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To: Wisconsin Local Health Departments, Tribal Health Agencies, Infection Preventionists, Division of Quality Assurance, Wisconsin DON Council, Wisconsin LTC Medical Directors Association, Wisconsin Health Care Association, LeadingAge Wisconsin, Wisconsin Assisted Living Association

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Prevention and Control of Acute Respiratory Illness Outbreaks in Long-Term Care Facilities

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Summary

This memo is intended as guidance to medical and administrative staff of long-term care facilities (LTCFs), including skilled nursing facilities (SNFs), community-based residential facilities (CBRFs), and residential care apartment complexes (RCACs), in Wisconsin. The unpredictable nature of the COVID-19 pandemic, emerging information about SARS-CoV-2, and fluctuations in COVID-19 disease activity may necessitate future changes to this guidance. Refer to the Centers for Disease Control and Prevention (CDC) or Wisconsin Department of Health Services (DHS) websites for the most up-to-date information.

Requirements for the timing of reporting, once a disease or condition is recognized or suspected, vary by disease. In addition to the information listed below, general reporting requirements are described in Wis. Stat. ch. 252 Communicable Diseases. The specific reporting requirements are described in Wis. Admin Code, ch. DHS 145 Control of Communicable Diseases. Confirmed or suspected outbreaks of any disease in health care facilities, including LTCFs, are a Category I Disease, meaning they shall be reported IMMEDIATELY by telephone to the patient's local health officer, or to the local health officer's designee, upon identification.

When an outbreak of acute respiratory illness (ARI) (COVID-19 or other viral respiratory disease) is suspected, testing to determine the etiology of the disease is essential to determine the appropriate precautions needed to control the outbreak. Until the cause(s) of an ARI outbreak is determined, facilities should initiate empiric precautions at the most protective level among common ARIs (e.g., those for residents with suspected COVID-19), including gown, gloves, fit tested N95, and eye protection (e.g., goggles or face shield).
**Definition of Terms Used**

**Acute respiratory illness (ARI)** is defined as illness characterized by any two (2) of the following:

- Fever*
- Cough (new or worsening, productive or nonproductive)
- Rhinorrhea (runny nose) or nasal congestion
- Sore throat
- Myalgia (muscle aches) greater than the resident’s norm
- Shortness of breath or difficulty breathing
- Low SpO2 (oxygen saturation in the blood, normal levels are between 95 and 100%, but may vary for people with certain medical conditions)
- New loss of taste or smell

*Fever may be difficult to determine among elderly residents. Therefore, the definition of fever used for ARI is defined as temperature two degrees (2°F) above the established baseline for that resident.

**Pneumonia** is defined as radiographic evidence of new or increased pulmonary infiltrates, usually accompanied by fever. It is strongly recommended that all clinically diagnosed pneumonia be followed with radiographic testing.

A **suspected respiratory disease outbreak** in a LTCF is defined by the Division of Public Health (DPH) as three or more residents and/or staff from the same unit with illness onsets within 72 hours of each other and who have:

- Pneumonia, or
- ARI, or
- Laboratory-confirmed viral or bacterial infection (including influenza)

A **suspect COVID-19 outbreak** in a LTCF is defined by DPH as one or more residents and/or staff (who worked during their infectious period) within a facility who have a case of COVID-19.

**Laboratory Testing: Acute Respiratory Disease Outbreaks**

When an outbreak of acute respiratory illness (COVID-19 or other viral respiratory disease) is suspected, testing to determine the etiology of the disease is essential to determine the appropriate precautions needed to control the outbreak. Nasopharyngeal swabs (preferred) or oropharyngeal swabs collected from residents or staff should be sent for multiplex PCR testing. Specimens can be sent to any laboratory that performs multiplex testing or, with prior DPH approval, specimens can be sent to the Wisconsin State Laboratory of Hygiene (WSLH) where testing will be done free of charge.

