

Virginia Department of Health (VDH) Guidelines for the Prevention and Control of Influenza and COVID-19 in Nursing Homes and Long-Term Care Facilities, 2020-2021

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Key Points

- Influenza season occurs in Virginia every year, between October and May. Because long-term care facility (LTCF) residents are at increased risk for complications from influenza and to prevent outbreaks, LTCFs should be aware of when influenza-like illness has increased in their region of the state and be on the lookout for any change in acute respiratory illness that might indicate the arrival of influenza in the facility.
- Many measures that are in place to prevent the spread of COVID-19 in facilities will also help prevent influenza. These include screening staff, residents, and visitors for respiratory illness or exposures, supporting distancing or restricting group activities and visitation, increased compliance with infection control practices, including use of face masks, hand hygiene, and standard- and transmission-based precautions, and enhanced environmental cleaning and disinfection.
- Widespread use of influenza vaccination, with documentation and tracking to maximize coverage, and standing orders for the use of influenza antiviral medications for treatment and prophylaxis are recommended.
- When influenza is circulating in the region, initiate all personal protective equipment (PPE) for COVID-19 for residents experiencing signs or symptoms of acute respiratory illness (ARI). Place them in a single room or maintain them in their current room until the diagnosis is confirmed.
- Test residents with ARI for both influenza and COVID-19 simultaneously. PCR is recommended; antigen tests can be used if PCR is not available.
- Residents confirmed to have COVID-19 should be moved to the COVID care unit. If they are co-infected with influenza, they should be in a single room or housed with another co-infected resident.
- Residents who test positive only for influenza should be in a single room or housed with another influenza-positive resident.
- Staff should not mix between well residents, those with COVID-19, and those with influenza.
- If it is not possible to move a resident in a shared room, the roommate can be protected with a barrier, hand hygiene between resident care, transmission-based precautions, and the use of influenza antiviral prophylaxis if influenza is highly suspected or confirmed.
- Antiviral treatment for influenza should be started as early as possible, even if the diagnosis is suspected and test results are pending. Antiviral medications should be administered as prophylaxis for those exposed to confirmed influenza.
- If two or more residents are confirmed with influenza within 72 hours, prophylaxis should be administered to all residents on the unit or floor. Antiviral prophylaxis should continue for a minimum of two weeks and until one week has passed after the last case. Anyone who develops symptoms of ARI on the affected unit should be tested.
- Staff with influenza should be excluded from work until 24 hours after fever has resolved without the use of fever-reducing medications. Those with COVID-19, with or without influenza, should be excluded until 10 days after date of onset or positive test plus 24 hours after fever has resolved without the use of fever-reducing medications and other symptoms have improved.
- LTCFs are encouraged to consult with their local health department (LHD) to discuss any questions about testing, cohorting, or prophylaxis.

Background and Rationale for Recommendations

The influenza season, which can start as early as October and continue through May, presents a challenge to nursing homes and other long-term care facilities (LTCFs) every year. The 2020-2021 influenza season is sure to be especially challenging, when both influenza viruses and the SARS-CoV-2 virus that causes COVID-19 are expected to be circulating simultaneously. This Virginia Department of Health (VDH) guidance document contains recommendations for the prevention of influenza and management of cases and outbreaks of influenza, consistent with recommendations that are issued annually, and references COVID-19 where both infections need to be considered. Many of the measures that facilities already have in place for the early detection and prevention of COVID-19 are expected to also help with the detection and prevention of influenza.

VDH reminds LTCFs that local health department (LHD) staff are available for consultation at any time infectious disease concerns arise. To find the LHD nearest you, go to www.vdh.virginia.gov/local-health-districts/. Facility managers are reminded that they are required to report any suspected or confirmed outbreak, including outbreaks of influenza, influenza-like illness (ILI), or COVID-19 to the LHD immediately per the *Code of Virginia* ([§32.1-37](#)).

Influenza Illness, Transmission, and Risk for Complications

Throughout 2020, LTCF administrators, staff, and residents have become very familiar with managing an acute respiratory illness. Influenza and COVID-19 share many similarities. Influenza is described below and compared with COVID-19 in a [Table](#) at the end of this document.

ILI is defined as fever with a cough or fever with a sore throat. Influenza also causes other symptoms, such as muscle aches, headache, and fatigue. Symptoms can vary depending on age, immune status, and underlying health conditions, and atypical presentations are common among LTCF residents. In particular, the elderly or immunosuppressed often do not have a fever with influenza. Instead, they might appear lethargic, less alert, and display behavior changes. Influenza typically resolves after 3-7 days of illness for most people, although cough and malaise can persist for more than 2 weeks, especially in the elderly and those with chronic lung disease.

