



# Viral Respiratory Pathogens Toolkit for Nursing Homes



U.S. Department of  
Health and Human Services  
Centers for Disease  
Control and Prevention



## **ACTION: PREPARE** for respiratory viruses (e.g., SARS-CoV-2, influenza, RSV)

### **Vaccinate**

Provide [recommended vaccines](#) to residents and HCP and provide information (e.g., posted materials, letters) to families and other visitors encouraging them to be vaccinated. Recommended vaccines help prevent infection and complications such as severe illness and death. Utilize pharmacy and public health partners to ensure access to indicated vaccines for residents and HCP.

### **Allocate resources**

Ensure that resource limitations (e.g., personal protective equipment (PPE), alcohol-based hand sanitizer (ABHS)) do not prevent HCP from adhering to recommended infection prevention and control (IPC) practices. Plan for situations (e.g., multiple symptomatic individuals) that may require increased supplies. Have a process for monitoring supplies availability and access.

### **Monitor and Mask**

Be aware when levels of [respiratory virus spread](#) are increasing in the community. When levels in the community are higher, consider having visitors and HCP [wear a mask](#) at all times in the facility and at a minimum, consider having residents wear a mask when outside of their room.

### **Educate**

Ensure everyone, including residents, visitors, and HCP, are aware of recommended [IPC practices in the facility](#), including when specific IPC actions are being implemented in response to new infections in the facility or increases in respiratory virus levels in the community. Encourage visitors with respiratory symptoms to delay non-urgent in-person visitation until they are no longer infectious. Following close contact with someone with SARS-CoV-2, [testing is recommended](#) and [visitors should wear](#) a mask while in the facility.

### **Ventilate**

In consultation with facility engineers, explore options to improve ventilation delivery and indoor air quality in resident rooms and all shared spaces.

### **Test and Treat:**

Develop plans to provide rapid clinical evaluation and intervention to ensure residents receive timely treatment and/or prophylaxis when indicated.

- Ensure access to respiratory viral testing with rapid results (i.e., onsite or send-out testing with results available within 24 hours). Testing results can inform recommended treatment and IPC actions.
- Establish pharmacy connections to enable the use of any available respiratory virus treatments or prophylaxis.



# ACTION: RESPOND when a resident or HCP develops signs or symptoms of a respiratory viral infection

When an acute respiratory infection is identified in a resident or HCP, it is important to take rapid action to prevent the spread to others in the facility. While decisions about treatment, prophylaxis, and the recommended duration of isolation vary depending on the pathogen, IPC strategies, such as placement of the resident in a single-person room, use of a facemask for source control, and physical distancing, are the same regardless of the pathogen.

## Prevent Spread

**Residents** apply appropriate Transmission-Based Precautions for symptomatic residents based on the suspected cause of their infection.

- When available, residents can be placed in a single-person room to minimize the risk of transmission to roommates. Moving residents to a single room is often not practical (e.g., limited rooms available), and in those situations, residents could remain in their current location. In shared rooms, consider ways to increase ventilation; the use of [in-room HEPA air cleaners](#) could also be considered. Use of facemasks at all times by both residents while in the room might also reduce the risk of transmission but is often impractical and not routinely recommended.
- ❑ Symptomatic residents should not be placed in a room with a new roommate unless they have both been confirmed to have the same respiratory infection.
- ❑ Roommates of symptomatic residents – who have already been potentially exposed – should not be placed with new roommates, if possible. They should be considered exposed and wear a facemask for source control around others.
- Residents placed in Transmission-Based Precautions for acute respiratory infection should primarily remain in their rooms except for medically necessary purposes. If they must leave their room, they should practice physical distancing and wear a facemask for source control. The resident should be removed from Transmission-Based Precautions as soon as they are deemed no longer infectious to others.
- HCP who enter the room of a resident with signs or symptoms of an unknown respiratory viral infection that is consistent with SARS-CoV-2 infection should adhere to Standard Precautions and use a NIOSH-approved® particulate respirator with N95® filters or higher, gown, gloves, and eye protection (i.e., goggles or a face shield that covers the front and sides of the face). This PPE can be adjusted once the cause of the infection is identified. Recommendations on PPE for respiratory viruses are available in [Appendix A of the 2007 Guideline for Isolation Precautions](#).