- Specimens for non-COVID respiratory outbreaks should be collected within five days after the onset of illness and placed in viral transport media to assure optimal test results.
- If specimens will be submitted to the WSLH, include the WSLH lab requisition form.
- Facilities may choose to have clinical specimens tested at a laboratory other than the WSLH, however, fee-exempt testing cannot be offered for tests performed at those laboratories, other than as part of state-contracted laboratory services for COVID-19 testing.
- Due to possible false positive results when using rapid influenza tests, especially when testing occurs during periods of low influenza activity, confirmatory testing of positive rapid test results using RT-PCR or viral culture should be performed.
- With DPH approval, specimens may also be tested for other respiratory viruses.
If test results confirm influenza or SARS-CoV-2 within a facility, no further testing will be performed unless the resident has an atypical presentation of illness or is not responding to treatment. A negative test result does not rule out viral infection or the existence of an outbreak.

**Laboratory Testing: COVID-19 Outbreaks**

COVID-19 outbreaks have different outbreak testing guidance and procedures based on the type of facility, including CMS requirements for skilled nursing facilities (SNFs) and DHS COVID testing guidance for assisted living facilities (ALFs). In both of these cases, testing should be done to establish the extent of the outbreak and any transmission at minimum. WSLH and other state-contracted labs will test any symptomatic resident or staff for SARS-CoV-2, as well as provide outbreak testing.

If SARS-CoV-2 is identified, facilities should determine a testing approach, either targeted based on contact tracing or a wider approach, per CDC LTCF guidance. Testing of the targeted individuals or location(s) should be done at minimum immediately (defined as no sooner than two days post-exposure) and 5–7 days post-exposure if no cases are found immediately.

If additional cases are found during either testing cycle, facilities should continue testing for the targeted location(s) or facility-wide every 3–7 days until 14 days pass since the last identified positive. If facilities are not confident in the ability to conduct contact tracing or the situation warrants wider testing, they should explore broader testing of location(s) or facility-wide. If cases are identified after an initial contact tracing testing approach, facilities should conduct contact tracing for the additional cases and also consider expanding the testing approach more broadly.

Nursing homes should follow any testing mandates issued by the Centers for Medicare and Medicaid Services. Other LTCFs with confirmed COVID-19 should test residents and/or staff for COVID-19 based on the current recommendations on the DHS website. Testing and supplies are provided for fee-exempt testing through WSLH or participating private or clinical labs. More information about requesting testing supplies can be found on the DHS COVID testing website.

**Antiviral Treatment and Prophylaxis During Influenza Outbreaks**

Influenza antiviral prophylaxis may prevent further spread of infection during outbreaks of influenza in a LTCF. Ideally, within 48 hours of the onset of illness, treat residents with confirmed or suspect cases of influenza with oseltamivir (Tamiflu®), zanamivir (Relenza®), or baloxovir (Xofluza®) to reduce the severity and shorten the duration of illness. At the discretion of a clinician, treatment with oseltamivir (Tamiflu®) or zanamivir (Relenza®) can be initiated more than 48 hours after the onset of illness. Because of identified resistance, adamantanes should not be used to treat or prevent cases of influenza A. Both pd2009/H1N1 and seasonal H3N2 viruses are resistant to adamantanes (amanadine, rimantadine, Symadine®, Symmetrel®, Flumadine®). Adamantanes are not effective against influenza B. CDC influenza antiviral recommendations are available on the CDC clinician summary web page.

When cases of influenza have been confirmed in a facility, antiviral prophylaxis should be offered to:

- All residents regardless of vaccination status,
- All unvaccinated employees, and
- Those employees vaccinated less than two weeks before the cases were identified.

If exposure is limited to a specific wing or residential area, antiviral prophylaxis use can be limited to residents and unvaccinated staff in those areas.
Only oseltamivir (Tamiflu®) and zanamivir (Relenza®) can be used for antiviral prophylaxis to prevent influenza A and B infection. Once initiated, antiviral prophylaxis should continue for a minimum of two weeks, and continue up to seven days after the last known case was identified.

NOTE: For a resident with a known creatinine clearance of 10–30 mL per minute, a reduction of the treatment dosage of oseltamivir and in the prophylaxis dosage is recommended. Refer to CDC recommendations. It is not necessary for residents to have their creatinine clearance checked prior to receiving oseltamivir treatment or prophylaxis.