As with COVID-19, influenza spreads primarily by large droplets produced when an infected person coughs or sneezes. The droplets can travel short distances through the air (usually not more than 6 feet) and enter the nose or throat of a person in close contact, where the virus grows and causes infection. Influenza can also be spread by hands or through contact with environmental surfaces or objects. The influenza virus can survive on hands for 3 to 5 minutes and on some surfaces (e.g., environmental surfaces, medical equipment) for up to 48 hours. The virus is denatured by soap and water, hand sanitizers, and the cleaning/disinfecting agents used in routine environmental cleaning, including by products used against COVID-19.

Although anyone can get influenza, [certain groups are at high risk](#) for developing serious flu-related complications (e.g., pneumonia, exacerbation of underlying chronic disease, bacterial coinfection, etc.), that result in hospitalization and sometimes death. These groups include the following:

- Adults aged 65 years or older;
- Children aged less than 5 years (especially those aged less than 2 years)
- Pregnant women and women up to two weeks postpartum;

- *Residents of nursing homes and other long-term care facilities;*
- People who are Black, Hispanic, American Indian or Alaska Native;
- People who have a medical condition, such as asthma, neurological and neurodevelopmental condition, chronic lung disease, heart disease, blood disorder, endocrine disorder (including diabetes), kidney disorder, liver disorder, metabolic disorder, weakened immune system because of disease or medication, people younger than 19 years who are receiving long-term aspirin therapy, and people with extreme obesity (body mass index of 40 or more).

Nursing homes and other LTCFs house individuals with increased risk for developing serious complications. Strict infection prevention precautions are needed to ensure that the virus is not spread from one resident or care provider to other residents or staff of the facility.

COVID-19 Prevention and Control Measures in Place that are also Recommended for Influenza

Many measures LTCFs put in place earlier in 2020 and continue to follow for COVID-19 prevention and control will help to prevent and control influenza. Details about what measures need to be implemented will not be repeated here because they are very well known and followed routinely by LTCF management and staff. COVID-19 guidance for LTCFs is available on the [Virginia Long-Term Care Task Force](#) website.

Surveillance

- Daily screening is conducted of all residents, staff, volunteers, and visitors for signs and symptoms of respiratory infection. No one with any signs or symptoms is allowed to enter the facility. Staff are familiar with the signs and symptoms of respiratory illness and able to quickly identify onset of new illness, an increase in illness rates, or a change in severity of illness. Monitoring is done in a standardized way and documentation maintained (see Resources for sample logs).

Infection Prevention and Communication

- Infection control measures are in place and followed appropriately. Face masks are worn by care providers at all times while in the facility and by residents and visitors to the extent they can be tolerated. Hand hygiene is performed thoroughly and frequently. Care providers follow standard precautions when caring for all residents; transmission-based precautions when caring for ill residents or when contact with the resident, body fluids, or the environment presents a risk in spite of using standard precautions; and add an N-95 respirator if performing an aerosol-generating procedure.
- Educational signs are posted to remind residents, staff, and visitors to take steps to prevent disease (see [Resources](#) for links to printable signs).
- Contact information for the local health department is readily available and the facility is prepared to call the health department if an outbreak is suspected. See the VDH website at www.vdh.virginia.gov/local-health-districts/ to locate your LHD.

Supplies

- Adequate supplies are readily available and positioned where they are needed throughout the facility. This includes hand hygiene supplies (e.g., soap, paper towels, hand sanitizer with at least 60% alcohol), personal protective equipment (e.g., gloves, gowns, face shields, eye protection, face masks, and higher level respiratory protection as needed), as well as other items, such as tissues and no-touch trash containers.
- A respiratory etiquette station is set up at entrances, with supplies and signage to encourage hand hygiene and visits only by those who are free of respiratory symptoms.

Other Policies and Procedures

- Policies and procedures are established that define how to handle group activities, including meal service, visitors, and potential exposures. These take into account the need for social distancing, mask wearing, illness screening, and, at times, cancellation or restrictions on activities.
 - Nursing homes follow [CMS](#) guidelines on visitation
 - Not only persons ill with signs and symptoms of acute respiratory illness but also people who have had close contact with someone with COVID-19 in the past 14 days or waiting for COVID-19 testing results are not allowed to visit.
 - Staff and residents are being managed, based on symptoms and exposures, in a way that reduces the risk of disease spread to others.
- Environmental surfaces are cleaned and disinfected in accordance with facility COVID-19 prevention protocols, which are also effective against influenza. Special attention is paid to frequently touched surfaces and objects (e.g., counter tops, doorknobs, bed rails, railings, bathroom surfaces, medication carts, physical therapy equipment, and snack carts).
- Policies and procedures are established for screening newly admitted residents for respiratory illness. Transmission-based precautions are used for newly admitted residents with respiratory symptoms until influenza and COVID-19 have been ruled out or criteria for discontinuation of precautions are met.

