**INTERIM Guidelines for Preparation and Response to Single Cases and Outbreaks of COVID-19 in Long-Term Care Settings**

**Issued: 03/14/2020**

| Date of Update | Description of Update |
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| 03/25/2020 | **Updates to symptom screening and case symptoms, reporting to public health, surveillance and monitoring, source control, testing, outbreak precautions, discontinuation of isolation, return of residents to the facility following hospitalization or new admission to the facility, return of HCP to work after suspected or confirmed COVID-19, outbreak resolution.** |
| 04/09/2020 | **Updates to outbreak definitions, surveillance and monitoring, specimen collection, infection control, admissions, communication, outbreak resolution and containment** |

**Scope:** The purpose of this document is to provide guidance to long-term care facilities (LTCFs) when a resident or healthcare personnel is suspected or confirmed to have COVID-19 and to provide recommendations to prevent transmission within the facility. These recommendations are specific for nursing homes, including skilled nursing facilities. Much of this information could also be applied in assisted living facilities. Guidance provided in this document is based on currently available information at the time it was drafted and is subject to change.

**Background:** A new respiratory disease, coronavirus-19 (COVID-19) is currently spreading globally and there have been instances of community spread within the United States. This disease is caused by the virus SARS-CoV-2. The Colorado Department of Public Health and Environment (CDPHE) is currently monitoring the situation closely. Updated case counts are available on the CDPHE website: Coronavirus Disease 2019 (COVID-19) in Colorado.

Residents of LTCFs, which are often older people and those with underlying health conditions, are at especially high risk for developing serious illness associated with COVID-19. Healthcare workers and close contacts of people with COVID-19 are also at elevated risk for exposure. Respiratory illnesses have the potential to spread easily in these settings due to the communal nature of the environment.

**Definition of Healthcare Personnel (HCP):** HCP refers to all persons, paid and unpaid, working in healthcare settings engaged in resident care activities, including: resident assessment for triage, entering examination rooms or resident rooms to provide care or clean and disinfect the environment, obtaining clinical specimens, handling soiled medical supplies or equipment, and coming in contact with potentially contaminated environmental surfaces.

**Preparation:** Steps that LTCFs can take to prepare for community spread of COVID-19 and to prevent introduction of COVID-19 into the facility include:

1. Review the facility emergency plan.
2. Establish relationships with key healthcare and public health partners.
3. Communicate about COVID-19 with your staff.
4. Communicate about COVID-19 with your residents.
5. Ensure proper use of recommended personal protective equipment (PPE).
6. Conduct an inventory of available PPE and ensure adequate supply of PPE.
7. Reinforce sick leave policies and restrict ill HCP from work.
8. Ensure supplies are available for hand hygiene and respiratory etiquette.
9. Restrict visitors according to public health order 20-20 and guidelines from the Centers for Medicare and Medicaid Services (CMS) and the Centers for Disease Control and Prevention (CDC).
10. Cancel group activities and communal dining.
11. Implement active screening of residents and HCP for symptoms and signs of infection (See Surveillance and Monitoring, below).
12. Ensure adequate supplies and procedures for environmental cleaning and disinfection.

Resources for preparation can be found here:

- Steps Healthcare Facilities Can Take Now to Prepare for Coronavirus Disease 2019 (COVID-19) (CDC).
- Preparing for COVID-19: Long-term Care Facilities, Nursing Homes (CDC).
- Notice of Public Health Order 20-20.

**Response**

## Key Information about COVID-19

- **Agent:** SARS-CoV-2
- **Incubation Period:** Range 2 to 14 days
- **Transmission/Communicability:** The virus is thought to spread mainly from person-to-person.
    - Between people who are in close contact with one another (within about 6 feet),
    - Through respiratory droplets produced when an infected person coughs or sneezes.

- These droplets can land in the mouths or noses of people who are nearby or possibly be inhaled into the lungs.
- It may be possible that a person can get COVID-19 by touching a surface or object that has the virus on it and then touching their own mouth, nose, or possibly their eyes, but this is not thought to be the main way the virus spreads.

