COVID-19 Infection Prevention and Control Guidance for Licensed Long-Term Care Settings

Why is this guidance being updated?
In April 2020, in response to the recognized role that asymptomatic and pre-symptomatic healthcare workers (HCWs) play in introducing COVID-19 into Utah’s long-term care facilities (LTCFs), the Utah Department of Health (UDOH) issued guidance for HCWs to use personal protective equipment (PPE) with every patient encounter. At that time, PPE was in short supply, and the recommendation was limited to mask and glove use and could only be implemented as supplies could be obtained by LTCFs. Since that time, a number of changes have occurred: 1) PPE is becoming increasingly available, although some shortages remain; 2) national recommendations have been updated (e.g., from the Centers for Disease Control and Prevention (CDC) and the Centers for Medicare and Medicaid Services (CMS)); and 3) there is a need for more specific recommendations to guide facility licensing surveyors and the facilities being surveyed.

Summary of changes
- Updated recommendations for facility administrators and HCWs
- Updated PPE recommendations for HCWs
- Updated information on COVID-19 testing in LTCFs
- Updated information on quarantine and isolation
- Update information on testing in LTCFs

Who is this guidance for?
This guidance is for administrators and HCWs in all types of LTCFs licensed by UDOH, including long-term acute care facilities, skilled nursing facilities, nursing homes, assisted living facilities, intermediate care facilities for individuals with intellectual disabilities, and home health. It also pertains to essential service providers who have contact with patients.

Responsibilities of facility administration
Facility administration should refer to the CDC updated infection prevention and control guidance\(^1\) and support recommendations in the following areas:
- Appoint an infection prevention point person.
- Work with the UDOH infection preventionist staff to schedule a facility assessment using the infection control and response (ICAR) tool recommended by the CDC.\(^2\) The ICAR assessment should be completed by December 2021, except for new facilities. Based on the results of the ICAR, the facility should develop an infection control and prevention plan. The plan should
include a section on the facility’s response to a COVID-19 event in a patient/resident or HCW or other staff. This activity fulfills the CMS requirement for establishing and improving infection control and prevention programs in all LTCFs.³

- Update the facility’s visitor policy to require all visitors to align with current guidances²⁴⁶. Screen all visitors, staff, and others entering the facility for COVID-19 symptoms on entering the facility. Implement processes to document this screening. Exclude symptomatic individuals from entering the facility and refer to their healthcare provider for COVID-19 testing. Regularly review the current spread of COVID in your community by going to the UDOH website.⁷ If the community case rate is moderately high or higher in your area is high, strongly consider limiting non-essential visitors.

- Provide education, (e.g., through in-service trainings), about the new policies and recommendations to all staff.

- Estimate PPE needs for the facility; develop a PPE inventory and acquire PPE. Because PPE is in such short supply, administration will need to work with private and public (e.g., the local health department) resources to acquire PPE. Get to know the PPE resources available to you and regularly check in with them as the availability of PPE changes quickly.

- Become familiar with guidelines on and develop policies for preserving and re-using PPE.⁸

- Identify ways to support HCWs. Frontline HCWs are under tremendous stress in dealing with COVID-19 issues. Maintaining their morale is very important to sustaining their ability to work.

- Sign up for and learn how to report cases of COVID-19 and other healthcare-associated infections to the National Healthcare Safety Network (NHSN).⁹ CMS has mandated reporting of COVID-19 cases to NHSN as of May 8, 2020. In practice, it will take some time to implement this recommendation. UDOH has contracted with CoMagine (the regional CMS quality improvement organization) to conduct training for NHSN access and use. The training will be available online and through email consultation with CoMagine at https://comagine.org/form/nhsn-training. UDOH can also assist facilities with getting started with NHSN. UDOH recommends that nursing homes and skilled nursing facilities implement NHSN reporting by December 2020.

- If a COVID-19 case is strongly suspected or has been identified in a patient/resident or staff in the facility, immediately contact the UDOH Healthcare-Associated Infections and Antibiotic Resistance (HAI/AR) Program by sending an email to HAI@utah.gov. This mailbox is monitored frequently and an infection preventionist or epidemiologist will be assigned to begin a coordinated response to assist the facility with infection control recommendations, testing services, PPE access and training, contact tracing, and expert consultation. Early response is the best way to reduce transmission within the facility.

- Discuss and prepare a communication strategy for family members and patients about COVID-19, especially if there is a COVID-19 event in the facility.

