STATE OF CONNECTICUT
DEPARTMENT OF PUBLIC HEALTH

Renée D. Coleman-Mitchell, MPH
Commissioner

Ned Lamont
Governor

Susan Bysiewicz
Lt. Governor

COVID-19 Point Prevalence Survey Testing and Cohorting in Nursing Homes
[Interim Guidance – May 11, 2020]

If done effectively, cohorting can control the spread of COVID-19 in Nursing Homes (NHs). Cohorting physically separates residents potentially capable of transmitting SARS-CoV-2 from those potentially naïve to it. Knowing the COVID-19 status (positive or negative) of all residents within a NH at a given point in time can help inform a cohorting strategy. CDC recommends testing in NHs when results will lead to specific infection control interventions such as cohorting.[1]

With Connecticut's increasing supply of nasopharyngeal (NP) swabs and capacity for laboratories to provide COVID-19 results rapidly, NHs are being prioritized for Point Prevalence Surveys (PPSs) to inform effective resident cohorting. During the month of May, the Connecticut Department of Public Health (DPH) will reach out to every NH to assess if a PPS has been completed, and if not, readiness to conduct one. We strive to test all Connecticut NH residents.

Point Prevalence Survey Testing

A PPS involves testing broadly to determine the COVID-19 status of all residents on the same day. To effectively limit the spread of COVID-19, **cohorting must be done as soon as PPS test results are received**, limiting potential time for change in COVID-19 status from negative to positive before cohorting is completed. To minimize the lag time between PPS testing and cohorting, the servicing laboratory must have a rapid turn-around-time.

PPS specimens should not be submitted to the CT State Public Health Laboratory, as rapid turn-around-times for a high volume of specimens cannot be guaranteed. The Connecticut National Guard is assisting with coordination of specimen submission to laboratories that can commit to providing test results for all specimens within 24 hours of collection.

DPH staff will initiate discussions about PPS with NHs; when a facility is ready, DPH will provide the National Guard with information needed to deliver specimen collection kits and coordinate specimen submission to a designated laboratory.

Important Planning Considerations Before Scheduling a PPS

Before scheduling a PPS, make plans and any preparations that can be made ahead of time to implement cohorting as soon as all resident results are received. A delay between PPS specimen collection and cohorting actions (designating separate areas and moving residents) can potentially extend exposure of COVID-naïve residents to COVID-positive ones.

While some decisions cannot be made until results are available, some decisions need to be made before the PPS.

- Assess physical space, equipment (e.g., boxes, dollys) staffing, and PPE needs for resident movement.
- Decide if residents who have already tested positive will be included in the PPS. See **Considerations for Discontinuation of Transmission-Based Precautions** (page 3).

Phone: (860) 509-7995• Fax: (860) 509-7910
Telecommunications Relay Service 7-1-1
410 Capitol Avenue, P.O. Box 340308
Hartford, Connecticut 06134-0308
www.ct.gov/dph
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- Obtain permission/consent for testing per facility policy.
- Plan for adequate PPE and staffing to collect NP specimens on the day of PPS. Gowns and gloves should be changed between each resident's specimen collection. Facemask/respirator and eye protection may stay on (extended use) between specimen collections. Specimen collector should be trained in donning/doffing PPE.
- Plan for adequate staff and supplies for environmental cleaning/disinfection of rooms after residents are moved out (terminal cleaning) during cohorting. See attached **Example Environmental Checklist**.
- Please review CDC websites with guidance for **Testing[1] and Response[2] to COVID-19 in Nursing Homes** and see **Considerations for Cohorting** (below).

Considerations for Testing Nursing Home Staff

Cohorting *residents* is the priority for this PPS and cohorting initiative, as they are a high-risk population residing in a congregate living setting. As testing resources allow, staff testing should be considered. A resident PPS should not be delayed while planning for staff testing. If a NH is ready to test staff on the PPS date, please discuss with DPH.

DPH has previously recommended that symptomatic NH staff should seek testing. Considerations for testing asymptomatic staff (as part of a staff PPS) include:

- If asymptomatic staff are tested and are COVID-positive, CDC recommends the staff member not return to work until 10 days after their positive COVID-19 test OR two consecutive COVID-19 tests collected ≥24 hours apart.[3] **Facilities should consider staffing contingency plans before testing asymptomatic staff.[4]**
- If asymptomatic staff are tested and are COVID-negative, that is their status for only the point in time of specimen collection. There is no guarantee that they will not later develop illness or the potential to transmit the virus.
- Nonetheless, asymptomatic transmission can be controlled by "universal source control" (which means ALL staff ALWAYS have a mask covering the nose and mouth while in the NH). In addition:
  - Staff should be screened for fever and symptoms before entering NHs.
  - Symptomatic staff should not be allowed into the facility and should be referred for testing.

Considerations for Cohorting: DPH recommends cohorting residents into 3 separate units/areas.

