

# Transmission-Based Precautions in Health Care Settings

## Reference Guide

This reference guide may be used for common diseases to prevent transmission of infectious agents in health care settings. For a more complete list of infectious diseases and indicated precautions, see the Centers for Disease Control and Prevention's (CDC) [Appendix A: Type and Duration of Recommended for Selected Infections and Conditions](#). For a general list of clinical syndromes or conditions warranting empiric transmission-based precautions, refer to CDC's [Appendix A: Table 2. Clinical Syndromes or Conditions Warranting Empiric Transmission-Based Precautions in Addition to Standard Precautions](#).

### Standard precautions

Standard precautions are a set of infection control practices used to prevent transmission of diseases that can be acquired by contact with blood, body fluids, non-intact skin (including rashes), and mucous membranes.

Standard precautions should be used when providing care to all patients and residents, whether they appear infectious, symptomatic, or not. Standard precautions apply at all times and in all locations of health care.



#### Standard precautions

- **Practice hand hygiene.** Hand hygiene refers to cleaning your hands, either by washing with soap and water or by using alcohol-based hand rub (ABHR).
- **Use personal protective equipment** whenever there is an expectation of possible exposure to infectious material.
- **Properly clean and disinfect patient care equipment** following products' manufacturer's instructions for use, including amount, dilution, and contact time.
- **Promote respiratory hygiene or cough etiquette** among staff, patients, and residents.
- **Follow safe injection practices** to prevent exposures to bloodborne pathogens.

Additional information on [standard precautions](#) is available on the CDC website.

## Transmission-based precautions

Transmission-based precautions are used in addition to standard precautions. They are used for patients who may be infected or colonized with certain infectious agents for which additional precautions are needed to prevent infection transmission.

There are three categories of transmission-based precautions including: **contact precautions**, **droplet precautions**, and **airborne precautions**.



### Contact precautions

- **Wear a gown and gloves** for all interactions that may involve contact with the patient or resident or potentially contaminated areas in the patient's or resident's environment. Don personal protective equipment (PPE) upon room entry and discard before exiting the room to contain pathogens, especially those that have been implicated in transmission through environmental contamination.
- **The door to the room may remain open.**
- **Use disposable or dedicated patient-care equipment** (for example, blood pressure cuffs). If common use of equipment for multiple patients or residents is unavoidable, clean and disinfect such equipment before use on another patient or resident.
- **The patient or resident should perform hand hygiene and wear clean clothing when leaving the room.**
- **Limit movement of the patient or resident outside of the room** to medically necessary purposes only.



### Droplet precautions

- **Wear a surgical or procedure mask** (a respirator is not necessary) for close contact with infectious patient or resident. The mask is generally donned upon room entry.
- **The door to the room may remain open.**
- **Limit movement of the patient or resident outside of the room** to medically necessary purposes only. Patients and residents on droplet precautions who must be transported outside of the room should wear a surgical or procedure mask if tolerated and practice respiratory hygiene and cough etiquette.

## Airborne precautions

- **Wear a fit tested, NIOSH-approved N95 or higher level respirator** for respiratory protection when entering the room of a patient or resident.
- **Ensure appropriate placement in an airborne infection isolation room (AIIR)**, if available. Keep the AIIR door closed when not required for entry and exit.
- **Limit movement of the patient or resident outside of the room to medically necessary purposes only.** If transport or movement outside an AIIR is necessary, instruct the patient or resident to wear a surgical or procedure mask, if possible, and practice respiratory hygiene and cough etiquette.

Additional information on [transmission-based precautions](#) are available on the CDC website.

## Enhanced barrier precautions for nursing homes

Enhanced barrier precautions expand the use of personal protective equipment beyond situations in which exposure to blood and body fluids is anticipated in nursing homes. Enhanced barrier precautions incorporate gown and glove use for high-contact resident care activities where multidrug-resistant organisms (MDROs) may be transferred to staff hands, equipment, and clothing.

## Enhanced barrier precautions



- **Wear gown and gloves during high-contact resident care activities**, when contact precautions do not otherwise apply, for those at increased risk of acquiring or spreading multidrug-resistant organisms (MDROs). This includes residents with:
  - Wounds or indwelling medical devices, regardless of MDRO colonization status.
  - Infection or colonization with an MDRO targeted by the CDC or other epidemiologically important MDROs.
- **Do not restrict residents on EBPs** to their rooms or limit them from group activities.


Additional information regarding [EBPs](#) is available on the CDC website.

