

Long Term Care Facilities Influenza Outbreak Toolkit

Skilled Nursing Facilities, Assisted Living, and Residential Care Facilities

Last Updated: November 22, 2022

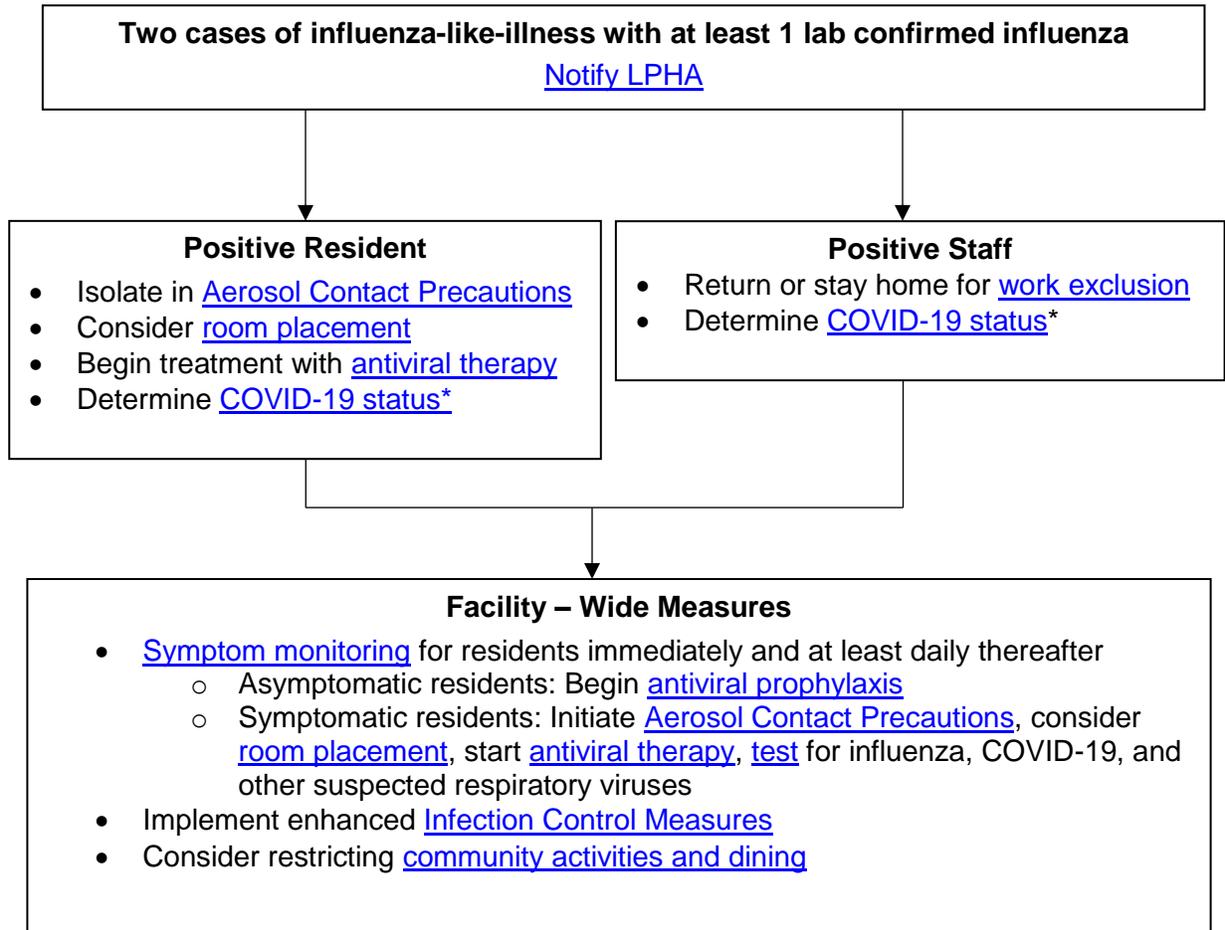


Multnomah County Health Department

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Influenza Outbreak Flowchart



* For COVID-19 positive staff or residents, refer to [COVID-19 Toolkit for LTCF](#) for guidance in addition to this document. See [Resident Isolation](#) table for details on resident isolation.

Reporting

Report to MCHD when there are two or more people showing symptoms of influenza-like illness in the facility within 72 hours of each other AND at least one resident has lab-confirmed influenza. Suspected outbreaks should be reported even if lab results are not yet available.

Please include in your initial report all of the following case information:

- Full Name
- Date of birth
- Date of symptom onset
- Date of positive test result (if applicable)
- Type of Test (NAAT / PCR, or antigen)
- Phone and Address (for staff cases)
- Work role and location (for staff cases)
- Last date on site and dates worked while infectious (for staff cases)

Please report using **one** of the following methods:

- Phone: 503-988-3406, option #1
- Email: cd@multco.us

For continued outbreak management, you will be asked to provide information on subsequent cases in your facility. In order to facilitate the data collection, you can utilize a case log that can be submitted to your outbreak investigator. Please reach out to your outbreak investigator if you need assistance.

