14. Facility Testing Plan and Response Strategy

BACKGROUND

It has been documented through mass testing that when a single or small number of symptomatic cases are identified, there are many additional asymptomatic or mild cases in other residents and HCP. Experience has shown that despite HCP symptom screening, when COVID-19 cases are identified in a nursing home, there may be HCP with asymptomatic SARS-CoV-2 infection. HCP likely contribute to introduction and further spread of SARS-CoV-2 within nursing homes. A proactive testing strategy allows for earlier detection and intervention in outbreaks in skilled nursing facilities (SNF), and can be used by SNFs as follows:

- Making decisions about cohorting of residents and healthcare personnel* (HCP) within facilities
- Discontinuing transmission-based precautions
- Identifying HCP testing positive for SARS-CoV-2 infection for exclusion from work
- Allocation of resources based on burden of SARS-CoV-2 infection across different units or facilities

Testing should not supersede existing infection prevention and control interventions

Testing conducted at the facility will be implemented in addition to existing infection prevention and control measures recommended by the Centers for Disease Control and Prevention (CDC), Illinois Department of Public Health (IDPH), Wisconsin Department of Public Health and OSHA, 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.

Health care 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).

Testing Stages

The following guidelines are minimum guidance and facility may revise testing guidance to be more stringent in the event of increasing levels of community transmission.
Regular testing of residents and staff may be undertaken in three stages dependent on the presence of COVID-19:

- Baseline testing for facilities with no current COVID-19 cases
- Surveillance testing: Conduct weekly sampling of asymptomatic HCP and test any symptomatic or exposed residents and HCP immediately
- Response-driven testing: After detection of a confirmed case of COVID-19, implement broader testing and retesting of both residents and staff until no cases are detected within the facility for two sequential rounds of testing.

Stage 1: Baseline testing/Point Prevalence Survey (PPS) for facilities

1. Conduct a facility-wide Point Prevalence Survey (PPS)/Baseline testing of all residents and HCP.
    - What's a Point Prevalence Survey? A data collection tool used to identify the number of people with a disease or condition at a specific point in time.
    - 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.
2. If one (or more) positive resident or HCP is identified in the PPS/baseline testing, move to stage 3.
3. If testing capacity is not sufficient:
    - for a facility-wide PPS, performing PPS in residents and HCP on units with symptomatic residents should be prioritized.
    - 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. All efforts should be made to conduct a minimum of unit wide testing of HCP for units with symptomatic residents.

Stage 2: Surveillance testing in facilities with no COVID-19 cases

1. HCP: test all HCP monthly
    a. Test 25% of previously negative staff each week (every 7 days) to achieve 100% of HCP are tested each month.
    b. Test any HCP who are exposed to a COVID-19 positive individual or who develop symptoms consistent with COVID-19
2. Residents:
    a. Test those who frequently leave the facility for dialysis or other services every 7 days.
    b. Test any residents who are exposed to a COVID-19 positive individual or who develop symptoms consistent with COVID-19

3. If positives identified during this stage, initiate response-driven testing strategy (Stage 3).

Stage 3: Response-driven testing in facilities with confirmed cases of COVID-19

1. If not already done, conduct PPS of all residents and staff as outlined in baseline testing stage (Stage 1).
2. Initiate weekly (every 7 days) testing of all residents and HCP who previously tested negative.
    a. Continue testing all previously negative residents and HCP within the facility for two sequential rounds of testing (14 days).
    b. Once a resident or HCP tests positive, they do not need to be re-tested.
3. Immediately test any resident or HCP who develop symptoms consistent with COVID-19.
4. When no new cases have been detected among residents or HCP for two sequential rounds of weekly testing (14 days), switch to surveillance testing strategy (Stage 2).
5. All residents and HCP are required to participate in testing.
    a. Residents that refuse testing will be placed in isolation for 14 days.
    b. Staff that refuse testing will not be permitted to come to work until tested.
6. If full participation (all previously negative residents and HCP) over 14 days:
    a. NOT ACHIEVED: then testing must continue until no cases are detected for 28 days.
    b. IS ACHIEVED: all negative results over 14 days, then switch to Stage 2 (surveillance testing).
7. 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 at least every 7 days until all tests of said residents and HCP are negative for SARS-CoV-2 for two sequential rounds of testing (14 days).