Infection Control

Caregivers and visitors should adhere to the appropriate precautions when in the presence of a resident with suspected or confirmed respiratory illness. Until the cause(s) of an ARI outbreak is determined, facilities should use the most protective level of precautions (e.g., for COVID-19), including gown, gloves, fit tested N95, and eye protection (e.g., goggles or face shield).

Droplet Precautions are intended to prevent transmission of pathogens spread through close respiratory or mucous membrane contact with respiratory secretions. In contrast to contact transmission, respiratory droplets carry and transmit infectious pathogens when they travel directly from the respiratory tract of the infectious individual to susceptible mucosal surfaces of the recipient, generally over short distances (within 6 feet). Residents on droplet precautions who must be transported outside of their room should wear a surgical or cloth mask (if tolerated) and practice respiratory hygiene (cough etiquette).

- **Non-COVID-19**
  Health care personnel should wear a surgical mask for close contact with an ill resident. A respirator is not necessary unless engaging in an aerosol-generating procedure (AGP), such as BIPAP/CPAP procedures. The mask is generally donned immediately prior to room entry.

- **COVID-19**
  Health care personnel should wear surgical masks in all areas of the building for source control aside from when actively eating or drinking. Fully vaccinated staff may choose to remove source control in a well-defined area that is restricted from resident access (e.g., breakroom, all-staff meeting) when the county community transmission level is low to moderate.

  When the county community transmission level is at substantial to high levels (regardless of whether the facility currently has COVID-19 cases), staff should wear the following as part of CDC guidance for the universal use of PPE during the COVID-19 pandemic:

    - An N95 for all residents during AGPs
    - Eye protection for all resident care encounters.

Airborne Precautions for COVID-19

A fit tested N95 respirator and eye protection should be worn when caring for any residents with suspected or confirmed COVID-19 and during any AGP performed on those residents. AGPs should take place in an airborne infection isolation room (AIIR), if possible. When AGPs cannot be performed in an AIIR, staff present during the procedure should be limited and the door should remain closed.
Contact Precautions apply when the presence of discharges from the body suggest an increased potential for extensive environmental contamination and risk of transmission and for residents suspected or confirmed to have COVID-19.

- Health care staff should wear a gown and gloves for all interactions that may involve direct contact with the resident or potentially contaminated areas in the environment.
- Follow CDC guidelines for suspected or confirmed COVID-19 in residents, including use of a fit-tested N95, gown, gloves, and eye protection.
- Don PPE immediately prior to room entry and discard before exiting the room to contain pathogens implicated in direct transmission or indirect transmission through environmental contamination. Perform hand hygiene after PPE removal prior to exiting the room.

**CDC Recommended Precautions for Common Respiratory Viruses**¹

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¹If test results fail to identify an etiologic agent, ill residents should continue to be placed on contact and droplet precautions.
²Airborne precautions (e.g., N95 respirator and, if available, negative airflow rooms) should be used for patients with confirmed or suspected COVID-19 during AGPs.
³Eye protection should also be worn as part of droplet precautions for suspected or confirmed COVID-19 residents or when the county community transmission level is at a substantial or high level (regardless of whether the facility currently has cases).

**Duration of Transmission-Based Precautions: Non-COVID-19-Respiratory Disease Outbreaks**

Follow CDC guidelines for the specific type and duration of precautions. When a resident has confirmed or suspected influenza, the resident should remain on droplet precautions for seven days after onset of illness or until 24 hours after the resolution of fever and respiratory symptoms, whichever is longer.

For other respiratory illnesses, the resident should remain on appropriate precautions for the duration of illness, defined as 24 hours after resolution of fever without the use of fever-reducing medications and without respiratory symptoms (see ARI symptoms above). Criteria for determining ARI among staff or residents should focus on whether cough is a new or worsening symptom. For discontinuation of droplet or contact precautions, exclude cough as a criterion unless the cough produces purulent sputum. In many cases, a non-
infectious post-viral cough may continue for several weeks following resolution of other respiratory symptoms.