## Outbreak Definitions

- **Respiratory illness in LTCF**s: [Fever (>100 F)] OR [lower respiratory illness (new cough or shortness of breath)]

  **Note* When COVID-19 is detected in the surrounding community of the LTCF, a high index of suspicion should be maintained. The medical director or local public health agency might consider loosening the respiratory illness case definition to account for upper respiratory symptoms in an outbreak highly suspected of being due to COVID-19 in which residents have a broader array of symptoms or signs (see* Interim Clinical Guidance for Management of Patients with Confirmed Coronavirus Disease (COVID-19) (CDC) *for updated information on clinical presentation of COVID-19).*

- **Suspected COVID-19 Outbreak:** Two or more cases of respiratory illness in residents with symptom onset within a 14 day period without a positive test for COVID-19. During the time when COVID-19 is circulating locally, the occurrence of acute febrile respiratory illness in several residents within a short time frame should be considered highly suspect for COVID-19 until proven otherwise.

- **Confirmed COVID-19 Outbreak:** Two or more residents with new lab-confirmed diagnoses of COVID-19 by an FDA-approved COVID-19 test within a 14 day period

  --OR--

  Two or more cases of respiratory illness in residents with symptom onset within a 14 day period and at least one resident with a new diagnosis of COVID-19 by an FDA-approved COVID-19 test.*

  *Excluding residents with a diagnosis of COVID-19 known at time of admission to the facility.

## Reporting to Public Health

Any suspected or confirmed case or outbreak of COVID-19 should immediately be reported to the local or state public health agency. To report, utilize the Outbreak Reporting Form for Long-Term Care Facilities. Send this form to your local public health agency OR to CDPHE by securely emailing a completed form to: HAIOutbreak@state.co.us. You may also contact your

local public health agency or the Colorado Department of Public Health and Environment at 303-692-2700 (8:30 - 5:00, Monday - Friday) or 303-370-9395 (after-hours, holidays and weekends).

## Surveillance and Monitoring

**Surveillance for Respiratory Illness in Residents during COVID-19:** Routinely monitor residents for symptoms (cough, shortness of breath, or difficulty breathing, fever, chills, rigors, myalgia, headache, sore throat, new olfactory and taste disorder(s); consider also rhinorrhea, headache, diarrhea, nausea or vomiting), temperature, and other vital signs, including pulse oximetry daily. **Increase monitoring of all residents to twice daily if there is a resident with suspected or confirmed COVID-19 or a suspected or confirmed COVID-19 outbreak in the facility.**

Residents with the following symptoms should be considered for potential COVID-19:

- Fever
- Cough
- Shortness of breath
- Other symptoms in the setting of a suspected or confirmed COVID-19 outbreak (e.g., chills, rigors, myalgia, headache, sore throat, new olfactory and taste disorder(s), rhinorrhea, headache, diarrhea, nausea or vomiting) or signs of new hypoxemia

Residents should ***also*** be assessed for other etiologies (e.g. influenza, RSV, etc.) according to clinical suspicion. See Testing section below for more information.

CDPHE provides a basic tracking tool: Line List Template to Monitor Residents and Staff. Collection of additional variables may be recommended in the setting of a suspected or confirmed COVID-19 outbreak.

**Surveillance for Respiratory Illness in HCP during COVID-19:**

- Screen all staff at the beginning of their shift for fever or respiratory symptoms (cough, shortness of breath, or difficulty breathing, fever, chills, rigors, myalgia, headache, sore throat, new olfactory and taste disorder(s); consider also rhinorrhea, headache, diarrhea, nausea or vomiting) and close contact with an ill household member.
    - Actively take their temperature and document absence of fever and symptoms.
    - Keep a record of other healthcare facilities where your staff are working (these staff may pose a higher risk) and ask about exposure to facilities with recognized COVID-19 cases.
- As part of routine practice, ask HCP (including consultant personnel) to regularly monitor themselves for fever and symptoms of respiratory infection.

- CDPHE provides a basic tracking tool: Line List Template to Monitor Residents and Staff. Collection of additional variables may be recommended in the setting of a suspected or confirmed COVID-19 outbreak.