Logistics

- Laboratory and testing:
    - Facility has entered into a Laboratory Service Agreement with Simple Laboratories (“SL”) to conduct widespread and routine testing using a molecular amplification detection test, such as reverse-transcriptase polymerase chain reaction (RT-PCR) with at least 95% sensitivity and 90% specificity.
    - SL will provide the facility with supplies necessary for collecting, preparing and delivering specimens to SL. Facility nursing staff will collect specimens from residents, staff and contracted staff and appropriately label, process and prepare each specimen for testing.
    - SL will pick up specimens upon a regular schedule. In addition, facility will be able to send specimens to SL via Federal Express as necessary.
    - Acceptable specimens include NP, OP, or mid-turbinate swab by HCP collection, or midturbinate or anterior nares by either onsite self-collection or HCP collection. Multiple specimens may be taken with a single swab and swabs from two anatomic locations may be placed in the same vial. See FDA FAQ on

Diagnostic Testing for SARS-CoV-2 and CDC Interim Guidelines for Collecting, Handling and Testing Clinical Specimens for COVID-19. Use of test results to guide cohorting of HCP and residents.
    - Antibody testing will not be used or relied upon to diagnose SARS-CoV-2
- Informed consents:
    - HCP and Residents or their representative will be required to sign consents for testing. Residents that are unable to sign may give verbal consent which will be documented accordingly.
- Orders:
    - The Facility Medical director will be the ordering physician for all HCP and residents. See attached order sample.

PPE requirements

- HCP will follow facility policy related to proper PPE usage- see attached policy "How facility will respond to suspected and confirmed COVID-19 cases".
- Facility will have sufficient Personal Protective Equipment (PPE) available to properly care for the facility's residents using Burn Rate Calculator to calculate quantities of PPE needed on hand to include:
    - Isolation Gowns
    - Gloves
    - N95 masks
    - Surgical masks
    - Face Shields
    - Testing kits

Necessary Healthcare Personnel and Training

- Facility will provide the necessary personnel to execute the COVID-19 testing plan.
- Contracted Nurse Practitioners along with trained Nurses will perform testing.
- Nurses will be trained by Nurse Practitioners on proper testing procedures and will be required to prove competency through return demonstration.
- In the event Nurse practitioners are unable to train nurses on proper testing procedures, the facility will request IDPH to provide onsite training for proper specimen collection or other assistance. LTC facilities can request onsite training for specimen collection at: https://redcap.dph.illinois.gov/surveys/?s=8TYYKCETCX.

Healthcare Personnel

- New employees: tested upon hire and thereafter according to whatever stage of testing facility is in.
- HCP testing positive for SARS-CoV-2 should be excluded from work until Return-to-Work Criteria for Healthcare Workers are met per facility policy.
- HCP will be expected to sign the attached consent form allowing facility to perform and receive personal information related to SARS-CoV-2 testing.

Residents

- Residents who test positive should be isolated according to facility policy.
- Symptomatic residents:
    - Residents who have symptoms consistent with COVID-19, but test negative should still be presumed to have COVID-19 in the absence of a verifiable alternative diagnosis, given the sensitivity of the SARS-CoV-2 PCR may be around 70%. These residents should be placed on standard, contact, and droplet precautions, and isolated away from both the COVID-positive and COVID-negative residents if possible. Re-testing may be performed if available and then a disposition can be chosen based on the retesting results.
- New and Re-admits:
    - Test residents prior to admission or readmission, including transfers from other healthcare facilities unless resident was previously positive or tested within 24 hours of admission. If not tested within 24 hours of admission, facility will test upon admission. A resident that tests negative, will be quarantined for 14 days and then retested prior to ending quarantine. If negative and asymptomatic at the end of the 14-day quarantine, the resident can be released from quarantine.
- Resident consent forms for SARS-CoV-2 testing will be signed by the resident or there representative upon admission or prior to testing. Residents that refuse testing will be placed in isolation for 14 days.
- The facility will report to public health officials the number of residents and staff tested, and the number of positive, negative, and indeterminate test results.
- A copy of the facility's infection control policies and procedures will be provided to residents, and to the resident's family or representative.

References

Kimball A, Hatfield KM, Arons M, et al. Asymptomatic and Presymptomatic SARS-CoV-2 Infections in Residents of a Long-Term Care Skilled Nursing Facility — King County, Washington, March 2020. MMWR Morb Mortal Wkly Rep 2020;69:377–381. DOI: http://dx.doi.org/10.15585/mmwr.mm6913e1

Testing for Coronavirus (COVID-19) In Nursing Homes: Considerations for use of test-based strategies for preventing SARS-CoV-2 transmission in nursing homes. https://www.cdc.gov/coronavirus/2019-ncov/hcp/nursinghomes-testing.html

Responding to Coronavirus (COVID-19) in Nursing Homes. https://www.cdc.gov/coronavirus/2019-ncov/hcp/nursing-homes-responding.html
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

Strategies to Mitigate Healthcare Personnel Staffing Shortages. https://www.cdc.gov/coronavirus/2019-ncov/hcp/mitigating-staff-shortages.html