MCHD will declare the influenza outbreak over and associated restrictions may be lifted 7 days after the last influenza symptom onset.

Influenza Overview – Spread and Contagiousness

Spread

Influenza most commonly spreads by large contaminated droplets from people talking, coughing, or sneezing. The droplets spread the virus by coming into contact with someone's mucus membranes of their mouth, nose, or eyes. It is also possible to touch a surface with contaminated droplets and then touch one's mouth, nose, or eyes and spread the virus this way. Contaminated droplets may also be spread by aerosols created during [aerosol generating procedures](#) (AGPs).

Contagiousness

People are usually most contagious in the first three to four days after their illness begins. Flu viruses can usually be detected using PCR or antigen testing one day before symptoms begin and up to five to seven days after becoming sick.

High-Risk Groups

Individuals over the age of 65, under the age of 5, and those with underlying medical conditions or pregnancy are at highest risk of becoming severely ill from influenza.

Prevention

The most important steps in preventing and stopping transmission of influenza outbreaks are:

- Influenza Vaccines
- Influenza Testing
- Infection Prevention and Control Measures
- Antiviral Treatment
- Antiviral Chemoprophylaxis

Vaccines

Vaccinating all residents and staff is a critical step in preventing influenza outbreaks. Ideally, residents and staff should be offered an influenza vaccine every year before influenza season in the months of September and October. It is never too late to vaccinate and vaccines given during the winter months are still beneficial. Discuss vaccines with current residents and new admissions.

The CDC recommends that all healthcare staff receive an influenza vaccine. Consider the following measures to help with staff compliance:

- Provide vaccine at no cost to staff
- Offer vaccine during shifts
- Require staff to sign an educational declination form if they refuse vaccine
- Mandating vaccine for staff without contraindications

Testing

Test symptomatic residents as soon as possible. Negative test results do not guarantee that an individual is not infected. Use clinical judgment and re-test individuals with high suspicion of an illness.

- Test for influenza
 - PCR tests are preferred, and are the most accurate.
 - Antigen tests are less accurate, but acceptable.
 - Routine influenza testing of asymptomatic residents is not currently recommended.
 - Interpreting results:
 - Influenza Positive
 - 1 positive antigen or PCR

- Influenza Negative
 - 1 negative PCR, or
 - 1 negative antigen followed by 1 negative PCR
 - *Negative test results do not guarantee that an individual is not infected.* Use clinical judgment and re-test individuals with high suspicion of an illness.

- Testing for COVID-19
 - Symptomatic residents should be tested for COVID-19.
 - Individuals who have recovered from COVID-19 in the last 30 days do not need to be tested.
 - PCR tests are recommended, but antigen is acceptable.
 - Antigen tests are recommended for individuals who have recovered from COVID-19 in the last 31-90 days
 - Interpreting results:
 - COVID-19 positive
 - 1 positive antigen or PCR
 - COVID-19 negative (symptomatic resident)
 - 2 negative antigen tests 48 hours apart, or
 - 1 negative PCR (repeat if high suspicion)
 - *Negative test results do not guarantee that an individual is not infected.* Use clinical judgment and re-test individuals with high suspicion of an illness.

- Testing for additional respiratory viruses
 - Consider testing for additional respiratory viruses that may be circulating in the community, such as RSV and rhinovirus.
 - Multiple respiratory pathogens may be able to be identified with one swab. Please discuss this with the provider or the lab as it may be the most efficient way to identify a respiratory virus.

Transmission-based Precautions

Transmission-based precautions are additional measures, such as respirators and eye protection that are required to prevent spread of germs. Aerosol Contact Precautions and Droplet Precautions are transmission-based precautions that are commonly used for certain respiratory illnesses.

When a resident develops symptoms of a respiratory illness, it is best to start with the most protective transmission-based isolation precautions, Aerosol Contact Precautions,

until more is known about their illness. Aerosol Contact Precautions are typically used for COVID-19 and should be utilized until COVID-19 can be ruled out.

In addition to PPE requirements for residents in transmission-based precautions, it is recommended that:

- Residents are moved to private room
- Resident doors are kept closed as safety permits
- Appropriate isolation sign is placed at entry to resident room
- Additional PPE supplies are placed outside of residents room
- All PPE is discarded when leaving the room (exception of eye protection that can be safely disinfected)
- Non-urgent visitation is deferred

Please refer to the following Tri-County documents for additional information:

- [Transmission-based Precautions](#): Details on setting up isolation room, PPE use, managing equipment, transportation, and signage
- [Donning and Doffing](#): How to safely put on and take off PPE