**Healthcare Personnel:** Develop sick leave policies for HCP that are non-punitive, flexible, and consistent with public health guidance to discourage presenteeism and allow HCP with respiratory infection to stay home for the [recommended duration of work restriction](#).

## Test

Test anyone with respiratory illness signs or symptoms

- ❑ Selection of diagnostic tests will depend on the suspected cause of the infection (e.g., which respiratory viruses are circulating in the community or the facility, recent contact with someone confirmed to have a specific respiratory infection) and if the results will inform clinical management (e.g., treatment, duration of isolation). At a minimum, testing should include [SARS-CoV-2 and influenza viruses](#) with consideration for other causes (e.g., RSV).

## Treatment and Prophylaxis

Provide recommended **treatment and prophylaxis** to infected and exposed residents when indicated.

- For Influenza:
  - ❑ [Provide antiviral treatment immediately](#) for all residents who have confirmed or suspected influenza.
  - ❑ Provide chemoprophylaxis to exposed residents on units or wards with influenza cases (currently impacted wards) as soon as an influenza outbreak is determined. See the [guidance](#) for additional chemoprophylaxis recommendations.
- For SARS-CoV-2 infection:
  - ❑ [Provide COVID-19 treatment](#) for eligible residents with [mild-to-moderate COVID-19](#) with one or more risk factors for severe COVID-19; be aware of potential drug interactions. Treatment must be started as soon as possible and within five days of symptom onset to be effective.

## Investigate

**Investigate** for potential respiratory virus spread among residents and HCP.

- Perform active surveillance to identify any additional ill residents or HCP using symptom screening and evaluating potential exposures.
- ❑ For SARS-CoV-2 infection, [testing of exposed individuals](#) is recommended, even if they are asymptomatic.



# **ACTION: CONTROL** respiratory virus spread when transmission is identified.

## **Notify the local or state public health department**

when respiratory viral outbreaks\* are suspected or confirmed. Once spread is identified in a nursing home, rapid and coordinated action is necessary to prevent further transmission. Health departments have IPC expertise and might also have access to additional testing resources to identify a potential etiology.

In addition to the actions described in the previous section, the following interventions should be considered. Jurisdictions and/or facilities implementing additional measures that impose restrictions on residents (e.g., quarantine, limitations on communal activities) should carefully consider the risks and the benefits to residents to determine whether these time-limited strategies would be appropriate and have a de-escalation plan.

## **Initial** attempts to control limited spread:

- Offer and reinforce the importance of vaccination in the facility.
- Consider [supplemental measures](#) to improve air circulation and air cleanliness.
- Implement universal masking for source control on affected units or facility-wide, including for residents around others (e.g., out of their room) and for HCP when in the facility.
- Continue active surveillance to identify others with respiratory viral illness (e.g., daily or every shift review of symptoms among residents and HCP) and manage people who were exposed or infected (e.g., use of source control, work restriction for HCP, use of Transmission-based Precautions).
  - ❑ If influenza transmission is occurring, provide [recommended treatment and chemoprophylaxis](#).
  - ❑ If SARS-CoV-2 transmission is occurring, provide recommended [treatment](#) for eligible individuals. Consider implementing [broad-based testing](#) as opposed to only testing close contacts to identify asymptomatic infection.
- If transmission is limited to specific units, consider limited quarantine of those units (e.g., restricting those units from group activities or communal dining with residents from other units).

■ **Additional** measures if initial interventions fail to halt transmission:

- Consult with the local or state public health department about additional interventions.
- Consider establishing cohort units for residents with confirmed infections.
  - ❑ Dedicate HCP to care for residents in cohort units and
  - ❑ Minimize HCP movement from areas of the facility where residents are having illness to areas not affected by the outbreak.
- Limit group activities and communal dining.
  - ❑ Consider limiting the use of communal areas where residents or HCP might congregate over multiple units or facility wide.
- Consider modifications to indoor visitation policies.
  - ❑ Visitors should be counseled about their potential exposure to respiratory infection in the facility.
  - ❑ If indoor visitation occurs, visits should ideally occur in the resident's room, and visitors should not linger in other areas of the facility or engage with other residents.
- Avoid new admissions or transfers into and out of units or wards with infected residents or facility-wide if the outbreak is more widespread.