Influenza Planning and Preparation Activities

The facility's preparation and prevention activities necessitate collaboration between facility leadership (e.g., Medical Director, Director of Nursing) and other staff members involved with infection prevention. The following steps are recommended in advance of the influenza season:

Vaccination and Antiviral Medications

- To comply with state regulations ([12 VAC 5-371-110](#)) regarding resident vaccination:
 - Ensure that all residents receive influenza vaccine in accordance with current [Centers for Disease Control and Prevention \(CDC\) Advisory Committee on Immunization Practices \(ACIP\) recommendations](#) unless the vaccine is contraindicated or the resident declines the vaccination.
 - Review residents' medical records to identify individuals who should receive pneumococcal vaccine and arrange to administer the vaccination unless it is contraindicated or the resident declines the vaccination.
- Implement a standing orders program so the facility will be prepared to rapidly administer influenza vaccinations and antiviral medications in the event of an influenza outbreak. These procedures authorize nurses and pharmacists to administer vaccinations or medications without a physician's exam, in accordance with an institution- or physician-approved protocol.
- Strongly encourage all facility workers, volunteers, and visitors to receive influenza vaccine in accordance with [CDC/ACIP recommendations](#).
- Keep track of resident and staff vaccinations by maintaining vaccination logs.
- Develop a plan for the use of influenza antiviral medications in the facility in consultation with facility managers, healthcare providers, and the local health department. The use of antiviral medications for prophylaxis and treatment should be considered part of the facility's overall influenza prevention and control strategy, not just a tool for the individual case management of ill residents and staff.
 - Review residents' medical records and note known contraindications to the use of antiviral drugs.

Management of an Influenza Outbreak in a Long-Term Care Facility

CDC's [Testing and Management Considerations for Nursing Home Residents with Acute Respiratory Illness Symptoms when SARS-CoV-2 and Influenza Viruses are Co-circulating](#) is a valuable resource for this section.

Initiate Action Based on Data:

VDH publishes [Weekly Influenza Activity Reports](#) on the agency's website from October-May. These reports show which regions of the state have had positive confirmatory laboratory results of influenza, elevated ILI, and influenza outbreaks. Once ILI is elevated in the region of the state in which the LTCF is located, especially if influenza has been laboratory-confirmed in the region or is highly suspected as the diagnosis in a resident or staff member, staff should be on heightened alert to identify any changes in respiratory illness noted among residents. During the COVID-19 pandemic, it will be hard to distinguish the causes of respiratory illnesses and additional vigilance will be needed to prevent the mixing of viruses and the risk of coinfections. Facility management should **immediately** contact the LHD if an increase in cases of ILI is observed. That is, if an increase is seen in coughs or sore throats, especially when accompanied by a fever. The health department will work with the facility to tailor prevention and control measures to the situation and the setting.

- Review influenza immunization logs for residents and staff to identify anyone who has not received the current vaccine. Administer influenza vaccine to anyone not already immunized in accordance with [CDC/ACIP recommendations](#). Influenza vaccines can be administered after an outbreak has started.
- Consult with the LHD regarding diagnostic testing for influenza and other respiratory viruses. See the section on laboratory testing ([Appendix 1](#)) for more information.
- Consult with the medical director, individual healthcare providers (if applicable), and the local health department regarding the use of antiviral medications for influenza treatment and prophylaxis. Antiviral medications are most effective when initiated early in an outbreak. See the section on antiviral medications (under Clinical Management below and in [Appendix 2](#)) for additional information.
- Continue to maintain heightened surveillance for febrile and respiratory illness among residents and staff. Documentation of signs and symptoms should be reviewed daily by facility management and be available for review by the health department.

Reinforce [Infection Control](#) Precautions:

- Remind all staff of the importance of adhering to standard precautions during the care of all residents and transmission-based precautions when collecting specimens or caring for a resident with acute respiratory illness. Frequent hand hygiene and respiratory hygiene (e.g., cover your cough) should be emphasized for staff and residents.
 - Transmission-based precautions can be discontinued for those with influenza when 7 days have passed since illness onset or until 24 hours after the resolution of fever and respiratory symptoms, whichever is longer. For those with COVID-19 or unknown respiratory illness, transmission-based precautions can be discontinued when at least 10 days have passed since the onset of illness, the person has been fever-free for at least 24 hours without the use of fever-reducing medications, and other symptoms have improved.
 - If a resident with suspected or confirmed influenza (or any acute respiratory illness) must be moved to another room or transported to another facility, the resident should wear a face mask during transport, if they are able to do so.
- When [aerosol-generating procedures](#) (e.g., sputum induction, bronchoscopy, elective intubation and extubation, CPR) are being performed, healthcare workers should add a fit-tested N-95 respirator (or

a respirator offering an equivalent or higher level of protection) to their PPE. The number of personnel present during the procedure should be limited and the door closed. Unprotected staff should not be allowed in the room until a sufficient time has elapsed to remove potentially infectious particles. Environmental surfaces should be cleaned and disinfected after the procedure.

○ For more information, see

www.cdc.gov/flu/professionals/infectioncontrol/healthcaresettings.htm.