### Source Control/What to do when a resident with respiratory illness is identified

- Do not wait for confirmation of a diagnosis to implement infection control precautions.
- Place a facemask over the resident's nose and mouth until the resident can be properly isolated. In times of PPE shortages, consider the use of tissues or other barriers to cover the resident's mouth and nose. Ensure that residents have access to a trash receptacle to dispose of used tissues and a method for hand hygiene.
- Place the resident in a private room with the door closed. If roommates cannot be moved, ensure at least 6 feet separation between residents and utilize curtains or other physical dividers for seperation.
- Avoid transferring residents with symptoms of respiratory illness to unaffected units or other facilities unless medically necessary.
- Per CDC guidance, residents with known or suspected COVID-19 in the long-term care setting do not need to be placed into an airborne infection isolation room (AIIR) (Preparing for COVID-19: Long-term Care Facilities, Nursing Homes (CDC)).
- Only essential personnel should enter the room. Implement staffing policies to minimize the number of HCP who enter the room.
- If symptomatic residents need to leave their room (e.g., for medical care), the resident should wear a facemask or use tissues as source control when they are outside of their room or affected unit.

### Source Control/What to do when a HCP with symptoms is identified

- Remind HCP to stay home when they are ill.
- If HCP develop a fever or symptoms of respiratory infection while at work, they should immediately put on a facemask, inform their supervisor, and leave the workplace. In times of PPE shortages, use tissues or other barriers to cover the HCP's mouth and nose. Ill staff should seek medical care if necessary (make sure to call ahead) and practice self-isolation at home.
- Consult occupational health/infection prevention or other appropriate administrative personnel on decisions about further evaluation and return to work. See also: .Interim U.S. Guidance for Risk Assessment and Public Health Management of Healthcare Personnel with Potential Exposure in a Healthcare Setting to Patients with Coronavirus Disease (COVID-19) (CDC) Consult public health as necessary.

### Testing

Residents with respiratory illness should be tested for COVID-19. **Note that COVID-19 testing should not wait for results of other virus testing.** COVID19 testing may be performed at a commercial laboratory or at the state public health laboratory if they meet current testing criteria.

Residents should also be tested for influenza, RSV, and other respiratory viruses according to clinical suspicion and facility protocols. Facilities should submit samples for influenza, RSV, and other respiratory viruses via their usual testing protocols (not to CDPHE).

Staff ill with respiratory symptoms should also be tested for COVID-19 and influenza, at a minimum, through their usual healthcare provider or alternate testing site.

During an investigation of a confirmed COVID-19 outbreak, once two or more residents on a unit have tested positive for COVID-19, then additional COVID-19 testing on the unit may be unnecessary, and all residents on the unit with compatible symptoms should be cared for as if COVID-19 positive. COVID-19 testing should be conducted on other units to establish the extent of COVID-19 spread.

HCP with symptoms of COVID-19 should be prioritized for testing. However, testing of HCP and other staff can be limited during a confirmed COVID-19 outbreak once the extent of spread has been established.

Postmortem testing for COVID-19 should be completed following undiagnosed deaths suspected to be due to COVID-19.

### Specimen Collection

- Follow guidance from CDC and CDPHE regarding which specimens to obtain for COVID-19 testing (e.g., nasopharyngeal or lower respiratory specimens).
  - Evaluating and Testing Persons for Coronavirus Disease 2019 (COVID-19) (CDC)
  - Interim Guidelines for Collecting, Handling, and Testing Clinical Specimens from Persons for Coronavirus Disease 2019 (COVID-19)
  - Interim Guidance for Collection and Submission of Postmortem Specimens from Deceased Persons Under Investigation (PUI) for COVID-19, February 2020 (CDC)
  - COVID-19 resources for health care providers and local public health agencies (CDPHE)
- When collecting diagnostic respiratory specimens (e.g., nasopharyngeal swab) from a possible COVID-19 patient, CDC recommends:
  - Specimen collection should be performed in a private area, such as an examination room with the door closed.
  - HCP in the room should wear an N-95 or higher-level respirator (or facemask if a respirator is not available), eye protection, gloves, and a gown.