1. **Positive**: residents confirmed to have COVID-19 due to a positive PCR test.
2. **"Negative"**: asymptomatic residents with no known exposures who test negative for COVID-19.
3. **"Exposed"**: roommates of COVID-positive residents undergoing a 14-day quarantine OR symptomatic resident with high clinical suspicion for COVID-19 awaiting test results (also known as Persons Under Investigations or PUIs)

- Each cohort should ideally have dedicated staff and equipment, minimizing movement across cohorts. When movement across cohorts is necessary, staff and equipment should move from "Negative" to "Exposed" to "Positive" where possible.
- Room sharing priorities if single-occupancy rooms are not available:
  - Prioritize private rooms for "Exposed" cohort, where residents could potentially be positive or negative
  - COVID-positive residents can share a room with other COVID-positive residents; COVID-negative residents can share a room with other COVID-negative residents.
- Refusal/declination of testing:
  - If a resident refuses testing AND has a COVID-19 positive roommate OR direct contact with a COVID-positive staff member, consider placing the resident in the "Exposed" cohort.
  - If a resident refuses testing AND has no known exposure AND is asymptomatic, consider placing the resident in the "Negative" cohort.
- Cohorting can help preserve Personal Protective Equipment (PPE):[5]
  - In the Positive cohort, due to current gown shortages, when laundered cloth gowns are unavailable, consider extended use of single use gowns (keeping gown on when moving direcctly between care for COVID-positive residents). Extended use of facemask/respirator and eye protection should also be considered for the Positive cohort. Change gloves and perform hand hygiene between residents.

- In the Exposed cohort, gown and gloves must be changed between residents, extended use of facemask/respirator and eye protection is acceptable.
- Conserve PPE in the "Negative" cohort. Use only facemask and other transmission-based precautions indicated by patient condition.

Considerations for Discontinuation of Transmission-Based Precautions[6]

- **If the symptom-based strategy is used, residents who previously tested positive by PCR should not be tested during the PPS.**
  - Preliminary viral culture studies suggest that though PCR testing (detection of RNA) can remain positive for over 14 days, transmission (measured by isolation of live virus) is not likely possible 10 days after symptom onset.[7]
  - Previously-positive residents can move from the Positive cohort to the "Negative" cohort when they are at least 72 hours fever-free, symptoms are improved, and it has been at least 10 days since symptom onset.
- **If the test-based strategy is used**, be aware that retesting residents who previously tested positive potentially lengthens the time spent in the Positive cohort beyond the length of transmissibility. If the test-based strategy is used for a resident that was previously positive:
  - Two negative PCR tests (collected ≥24 hours apart), in addition to improvement in symptoms and resolution of fever are required before lifting precautions or transfer to the "Negative" cohort.
  - A persistently positive but asymptomatic resident will need to continue transmission-based precautions until 10 days after the most recent positive result, then can move to the "Negative" cohort.
  - Due to persistence of RNA detection by PCR, DPH does not recommend retesting unless residents are ≥14 days after symptom onset, afebrile for ≥72 hours, and respiratory symptoms are improved.

Testing after PPS and Cohorting: Extra collection kits will be provided. Testing is recommended for:

- Testing all newly symptomatic residents and staff
- PPS of staff and/or a repeat PPS of residents if there is evidence for ongoing transmission within the facility.

Safe Specimen Collection Procedure

Collection of COVID-19 test specimens from patients is safest using a "buddy system": The "Collector" collects the NP specimen, and the "Assistant" performs a clean hand-off to the courier transporting to the processing laboratory.

1. Collector dons appropriate PPE.[8] Assistant is wearing gloves.
2. Collector opens pre-packaged vial and swab kit.
3. Collector verifies and handwrites patient name and DOB on specimen label on Transport Media tube.
4. Collector enters patient's room with pre-labeled vial and swab and closes door to minimize risk of droplet spread.
5. Collector collects NP specimen per protocol,[9] breaking off swab shaft and threading on vial cap completely.
6. Assistant stands outside patient room entrance, verbally checks with Collector that specimen cap is secured, and holds open biohazard bag for Collector.
7. Collector carefully drops specimen vial into biohazard bag, taking care to not touch sides of open bag.
8. Assistant seals bag and wipes it down with sanitizing cloth.
9. Collector doffs PPE as appropriate and performs hand hygiene.
10. Assistant packages specimen with cold packs.
11. Assistant sends the specimen to the processing laboratory with corresponding test requisition.

References: Note that COVID-19 websites are updated regularly.

1. CDC. Testing for Coronavirus (COVID-19) in Nursing Homes: https://www.cdc.gov/coronavirus/2019-ncov/hcp/nursing-homes-testing.html
2. CDC. Responding to Coronavirus (COVID-19) in Nursing Homes: https://www.cdc.gov/coronavirus/2019-ncov/hcp/nursing-homes-responding.html
3. Criteria for Return to Work for Healthcare Personnel with Suspected or Confirmed COVID-19 (Interim Guidance): https://www.cdc.gov/coronavirus/2019-ncov/hcp/return-to-work.html

4. CDC. Strategies to Mitigate Healthcare Personnel Staffing Shortages: https://www.cdc.gov/coronavirus/2019-ncov/hcp/mitigating-staff-shortages.html
5. CDC. Strategies to Optimize the Supply of PPE and Equipment: https://www.cdc.gov/coronavirus/2019-ncov/hcp/ppe-strategy/index.html
6. CDC. Discontinuation of Transmission-Based Precautions and Disposition of Patients with COVID-19 in Healthcare Settings (Interim Guidance): https://www.cdc.gov/coronavirus/2019-ncov/hcp/disposition-hospitalized-patients.html
7. CDC. Symptom-Based Strategy to Discontinue Isolation for Persons with COVID-19, Decision Memo: https://www.cdc.gov/coronavirus/2019-ncov/community/strategy-discontinue-isolation.html
8. CDC. Using Personal Protective Equipment (PPE): https://www.cdc.gov/coronavirus/2019-ncov/hcp/using-ppe.html
9. CDC. Interim Guidelines for Collecting, Handling, and Testing Clinical Specimens from Persons for Coronavirus Disease 2019 (COVID-19): https://www.cdc.gov/coronavirus/2019-nCoV/lab/guidelines-clinical-specimens.html