Aerosol Contact Precautions

Suspected, symptomatic, or confirmed COVID-19

Aerosol Contact Precautions are used for suspected, symptomatic, or confirmed COVID-19 residents. Place an [Aerosol Contact Precautions Sign](#) at the entrance to the resident's room to alert staff and visitors that precautions are required. The sign should alert staff to wear correct PPE when entering the room, including:

- NIOSH approved [N95 Respirator](#)
- [Eye protection](#)
- [Gown](#)
- Gloves

Droplet Precautions

Influenza

Droplet Precautions are used for residents with influenza and other respiratory viruses, after COVID-19 has been ruled out. Place a [Droplet Precautions Sign](#) at the entrance to the resident's room to alert staff and visitors that precautions are required. The sign should alert staff to wear correct PPE when entering the room, including:

- Well-fitted mask (NIOSH approved N95 also acceptable)
- Eye protection
- Gown and Gloves as needed for potential contact with body fluids

Staff should discard mask or N95 when leaving the room and discard or [disinfect eye protection](#).

Resident Isolation

New onset symptomatic resident: Unknown Pathogen <i>Default to current COVID-19 recommendations until test results available</i>	
Residents	Recommendations
<p>Symptomatic for influenza or COVID-19:</p> <ul style="list-style-type: none"> ● Sore throat ● Shortness of breath ● Runny nose ● Congestion ● Cough ● Fever, chills, or rigor ● Nausea, vomiting, or diarrhea ● Fatigue or weakness ● Body aches ● Changes in mentation <p>AND</p> <p>Influenza and COVID-19 Status are both Unknown</p>	<p>Isolate in Aerosol Contact Precautions until test results known (or for duration of COVID-19 isolation if testing not performed)</p> <p>Move to private room if available</p> <ul style="list-style-type: none"> ● If not immediately available, refer to Shared Resident Rooms for recommendations <p>Test for Influenza and COVID-19</p> <ul style="list-style-type: none"> ● PCR testing is preferred, but antigen is acceptable for initial testing. <p>Interpret Results (<i>Negative results do not guarantee that an individual is not infected. Use clinical judgment and re-test individuals with high suspicion of an illness</i>)</p> <p>COVID-19 positive</p> <ul style="list-style-type: none"> ● 1 positive antigen or PCR <p>COVID-19 negative</p> <ul style="list-style-type: none"> ● 2 negative antigens 48 hours apart, or ● 1 negative PCR (repeat if high suspicion) <p>Influenza positive</p> <ul style="list-style-type: none"> ● 1 positive antigen or PCR <p>Influenza negative (likely)</p> <ul style="list-style-type: none"> ● 1 negative PCR, or ● 1 negative antigen followed by 1 negative PCR <p>Refer to next section based on test results</p>

Influenza Positive	
Residents	Recommendations
<p>Influenza Positive and COVID-19 status unknown:</p> <ul style="list-style-type: none"> No has been no recent COVID-19 testing (since symptom onset) <p>OR</p> <ul style="list-style-type: none"> Single negative antigen <p><i>Follow influenza AND COVID-19 recommendation until confirmed COVID-19 test results - residents could be infected with both influenza and COVID-19</i></p>	<p>Isolate in Aerosol Contact Precautions</p> <p>Move to private room</p> <ul style="list-style-type: none"> If not immediately available, refer to Shared Resident Rooms for recommendations <p>Test for COVID-19</p> <p>Interpret results</p> <p>COVID-19 positive</p> <ul style="list-style-type: none"> 1 positive antigen or PCR <p>COVID-19 negative</p> <ul style="list-style-type: none"> 2 negative antigens 48 hours apart, or 1 negative PCR (repeat if high suspicion) <p>Refer to appropriate section of this chart based on COVID-19 test results</p>
<p>Influenza Positive and COVID-19 positive:</p> <ul style="list-style-type: none"> Positive antigen or PCR <p><i>Follow influenza and COVID-19 recommendations</i></p>	<p>Isolate in Aerosol Contact Precautions</p> <p>Move to private room</p> <ul style="list-style-type: none"> Refer to Shared Resident Rooms for recommendations If cohorting COVID-19 residents, any shared room must have residents with the same confirmed influenza status
<p>Influenza Positive and COVID-19 negative:</p> <ul style="list-style-type: none"> Two negative antigen tests 48 hours apart, or Negative PCR, or Recovered from COVID-19 in the last 30 days <p><i>Follow influenza recommendations</i></p>	<p>Isolate in Droplet Precautions</p> <ul style="list-style-type: none"> Consider NIOSH approved N95 respirator during AGPs or high risk, prolonged close contact <p>Move to private room</p> <ul style="list-style-type: none"> If not immediately available, refer to Shared Resident Rooms for recommendations <p>De-isolate</p> <ul style="list-style-type: none"> 7 days after symptom onset or 24 hours after fever and respiratory symptoms resolve - whichever is longer. Use clinical judgment for young children or immunocompromised who may shed virus for longer periods of time

Staff Work Exclusion

Staff who develop a fever or respiratory symptoms should stay or return home, and notify their supervisor to report symptoms. Facilities should develop sick leave policies for staff that are non-punitive, flexible, and encourage staff to stay home when they are ill.

