Guidance for Viral Respiratory Disease Management in Long-Term Care Facilities

Long-term care facilities may be defined as institutions, such as nursing homes and skilled nursing facilities that provide health care to people (including children) who are unable to manage independently in the community. This care may represent custodial or chronic care management or short-term rehabilitative services. Viral respiratory diseases (VRD) can be introduced into a long-term care facility by newly admitted residents, health care workers and by visitors. Spread of VRD can occur between and among residents, health care providers, and visitors. Residents of long-term care facilities can experience severe and fatal illness during VRD outbreaks. Preventing transmission of VRD viruses and other infectious agents within health care settings, including in long-term care facilities, requires a multi-faceted approach that includes the following:

- Infection Control
- Testing
- Public Health Coordination

Before an Outbreak of Any Viral Respiratory Disease Occurs

Influenza vaccination should be provided routinely to all residents and health care workers of long-term care facilities. If possible, all residents should receive the flu vaccine before influenza season. Informed consent is required to implement a standing order for vaccination, but this does not necessarily mean a signed consent must be present. In the majority of seasons, the vaccine will become available to long-term care facilities beginning in September, and influenza vaccination should commence as soon as vaccine is available.

Residents

It is important to note that nursing home residents may have chronic respiratory issues such as chronic obstructive pulmonary disease (COPD). Patients should be evaluated for signs/symptoms of respirator infections that are above their normal course. **If a patient is suspected of having a respiratory infection, first test the patient for respiratory viruses on commercially available laboratory assays.** This can be coordinated with your facility's reference laboratory.

Considering nursing homes are residents' primary dwelling, visitors and healthcare workers pose the greatest risk of introducing viral respiratory diseases into the care setting.

Health Care Personnel

Healthcare personnel should be educated on transmission of infectious diseases, hand hygiene, and personal protective equipment (PPE). Nursing homes should reinforce protocols on the following:

- Report signs/symptoms of respiratory infection to supervisors. Persons with any respiratory symptoms or fever should be encouraged to stay home for the duration of their illness.
- Adherence to hand hygiene and PPE use should be audited. Auditing methods include utilizing "secret shoppers" and two-person donning/doffing teams. Hand hygiene should be observed upon entry/exit of patient rooms as well as offering care between patients. PPE should not be worn in hallways and common areas. Doff all PPE before exiting patient rooms and observe hand hygiene after completion.

Visitors

Develop protocols for evaluating visitors for respiratory signs/symptoms before they are permitted access to the facility. This can be done by having them check in with the front desk or nurse's station to confirm presence or absence of respiratory illness.

- Post signs at entrances to notify visitors that they must first check-in with the nurse's station before being granted access to the facility.
- Have respiratory etiquette/hand hygiene stations available in waiting areas.
- Educate visitors that respiratory infections may be mild in presentation in persons who are in good health.
- Ask visitors if they have had recent travel in the past two weeks to VRD outbreak locations with community transmission.

When There is a Confirmed or Suspected Viral Respiratory Disease Outbreak

Examples of outbreak indicators: one case of COVID-19; 2 or more ill residents with influenza-like symptoms. If there is one laboratory-confirmed case of a rare or novel VRD such as COVID-19, aggressive containment measures are required. Facilities should immediately call the Infectious Disease Epidemiology (IDEpi) Section of Louisiana Department of Health to report by calling **1-800-256-2748**. Please note that testing for COVID-19 is only available at the Louisiana Office of Public Health Laboratory at this time.

Even if it's not influenza season, influenza testing should occur when any resident has signs and symptoms that could be due to influenza *, and especially when two residents or more develop respiratory illness within 72 hours of each other.