## Infectious disease or condition and indicated precautions

| Condition                           | Precautions  | Duration   | Comment  |
|-------------------------------------|--|--|--|
| Acute diarrhea                      | <b>Standard precautions</b><br><b>Contact precautions</b>  | Duration of illness or longer  | Handwashing with soap and water is preferred.  |
| Adenovirus                          | <b>Standard precautions</b><br><b>Contact precautions</b><br><b>Droplet precautions</b>                                | Duration of illness, defined as 24 hours after resolution of fever without the use of fever-reducing medications and without respiratory symptoms  |  |
| <i>C. difficile</i>                 | <b>Standard precautions</b><br><b>Contact precautions</b>  | Duration of illness or longer, according to facility policy  | Use an <a href="#">EPA-registered disinfectant</a> that is effective at killing <i>C. difficile</i> spores to prevent spread. Handwashing with soap and water is preferred.  |
| Chickenpox (varicella zoster virus) | <b>Standard precautions</b><br><b>Contact precautions</b><br><b>Airborne precautions</b>                               | Until lesions are dry and crusted  | Susceptible health care workers should not enter the room.   |
| COVID-19/<br>SARS-CoV-2             | <b>Standard precautions</b><br><b>Contact precautions</b><br><b>Droplet precautions</b><br><b>Airborne precautions</b> | <b>For mild to moderate illness</b> in those not moderately to severely immunocompromised: <ul style="list-style-type: none"> <li>At least 10 days have passed since symptoms first appeared and,</li> <li>At least 24 hours have passed since last fever without the use of fever-reducing medications</li> </ul> | Airborne preferred (AIIR or negative pressure room) <ul style="list-style-type: none"> <li>Use N95 or higher respiratory protection.</li> <li>Use eye protection (goggles, face shield).</li> <li>Refer to CDC's <a href="#">Interim Infection Prevention and Control Recommendations for Healthcare Personnel During the Coronavirus Disease 2019 (COVID-19) Pandemic</a>.</li> </ul> |

| Condition                              | Precautions  | Duration  | Comment   |
|--|--|---|---|
| COVID-19/<br>SARS-CoV-2<br>(continued) | <b>Standard precautions</b><br><b>Contact precautions</b><br><b>Droplet precautions</b><br><b>Airborne precautions</b> | and, <ul style="list-style-type: none"> <li>Symptoms (such as, cough, shortness of breath) have improved</li> </ul> <p><b>For those asymptomatic</b> throughout infection and not moderately to severely immunocompromised: At least 10 days have passed since the date of their first positive viral test.</p> | Airborne preferred (AIIR or negative pressure room) <ul style="list-style-type: none"> <li>Use N95 or higher respiratory protection</li> <li>Use eye protection (goggles, face shield).</li> <li>Refer to CDC's <a href="#">Interim Infection Prevention and Control Recommendations for Healthcare Personnel During the Coronavirus Disease 2019 (COVID-19) Pandemic.</a></li> </ul> |
| Head lice                              | <b>Standard precautions</b><br><b>Contact precautions</b>  | Until 24 hours after initiation of effective therapy  |   |
| Human metapneumovirus                  | <b>Standard precautions</b><br><b>Contact precautions</b>  | Duration of illness, defined as 24 hours after resolution of fever without the use of fever-reducing medications and without respiratory symptoms   |   |
| Impetigo                               | <b>Standard precautions</b><br><b>Contact precautions</b>  | Until 24 hours after initiation of effective therapy  |   |
| Influenza (seasonal)                   | <b>Standard precautions</b><br><b>Droplet precautions</b>  | Isolate for seven days after illness onset or until 24 hours after the resolution of fever and respiratory symptoms, whichever is longer  |   |

| Condition                             | Precautions   | Duration  | Comment  |
|---------------------------------------|---|---|--|
| Measles (rubeola)                     | <div>Standard precautions</div> <div>Airborne precautions</div>   | Four days after onset of rash; duration of illness in immune compromised  | Susceptible health care workers should not enter the room. For details see <a href="#">CDC's Interim Infection Prevention and Control Recommendations for Measles in Healthcare Settings</a> . |
| Multidrug-resistant organisms (MDROs) | <div>Standard precautions</div> <div>Contact precautions</div> <p> <b>In nursing home settings:</b> Use enhanced barrier precautions for targeted MDROs and facility-designated epidemiologically important MDROs when contact precautions do not otherwise apply.</p> | <p>The duration of contact precautions for patients or residents who are colonized or infected with MDROs remains undefined.</p> <p> <b>In nursing home settings:</b> Residents colonized or infected with a targeted MDRO or facility-designated epidemiologically important MDRO should remain on enhanced barrier precautions for the duration of their stay at the facility. A brief transition to contact precautions may be necessary when a resident with an MDRO shows acute signs or symptoms of infection.</p> | It may be prudent to assume that MDRO carriers are colonized permanently and manage them accordingly.  |
| <i>Norovirus</i>                      | <div>Standard precautions</div> <div>Contact precautions</div>  | Minimum of 48 hours after the resolution of symptoms or according to facility policy  | Handwashing with soap and water is preferred.  |