*\*Reporting requirements and outbreak definitions may vary by pathogen and by state/local health department. Maintain a point of contact and phone number for your health department and remain aware of notification and reporting requirements within your jurisdiction.*

## RESOURCES

### CDC Information on specific respiratory viruses

- [Respiratory Syncytial Virus \(RSV\)](#)
- [Influenza \(Flu\)](#)
- [About Coronavirus Disease 2019 \(COVID-19\)](#)
- [Rhinoviruses](#)
- [Human Parainfluenza Viruses \(HPIVs\)](#)
- [Human Metapneumoviruses \(HMPV\)](#)

### Unexplained Respiratory Disease Outbreaks:

- [Investigating Unexplained Respiratory Outbreaks \(URDO\) | CDC](#)

### CDC Prevention and Control Resources for Long-term care

#### General Information

- [General IPC in LTCFs](#)
- [Isolation Precautions | Appendix A](#)

#### Infection control and outbreak management for Influenza and COVID-19 in LTCFs

- [Testing and Management Considerations for Nursing Home Residents with Acute Respiratory Illness Symptoms when SARS-CoV-2 and Influenza Viruses are Co-circulating | CDC](#)
- [Infection Control: Severe acute respiratory syndrome coronavirus 2 \(SARS-CoV-2\) | CDC](#)
- [Interim Guidance for Influenza Outbreak Management in Long-Term Care and Post-Acute Care Facilities | CDC](#)

#### Vaccines and other prevention measures in LTCFs

- [Prevention and Control of Seasonal Influenza with Vaccines: Recommendations of the Advisory Committee on Immunization Practices — United States, 2022–23 Influenza Season \(cdc.gov\)](#)
- [Clinical Guidance for COVID-19 Vaccination | CDC](#)
- [Interim Clinical Considerations for COVID-19 Treatment in Outpatients](#)
- [Use of Respiratory Syncytial Virus Vaccines in Older Adults: Recommendations of the Advisory Committee on Immunization Practices — United States, 2023 | MMWR \(cdc.gov\)](#)
- [Recommended Vaccines for Adults | CDC](#)
- [Adult Immunization Schedule – Healthcare Providers | CDC](#)
- [RSV Vaccine Information Statement | CDC](#)

### CDC Resources for Clinical Management

[Influenza Antiviral Medications: Summary for Clinicians | CDC](#)

#### Forms

[LTC Respiratory Surveillance Line List and Surveillance Outbreak Summary \(cdc.gov\)](#)

### Ventilation

- [Guidelines for Environmental Infection Control in Health-Care Facilities](#)
- [American Society of Heating, Refrigerating and Air-Conditioning Engineers \(ASHRAE\) resources for healthcare facilities, which also provides COVID-19 technical resources for healthcare facilities](#)
- [Ventilation in Buildings](#), which includes options for non-clinical spaces in healthcare facilities

### Health department respiratory virus outbreak resources

- The Council for Outbreak Response: Healthcare-Associated Infections and Antimicrobial-Resistant Pathogens: [resources and products](#)
- Wisconsin Department of Health Services: [Preventing and Controlling Respiratory Illness Outbreaks in Long-Term Care Facilities](#)
- California Department of Public Health: [Influenza and other non-COVID-19 respiratory illness outbreak quicksheet](#)
- Virginia Department of Health: [frequently asked questions about respiratory illness](#)
- Minnesota Department of Health: [resident cohorts for respiratory outbreaks in long-term care](#)
- Washington State Department of Health: [laboratory testing and cohorting recommendations for respiratory outbreaks in long-term care when SARS-CoV-2 and Influenza viruses are co-circulating](#)
- Michigan Department of Health and Human Services: [guidelines for influenza and respiratory virus outbreaks in long-term care facilities](#)

### Other Resources

- [Clinical Practice Guidelines by the Infectious Diseases Society of America: 2018 Update on Diagnosis, Treatment, Chemoprophylaxis, and Institutional Outbreak Management of Seasonal Influenza](#)
- [National Institute of Health Coronavirus Disease 2019 \(COVID-19\) Treatment Guidelines](#)
- [Infectious Diseases Society of America Guidelines on the Treatment and Management of Patients with COVID-19](#)
- [Diagnosis and Treatment of Adults with Community-acquired Pneumonia. An Official Clinical Practice Guideline of the American Thoracic Society and Infectious Diseases Society of America](#)
- [COVID-19 Vaccination and Therapeutics in PALTC Toolkit: Resources for Clinicians](#)

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\*CDC guidance websites are updated periodically, please check regularly for the most recent information.