- Determine if influenza virus is the causative agent by performing influenza testing on respiratory specimens (i.e. nasal swabs, throat swabs, nasopharyngeal swab, or nasopharyngeal or nasal aspirates) of ill residents with recent onset of signs and symptoms suggestive of influenza.
- In order of priority, the following influenza tests are recommended: reverse transcription polymerase chain reaction (RT-PCR); rapid influenza diagnostic tests.
- Because of the possibility of false negative results during influenza season, if influenza is suspected and rapid influenza diagnostic test results are negative, perform confirmatory testing using RT-PCR. Information on influenza diagnostic testing is available online or by contacting your state public health laboratory.
- Because of the possibility of false positive results, especially outside of influenza season, perform confirmatory testing using RT-PCR if rapid influenza diagnostic test results are positive.
- Determining influenza virus type or subtype of influenza A virus can help inform antiviral therapy decisions.
- Test for other respiratory pathogens if influenza RT-PCR is negative.
- Once an outbreak has been identified, outbreak prevention and control measures should be implemented immediately.

Implement daily active surveillance for respiratory illness among ill residents, health care personnel and visitors to the facility.

- During an outbreak, it is likely there are other cases among exposed persons.
- Conduct daily active surveillance until at least 14 days after the last confirmed VRD case occurred.
- Test for influenza in the following:
  - Ill persons who are in the affected unit as well as previously unaffected units in the facility
  - Note that elderly persons and other long-term care residents, including those who are medically fragile and those with neurological or neurocognitive conditions, may manifest atypical signs and symptoms with influenza virus infection, and may not have fever.
  - Ensure that the laboratory performing the tests notifies the facility of tests results promptly.

Implement Standard, Contact, and Droplet Precautions for all residents with suspected or confirmed viral respiratory infection.

Standard Precautions are intended to be applied to the care of all patients in all health care settings, regardless of the suspected or confirmed presence of an infectious agent. Implementation of Standard Precautions constitutes the primary strategy for the prevention of healthcare-associated transmission of infectious agents among patients and health care personnel. Examples of Standard Precautions include:

- Wearing gloves if hand contact with respiratory secretions or potentially contaminated surfaces is anticipated.
- Wearing a gown if soiling of clothes with a resident's respiratory secretions is anticipated.
- Changing gloves and gowns after each resident encounter and performing hand hygiene.
- Perform hand hygiene before and after touching the resident, after touching the resident's environment, or after touching the resident's respiratory secretions, whether or not gloves are worn. Gloves do not replace the need for performing hand hygiene.

Contact Precautions are intended to prevent transmission of infectious agents, including epidemiologically important microorganisms, which are spread by direct or indirect contact with the patient or the patient's environment.

- A single patient room is preferred for patients who require Contact Precautions.
- When a single-patient room is not available, consultation with infection control personnel is recommended to assess the various risks associated with other patient placement options (e.g., cohorting, keeping the patient with an existing roommate).
- Healthcare personnel should wear a mask for close contact with infectious patients; the mask is generally donned upon room entry.

*Patients with illness associated with influenza virus infection often have fever with cough, chills, headache, myalgias, sore throat, or runny nose. Some patients, such as the elderly, children with neuromuscular disorders, and young infants may have atypical clinical presentations.

Droplet Precautions are intended to prevent transmission of pathogens spread through close respiratory or mucous membrane contact with respiratory secretions. Droplet Precautions should be implemented for residents with suspected or confirmed influenza for 7 days after illness onset or until 24 hours after the resolution of fever and respiratory symptoms, whichever is longer, while a resident is in a health care facility. Examples of Droplet Precautions include:

- Placing ill residents in a private room. If a private room is not available, place (cohort) residents suspected of having influenza should be placed with one another.
- Spatial separation of ≥6 feet and drawing the curtain between patient beds is especially important for patients in multi-bed rooms with infections transmitted by the droplet route.
- Wear a facemask (e.g., surgical or procedure mask) upon entering the resident's room. Remove the facemask when leaving the resident's room and dispose of the facemask in a waste container.
- If resident movement or transport is necessary, have the resident wear a facemask (e.g., surgical or procedure mask) if possible. Patients on Droplet Precautions who must be transported outside of the room should wear a mask if tolerated and follow Respiratory Hygiene/Cough Etiquette.
- Communicate information about patients with suspected, probable, or confirmed influenza to appropriate personnel before transferring them to other departments.