- Ensure that environmental surfaces are cleaned and disinfected as recommended, especially frequently touched surfaces and objects (e.g., counter tops, doorknobs, bed rails, railings, bathroom surfaces, medication carts, physical therapy equipment, and snack carts) and that adequate supplies of soap, paper towels, hand sanitizer, gloves, gowns, face masks, and other supplies are available everywhere they are needed.

Manage Acute Respiratory Illness in Residents:

- Symptomatic residents should be cared for using transmission-based precautions, with all PPE that is recommended for COVID-19.
- They should be in a private room, if available, or stay in their current room while waiting for test results. They should not be placed with a new roommate or moved to a COVID-19 care unit unless confirmed to have COVID-19.
- Roommates can be protected through the use of barriers in the room and adherence to transmission-based precautions. Staff should practice good hand hygiene between residents. Chemoprophylaxis with oseltamivir may be considered for roommates if influenza is highly suspected. Frequent cleaning and disinfection should occur in rooms housing residents with acute respiratory illness.

Test Residents with Acute Respiratory Illness:

- Test any symptomatic resident for both COVID-19 and influenza. Realize they could have infections with both at the same time, and a positive result for one does not rule out the other.
- Test for COVID-19 by molecular or antigen test. Confirm a negative antigen result in a symptomatic person with a molecular test. Prepare to conduct additional testing in the facility if COVID-19 is confirmed in a healthcare provider (HCP) or in a resident with a nursing home-onset case.
- Test for influenza by rapid molecular test. If that is not available, use a rapid antigen test. Confirm a negative antigen result with a molecular test.
- Test for other pathogens if negative for COVID-19 and influenza.
- If pursuing laboratory confirmation of an outbreak, the LHD will coordinate the submission of several specimens to the Division of Consolidated Laboratory Services (DCLS) for outbreak confirmation.
- Additional information about testing is provided in [Appendix 1](#).

Placement of Residents with Acute Respiratory Illness:

- The cohorting of ill residents needs to be conducted carefully to ensure influenza is not introduced into COVID-19 care units and vice versa. LTCFs must follow the requirements and recommendations of their regulatory bodies (e.g., [CMS](#) for nursing homes) with respect to cohorting. In addition, VDH recommends the following:
 - Continue to follow established procedures for cohorting residents and staff in response to cases of COVID-19. Consultation with the health department on cohorting decisions is recommended.
 - Move a resident confirmed to have COVID-19 to the COVID-19 care unit. Put residents who are coinfecting with COVID-19 and influenza in a single room on the COVID-19 unit or house them with another coinfecting resident. Use all COVID-recommended PPE.
 - If confirmed positive for influenza only, place the resident in a single room or with another influenza positive resident. If it is not possible to move the person, use physical barriers and

antiviral prophylaxis for roommates. Follow droplet precautions with eye protection in addition to standard precautions.

- For someone with acute respiratory illness that is not confirmed to be either COVID-19 or influenza, use standard precautions and the transmission-based precautions applicable to the confirmed or suspected diagnosis.
- Staff should also be cohorted and **not** mix between well residents, influenza areas, and COVID-19 areas. Personnel entering the room of an ill individual should be limited to those performing essential functions, such as direct care or environmental cleaning.
- Remind ill residents to stay in their room as much as possible, cough and sneeze into tissues, dispose of used tissues properly, and wash their hands frequently. They should wear a face mask to the extent that they can tolerate one.
- Residents being transferred from a facility with a known influenza or COVID-19 outbreak should be placed in a separate room apart from other residents, even if asymptomatic, for up to 7 days in the case of influenza and 14 days in the case of COVID-19. All new residents should receive the current seasonal influenza vaccine unless they have already done so or it is contraindicated.

Clinical Management Based on Diagnosis:

- Start antiviral treatment if influenza is confirmed or is clinically suspected and test results are pending.
- Follow [NIH treatment guidance](#) for cases of COVID-19. Check [clinicaltrials.gov](#) for potential clinical trials.
- Follow [antibiotic treatment recommendations](#) in residents with community-acquired pneumonia who are not hospitalized.
- Provide antiviral prophylaxis (oral oseltamivir) to all who are exposed to a confirmed case of influenza. If two or more residents are ill within 72 hours with confirmed influenza, antiviral prophylaxis should be given to non-ill residents on the same unit. Test anyone who develops signs and symptoms and change to treatment doses pending results.
- Provide influenza vaccine to unvaccinated residents and HCPs. Antiviral prophylaxis may be offered for two weeks post-vaccination.
- Additional information about use of antiviral medications for treatment and prophylaxis of influenza is provided in [Appendix 2](#).