- Plan for how to mitigate staff shortages that may occur in conjunction with an outbreak of COVID-19 in the facility.

Responsibilities of HCWs while outside the facility

Patients in LTCFs are among the most vulnerable to COVID-19 and have the worst outcomes, including death. In Utah, approximately 40% of deaths due to COVID-19 are among patients and residents of
LTCFs. Caring for these patients often requires HCWs to be in very close proximity or touching patients. Therefore, HCWs should be extra cautious to avoid getting infected in the community and then spreading COVID-19 to their patients.

In a recent study of nursing homes with COVID-19, the location of the facility (i.e., in terms of community prevalence of COVID-19) was the only significant risk factor for having a COVID-19 event.10 Similarly, in Utah, as the number of COVID-19 cases diagnosed per day has risen, the number of LTCFs with COVID-19 events has increased. As the prevalence of COVID-19 increases in the community, an increasing number of HCWs are exposed and may become infected and transmit infection to patients. As mentioned above, it is important that HCWs take extra precautions to prevent acquiring COVID-19 in the community.

CDC recently called on all Americans to wear masks to prevent COVID-19 spread, showing examples of how masking has prevented spread in high-risk situations.11 A recent systematic review and meta-analyses of available studies on the efficacy of masking and social distancing showed that these measures can significantly reduce transmission.12 In Utah, a recent masking ordinance in Salt Lake County, turned around a steeply increasing rate of new cases that had begun after Memorial Day.7 Facilities should regular provide in-service training for their staff to remind them of the following ways to reduce their risk of acquiring COVID-19 in the community:

- HCWs should wear masks at all times while outside their home if they will be within six feet of another person.
- They should avoid indoor situations where other people cannot mask (e.g., indoor restaurants) or are otherwise not masked.
- They should ask other household members to adhere to these same precautions so they will not become infected and transmit infection to the HCW.
- If conducting aerosol generating procedures (AGPs), (e.g., nebulizer use or suctioning), consider using a fit-tested N-95 respirator, especially if community transmission is high.

Routine use of PPE by HCWs while working in a LTCF

In Utah, 91 (79%) of 112 confirmed introductions of COVID-19 into LTCFs were due to an asymptomatic or pre-symptomatic HCW or other staff members. The focus of these recommendations is to reduce the risk of transmission of COVID-19 from asymptomatic and pre-symptomatic infected staff to patients/residents and co-workers before they have been diagnosed.

- **Universal mask use.** Because of the potential for asymptomatic and pre-symptomatic transmission, universal use of a mask by the HCW and staff in LTCFs for every patient encounter is recommended1,13. Masks prevent the spread of respiratory droplets and droplet nuclei while talking, sneezing, or coughing; this is called “source control.” When available, disposable surgical or medical masks are preferred over reusable cloth masks14. Reusable face shields are helpful in reducing the need to change face masks by preventing HCWs from touching their masks and may be used if available1,8. Perform PPE hand hygiene immediately before and after any contact with a facemask or cloth face covering. Wear masks at all times, including in breakrooms or other areas where they might encounter co-workers. To reduce the number of times HCWs
must touch their face and risk self-contamination, they should wear the same mask (extended use) throughout their entire shift.

- **Hand and respiratory hygiene.** Practicing good hand hygiene includes the use of alcohol-based hand rub (ABHR) or handwashing and is a simple, yet effective, way to prevent the spread of COVID-19. Unless hands are visibly soiled, an ABHR is usually preferred over soap and water due to ease, improved compliance and decreased skin irritation. Wash hands with soap and water for at least 20 seconds when visibly soiled, before eating and after using the restroom. When leaving the patient’s room, use a disinfectant wipe to clean all surfaces the HCW touched.

- **Respiratory and cough.** Good respiratory cough etiquette is recommended for all individuals with signs and symptoms of a respiratory infection. This is also important as influenza season approaches.

- **Gown use.** If close contact is required, (e.g., bathing, changing diapers or physical therapy), gown use is desirable as additional source protection. Wear a gown and gloves for care requiring prolonged (>15 minutes), close (<6 feet) contact. However, because there is a universal shortage of PPE, this recommendation should be implemented as supplies permit.

