Transmission-Based Precautions in Health Care Settings
Reference Guide

How to Use:

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.

bit.ly/TypeDuration

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.

bit.ly/ClinicalSyndromes

Standard Precautions:

Standard Precautions

Standard precautions are a set of infection control practices designed to prevent the spread of diseases through contact with blood, body fluids, non-intact skin (including rashes), and mucous membranes.

These precautions **should be used when providing care to all patients and residents** – regardless of whether they show signs of infection or illness. Standard precautions **apply at all times** and **in all health care settings**.

Use at all times
Use for all patients

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:
bit.ly/Standard-Precautions

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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.**

Use in addition to standard precautions

Contact Precautions

Use **for patients with known or suspected infections that can be spread by contact with skin, body fluids or contaminated objects**.

Examples include Multi-drug resistant organisms (MDRO), C. diff, norovirus (see table to follow for more).

Use when germs can spread by skin, fluids, or objects

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) before entering a room and doff before exiting the room.

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.

Ensure appropriate patient placement:

- Acute care hospitals: in a **single patient space** or room if available in acute care hospitals.
- Long-term and other residential settings: make **room placement** decisions balancing risks to other patients.
- Ambulatory settings: place patient in contact precautions in an **exam room or cubicle** as soon as possible.

Limit movement of the patient or resident outside of the room to medically necessary purposes only.

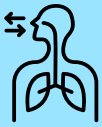
The door to the room may remain open, but signage shall be posted.

Transmission-Based Precautions: (continued):

Droplet Precautions

Use for patients known or suspected to be infected with germs transmitted by **respiratory droplets that are generated by a patient who is coughing, sneezing or talking**.

Examples include Influenza and COVID-19 (see table to follow for more).



Use when germs can spread through coughs, sneezes, or talking.

Wear a surgical procedure mask (a respirator is not necessary) for close contact with infectious patient or resident. Don mask before entering the room.

Limit movement of the patient or resident outside of the room to medically necessary purposes only. If transport or movement is necessary, instruct patient to wear a surgical mask and follow respiratory hygiene and cough etiquette.

Ensure appropriate patient placement

- Acute care hospitals: in a single patient space or room if available in acute care hospitals.
- Long-term and other residential settings: make room placement decisions balancing risks to other patients.
- Ambulatory settings: place patient in contact precautions in an exam room or cubicle as soon as possible and instruct patients to follow respiratory hygiene/cough etiquette recommendations.

The door to the room may remain open.

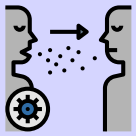
Transmission-Based Precautions (continued):

Airborne Precautions

Use for patients known or suspected to be infected with **pathogens that are easily transmitted through the air.**

Examples include tuberculosis, measles, and chickenpox (see table to follow for more).

Use when germs can spread by through the air



Wear a fit tested, NIOSH-approved N95 or higher level respirator for respiratory protection. Don the respirator **before entering** the room.

Ensure appropriate placement in an airborne infection isolation room (AIIR), if available. Keep the AIIR door closed when not required for entry and exit.

- **If AIIR is not available**, place the patient in a private room with the door closed to reduce the likelihood of airborne transmission until the patient is either transferred to a facility with an AIIR or returned home.

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.

- Healthcare personnel don't need to wear a mask or respirator during transport if the patient on Airborne Precautions is masked and skin lesions are covered.

After exposure to a vaccine-preventable disease (e.g., measles, varicella, smallpox), **check vaccination status of susceptible individuals** and offer vaccination to those who are not up to date.

Additional information on transmission-based precautions are available on the CDC website:
bit.ly/Transmission-Based

Enhanced Barrier Precautions for Long-Term Care Facilities:

Enhanced barrier precautions (EBP) **expand the use of PPE** in long-term care facilities beyond standard situations **involving exposure to blood and body fluids**.

EBP precautions includes **wearing gowns and gloves** during high-contact resident care activities where multidrug-resistant organisms (MDROs) may be transferred to staff hands, equipment, and clothing.

Use with exposure to blood and bodily fluids

Enhanced Barrier Precautions

Use for facilities experiencing an **outbreak or ongoing transmission** may consider implementing Enhanced Barrier Precautions (EBP) for high-risk individuals and affected residents including **residents with**:

- An **MDRO infection or colonization** when contact precautions do not otherwise apply
- An **open wound requiring nursing intervention, wound measures, or wound care** (this does not need to apply to small scrapes/abrasions or skin tears covered with a band-aid or Tegaderm)
- **Indwelling medical devices** such as central lines, foley catheters, dialysis ports, feeding tube, and tracheostomy or ventilator

During outbreaks

For residents with MDROs, wounds, or indwelling devices

EBP **should NOT be used** for residents infected or colonized **with an MDRO who also have:**

- **Acute diarrhea** (more than two loose stools in 24 hours, not caused by other underlying conditions or treatments).
- Draining wound or site of **secretions that cannot be covered or contained**.

Note: units or facilities investigating a suspected or confirmed MDRO outbreak may consider using contact precautions for a limited time.

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 <u>not</u> restrict residents on EBPs to their rooms or limit them from group activities.