Management of acute respiratory illness in staff:

- If ill with influenza, staff should be excluded from work until at least **24 hours** after fever has resolved without the use of fever-reducing medications.
- If ill with COVID-19 or COVID-19 with influenza, staff should be excluded for at least 10 days from date of symptom onset or positive test result (for those who never had any symptoms) and at least 24 hours have passed since last fever without fever-reducing medications and other symptoms have improved.
- For either illness, hand hygiene and constant use of face masks and other recommended PPE must be followed upon return to work.

Policies Related to Group Activities and Visitation:

Depending on the extent and severity of the outbreak, policies and procedures related to group activities, including dining, and visitation might need to be reviewed. Many LTCFs have already put restrictions in place in response to the COVID-19 pandemic. Those that have lifted the restrictions might have to put them back in place. In an influenza outbreak, it might be necessary to cancel group activities, restrict visitors, and/or consider serving all meals in rooms for all residents.

- Post signs in the facility and/or distribute letters to family members and visitors notifying them of the outbreak. Sample signs and letters are available from VDH at www.vdh.virginia.gov/epidemiology/influenza-flu-in-virginia/influenza-information-for-healthcare-professionals-and-facilities/.
- If visitation continues, visitors should be instructed to stay home if they are sick, be screened upon arrival, and reminded to practice good hand hygiene, physical distancing, and respiratory hygiene.
- The LHD can assist with decisions on limiting visitors and restricting group activities.

Policies Related to New Admissions:

- If possible, new admissions should be halted and visitation restricted until an influenza outbreak is over (i.e., at least 7 consecutive days without any new cases). When admissions resume, any new residents should receive the influenza vaccine if they have not previously received it.
 - If it is not possible to halt admissions, all persons who are admitted to the facility during an outbreak should receive the influenza vaccine if they have not already been vaccinated with that season's vaccine, should be placed in an unaffected or less affected unit of the facility if possible, and should receive antiviral prophylaxis until one week after the outbreak is over. If possible, they should receive the vaccine and begin taking the antiviral medications prior to admission to the long-term care facility.
- Facilities experiencing a concurrent outbreak of COVID-19 should consult with the LHD to discuss reopening recommendations.

Resources

Surveillance Logs:

- Examples of illness logs are available and can be modified to meet the needs of the facility: <http://www.vdh.virginia.gov/content/uploads/sites/3/2016/03/RespiratoryIllnessLog-Residents.xls> (for residents) and <http://www.vdh.virginia.gov/content/uploads/sites/3/2016/03/RespiratoryIllnessLog-Staff.xls> (for staff).
- The VDH Facility Employee Daily Screening Form is available under Guidance for All LTCFs on the [LTCF Task Force](#) webpage.
- Staff and Resident Linelist Templates are listed as the VDH Line List for COVID-19 Outbreaks under Guidance for All LTCFs on the [LTCF Task Force](#) webpage.

Influenza Signs and Posters:

- Signs suitable for printing are available from VDH (Scroll down to Resources for LTCFs) at <http://www.vdh.virginia.gov/epidemiology/influenza-flu-in-virginia/influenza-information-for-healthcare-professionals-and-facilities/> and CDC at <https://www.cdc.gov/flu/resource-center/freeresources/print/index.htm>.
- Weekly Influenza Activity Reports www.vdh.virginia.gov/epidemiology/influenza-flu-in-virginia/influenza-surveillance/

References

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

CDC. Testing Guidance for Clinicians When SARS-CoV-2 and Influenza Viruses are Co-circulating www.cdc.gov/flu/professionals/diagnosis/testing-guidance-for-clinicians.htm

CDC. Seasonal Influenza Vaccination Resources for Healthcare Professionals. www.cdc.gov/flu/professionals/vaccination/index.htm.

CDC. Influenza Antiviral Medications: Summary for Clinicians www.cdc.gov/flu/professionals/antivirals/summary-clinicians.htm

CDC. Additional information on influenza for health professionals www.cdc.gov/flu/professionals/.

Table: A Comparison of Attributes of Influenza and COVID-19*

Attribute	Common to Both Diseases	Influenza	COVID-19
Symptoms	Fever or feeling feverish/chills Cough Shortness of breath or difficulty breathing Fatigue (tiredness) Sore throat Runny or stuffy nose Muscle pain or body aches Headache		Change in or loss of taste or smell
Incubation Period		1-4 days	2-14 days, typically 5
When Communicable		1 day before to 7 days after onset	2 days before to 10 days after onset
How Spread	Spread between people in close contact (within about 6 feet), mainly by droplets made when people with the illness (COVID-19 or flu) cough, sneeze, or talk. Less commonly by physical contact (e.g. shaking hands) or by touching a surface or object that has a virus on it and then touching the mouth, nose, or possibly eyes.		More highly communicable
People at High Risk for Severe Illness	Older adults People with certain underlying medical conditions Pregnant people	Young, healthy children	School-age children at risk for Multisystem Inflammatory Syndrome-Children (MIS-C)
Possible Complications	Pneumonia Respiratory failure Acute respiratory distress syndrome (fluid in lungs) Sepsis Cardiac injury (e.g., heart attacks and stroke) Multiple-organ failure (respiratory failure, kidney failure, shock) Worsening of chronic medical conditions (involving the lungs, heart, nervous system or diabetes) Inflammation of the heart, brain or muscle tissues Secondary bacterial infections		Blood clots in the veins and arteries of the lungs, heart, legs or brain; MIS-C, MIS-A