### Routine masking of patients

Masking of patients whenever they leave their room is recommended as source control to prevent transmission in the event they may be asymptomatic, but infected. They may be unmasked while in their own rooms. In facilities without a COVID-19 event, the effectiveness of this intervention in preventing COVID-19 transmission has not been studied, and it may be a lower priority to implement if mask supplies are low or the patient is unwilling to comply. However, if the patient leaves the facility (e.g., for a doctor visit or dialysis), s/he should be masked.

### Use of PPE by HCWs when caring for a COVID-19 patient or during a COVID-19 outbreak

While caring for COVID-19 patients, the focus is on preventing transmission from the infected patient to the uninfected HCW and to prevent transmission from patient-to-patient:

- **Use and type of face coverings by HCWs.** Ideally, if a HCW spends significant time in a COVID-19 patient’s room (more than 10 minutes), s/he should be wearing a NIOSH-approved, fit-tested N-95 respirator or a powered air purifying respirator (PAPR). This equipment may not be readily available in most LTCFs, in which case, K-95 respirators or surgical masks may be used, understanding there is reduced protection for the HCW. In a Utah COVID-19-only facility, when N-95 masks were not readily available, COVID-19 patients were safely cared for several months with only two HCWs converting to COVID-19-positive; both HCWs had other significant risks that could have contributed to their infections. A surgical mask worn over the N-95 mask is useful for prolonging the usable life of the N-95 respirator. A face shield worn over the N-95 and surgical mask is also recommended to provide eye protection and prolong N-95 and surgical mask life. If AGPs (e.g., nebulizing, suctioning, etc.) need to be performed on a COVID-19 patient, then a NIOSH-approved N-95 respirator or PAPR must be used by the HCW. Such procedures should be performed in a negative pressure room if at all possible.

- **Use of face shields and eye protection.** Eye protection is recommended while caring for a COVID-19 patient since infection may be transferred if the HCW touches his/her eyes. Face shields are
preferred over goggles because they provide the added benefit of prolonging the usable life of the surgical mask by preventing the HCW from touching his/her face and mask.

- **Masking the patient.** As source control, while the HCW is in the patient’s room for prolonged periods in close contact (e.g., for bathing, changing diapers, or physical therapy), a mask can be placed on the patient if s/he is cooperative.

- **Glove and gowns.** Gloves and gowns are recommended when caring for COVID-19-positive patients.

- **PPE donning and doffing considerations.** For COVID-19 units, separate PPE donning and doffing areas should be established. The doffing area should include a shower so that the HCW can shower before s/he puts on clean street clothes to leave the facility. A donning and doffing Standard Operating Procedure (SOP) should be written and training provided so the HCW understands the flow and procedures for donning and doffing when entering and leaving the COVID-19 unit to minimize risk of transmission. During an outbreak, the UDOH HAI/AR program can send a Utah Health Emergency Response Team (UHERT) to assist the facility on-site with setting up optimal donning and doffing areas and staff training.

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**Maintaining supplies of PPE and equipment**

There is a scarcity of some supplies in certain areas of the country. State and Federal surveyors should not cite LTCFs for not having certain supplies if a LTCF is having difficulty obtaining these supplies for reasons outside of their control. LTCFs are expected to take actions to mitigate any resource shortages and show they are taking all appropriate steps to obtain the necessary supplies as soon as possible. For example, if there is a supplier shortage, the LTCF should contact their local health department (LHD) for assistance (See Appendix A for LHD PPE contacts). Additionally, LTCFs should implement strategies to optimize the supply of PPE and equipment and be familiar with the standard nomenclature for communicating their current status of PPE use.⁸

<table>
<thead>
<tr>
<th>Capacity</th>
<th>Eye Protection</th>
<th>Gowns</th>
<th>Gloves</th>
<th>Facemasks</th>
<th>N95 Respirators</th>
</tr>
</thead>
<tbody>
<tr>
<td>Conventional</td>
<td>Use per product labeling</td>
<td>Use of isolation gown alternatives with equivalent or higher protection</td>
<td>Use per standard and transmission-based precautions</td>
<td>Use per product labeling</td>
<td>Use of NIOSH-approved respirators; use in accordance with OSHA standards (e.g., fit testing)</td>
</tr>
<tr>
<td>Contingency</td>
<td>Shift from disposable to reusable; extended use</td>
<td>Shift from disposable to reusable; use of coveralls; use beyond shelf life</td>
<td>Use beyond shelf life for training activities (i.e., no exposure to pathogens)</td>
<td>Extended use; restricted use to HCW</td>
<td>Use beyond shelf life for training and fit testing activities (e.g., no exposure to pathogens); extended use</td>
</tr>
<tr>
<td>Crisis</td>
<td>Prioritized use for splashes/sprays/AGPs/high contact activities; extended use of gowns; reuse of cloth gowns</td>
<td>Prioritized use for splashes/sprays/AGPs/high contact activities; extended use of gowns; reuse of cloth gowns</td>
<td>Use beyond shelf life; use of non-healthcare glove alternatives; extended use of disposable medical gloves</td>
<td>Use beyond shelf life; prioritized use for splashes/sprays/AGPs/high contact activities; limited reuse (removal between patient encounters)</td>
<td>Use beyond shelf life; limited reuse (removal between patient encounters); use of respirators not evaluated by NIOSH; prioritized use for direct patient care and AGPs</td>
</tr>
</tbody>
</table>
A PPE Burn Rate Calculator should be used to customize PPE supply chain management to the facility's needs.17