When considering work exclusion for staff, note that people with influenza are most contagious in the first three to four days after their illness begins and staying home during this time may prevent spread in the facility. Not all individuals with influenza will develop a fever or test positive so it is important to monitor symptoms and err on the side of caution when returning to work. While influenza testing does not always detect a case of influenza, testing is usually most accurate a day before symptoms develop to about 5 – 7 days after illness began. PCR testing is more accurate than antigen.

In addition to staying home when sick, consider the following recommendations for symptomatic staff who are:

Unknown influenza (unknown COVID-19)

- Testing for COVID-19 and influenza recommended
- COVID-19 positive staff should follow recommendations from [CDC's Interim Guidance for Managing Healthcare Personnel with SARS-CoV-2 Infection or Exposure to SARS-CoV-2](#)

Unknown or negative influenza (negative for COVID-19)

- An evaluation with provider may be helpful to decide appropriateness of contact with residents and consideration of antiviral treatment (may have influenza despite no fever or possibly negative test)
- Consider that people with influenza may be most infectious for the first 3 -4 days after symptom onset and staying home during this time may prevent spread in the facility
- If fever present, then exclude from work until at least 24 hours after fever resolves without the use of fever-reducing medication
- When returning to work, ensure staff with a persistent cough or sneezing wear a mask for source control and practice meticulous hand hygiene before and after every resident contact.

Staff with influenza (negative COVID-19):

- Exclude from work until at least 24 hours after fever resolves without the use of fever-reducing medicine
- Consider that people may be most infectious for the first 3 - 4 days after symptom onset and staying home during this time may prevent spread in the facility
- Staff who have ongoing respiratory symptoms should be considered for evaluation by a provider to decide appropriateness of contact with residents

- A reasonable work exclusion would allow staff to return 5 - 7 days after symptom onset or 24 hours after fever and respiratory symptoms resolve - whichever is longer
- When returning to work, ensure staff with a persistent cough or sneezing wear a mask for source control and practice meticulous hand hygiene before and after every resident contact.

For additional details, refer to [CDC Prevention Strategies for Seasonal Influenza in Healthcare Settings](#)

Antiviral Treatment and Prophylaxis

Antiviral medication reduces the risk of severe illness and hospitalizations. Once an outbreak has been identified in a facility, residents who have confirmed or suspected influenza should receive antiviral treatment immediately. Residents who have been exposed or potentially exposed should receive antiviral prophylaxis treatment. The antiviral dose and number of days of administration is different depending on if the resident is receiving treatment or prophylaxis.

Antiviral medication should begin as soon as possible to achieve the most effectiveness, ideally within 48 hours of symptom onset, or as soon as an exposure has been identified. Planning ahead by having standing provider orders before any influenza cases are in the facility can speed up the process in the event of an outbreak. The following documents are available to send to providers:

[Letter to Provider](#): This prepared letter is for facilities to send to residents' providers to alert them of an outbreak in the facility and request expedited orders for antivirals.

[Antiviral Order Form](#): This template medication order can be sent with the letter and is for providers to fill out for antiviral treatment or prophylaxis. This order form may be filled out *in advance* of an outbreak (recommended), or at the time of need.

Antiviral Treatment

- Begin as soon as possible, ideally within 48 hours of symptom onset
- Residents with confirmed influenza
- Residents with symptoms such as sore throat, fever, or cough
 - If symptomatic, do not wait for lab results, start treatment as soon as possible (this is called empirical treatment)

Antiviral Prophylaxis

- Begin as soon as possible for asymptomatic residents, regardless of vaccine status
- When there is only 1 lab-confirmed influenza resident in a facility and no other symptomatic residents, administer prophylaxis to:
 - Exposed residents, such as roommates of the resident with confirmed influenza

- When there are 2 or more residents that are ill with any [symptoms of influenza](#) within 72 hours of each other, with at least one lab-confirmed influenza, administer prophylaxis to:
 - Residents on affected unit if ill residents contained to a unit, or
 - Facility-wide if staff and ill residents have moved about the facility
- Residents on prophylaxis antivirals should switch to antiviral treatment doses if they become symptomatic.

COVID-19 and Influenza Antivirals

Oseltamivir (Tamiflu) is the antiviral medication most commonly used for influenza.

Paxlovid™ is the most common antiviral medication for COVID-19.

- A provider order is needed for any antiviral administration.
- Paxlovid™ requires a confirmed COVID-19 diagnosis for use.
- Oseltamivir does not require a confirmed influenza diagnosis for use for treatment. A potential exposure without symptoms is an indication for use for prophylaxis.
- There are no contraindications for a resident taking both Oseltamivir and Paxlovid™

Infection Prevention and Control

Monitoring and Screening

Residents

Close monitoring of residents is critical. Being able to identify and isolate a resident in the early stages of influenza, when they are very contagious, could prevent many other cases from occurring. Testing residents with very mild subjective symptoms and having a low threshold for isolation can also help contain outbreaks.