Severity		Case fatality rate of roughly 0.1% Case hospitalization rate of roughly 1%**	Case fatality rate of roughly 2% Case hospitalization rate of roughly 7%†
Treatment		Antiviral medications	Remdesivir; NIH Guidance on Treatment Options
Vaccine		Multiple licensed annual vaccines available	Under development

*Source: www.cdc.gov/flu/symptoms/flu-vs-covid19.htm

**Source: www.cdc.gov/flu/about/burden/2019-2020.html

†Source: www.vdh.virginia.gov/coronavirus/covid-19-in-virginia/

Appendix 1: Additional Information About Laboratory Testing

Decisions on laboratory testing during any outbreak (two or more cases with onset within an incubation period of each other [e.g., 4 days for influenza, 14 days for COVID-19]) of acute respiratory illness at a long-term care facility should be made in collaboration with the local health department. Laboratory testing will be particularly important during the 2020-2021 influenza season to verify the cause of the outbreak and inform disease prevention and control recommendations. In general, if an increase in acute respiratory illness is detected in a LTCF when influenza is circulating in the region, laboratory testing of ill residents and/or staff for **both** COVID-19 and influenza is recommended. Some [laboratory assays](#) are available at commercial and public health laboratories that simultaneously test for influenza A, influenza B, and SARS-CoV-2 (the virus that causes COVID-19). Coinfection is possible; an influenza positive result does not mean a person does not have COVID-19 and vice versa. Testing for additional infectious agents might also be suggested, depending on clinical characteristics of the illness.

CDC has released [Testing Guidance for Clinicians When SARS-CoV-2 and Influenza Viruses are Co-circulating](#). If a resident has acute respiratory illness, with or without a fever, guidelines depend on whether inpatient hospitalization is needed. If hospitalized, the resident will be tested for influenza and COVID-19 by polymerase chain reaction (PCR, molecular test) and empiric antiviral treatment with oseltamivir will be initiated right away, without waiting for test results. If hospitalization is not needed, the resident should be tested for COVID-19 by PCR, or an antigen test may be used if PCR is not available. However, if the antigen test is negative and the resident is symptomatic, a molecular test is needed to confirm the result. A rapid influenza PCR test should also be conducted and antiviral treatment begun as soon as possible, without waiting for lab results. Isolation and quarantine recommendations for COVID-19 should be put in place; however, the resident should be isolated in the room and not be moved to another room or special unit until test results are available.

Information about specimen collection for COVID-19 is available [here](#). Information about specimen collection for influenza is available [here](#). Use of an N95 or higher-level respirator (or face mask if a respirator is not available), eye protection, gloves, and a gown are recommended when collecting nasopharyngeal (NP) or nasal swabs.

Some of the main reasons for laboratory testing include:

- To confirm the cause of the outbreak. Outbreaks of respiratory illness could be caused by influenza, SARS-Cov-2, other respiratory viruses (e.g., rhinovirus, enterovirus, adenovirus, parainfluenza virus, respiratory syncytial virus), or bacteria (e.g., *Streptococcus pneumoniae*, *Legionella pneumophila*). Some disease control recommendations apply across the board, no matter what agent is involved, while others (e.g., use of antiviral medications, cohorting decisions) will differ by the infectious agent.
- To confirm results of rapid testing. Although rapid antigen tests play an important role in COVID-19 and influenza testing, molecular (PCR) tests are preferred in outbreaks because of the chance of false negative results with antigen tests. Antigen tests can be conducted if PCR testing is not available or PCR results might be delayed.
- To determine the influenza type associated with an outbreak of influenza. Knowledge of the influenza type and sub-type [e.g., influenza B, A (H1N1), A (H3N2)] can help public health officials and clinicians determine the best choice of antiviral drugs. Typing influenza strains is also important for comparing circulating strains with those included in the vaccine and monitoring for the appearance of new viruses.
- Additional laboratory testing, including viral culture for influenza, might be needed if symptoms persist despite appropriate antiviral treatment or prophylaxis. Resistance to the antiviral agent used can occur

quickly. Individuals with compromised immune systems might be at an increased risk for persistent infection and emergence of an influenza virus with resistance to available antiviral agents.

- If pursuing laboratory confirmation of the outbreak, the local health department will coordinate the submission of several specimens to the Division of Consolidated Laboratory Services (DCLS) for outbreak confirmation.
 - For influenza testing, DCLS provides “flu kits,” which include materials for the collection and transport of specimens [e.g., NP swabs, viral transport media]. The LHD can provide “flu kits” if needed. NP swabs collected from persons within the first 2 days of illness are the specimens of choice.