**Duration of Transmission-Based Precautions: COVID-19 Outbreaks**

When a resident has confirmed or suspected COVID-19, the resident should remain on standard, airborne, and contact (plus eye protection) precautions at minimum until conditions for discontinuation* are met:

- At least 10 days have passed since onset of symptoms, AND
- At least 24 hours have passed since last fever without the use of fever-reducing medications, AND
- Symptoms (e.g., cough, shortness of breath) have improved.

*Some individuals with severe illness OR who are severely immunocompromised should be maintained on droplet and contact precautions until at least 10 days and up to 20 days have passed since symptom onset AND at least 24 hours since the last fever with symptom improvement. Consultation with infection control experts should be considered in these cases.

Facilities should continue to follow the latest guidance from federal and state agencies. This includes the use of full PPE for residents with suspected or confirmed COVID-19: gown, gloves, fit tested N95, and eye protection. AGPs should take place in an AIIR, if possible. When AGPs cannot be performed in an AIIR, staff present during the procedure should be limited and the door should remain closed.

**Resident Room Assignments**

If possible, any resident who is ill with symptoms of ARI should stay in a private room. Decisions by medical and administrative staff regarding resident placement should be made on a case-by-case basis. In determining resident placement, consider:

- Balancing the risk of infection to other residents in the room.
- The presence of risk factors that increase the likelihood of transmission within the facility.
- The potential adverse psychological impact on the infected resident.

When a single-resident room is not available, ill residents can be placed in a multi-bed room following consultation with infection control personnel to assess risks associated with resident placement options (e.g., cohorting, keeping the resident with an existing roommate). Spatial separation of six feet or more and drawing the curtain between resident beds is especially important for residents in multi-bed rooms.

The LTCF may consider allowing a resident with a cough that is not a suspected or confirmed COVID-19 resident, to leave their room while wearing a surgical mask. This can be reviewed on a case-by-case basis and if the resident’s understanding and compliance with the core principles of infection control will minimize the risk of infection to other residents. Non-ill residents should not be confined or restricted to their rooms during a non-COVID-19 outbreak.

**Outbreaks of COVID-19** may necessitate the cohorting of patients with COVID-19 to a dedicated floor, unit, or wing, with dedicated staff to prevent transmission based on consultation with the facility’s infection prevention personnel.

**Visitors in General**

Facilities should assess risks and develop policies that provide guidance on general screening practices for visitors at any time to advise the in advance to avoid visitation while having active signs or symptoms of
acute respiratory infections or other communicable diseases. This guidance should be reinforced at the facility entrance due to the inherent risks of ARI outbreaks among LTCF populations.

**Visitors During Outbreaks**

A facility with a confirmed or suspected outbreak should follow current [CMS visitation requirements](https://www.cms.gov/Long-Term-Care/Long-Term-Care-QSO/CMS-QSO-20-14.html) for nursing homes and [DHS guidance](https://www.dhs.gov/coronavirus) for other LTCFs based on current [CDC guidance](https://www.cdc.gov/coronavirus/2019-ncov/community/nursing-home-resident-care.html).

All visitors should be screened prior to entry and those who meet quarantine criteria, including those with any symptoms consistent with COVID-19, should not be permitted to enter the facility. All visitors should be educated upon admission on the type of PPE and other infection prevention principles that should be followed as part of their visit. Ask visitors to inform the facility if they develop fever or symptoms consistent with COVID-19 within 14 days of visiting the facility.

**Temporary Halting of New Admissions: Non-COVID-19 Respiratory Disease Outbreaks**

Upon recognition of a confirmed or suspected outbreak of respiratory illness, the facility may consider temporarily halting new admissions to the facility. If the outbreak is confined to a specific unit, wing, or floor, the facility may consider allowing new admissions to other units, wings, or floors not affected by the outbreak. A pause of new admissions to the facility or the affected unit, wing, or floor may be considered until one week after the illness onset of the last confirmed or suspected case for non-COVID outbreaks.