Suggested assessment:

- Assess residents at least daily, but preferable every shift
- Symptoms include sore throat, shortness of breath, runny nose, congestion, cough, fever, nausea, vomiting, diarrhea, fatigue, body aches, chills, rigor, or headache
- Check temperature
- Check oxygen saturation
- It may be difficult to determine if a resident is symptomatic. In this case watch for changes in moods, energy levels, confusion, agitation, or any other notable changes
- Immediately isolate in [Aerosol Contact Precautions](#) as soon as symptoms are detected

Visitors

- Post [notices](#) on the entrance of the facility warning visitors of the outbreak and its highly communicable nature

- Encourage visitors to self-screen and defer non-urgent visitation if they have symptoms of influenza.
- Defer non-urgent visits with residents who have influenza. If visitation occurs, educate visitor on infection control recommendations including masking, distancing, hand hygiene before and after visit
- Encourage distancing and introduce fresh air during visits

Staff

- Staff should not work while acutely ill
- Symptom self-monitoring should occur prior to every shift and staff should know who the facility point-person is for reporting symptoms or positive tests
- Follow facility sick policy as well as recommendations for work exclusion, testing, and source control masking.
- Avoid punitive action for sick calls.

Placement of Ill Residents

Many long-term care facilities utilize shared rooms for residents. Shared rooms increase the risk of disease transmission between roommates. It is valuable to plan ahead and have rooming options (provision for private room) for an ill resident(s).

As facility resources allow, prioritize the placement of ill residents in the following manner:

1. Single Rooms in a cohort unit – Place residents with a confirmed illness in a single room, preferably with a private bathroom on a dedicated unit (COVID-19 only, Influenza only, or COVID-19 and influenza co-infected).
2. Single Rooms anywhere in the facility – Place ill residents in a single room, preferably with a private bathroom.
3. Shared Rooms in a cohort unit – Residents with the same confirmed illness may be housed in shared rooms in a dedicated unit (COVID-19 only, influenza only, or COVID-19 and influenza co-infected). Influenza and COVID-19 status must be confirmed with [testing](#) prior to placing in a shared room.
4. Remain in shared room (one resident infected with non-infected roommate(s)) using modifications -
 - Create a barrier between residents using curtains or shields.
 - Staff should practice meticulous hand hygiene between patients.
 - Staff should utilize [Aerosol Contact Precautions](#) for all residents in the room until COVID-19 is ruled out. For a resident with influenza only, [Droplet Precautions](#) should be used for the ill resident.
 - Consider assigning each resident in the room to different care staff (CNA, LPN, RN) to minimize a single staff member having crossover contact between two residents in the same room.
 - **PPE must be removed and new PPE donned between the care of each resident in the room**

- Implement COVID-19 testing of asymptomatic roommate(s) every 48 hours until ill resident is confirmed COVID-19 negative.
- Encourage masking of all residents while in the room during the period of infectiousness.
- Ill residents having AGPs should not share a room with asymptomatic residents.
- Use a portable air purifier / HEPA air scrubber(s). Make sure the intake draws in the air from the infected resident and direct the clean filtered air out in the room.
- For resident-to-resident transmission and placement challenges, an infection control consult with Oregon Health Authority (OHA) can provide detailed recommendations and support. Reach out to the MCHD outbreak investigator to schedule.

For additional details on resident placement, refer to CDC [Testing and Management Considerations for Nursing Home Residents with Acute Respiratory Illness Symptoms when SARS-CoV-2 and Influenza Viruses are Co-circulating](#)

Community Activities and Dining

Community activities and dining are important aspects to the mental health and wellbeing of residents. Consider the risks of influenza transmission with benefits of community activities and dining when making decisions for your facility.

- To stop influenza spread among residents, it is best practice to **stop all community activities and group dining** until the outbreak is over.
- When this is not feasible, intermediate measures could include:
 - Choose small cohorts of residents to attend activities and dining together
 - Utilize a large space so residents may distance themselves from each other
 - Encourage resident masking
 - Provide opportunities for hand hygiene before and after activities
 - Open windows in communal rooms, if feasible, or consider air scrubbers

Staffing Considerations

It is ideal to have dedicated staff caring only for influenza cases, with preference for staff who are vaccinated and demonstrate consistent and proper donning and doffing technique. If staff will be caring for residents who are in Aerosol Contact Precautions or Droplet Precautions as well as residents who are not, prioritize the care of non-infectious residents before infectious residents when possible.

Crisis Staffing

If your facility is experiencing a staffing crisis due to staff cases and isolation:

- Consider alternative methods including temporary agency staff.