Appendix 2: Use of Antiviral Medications for Influenza Treatment or Prophylaxis

CDC has updated recommendations for the use of antiviral drugs during the 2020-2021 influenza season, when influenza and SARS-Cov-2 viruses are both expected to be circulating. Current recommendations are located at www.cdc.gov/flu/professionals/antivirals/index.htm. In LTCFs, antiviral medications can be used for treatment or for prophylaxis (prevention).

Antiviral medications for influenza should be considered as soon as influenza is suspected within the facility. Choice of antiviral drug is based on knowledge of the resistance patterns of the viruses currently circulating in the United States and on characteristics of the person receiving the medication (e.g., kidney function, ability to use an inhaler, and potential side effects of the medication). At the time an antiviral drug is ordered for a resident, the resident's medical record should be reviewed to ensure that there are no known or new contraindications to the drug.

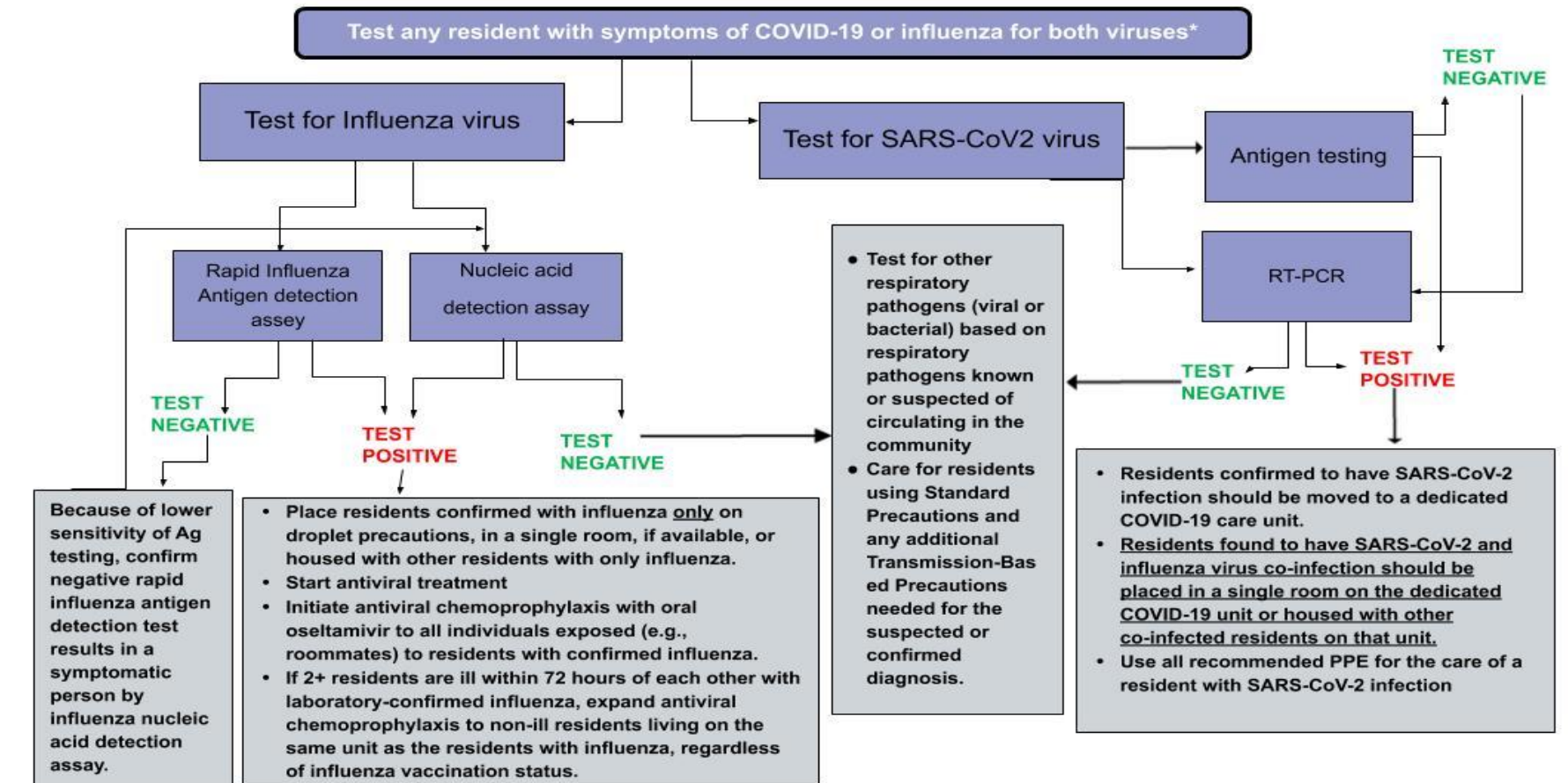
- Available Antiviral Drugs
 - The antiviral agents currently licensed for use in the United States are oseltamivir, zanamivir, peramivir, baloxavir marboxil, amantadine, and rimantadine.
 - Oseltamivir, zanamivir, and peramivir are neuraminidase inhibitors usually effective against both influenza A and influenza B viruses and are recommended for treatment. Oseltamivir and zanamivir are also recommended for prophylaxis. Oseltamivir is available as a pill or suspension, zanamivir is available as an inhaled powder using a disk inhaler device, and peramivir is available as an intravenous solution. Zanamivir is not recommended for use in people with underlying respiratory disease.
 - Baloxavir marboxil is a cap-dependent endonuclease inhibitor, meaning it limits viral replication. It is effective against both influenza A and B viruses and is recommended for treatment (not prophylaxis). It is available as a single-dose pill. Contraindications include immunocompromised conditions, complicated or progressive illness, and hospitalization.
 - Amantadine and rimantadine are **not** recommended for treatment or prophylaxis because of high levels of antiviral resistance among circulating influenza A viruses.
- Antiviral Treatment of Suspected or Confirmed Influenza
 - Treatment of an ill person should be started as soon as possible after illness onset, ideally within **48 hours** of symptom onset. Early treatment can shorten the duration and severity of symptoms and can reduce the risk of complications from influenza and death.
 - Treatment should not await laboratory confirmation, but should be based on symptoms and presence of influenza in the community.
 - Treatment is recommended as early as possible for any individual with confirmed or suspected influenza who is hospitalized; has severe, complicated, or progressive illness; or is at higher risk for influenza complications.
 - Residents of nursing homes and other chronic-care facilities are considered to be at high risk for influenza complications. Other high-risk groups include but are not limited to persons with immunosuppression or certain medical conditions such as asthma, diabetes, and renal conditions, adults aged 65 years and older, and persons who are morbidly obese.
 - More information on groups at high risk for complications is available on the CDC website at <https://www.cdc.gov/flu/highrisk/index.htm>.
 - Treatment regimens vary by the antiviral medication.
 - Residents on antiviral treatment should remain on droplet precautions until treatment is completed and should be monitored closely for worsening illness and antiviral drug side effects.