**Temporary Halting of New Admissions: COVID-19 Outbreaks**

When a suspected or confirmed case of COVID-19 is identified in a facility, a temporary new resident admissions halt is recommended, at least until the extent of transmission can be clarified and interventions can be implemented.

**Units, Wings, or Floors With COVID-19 (Affected Units)**

Affected units are determined by contact tracing and testing, so these outbreak responses will be situation-dependent. LTCFs should follow the [CDC LTCF IPC guidance](https://www.cdc.gov/coronavirus/2019-ncov/long-term-care-facility/index.html) when a new infection is identified in a staff member or resident. Skilled nursing facilities will also reference the aligned guidance from CMS in QSO-20-38.

These responses can take the form of a contact tracing-based, narrower scope of testing (e.g., specific individuals) or broad-based testing (e.g., unit, floor, shift, wing, facility-wide). At minimum, testing will involve two rounds: the first conducted immediately (defined as no sooner than 2 days post-exposure) and, if negative, a second round 5–7 days post-exposure. Additional positives identified during either round will lead to additional testing cycles every 3–7 days until more than 14 days pass from the last identified positive case. The results of the testing will help determine the extent of the outbreak and transmission, which may influence admission decisions.

Facilities should determine admission practices during outbreaks in consultation with the medical director and facility leadership that take the CDC and CMS guidance into account, including the CMS guidance in QSO-20-14 that says “Nursing homes should admit any individuals that they would normally admit to their facility.”

If facilities can safely admit new residents, they should facilitate the admission. Facilities should assess pertinent factors to disease transmission, as well as their capacity for adequate staffing, space,
and PPE to accommodate new admissions during the outbreak. Potential new admissions and their representatives should be made aware of the outbreak and steps taken to ensure patient safety.

As part of outbreak management, facilities can discuss plans to admit residents during active outbreaks with their local health department (LHD). LHDs do not need to approve the admission plan, but should be notified for awareness. LHDs and the DHS website will still officially note the outbreak as being a minimum of two incubation periods (28 days) in length from the last identified case, regardless of the selected outbreak testing approach or number of testing cycles.

Unit, Wings, or Floors Without COVID-19 (Non-Affected Units)
If it is determined, after the identification of potential close contacts and the evaluation of infection control practices, that the outbreak is confined to a specific unit, wing, or floor, the facility may consider allowing new admissions to other units, wings, or floors not affected by the outbreak. This should only be considered if the facility has the adequate staff, PPE, and available accommodations on units/wings/floors not affected by the outbreak, to care for a new admission based on current recommendations.

A situation where this may be appropriate is when a single positive staff member only worked on one wing during their infectious period. For positive staff members in non-direct resident care roles, admissions may continue once contact tracing has been completed and no direct patient contacts have been confirmed. Exposed staff should complete an appropriate exposure risk assessment.

Management of New Admissions or Readmissions: COVID-19 Outbreaks
When the facility is able to accept new admissions or is readmitting a resident, they should be placed in a single-person room or in a separate observation area so the resident can be monitored for symptoms of COVID-19.

- Quarantine is no longer recommended for residents who are being admitted to a LTCF if they are within 90 days of a SARS-CoV-2 infection or are fully vaccinated and have not had prolonged close contact with a SARS-CoV-2-positive individual in the prior 14 days.
- A negative test prior to admission does not replace the need for a 14-day quarantine for unvaccinated residents.
- Residents can be transferred from the observation area to other units if they remain afebrile and without symptoms for 14 days after their admission.
- All recommended PPE used for a COVID-19 positive resident (face shield, fit tested N95, gloves, and gown) should be worn by staff entering the room of a resident under quarantine.

Readmission of Current Residents
The facility should prioritize the readmission of ill residents (e.g., those returning from a hospital stay), provided that upon return to the facility, the appropriate infection control measures are implemented to protect the health of other residents. Laboratory testing of residents for ARI (including influenza and COVID-19) prior to readmission is not recommended and should not be used as criterion for readmission to the facility.