    - The number of HCP present during the procedure should be limited to only those essential for patient care and procedure support. Visitors and roommates should not be present for specimen collection.
- In the LTCF setting, consider the following options for appropriate specimen collection activities:
    - Identify and designate an office space or conference room for COVID-19 specimen collection. Consider designating this room for this purpose for an extended period of time.
    - Collect the specimen outdoors (if weather allows and is feasible given resident status).
    - Collect the specimen in the resident's room with the door closed.
        - If the resident has roommates, move the roommate to another location while the specimen is being collected, if possible. Do not allow residents or staff back in the room until a sufficient time has elapsed for enough air changes to remove potentially infectious particles has occurred (Airborne Contaminant Removal (CDC))
        - If roommates cannot be moved, ensure at least 6 feet separation between residents, and use curtains or other physical dividers for seperation.
- When collection of a nasopharyngeal swab is not possible, the following are acceptable alternatives:
    - An oropharyngeal (OP) specimen collected by a healthcare professional, or
    - A nasal mid-turbinate (NMT) swab collected by a healthcare professional or by onsite self-collection (using a flocked tapered swab), or
    - An anterior nares specimen collected by a healthcare professional or by onsite self-collection (using a round foam swab).
    - Self-collected specimens do not require the same level of PPE.
- Clean and disinfect procedure room surfaces promptly in accordance with CDC guidance **(Interim Infection Prevention and Control Recommendations for Patients with Suspected or Confirmed Coronavirus Disease 2019 (COVID-19) in Healthcare Settings (CDC))** .

## Infection Control

### General Guidance

- Infection prevention and control recommendations have been consolidated into the following checklist: COVID-19 Preparation and Rapid Response: Checklist for Long-Term Care Facilities. See the checklist for recommended **prevention measures** that should be implemented immediately to protect residents from possible COVID-19 infection and **rapid response measures** that should be implemented immediately when even a single case of respiratory illness is identified in a resident or during suspected or confirmed outbreaks of COVID-19.

- Also visit CDC's website for infection control guidance (Infection Control (CDC)) and Strategies to Prevent Spread of COVID-19 in LTCFs: Healthcare Facilities (CDC).
- CMS has additional guidance:
  - Guidance for Infection Control and Prevention of Coronavirus Disease 2019(COVID-19) in nursing homes (CMS).
  - Nursing home guidance (CMS)

**Case Management**

- **Management in facility:** Residents with milder illness may be treated in the facility if felt to be medically appropriate by their healthcare provider. For more information about clinical management and treatment, see: Interim Clinical Guidance for Management of Patients with Confirmed Coronavirus Disease (COVID-19) (CDC).
- **Acute care management:** Transfer of residents to an acute care facility could be considered in the following circumstances:
  - If a resident requires a higher level of care due to medical necessity.
  - If the LTCF is not able to implement or maintain recommended precautions to appropriately care for and protect other residents, transfer to another facility should be considered in consultation with public health and the accepting facility.
- **Transport:** When transporting residents who require hospitalization, residents should wear a facemask over their nose and mouth to contain secretions. **Ensure transport personnel and the receiving hospital are informed of COVID-19 suspicion or diagnosis before arrival. This will allow the transport service and healthcare facility the opportunity to properly prepare.**

**Discontinuation of Isolation**

- CDC recommends a test-based strategy for discontinuation of transmission-based precautions: Interim Guidance for Discontinuation of Transmission-Based Precautions and Disposition of Hospitalized Patients with COVID-19 (CDC).
  - Resolution of fever without the use of fever-reducing medications and
  - Improvement in respiratory symptoms (e.g., cough, shortness of breath), and
  - Negative results of an FDA Emergency Use Authorized COVID-19 molecular assay for detection of SARS-CoV-2 RNA from at least two consecutive nasopharyngeal swab specimens collected ≥24 hours apart (total of two negative specimens)
- When testing is not available, CDPHE recommends a non-test-based strategy. Standard, Droplet, and Contact Precautions, including eye protection, should be maintained on residents with respiratory symptoms, regardless of testing results, until the following criteria are met:
  - At least 3 days (72 hours) after recovery defined as resolution of fever without the use of fever-reducing medications and improvement in respiratory symptoms (e.g., cough, shortness of breath); AND
  - At least 10 days have passed since symptoms first appeared.

    - Facilities may consult public health on a case by case basis as necessary for guidance regarding special populations (e.g., severely immunocompromised persons).
- Additionally, all residents should remain in their rooms, and staff and essential visitors should practice universal masking (and possibly use of gowns, gloves, mask, and eye protection) until the outbreak is contained, defined as 14 days after the onset of symptoms of the last case (in residents and staff). This might be applied to an affected unit or the entire facility.