- Prioritize staff who do not work at other facilities to limit the spread between facilities.
- Contact your outbreak investigator prior to permitting staff to return to work early.

Admissions

- Restricting admissions during an influenza outbreak involving residents is recommended; however this may not always be possible. Please contact the LPHA outbreak investigator prior to accepting admissions in the facility. If a facility needs to admit during an active outbreak, consider the following:
 - Ensure infection control measures outlined in this document are in place
 - Have assigned staff to care for infected residents and separate dedicated staff caring for non-infected residents
 - Restrict community activities and dining among residents, including new admissions
 - Influenza outbreak status should be communicated to incoming residents and to any facility accepting a transfer out.
 - Admissions may not be admitted into a shared room with an infectious resident

Donning and Doffing PPE

- Ensure staff have been trained and can demonstrate proper donning and doffing of PPE.
- Set up a clean PPE station; this may include drawers, shelves, tables, etc.; all PPE must remain covered prior to use.
- Keep clean PPE station in close proximity to isolation rooms
- Avoid storing clean PPE or other supplies in areas where staff remove soiled PPE
- Assign staff to monitor and refill supplies on a schedule.
- Correct **Doffing Technique** is important to utilize to avoid cross contamination.
 - Doff gown (if using) and gloves before leaving the resident isolation room or right outside; place discarded gown and gloves in the designated trash.
 - Discard N95 or mask outside of the isolation room.
 - Maintain proper hand hygiene.
 - Disinfect eye protection at the designated table.
 - Post laminated [CDC Instructions](#) in areas where people doff.

N95 Respirator Use

If using a respirator when caring for suspected or confirmed residents with influenza:

- N95 respirators should be NIOSH approved.

- [KN95s](#) are NOT considered respirators and will not provide the same level of protection.
- Train staff on how to don and perform a seal check every time they don an N95.
 - Here is a [CDC Infographic](#) on how to use an N95 respirator.
 - This is a very short [video](#) on performing a seal check.
- Respiratory Protection Programs should be implemented to ensure workers are provided with medical clearance and fit testing. For help initiating a Respiratory Protection Program in your facility, use these OSHA resources:
 - [Oregon OSHA COVID-19 Consultation](#)
 - [OSHA Respiratory Protection Fact Sheet](#)
- Resource: MCHD [N95 Respirators Instructional Page](#)

PPE Supply

- Evaluate your current PPE inventory and increase your inventory to ensure a 30 day supply.
- If you are having trouble obtaining PPE and your inventory falls below 14 days, please contact your outbreak investigator for support.

Hand Hygiene

- Encourage frequent hand hygiene for both staff and residents before and after contact with another person, shared objects, or high touch surfaces.
- Ensure that alcohol-based hand sanitizer contains at least 60% alcohol.
- Place hand sanitizer dispensers near entrances and exits to rooms, scattered about communal areas, and near high touch surfaces such as outside of elevators.
- Reliable wall mount and free standing dispensers may help create positive hand hygiene habits.
- In units where accessible hand sanitizer is a safety issue, consider carrying pocket dispensers.
- Remember to wash hands with soap and water regularly, when hands are visibly soiled, and when residents have any symptoms of GI illness such as nausea, vomiting, or diarrhea.

Break Rooms

When multiple staff are sick or positive for influenza, consider areas in the facility where staff to staff transmission may be occurring. Addressing break rooms and smoking areas may help stop the spread of illness. Consider the following:

- Avoid crowded break rooms
- It may be helpful to reduce seating to discourage crowding.

- Staggering breaks can reduce the number of people on break at one time.
- Locate and open large open rooms for breaks to help with overcrowding.
- Place disinfectant wipes in plain view for staff to disinfect eye wear and high touch surfaces.
- Limit staff in smoking areas and encourage distancing while smoking.

Refer to [Break Room Safety](#) for additional guidance.

Indoor Air Considerations

- Outdoor fresh air is helpful in diluting indoor contaminants.
 - Open or crack a window if it is available and safe to do so.
 - Opening multiple windows to create cross ventilation is also helpful.
- Running exhaust fans such as bathroom fans, can help clear airborne germs.
- Portable HEPA filters can also help with air quality; they should run on a low speed, ensuring the outflow is not blowing air from person to person and is not directed toward an air intake vent.
- Avoid the use of fans unless it can be used to facilitate the flow of fresh outdoor air, such as being placed in a window. In these cases, run the fan at a low speed and direct the fan outside. Fan use in enclosed spaces may blow droplets and aerosols around the room and spread germs.
- Resources on Indoor Air:
 - [OHA Indoor Air Considerations for Smaller Spaces](#) provides additional detailed information on indoor air quality.
 - [Improving Indoor Air Quality](#) discusses measures to decrease the spread of disease through improving air quality

Cleaning and Disinfection

- Clean and disinfect high touch and horizontal surfaces at least twice a day.
 - High touch surfaces include: shared equipment, handles and door knobs, counters and tables, chairs, phones, light switches, bed rails, etc.
- Consider initiating a cleaning log as a reminder to staff, or assigning a point person.
- Check disinfectant product label to ensure that you are using an EPA-registered disinfectant that is effective against influenza A virus.
- Know the contact time of disinfectants as marked on the containers and ensure surfaces stay wet for the entire contact time to ensure proper disinfection. Consider writing contact times on the container using a bold marker.
- To reduce housekeeper exposures, clinical staff that provide care in droplet or aerosol contact isolation and quarantine rooms should also perform cleaning and disinfection.