Airborne Precautions prevent transmission of infectious agents that remain infectious over long distances when suspended in the air. The Louisiana Department of Health recognizes that no nursing homes in our state are outfitted with airborne infection isolation rooms (AIIR) and very few nursing homes have a respiratory protection program. In settings where Airborne Precautions cannot be implemented due to these engineering limitations, conduct the following:

- Place the patient in a private room with the door closed.
- Provide N95 or higher level respirators or masks if respirators are not available for healthcare personnel.
- If N95 masks are not available, utilize surgical masks. If surgical masks are not available, the facility will have to fashion facial protections that may not be NIOSH-approved.

Discontinuation of Transmission-Based Precautions

Transmission-Based Precautions remain in effect for limited periods of time. For most infectious diseases, this duration reflects known patterns of persistence and shedding of infectious agents associated with the natural history of the infectious process and its treatment. In the presence of VRD outbreaks, patients should be on necessary precautions for the duration of symptoms of infection.

In the presence of outbreaks of VRD outbreaks in long-term care facilities, enhanced Transmission-Based Precautions are required. Examples of infectious diseases that affect LTCF are as follows with commensurate precautions:

- Influenza: Droplet and Contact Precautions
- COVID-19: Standard, Contact, Droplet, and Airborne Precautions
- Circulating respiratory viruses such as rhinovirus or human metapneumovirus: Droplet and Contact Precautions
- Disseminated Herpes Zoster (Shingles): Airborne Precautions

Consider the following additional measures to reduce viral respiratory disease transmission among residents and health care personnel:

- Have symptomatic residents stay in their own rooms as much as possible, including restricting them from common activities, and have their meals served in their rooms when possible.
- Limit the number of large group activities in the facility and consider serving all meals in resident rooms if possible when the outbreak is widespread (involving multiple units of the facility).
- Avoid new admissions or transfers to wards with symptomatic residents.
- Limit visitation and exclude ill persons from visiting the facility via posted notices. Consider restricting visitation by children during community outbreaks of influenza.
- Monitor personnel absenteeism due to respiratory symptoms and exclude those with influenza-like symptoms from work until at least 24 hours after they no longer have a fever.
- Restrict personnel movement from areas of the facility having illness to areas not affected by the outbreak.
- Administer the current season's influenza vaccine to unvaccinated residents and health care personnel as per current vaccination recommendations.
- Audit adherence to hand hygiene using alcohol-based hand rubs, PPE use, and environmental cleaning.
- If a patient requires hospitalization, utilize the CDC Inter-facility Infection Control Transfer Form for transport and call the receiving facility to notify them that Transmission-Based Precautions are needed for the patient's care.

Coordination Summary: Viral Respiratory Disease Management in Long-Term Care Facilities

Utilize this algorithm to coordinate with public health epidemiologists upon the identification of patients identified with a novel VRD or suspected outbreak. Note that precursor steps such as monitoring visitors for signs/symptoms of infection and having staff notify of their infectious statuses should already be established.

Identify patient with signs/symptoms of respiratory infection above their normal course.

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Place the patient on Droplet and Contact Precautions. Utilize a private room if available.

- If a private room is unavailable, use barriers such as drawn curtains to protect the roommate.
- Do not move the roommate as they are considered exposed.
- Place PPE at the point of use outside of the patient's room.
- Implement active surveillance for other patients who may develop similar symptoms.
- Audit staff adherence to PPE use and hand hygiene. PPE should not be worn in hallways or between patients.
- Test the patient for influenza and other viral respiratory diseases through your reference laboratory.
- Activate daily surveillance for other residents who may develop similar symptoms in the following 14 days.

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If the patient is suspected to have a novel VRD:

- Call **1-800-256-2748** to speak with an on call infectious disease epidemiologist with the Louisiana Department of Health.
- Place the patient on Airborne, Droplet, and Contact Precautions in a private room. See methods outlined on page 3 of this protocol for coordination.
- Limit patient movement within the facility.
- Limit staff movement within the facility. Cohort staff to be assigned to the unit.
- Restrict visitation to the nursing home.
- If the patient has to be moved to a higher acuity facility, place a mask on the patient if they must be moved within the facility.
- Coordinate with epidemiologists to identify potentially exposed patients and staff.
- Continue active surveillance methods.

Resources

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