**Strategies to Optimize the Supply of PPE**

- CDC's optimization strategies for PPE offer options for use when PPE supplies are stressed, running low, or absent: Strategies to Optimize the Supply of PPE and Equipment (CDC).
- For resource requests: Concept of Operations (CONOPS) for Coronavirus Disease (COVID-19) Personal Protection Equipment Shortage (CDPHE).

## Admissions

**Admission of Residents with Suspected or Confirmed COVID-19**

- Hospitalized residents with a history of suspected or confirmed COVID-19 can be admitted to the facility if transmission-based precautions have been discontinued in the hospital based on the above test-based or non-test-based strategies.
    - If the resident's symptoms are resolved, no further restrictions are necessary unless resident activities are restricted due to an ongoing potential or confirmed outbreak.
    - If the resident has persistent symptoms from COVID-19 (e.g., persistent cough), they should be placed in a single room, and restricted to their room.
- Residents with a history of suspected or confirmed COVID-19 that have not met criteria for discontinuation of transmission-based precautions should go to a facility with adequate personal protective equipment supplies and an ability to adhere to infection prevention and control recommendations for the care of COVID-19 patients. Preferably, the patient would be placed at a facility that has already cared for COVID-19 cases, in a specific unit designated to care for COVID-19 residents.
- If facilities designate separate units for admission of residents with COVID-19, these units should be designed to separate residents with COVID-19 from residents without COVID-19 or whose COVID-19 status is unknown and include physical separation, separate resident populations, separate staff, separate equipment, and adequate PPE. Consultation with public health is advised during the creation of COVID-19 units.

**Admission of Residents Without COVID-19 or With Unknown COVID-19 Status**

- During a suspected or confirmed COVID-19 outbreak, the facility should halt new admissions until the outbreak has been contained (14 days after the last onset of fever or respiratory symptoms in a resident). It may be possible to admit residents to the facility if an unaffected area can clearly be established; however, consultation with public health is recommended.

- When an outbreak is not occurring or is contained, long-term care facilities should admit any individuals that they would normally admit to their facility, including individuals from hospitals where a case of COVID-19 was/is present.
    - For admission of residents who are not suspected or confirmed to have COVID-19, but whose COVID-19 status is unknown, admit to a private room and consider admission to a separate wing/unit or floor in order in order to quarantine for 14 days (maintain social distancing and actively monitor resident symptoms and signs).
    - If the newly admitted resident develops respiratory illness or develops symptoms compatible with COVID19, follow the infection prevention recommendations for isolation and transmission-based precautions (Standard, Contact, and Droplet Precautions, including eye protection).

### Return of HCP to Work after Confirmed or Suspected COVID-19

- See Return to Work Criteria for HCP with Confirmed or Suspected COVID-19 (CDC) for test-based and non-test-based strategies for determining when HCP may return to work. Note, that if a non-test-based strategy is used, CDPHE recommends that at least 3 days (72 hours) have passed since recovery defined as resolution of fever without the use of fever-reducing medications and improvement in respiratory symptoms (e.g., cough, shortness of breath), and at least *10 days* have passed since symptoms first appeared. The more stringent criteria recommended by CDPHE are based on evidence of cases of prolonged shedding of virus, and may need to be modified in consultation with public health in settings of staffing shortages.
- After returning to work, HCP should follow return to work practices and work restrictions as outlined by CDC (see Return to Work Criteria link, above).

### Communication

- Communicate with staff, residents, and families about the suspected or confirmed COVID-19 outbreak, and steps the facility is taking to halt the outbreak.
- Confirmed outbreaks will be publicly reported by facility name by the state emergency operations center.

### Outbreak Resolution and Containment

- Resolution is defined as 28 days after the onset of symptoms (fever or respiratory symptoms) of the last case (in residents and staff).
- An outbreak may be considered contained 14 days after the onset of symptoms (fever or respiratory symptoms) of the last case (in residents or staff), with infection prevention and control precautions in place during that time.
- Consideration can be given to unit-specific outbreak containment in consultation with public health.