Resources

CDC Prevention Strategies for Seasonal Influenza in Healthcare Settings
<https://www.cdc.gov/flu/professionals/infectioncontrol/healthcaresettings.htm>

CDC Testing and Management Considerations for Nursing Home Residents with Acute Respiratory Illness Symptoms when SARS-CoV-2 and Influenza Viruses are Co-circulating
<https://www.cdc.gov/flu/professionals/diagnosis/testing-management-considerations-nursinghomes.htm>

CDC Interim Guidance for Influenza Outbreak Management in Long-Term Care and Post-Acute Care Facilities
<https://www.cdc.gov/flu/professionals/infectioncontrol/ltc-facility-guidance.htm>

Oregon Health Authority (OHA) Clinical Considerations during SARS-CoV-2 and Influenza Virus Co-circulation
<https://sharedsystems.dhsoha.state.or.us/DHSForms/Served/le4352.pdf>

CDC How Flu Spreads
<https://www.cdc.gov/flu/about/disease/spread.htm#:~:text=People%20with%20flu%20are%20most,for%20longer%20than%20seven%20days.>

Update Log

November 22, 2022. Added recommendation to call LPHA prior to accepting any admissions during an active influenza outbreak under section “Admissions”.

Appendix 1

Communicable Disease Services Provider Letter



Dear Provider:

Situation: Your patient is currently in a long-term care facility that has an influenza outbreak confirmed by the local health department. Your patient should receive preventive antivirals as soon as possible to protect them from getting influenza and to help stop the outbreak, regardless of whether they received a flu vaccine this year.

Background: Use of antiviral drugs for chemoprophylaxis of influenza is recommended by the Centers for Disease Control and Prevention (CDC) as a key component of influenza outbreak control in institutions that house residents at higher risk of flu-related complications.

In Clackamas, Multnomah, and Washington counties, 1,327 total reported influenza-associated hospitalizations occurred during the 2018-2019 surveillance season, and 47 influenza outbreaks occurred in long term care facilities. In general, approximately 90% of influenza related deaths are in individuals age 65 or older. Controlling outbreaks of influenza in long term care facilities is a top priority to decrease morbidity and mortality of influenza.

More details on the CDC recommendations can be found at:

<https://www.cdc.gov/flu/professionals/antivirals/summary-clinicians.htm>

Recommendation: Please complete the enclosed orders for oseltamivir (Tamiflu) and return to your patient's facility as soon as possible. The indications and dosing were developed by the Tri-County Health Officer program, based on CDC guidance. Thank you for your efforts to protect the health and safety of your patients and our community. If you have any questions, please contact the Multnomah County Health Dept at 503-988-3406.

Sincerely,

Ann Loeffler, MD

Health Officer

Tri-County Health Officer Program

Appendix 2

Order for supply of oseltamivir (Tamiflu®)

capsules **Indication:** For residents of long term care facilities (LTCF) in the setting of an influenza outbreak.

Patient name: _____ DOB: _____

Wt.: _____ kg Estimated Creatinine clearance: _____ ml/min

Precautions (check all that apply):

- History of hypersensitivity or allergy to oseltamivir – **STOP, do not order**
- Routine hemodialysis or continuous peritoneal dialysis – **STOP, do not order**
- Estimated Creatinine clearance <10mL/min – **STOP, do not order, consult nephrology.**
- Weight <40kg—**STOP, dosage adjustment needed. Consult pharmacist as needed**
- History of renal impairment (precaution) – **Check one order each below**
- None – **Check one order each below**

Order for oseltamivir for PROPHYLAXIS (check one):

FOR ASYMPTOMATIC RESIDENTS IN SETTING OF INFLUENZA OUTBREAK IN LTCF

Check one	Renal function	Rx for prophylaxis in asymptomatic resident: Dispense: QS 2 weeks with one refill*
	Normal renal function	75 mg po ONCE daily
	CrCl >30 to 60 ml/min	30 mg po ONCE DAILY
	CrCl >10 to 30 ml/min	30 mg po EVERY OTHER DAY
	ESRD	Do not use standing order, Contact nephrologist

**CDC recommends minimum 2 weeks, and until 1 week after the last known case is identified in the institution*

If resident becomes symptomatic, consult with medical provider and change to treatment dosage (see below).

