



# Preventing Transmission of Viral Respiratory Pathogens in Healthcare Settings

#### WHAT TO KNOW

To prevent the transmission (spread) of all viral respiratory infections in healthcare settings, including influenza virus and SARS-CoV-2 infection, the following infection control measures should be implemented into standard procedures.

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# 1. Optimize the Use of Administrative and Engineering Controls, and Indoor Air Quality

- Take measures to limit crowding in communal spaces, such as scheduling appointments to limit the number of patients in waiting rooms or treatment areas.
- Encourage people with symptoms of respiratory infection to sit away from other patients. If possible, facilities may wish to place these people in a separate room while they are waiting for care.
  - During periods of increased community respiratory virus activity that results in a surge in visits, facilities could consider setting up triage stations that facilitate rapid screening of patients for signs and symptoms of respiratory infection and separation from other patients.
- Explore options, in consultation with facility engineers, to implement strategies to improve indoor air quality.
  - Guidance on ensuring that ventilation systems are operating properly and other options for improving indoor air quality are available in the following resources:
    - o Guidelines for Environmental Infection Control in Health-Care Facilities
    - American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE) resources for healthcare facilities
    - Ventilation in Buildings, which includes options for non-clinical spaces in healthcare facilities

## 2. Communicate About Recommended Infection Control Practices

- Provide instructions when scheduling appointments and post visual alerts at the entrances to healthcare facilities reminding patients and persons who accompany them (e.g., family, friends) to:
  - Tell healthcare personnel (HCP) about symptoms of a respiratory infection when they first register for care;

- Visitors with symptoms of respiratory infection should be encouraged to defer non-urgent routine visits in favor of alternative mechanisms (e.g., video-call applications on cell phones or tablets) until they have recovered.
- Wear a mask while in the facility if they have symptoms of respiratory infection (e.g., cough) or have recently been in close contact with someone with SARS-CoV-2 infection; and
- Clean their hands after having contact with respiratory secretions.
- Instructions and alerts should be provided in appropriate languages and with consideration for individuals with learning disabilities or visual impairment.

## 3. Practice Respiratory Hygiene and Cough Etiquette

- Healthcare facilities should ensure the availability of materials for adhering to Respiratory Hygiene/Cough Etiquette at facility entrances, triage areas, and waiting areas for patients and visitors.
  - Provide facemasks to people with symptoms of respiratory infection (e.g., cough) or who have recently had close contact with someone
    with SARS-CoV-2 infection and advise those older than 2 years of age to wear it while they are in the facility unless there are medical
    contraindications.
  - To facilitate hand hygiene, provide conveniently located dispensers of alcohol-based hand sanitizer; where sinks are available, ensure that supplies for hand washing (i.e., soap, disposable towels) are consistently available.
  - Provide tissues and no-touch receptacles for used tissue disposal.

## 4. Consider Broader Use of Source Control

- Source control refers to use of respirators or well-fitting facemasks to cover a person's mouth and nose to prevent spread of respiratory secretions when they are breathing, talking, sneezing, or coughing. Masks and respirators also offer varying levels of protection to the wearer.
  - Further information about types of masks and respirators, including those that meet standards and the degree of protection offered to the
    wearer, is available at: <u>Masks and Respirators</u>. People, particularly those at high risk for severe illness, should wear the most protective
    mask or respirator they can that fits well and that they will wear consistently.
- The overall benefit of broader masking is likely to be the greatest for patients at <u>higher risk for severe outcomes</u> from respiratory virus infection and during periods of high respiratory virus transmission in the community.
- Source control is recommended for those residing or working on a unit or area of the facility experiencing an outbreak of respiratory infection. Universal use of source control could be discontinued as a mitigation measure once the outbreak is over (e.g., no new cases of SARS-CoV-2 infection have been identified for 14 days).
- During periods of higher levels of community respiratory virus transmission\*, facilities should consider having everyone mask upon entry to the facility to ensure better adherence to respiratory hygiene and cough etiquette for those who might be infectious. Such an approach could be implemented facility-wide or, based on a facility risk assessment, targeted toward higher-risk areas (e.g., emergency departments, urgent care) or patient groups (e.g., when caring for patients with moderate to severe immunocompromise).
  - \*Examples reflecting higher levels of community respiratory virus transmission could include:
    - Months during the typical respiratory virus season (e.g., October-April)
      - National data on trends of respiratory viruses suggesting the beginning of respiratory virus season (e.g., the <u>RESP-NET interactive</u> dashboard or data from the <u>National Emergency Department Visits for COVID-19</u>, Influenza, and Respiratory Syncytial Virus).
    - Local increases in emergency department or outpatient visits related to respiratory infections
    - Data suggesting an increase of respiratory illness activity (e.g., Influenza-like illness activity reported to <a href="https://www.cdc.gov/flu/weekly/usmap.htm">https://www.cdc.gov/flu/weekly/usmap.htm</a> ILINet)

Even when a facility does not require masking for source control, it should allow individuals to use a mask or respirator based on personal preference, informed by their perceived level of risk for infection.

## 5. Use Appropriate Transmission-Based Precautions Based on Suspected Diagnosis

- Advise HCP to empirically apply appropriate <u>Transmission-Based Precautions</u>, including placement in a single-person room, when examining a patient with known or suspected respiratory infection. Precautions should be based on the clinical syndrome and the likely etiologic agents (e.g., which respiratory viruses are circulating in the community, contact with someone known to have influenza) and modified once the pathogen is identified or a transmissible infectious etiology is ruled out.
  - If the etiology is uncertain and SARS-CoV-2 is considered possible, Precautions should generally follow those <u>recommended for SARS-CoV-2</u> until this diagnosis is excluded
  - <u>Appendix A</u> in the Guideline for Isolation Precautions provides syndromic and pathogen-specific recommendations for Transmission-Based Precautions, including guidance on the recommended duration of isolation.
- 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 or infection control decisions (e.g., treatment, duration of isolation).
  - For example, as there are antiviral treatments for both SARS-CoV-2 and influenza, testing for both viruses should be considered for individuals eligible for such therapy when they are co-circulating. Depending on the setting, these results might also inform infection control decisions (e.g., decisions about PPE for admitted patients). Testing for other etiologies (e.g., RSV) could also be considered based on the factors described above.

## 6. Monitor and Manage III Healthcare Personnel

- Provide occupational infection prevention and control services for HCP according to CDC recommendations in <u>Infection Control in Healthcare</u>

  Personnel | Infection Control
- Provide and encourage receipt of <u>recommended vaccines</u> (e.g., flu vaccine, COVID-19 vaccine) to help prevent HCP respiratory infection and complications like severe illness and death.
- 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 <u>recommended duration of work restriction</u>.

### Other Resources

- Information about vaccination is available at: Immunization Schedules | CDC
- Information about testing and treatment are available on pathogen-specific pages. For example:
  - ∘ Influenza (Flu) | CDC
  - o Coronavirus Disease 2019 (COVID-19) | CDC
  - RSV (Respiratory Syncytial Virus) | CDC

### READ NEXT

Prevention and Control of Infections in Neonatal Intensive Care Unit Patients: Central Line-associated Blood Stream Infections



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### CONTENT SOURCE:

National Center for Emerging and Zoonotic Infectious Diseases (NCEZID)

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Infection Control in Healthcare Personnel: Epidemiology and Control of Selected Infections

Infection Control Basics

Prevention and Control of Infections in Neonatal Intensive Care Unit Patients: Central Line-associated Blood Stream Infections

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