Staff Screening: COVID-19 Outbreaks
In accordance with CDC guidance, screen all staff at the beginning of their shift for all symptoms of COVID-19, close contact with those outside the facility with a SARS-CoV-2 infection, and adherence to source control. Options include (but are not limited to) arrival screening or electronic monitoring systems. Fever is
defined as either measured temperature \( \geq 100^\circ F \) or subjective fever. Exclude and test staff with symptoms and have a plan for those who report close contact with an individual with a SARS-CoV-2 infection.

**Exclusion of Staff: Non-COVID-19 Respiratory Disease Outbreaks**

Staff with ARI who are tested and do not have COVID-19 should be excluded from work until at least 24 hours after they no longer have a fever (without the use of fever-reducing medicines such as acetaminophen or ibuprofen). If symptoms, such as cough and sneezing, are still present, staff should wear a surgical mask during resident care activities. Support and flexibility should be given to staff to encourage them to stay home from work. Try to reduce logistical barriers and financial hardship to the extent possible.

**Exclusion of Staff: COVID-19 Outbreaks**

Staff with confirmed COVID-19 and staff with ARI who are not tested for COVID-19 should be excluded from work until they meet criteria for discontinuation of isolation* established by CDC and DHS:

- At least 10 days have passed since onset of symptoms, AND
- At least 24 hours have passed since last fever without the use of fever-reducing medications, AND
- Symptoms (e.g., cough, shortness of breath) have improved

*Some individuals with severe illness OR who are severely immunocompromised should be maintained on droplet and contact precautions until at least 10 days and up to 20 days have passed since symptom onset AND at least 24 hours since the last fever with symptom improvement. Consultation with infection control experts should be considered in these cases.

Support should be given to staff being excluded from work to stay home. Try to reduce logistical barriers and financial hardship to the extent possible.

CDC and DHS do not recommend the regular use of a test-based strategy for return to work. Any facility considering implementing a test-based strategy should be aware that there have been reports of prolonged detection of RNA without direct correlation to viral culture.

**Participation in Activities, Therapy, and Communal Dining: Non-COVID-19 Respiratory Disease Outbreaks**

An outbreak of ARI does not require the cancellation of facility-wide resident activities, therapy, or communal dining. Residents with active ARI should not participate in facility-wide resident activities, therapy, or communal dining.

**Participation in Activities, Therapy, and Communal Dining: COVID-19 Outbreaks**

If a unit is open to new admissions, that unit may resume activities to the prior level before the outbreak if they have the staff, PPE, and accommodations to safely conduct these activities.

For units closed to new admissions due to an outbreak of COVID-19, unvaccinated residents should be encouraged to remain in their room. Restrict residents (to the extent possible) to their rooms, except for medically necessary purposes. If residents leave their room, they should be encouraged to wear a cloth face covering or facemask, perform hand hygiene, limit their movement in the facility, and perform social distancing.
Fully vaccinated residents and those in the 90-day period post-infection do not need to be restricted to their rooms as indicated in the CDC LTCF guidance for outbreak testing, but should continue to wear source control when outside their rooms.

References


CDC Infection Control Guidelines

- Influenza: cdc.gov/flu/professionals/infectioncontrol/index.htm

DHS

- Immunization: dhs.wisconsin.gov/immunization/index.htm
- Surveillance: dhs.wisconsin.gov/influenza/reporting.htm
- Influenza: dhs.wisconsin.gov/influenza/index.htm
- COVID-19 Guidance for LTCFs:
  - ALFs: https://www.dhs.wisconsin.gov/covid-19/assisted-living.htm
  - SNFs: https://www.dhs.wisconsin.gov/covid-19/nursing-homes.htm
- Testing:
  - ALFs: https://www.dhs.wisconsin.gov/publications/p02768.pdf
- Visitation:
  - ALFs: https://www.dhs.wisconsin.gov/covid-19/assisted-living.htm#safer-visits-in-wisconsin-assisted-living--a-person--centered-approach

If you have any questions or concerns, please contact Thomas Haupt, Influenza Surveillance Coordinator, 608-266-5326, or call the Bureau of Communicable Diseases at 608-267-9003.