| Condition  | Precautions  | Duration  | Comment |
|--|--|---|---------|
| Parainfluenza  | <b>Standard precautions</b><br><b>Contact precautions</b>  | Duration of illness, defined as 24 hours after resolution of fever without the use of fever-reducing medications and without respiratory symptoms |         |
| Pertussis  | <b>Standard precautions</b><br><b>Droplet precautions</b>  | Isolate until five days after initiation of effective therapy.  |         |
| Pressure ulcer or major wound (decubitus ulcer, pressure sore), infected | <b>Standard precautions</b><br><b>Contact precautions</b><br> <b>In nursing home settings:</b> Once the wound can be contained by a dressing, transition resident back to enhanced barrier precautions. | Duration of illness. Until drainage stops or can be contained by dressing.  |         |
| Respiratory syncytial virus (RSV)  | <b>Standard precautions</b><br><b>Contact precautions</b>  | Duration of illness, defined as 24 hours after resolution of fever without the use of fever-reducing medications and without respiratory symptoms |         |
| Rhinovirus and enterovirus   | <b>Standard precautions</b><br><b>Droplet precautions</b>  | Duration of illness, defined as 24 hours after resolution of fever without the use of fever-reducing medications and without respiratory symptoms |         |
| Scabies  | <b>Standard precautions</b><br><b>Contact precautions</b>  | Until 24 hours after initiation of effective therapy  |         |

| Condition  | Precautions  | Duration   | Comment   |
|--|--|--|---|
| Shingles (herpes zoster) in patient with intact immune system with lesions that can be contained and covered   | <b>Standard precautions</b>  | Until lesions are dry and crusted  | Susceptible health care workers should not provide direct patient care.   |
| Shingles (herpes zoster), disseminated in any patient <b>or</b> localized disease in immunocompromised patient until disseminated infection is ruled out | <b>Standard precautions</b><br><b>Contact precautions</b><br><b>Airborne precautions</b> | Duration of illness  | Susceptible health care workers should not enter room if immune health care workers are available.  |
| Tuberculosis (M. tuberculosis) pulmonary or laryngeal disease, suspected   | <b>Standard precautions</b><br><b>Airborne precautions</b>                               | Discontinue precautions only when the likelihood of infectious TB disease deemed negligible, and either: <ol style="list-style-type: none"> <li>1. There is another diagnosis that explains the clinical syndrome, or</li> <li>2. The results of three sputum smears for acid-fast bacillus (AFB) are negative. Each of the three sputum specimens should be collected 8 to 24 hours apart, and at least one should be an early morning specimen.</li> </ol> | Consult the <a href="#">Wisconsin TB Program</a> and the <a href="#">local or Tribal health department</a> for case specifics. It could be possible that isolation could be discontinued if the respiratory specimen is smear positive and TB PCR is negative, and there is another more likely or confirmed diagnosis. |



| Condition  | Precautions   | Duration  | Comment   |
|--|---|---|---|
| Tuberculosis (M. tuberculosis) pulmonary or laryngeal disease, confirmed | <b>Standard precautions</b><br><b>Airborne precautions</b>  | Discontinue precautions only when patient on effective therapy is improving clinically and has three consecutive sputum smears negative for acid-fast bacilli collected on separate days. | <a href="#">Wisconsin Admin. Code ch. 145, subch. XI</a> specifies 14 days of effective treatment. Consult the <a href="#">Wisconsin TB Program</a> and the <a href="#">local or Tribal health department</a> for case specifics. |
| Wound infections (minor or limited)                                      | <p>If dressing covers wound and contains drainage:<br/> <b>Standard precautions</b></p> <p>If wound can no longer be covered or drainage can no longer be contained use:<br/> <b>Contact precautions</b></p> <p><b>🚩 In nursing home settings:</b> If wound is chronic in nature and can be contained to a dressing, use enhanced barrier precautions. If wound is short-lasting and healing, standard precautions apply.</p> | Duration of illness. Until drainage stops or can be contained by dressing.  |   |

Contact the Wisconsin Healthcare-Associated Infections (HAI) Prevention Program at [DHSWIHAIPreventionProgram@dhs.wisconsin.gov](mailto:DHSWIHAIPreventionProgram@dhs.wisconsin.gov) or reach out directly to your [regional infection preventionist](#) for additional assistance.