- Antiviral Prophylaxis (Prevention of Illness)
 - Prophylaxis may be recommended as an **outbreak control measure**.
 - For residents:
 - During an outbreak, prophylaxis is usually recommended for all non-ill residents of the facility who have not developed symptoms of influenza, regardless of influenza vaccination status, because it is often difficult to determine who is immune and who is at risk.
 - Priority should be given to residents living in the same unit or floor as the ill resident(s).
 - Prophylaxis should be administered for a minimum of 2 weeks, continuing until 7 days after the last known case is identified.
 - For staff:
 - During an outbreak, prophylaxis can be offered to unvaccinated personnel who provide care to persons at high risk of complications.
 - Prophylaxis should also be considered in personnel for whom influenza vaccine is contraindicated (e.g., a person has a severe allergic reaction to a vaccine component).
 - Prophylaxis can also be considered for all employees, regardless of their influenza vaccination status, if the outbreak is caused by a strain of influenza virus that is not well matched by the vaccine.
 - Close monitoring for signs and symptoms of influenza, and initiation of early antiviral treatment is an alternative to chemoprophylaxis for health care personnel.
 - Prophylaxis may be used in combination with administration of the vaccine. For residents or staff who are newly vaccinated as part of an outbreak response, antiviral prophylaxis may be recommended for up to 2 weeks after vaccination, to allow time for vaccine-induced immunity to develop. If there is concern that the person may not mount an adequate immune response, prophylaxis may be continued for the duration of possible exposure.

CDC may update antiviral use recommendations if new viruses emerge or circulating viruses are found to be resistant to one or more of the available drugs. Questions regarding the use of antiviral drugs may be addressed to your facility's medical consultant or local health department.

Appendix 3: Decision-Making Algorithm for Acute Respiratory Illness in LTCFs

Considerations for Residents in **LTCFs** with Acute Respiratory Illness Symptoms when SARS-CoV-2 and Influenza Viruses are Co-circulating



- While waiting for testing results, place any resident with acute respiratory symptoms in a private room on a warm/observational unit if available.
- Because SARS-CoV-2 and influenza virus co-infection can occur, a positive influenza test result without SARS-CoV-2 testing does not exclude SARS-CoV-2 infection, and a positive SARS-CoV-2 test result without influenza testing does not exclude influenza virus infection.
- Notify your LHD for consultation and further investigation for any of the following: a suspected or confirmed case of either SARS-CoV-2 or influenza in a resident or healthcare personnel (HCP); a resident with severe respiratory infection resulting in hospitalization or death; or ≥ 3 residents or HCP with new-onset respiratory symptoms within 72 hours of each other.