Order for oseltamivir TREATMENT (check one):

If resident is **SHOWING SYMPTOMS OF INFLUENZA LIKE ILLNESS (ILI)** in setting of **known outbreak**

Check one	Renal function	Rx for treatment for ILI in setting of outbreak:
	Normal renal function	75 mg po TWICE daily FOR 5 DAYS
	CrCl >30 to 60 ml/min	30 mg po TWICE DAILY x 5 DAYS
	CrCl >10 to 30 ml/min	30 mg po ONCE DAILY x 5 DAYS
	ESRD	Do not use standing order, Contact nephrologist

Additional information:

- Take with food.
- Drug-drug interactions unlikely.
- The most likely adverse effects are gastrointestinal upset, headache and increased liver enzymes; see product information for full list.
- This order in effect through ___/___/___ (6/30/2023 unless otherwise noted)

Provider signature _____

Provider name _____

Date _____

Appendix 3 Facility Outbreak Notice



ATTENTION VISITORS!

We currently have a number of residents ill with respiratory symptoms.

In order to protect our residents' health and the health of others,

VISITOR ACCESS IS LIMITED THROUGHOUT THE FACILITY.

Please check in at the front desk.

Wash your hands as you enter and exit the facility.



NOTICE!

We are currently experiencing a respiratory outbreak among our staff and residents.

We are working with the Multnomah County Health Department to contain and control this highly communicable disease.

For the safety of our residents and their visiting friends and family, we please ask that you limit visits to your loved ones as much as possible to avoid further spread of illness. Please do not visit if you are ill with flu-like symptoms.

Please also refrain from bringing young children and elderly to visit. They are most susceptible to complications from influenza like illness.

If you do decide to visit, please wash your hands often, and wear a mask upon entry to the facility.



Comparing Influenza and COVID-19

Managing an influenza outbreak may present challenges due to the presence of COVID-19 in the community. Many symptoms of influenza overlap with symptoms of COVID-19 which could make it difficult to know which virus you are dealing with. When residents have either COVID-19 or influenza symptoms and it is unclear the cause, it is best to err on the side of caution and place the resident in COVID-19 Aerosol Contact Precautions.

Below is a table that compares the two viruses.

	Influenza (Flu)	SARS CoV-2 (COVID-19)
Onset of symptoms after exposure	2 - 4 days.	2 - 14 days, depending on the variant
Contagious (may be longer in certain populations)	3 - 7 days after symptom onset and possibly 24 hours before onset of symptoms	7 - 10 days after symptom onset and possibly 48 hours before onset of symptoms
Spread	Generally, less contagious than COVID-19 Person-to-person in respiratory droplets (within six feet) when infected person sneezes, coughs, or talks	Generally, more contagious than influenza Person-to-person in respiratory droplets (within six feet) when infected person sneezes, coughs, or talks

	Possibly aerosol in close vicinity or contaminated surfaces	Possibly aerosol or contaminated surfaces
Transmission Based Precautions (In addition to standard precautions)	Droplet Precautions Close fitting Medical, Surgical, or Procedural mask (minimum requirement) N95 recommended during AGP Eye protection Duration <ul style="list-style-type: none"> • 7 days after symptom onset or 24 hours after fever and respiratory symptoms resolve - whichever is longer. • Use clinical judgment for young children or immunocompromised who may shed virus for longer periods of time 	Aerosol Contact Precautions NIOSH Approved N95 Respirator Eye protection Gown Gloves Duration <ul style="list-style-type: none"> • 10 days after positive test if asymptomatic. • 10 days after onset of symptoms and at least 24 hours have passed since the last fever without the use of fever-reducing medications and symptoms have improved.
Symptoms	May include <ul style="list-style-type: none"> • Fever • Cough • Fatigue • Sore Throat • Runny or stuffy nose • Body Aches • Headache • Diarrhea (more common in children than adults) 	May include <ul style="list-style-type: none"> • Fever • Cough • Fatigue • Sore Throat • Runny or stuffy nose • Body Aches • Headache • Nausea, Vomiting, Diarrhea • Shortness of Breath

	<ul style="list-style-type: none"> • Shortness of breath is less common, but can occur when flu is complicated by pneumonia. 	<ul style="list-style-type: none"> • Change or loss of taste or smell
Vaccination	Seasonal flu vaccine	Primary series and booster
Outbreak Testing	<ul style="list-style-type: none"> • Test symptomatic residents immediately • Testing contacts is not routine practice • Routine testing of asymptomatic residents not currently recommended 	<ul style="list-style-type: none"> • Test symptomatic residents immediately • Test contacts • Routine testing of asymptomatic residents may be recommended during outbreak
Antiviral Treatment and Prophylaxis	<p>Antiviral treatment used for confirmed and suspected influenza. Testing not needed to confirm diagnosis.</p> <p>Antiviral Prophylaxis used for asymptomatic residents who may have been exposed</p>	Antiviral Treatment used for COVID-19 confirmed with testing