Quarantine and isolation of patients and HCWs

Quarantine and isolation are public health infection control measures to prevent further transmission of COVID-19 in the facility. “Quarantine” restricts the movement of persons who may have been exposed to an infectious disease during the time they may develop disease. For COVID-19, the quarantine period is 14 days from the most recent exposure. “Isolation” separates persons infected with the disease from uninfected persons to prevent spread.

- **Quarantining of new patients or residents.** During the COVID-19 epidemic, as a measure to prevent the disease from being introduced, some facilities put new, asymptomatic admissions into quarantine for 14 days and test them at the end of this period to ensure they do not have COVID-19. Patients should be quarantined in a private room with its own bathroom. During quarantine period, the patient’s movements within the facility are restricted. Staff caring for the patient should be rigorous about using PPE as recommended. This may be a prudent strategy to consider, especially if there are high levels of community transmission; however, there are no data to support its effectiveness.

- **Quarantining of patients or residents with a known exposure to COVID-19.** Patients with a known exposure to COVID-19 should be restricted to their rooms for 14 days after the last exposure. If they must leave their room for any reason, they should be masked. A negative PCR test for COVID-19 collected on or after the 14-day quarantine period ensures the patient is not infected. During an outbreak, if serial PCR testing is performed, two negative tests collected >24 hours apart (where the first test is collected >3 days after the last exposure) ensure the patient is negative and can be released from quarantine. A single negative test during the quarantine period does not ensure the patient is negative and s/he must complete the 14-day quarantine period.

- **Quarantining of exposed HCWs.** Ideally, asymptomatic, exposed HCWs should be sent home to quarantine for 14 days since their last exposure. In practice, due to staffing shortages, this may not be practical. These HCWs may work under the following conditions: 1) they must adhere to universal masking and other infection control precautions *at all times while in the facility*; 2) they should be monitored for symptoms and sent home immediately if they develop symptoms and referred to their healthcare provider for testing.

- **Patient isolation and standing up a COVID-19 unit.** A known infected patient should be isolated in a private room with its own bathroom under droplet precautions (at a minimum) or airborne precautions (preferred, if available). (Two known positive COVID-19 patients, however, can share a room if space is limited.) If multiple patients have COVID-19 or are suspected of COVID-19 (symptomatic and asymptomatic exposed patients), then the facility should identify an area in the facility where a COVID-19-only unit can be stood up. The COVID-19 unit should be clearly separated from the COVID-19-negative areas of the facility by some type of barrier or closed doors so that HCWs and residents/patients from the negative areas cannot easily enter the COVID-19-positive areas. The HCWs caring for COVID-19 patients and suspects should be separate from those providing care to uninfected patients in the facility. The COVID-19 unit should have negative pressure rooms if possible. At a minimum, the facility’s air system should
be examined by an expert to ensure there is no recirculated air going from the COVID-19 unit rooms to other areas of the facility.

- **Release of COVID-19 patients from isolation.** Many LTCFs, out of an abundance of caution, have required two negative PCR tests collected >24 hours apart for a patient to be released from isolation. This is often problematic because many patients continue to have positive test results consistently or intermittently weeks to months after symptoms have resolved. This is thought to be due to the fact that the PCR test is very sensitive and detects low levels of residual, non-viable RNA.

The CDC recently reviewed the evidence of continued transmissibility of COVID-19 after symptoms have resolved and developed time- and symptom-based criteria for safe release of patients from isolation in both healthcare and non-healthcare settings.\(^{18,19}\) Currently, patients may be released from isolation if the following criteria are met: 1) 10-days have passed since the initial symptom onset (or date of diagnosis, if asymptomatic); 2) >24 hours have passed since resolution of fever without use of antipyretics; and 3) other symptoms have improved.