Additional information on <u>EBPs</u> are available on the CDC website:
bit.ly/PPE-LTC

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Infectious Disease or Condition and Indicated Precautions

Note: All conditions require **Standard Precautions**

Condition	Precautions	Duration	Comment
Acute Diarrhea	Contact	Duration of illness or longer.	*Handwashing with soap and water is preferred.*
Adenovirus	Contact Droplet	Duration of illness, defined as 24 hours after resolution of fever without the use of fever- reducing medications and without respiratory symptoms.	
C. difficile	Contact	Duration of illness or longer, according to facility policy.	*Use an EPA-registered disinfectant that is effective at killing C. difficile spores to prevent spread. Handwashing with soap and water is preferred.* bit.ly/EPA-Disinfect
Chickenpox (varicella zoster virus)	Contact Airborne	Until lesions are dry and crusted.	*Susceptible health care workers should not enter the room.*
COVID-19/ SARS-CoV-2	Contact Droplet Airborne	For **mild to moderate illness** in those not moderately to severely immunocompromised: • At least 10 days have passed since symptoms first appeared **and**, • At least 24 hours have passed since last fever without the use of fever- reducing medications **and**, • Symptoms (such as, cough, shortness of breath) have improved. **For those asymptomatic** throughout infection and not moderately to severely immunocompromised: At least 10 days have passed since the date of their first positive viral test.	*Airborne preferred (AIIR or negative pressure room)* • *Use N95 or higher respiratory protection* • *Use eye protection (goggles, face shield).* • *Refer to CDC's Infection Control Guidance: SARS-CoV-2.* bit.ly/COVID-Control

Contact Wood County Health Department Infectious Disease at 419-354-4306 for additional questions.

Note: All conditions require ***Standard Precautions***

Condition	Precautions	Duration	Comment
Head lice	Contact	Until 24 hours after initiation of effective therapy.	
Human metapneumovirus	Contact	Duration of illness, defined as 24 hours after resolution of fever without the use of fever-reducing medications and without respiratory symptoms.	
Impetigo	Contact	Until 24 hours after initiation of effective therapy.	
Influenza (seasonal)	Droplet	Isolate for seven days after illness onset of until 24 hours after the resolution of fever and respiratory symptoms, whichever is longer.	
Measles (rubeola)	Airborne	Four days after onset of rash; duration of illness in immune compromised.	*Susceptible health care workers should not enter the room. For details see CDC's Interim Infection Prevention and Control Recommendations for Measles in Healthcare Settings.* bit.ly/Measles-Control
Multidrug-resistant organisms (MDROs)	Contact In long-term care: Enhanced Barrier	The duration of contact precautions for patients or residents who are colonized or infected with MDROs remains undefined. **In long-term care settings:** 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.	*It may be prudent to assume that MDRO carriers are colonized permanently and manage them accordingly.*

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Note: All conditions require ***Standard Precautions***

Condition	Precautions	Duration	Comment
Norovirus	***Contact***	Minimum of 48 hours after the resolution of symptoms or according to facility policy.	*Handwashing with soap and water is preferred.*
Parainfluenza	***Contact***	Duration of illness, defined as 24 hours after resolution of fever without the use of fever- reducing medications and without respiratory symptoms.	*Viral shedding may be prolonged in immunosuppressed patients.*
Pertussis	***Droplet***	Isolate until five days after initiation of effective antibiotic therapy.	*Effective antibiotic treatment includes the use of azithromycin, clarithromycin, erythromycin, or trimethoprim-sulfamethoxazole (TMP-X).*
Pressure ulcer or major wound (decubitus ulcer, pressure sore), infected	***Contact*** ***In long-term care:*** *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)	***Contact***	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	***Droplet***	Duration of illness, defined as 24 hours after resolution of fever without the use of fever-reducing medications and without respiratory symptoms.	
Scabies	***Contact***	Until 24 hours after initiation of effective therapy.	

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Note: All conditions require **Standard Precautions**

Condition	Precautions	Duration	Comment
Shingles (herpes zoster) in patient with intact immune system with lesions that can be contained and covered	*If disseminated disease in any patient or localized disease in immunocompromised patient until disseminated infection ruled out:* **Airborne**	Until lesions are dry and crusted.	*Susceptible health care workers should not provide direct patient care.*
Tuberculosis (M. tuberculosis) pulmonary or laryngeal disease, confirmed	**Airborne**	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. Each of the three sputum specimens should be collected 8 to 24 hours apart, and at least one should be an early morning specimen.	*Consult Wood County Health Department Infectious Disease for case specifics. It may 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.*
Tuberculosis (M. tuberculosis) pulmonary or laryngeal disease, suspected	**Airborne**	Discontinue precautions only when the likelihood of infectious TB disease deemed negligible, **and** either: 1. There is another diagnosis that explains the clinical syndrome, **or** 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.	*Consult Wood County Health Department Infectious Disease for case specifics. It may 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.*
Wound infections (minor or limited)	*Standard precautions if dressing covers wound and contains drainage or wound is short-lasting and healing.* **Contact** *if wound can no longer be contained* ***In long-term care:*** *If wound is chronic and can be contained to a dressing,* **Enhanced Barrier**	Duration of illness. Until drainage stops or can be contained by dressing.	

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