed (Yellow) and non-exposed (Green) residents. Using staff in more than one zone should be prioritized as below, with the best option listed first, and the least desirable option last.

 <p>Best Option</p> <p>Least Desirable</p>	<p>Staff always work on the same unit, and units do not include more than one Zone. Staff do not cross over to other units.</p>
	<p>Staff always work on the same Zone, and do not cross over to other Zones. They may work in two or more exposed (Yellow) units, for example.</p>
	<p>Staff are assigned to specific Zones but must <i>occasionally</i> cover staffing needs in other Zones for certain shifts. Ideally, staff would <u>not</u> work in the COVID-positive (Red) unit and then return to exposed (Yellow) or unexposed units (Green).</p>
	<p>Staff always work in the same Zone during one shift but may work in different Zones on different shifts. Ideally, staff would <u>not</u> work in the COVID-positive (Red) zone and then return to exposed (Yellow) or unexposed (Green) units.</p>
	<p>Occasionally staffing needs require that certain staff work in more than one Zone during a single shift. That person must change all PPE and perform hand hygiene when going from one Zone unit to another. <i>Exception: respirators or facemasks that have been worn with a face shield can be worn continuously.</i> Ideally, this should be limited to key staff (e.g. RNs).</p>

Zone Guidelines

- Zones should be clearly marked with limited access signs or temporary barriers to prevent unnecessary foot traffic to the area.
- Equipment should be dedicated ideally to each unit, and if necessary shared only between units of the same Zone. Any equipment that must be shared between

different Zones should be fully cleaned and disinfected between use. These occurrences should be rare.

- Full PPE must be used to care for residents in COVID+ (Red) and COVID- potentially exposed (Yellow) zones.
- COVID Positive (Red) and Unexposed (Green) units should be as far apart as possible within the facility.
- Unexposed (Green) units should be clearly marked with limited access signs or temporary barriers to prevent unnecessary foot traffic to the area.
- Occasionally, a laboratory may report an **inconclusive or indeterminant result** for SARS-CoV-2 PCR testing. For residents with these results, specimen collection should be repeated as soon as possible. The resident should be cared for within a COVID- potentially exposed (Yellow) zone while awaiting repeat test results.
- **Any resident who develops symptoms consistent with COVID, should be presumed positive**
 - Test for COVID-19 immediately if symptoms occur.
 - While awaiting test results, move to a private room or remove roommate from current room. Consider roommate exposed (Yellow). Keep resident in current unit if they are in an Exposed unit (Yellow). If the symptomatic resident is in an Unexposed (Green) zone, move to the Exposed (Yellow) zone in a private room.
 - If test positive, move to COVID Positive zone (Red).
- **De-escalating Zones:** When criteria set forth in PA-HAN-502 under “Discontinuing ‘exposed’ or ‘affected’ status for a unit or facility” are met:
 - A COVID Positive zone (Red) may be changed to Unexposed (Green) status
 - A COVID-potentially exposed (Yellow) Zone may be changed to Unexposed (Green) status where these criteria have been met and where exposure occurred at least 14 days ago.
- **Residents refusing testing:** occasionally asymptomatic residents may refuse to be tested. These residents, if potentially exposed to COVID-19, should be cared for in a COVID- potentially exposed (Yellow) zone until at least 14 days after exposure. If these residents develop fever or respiratory symptoms testing is recommended, and the testing request should be re-visited with the resident or responsible party.

For staff testing:

- Follow [PA-HAN-501](#) for Return-to-Work Guidance.
 - a. Staff with fever or respiratory symptoms should be excluded from work and isolated until they meet return to work criteria.
 - b. Asymptomatic staff who test positive should be excluded from work and isolated for 10 days from the date of their first positive test (if they have not developed symptoms).
See exception for critical staffing needs below.
- *Exceptions for critical staffing need-* Asymptomatic staff may be able to work, but facilities must ensure the following conditions exist prior permitting these staff to work:
 - a. Asymptomatic staff with SARS-CoV-2 infection must only work with COVID-19 positive residents (Red Zone) and staff.
 - b. Work areas for COVID positive and negative or untested staff must be kept separate, including break rooms, workstations and bathrooms.

If you have questions about this guidance, please contact DOH at 1-877-PA-HEALTH (1-877-724-3258) or your local health department.

Categories of Health Alert messages:

Health Alert: conveys the highest level of importance; warrants immediate action or attention.

Health Advisory: provides important information for a specific incident or situation; may not require immediate action.

Health Update: provides updated information regarding an incident or situation; unlikely to require immediate action.

This information is current as of May 12, 2020 but may be modified in the future. We will continue to post updated information regarding the most common questions about this subject.