As an extra precaution, LTCFs may choose to wait until 3 days after fever has resolved without use of antipyretics and other symptoms have improved as previously recommended because fever and symptom monitoring may not be performed as frequently as in the hospitalized setting and this allows facilities an added measure of protection. For patients with severe immunosuppression or prolonged symptoms (e.g., requiring hospital care), isolation should be maintained for at least 20 days. If symptoms persist or there are concerns for the possibility of continued infectiousness, it is recommended to seek the advice of an infectious disease expert to assist with the decision of when to release the patient from quarantine.

### Considerations for optimal use of testing for COVID-19

A variety of tests for COVID-19 have and will continue to become available. Facilities should ensure that the laboratories where they send specimens have been approved by the Clinical Laboratory Improvement Act (CLIA), which regularly inspects laboratories. For example, the three main laboratories in Utah—ARUP, Intermountain Healthcare and Utah Public Health Laboratory (UPHL)—are CLIA-certified laboratories. Also, the specific test should have received an Emergency Use Authorization (EUA) from the Food and Drug Administration (FDA) or UPHL, which has been authorized to provide EUAs during the emergency response. Facilities that use out-of-state laboratories should ensure that these laboratories are CLIA-certified and are using a test that has been validated and approved for emergency use by the FDA. Turnaround time is also important. For example, if it takes an out-of-state lab 7 days to return the results, the test will not be useful for making clinical or cohorting decisions.

- **Testing symptomatic residents/patients and staff:** The facility should have plans in place for collecting specimens and sending them to a laboratory where they can get results turned around in 24-48 hours, if possible. Facilities that have received the antigen testing machines from CMS may want to use these tests to get a rapid diagnosis. The specificity of these tests approaches 100%, so there should be few false positives and confirmatory testing is not needed. Negative results from these tests should be confirmed with a PCR test from a CLIA-certified lab because sensitivity of these tests is lower than for PCR.\(^{20}\) The antigen tests are validated only for use in symptomatic patients and using these tests for asymptomatic screening is an off-label use.
• Testing of asymptomatic residents/patients and staff in facilities with a COVID-19 event. Facilities with one or more COVID-19 cases in residents/patients and staff should contact the HAI/AR team at HAI@utah.gov to request assistance. A lead investigator will be assigned to the event, and s/he will work with the facility to arrange initial and follow-up testing needed for the response to the event.

• Testing of asymptomatic residents/patients and staff in facilities without a COVID-19 event. A new CMS rule is currently in public comment and is not finalized, but is slated to go into effect as of Wednesday, September 2, 2020. This rule requires testing of all residents/patients and staff in nursing home facilities without a COVID-19 event on regular intervals depending on the current COVID-19 positivity levels in the community. UDOH is working on strategies to assist facilities to meet the CMS requirements and will be providing frequent updates on this issue through licensing and other regular communication venues.

Additional resources


Recommendations of the Long-Term Care Facility Subcommittee of the Utah Governor’s COVID-19 Community Task Force
# APPENDIX A – Utah Local Health Department Personal Protective Equipment (PPE) Points of Contact

<table>
<thead>
<tr>
<th>Agency</th>
<th>Name</th>
<th>Cell Phone</th>
<th>Email Address</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bear River Health Department</td>
<td>Mike Wiebel</td>
<td>435-994-1122</td>
<td><a href="mailto:mweibel@brhd.org">mweibel@brhd.org</a></td>
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<tr>
<td>Davis County Health Department</td>
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<td><a href="mailto:ivy@co.davis.ut.us">ivy@co.davis.ut.us</a></td>
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<td>Salt Lake County</td>
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<tr>
<td>Southwest Utah Public Health</td>
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</tr>
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</tr>
<tr>
<td>TriCounty Health Department</td>
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<td>435-650-7338</td>
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</tr>
<tr>
<td>Utah County Health Department</td>
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<td>385-326-9280</td>
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<tr>
<td>Wasatch County Health Department</td>
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<td>801-557-4766</td>
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<tr>
<td>Weber Morgan Health Department</td>
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<td>801-940-7207</td>
<td><a href="mailto:cbodily@co.weber.ut.us">cbodily@co.weber.ut.us</a></td>
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