

# Isolation Precautions

## Preventing Transmission of Infectious Agents in Healthcare Settings

**Standard Precautions**  
**Contact Precautions**  
**Droplet Precautions**  
**Airborne Precautions**

### Additional Information

- Hand hygiene instructions: <http://www.who.int/gpsc/tools/GPSC-HandRub-Wash.pdf> and additional hand hygiene resources: <http://www.cdc.gov/handhygiene/>
- Instructions for donning and removing PPE may be found at: <http://www.cdc.gov/HAI/prevent/ppe.html> Pathogen-specific infection prevention guidelines: <http://www.cdc.gov/hicpac/2007IP/2007isolationPrecautions.html>
- Standard and transmission-based precautions (VDH HAI Program): <http://www.vdh.virginia.gov/epidemiology/surveillance/hai/StandardPrecautions.htm>

# Standard Precautions

**Standard precautions are the basic level of infection prevention that should be used in the care of all patients at all times.**

- Standard precautions reduce the risk of transmission of microorganisms from known sources of infection and from persons or objects that are not visibly infected or contaminated.
- Handwashing facilities and/or alcohol-based hand sanitizer are required for all patient care activities.
- The personal protective equipment (PPE) required to carry out standard precautions includes gloves, gowns, masks and eye protection/face shield.

**Standard precautions include:**

## Hand hygiene

- Always - following any patient contact.
- Wash hands for 20 seconds with soap and warm water – especially if visibly soiled. Clean hands with alcohol-based hand rub if not visibly soiled.

## Gloves

- Clean, non-sterile gloves are worn when touching or coming into contact with blood, body fluids, secretions or excretions.
- Vinyl, latex or nitrile gloves may be worn.
- Change gloves when visibly soiled, torn or punctured.
- Apply gloves just before touching mucous membranes or contacting blood, body fluids, secretions, or excretions.
- Remove gloves promptly after use and discard before touching non-contaminated items or environmental surfaces, and before providing care to another patient.
- Wash hands immediately after removing gloves.

## Gowns

- Gowns are worn to prevent soiling of clothing during activities that may generate splashes or sprays of blood, body fluids, secretions and excretions.
- Gowns should be fluid-resistant and may be non-sterile.
- Don gown prior to performing such activities.
- Remove gown as soon as activity is completed.

## Mask, face shield, eye protection

- Masks, face shields and eye protection are worn to protect eyes, nose, mouth and mucous membranes from exposure to sprays or splashes of blood, body fluids, secretions and excretions.
- Surgical masks are worn as part of standard protection, to protect the nose and mouth from splattered body fluids.
- Goggles help protect the eyes from splatters. Goggles should fit snugly over and around the eyes or prescriptive lenses. Standard prescription eye glasses do not provide adequate eye protection.
- A face shield provides splatter protection to facial skin, eyes, nose, and mouth.

## Patient care equipment

- Non-disposable equipment should be cleaned, disinfected or reprocessed before reuse with another patient.
- Single-use items should be disposed of properly.

## Additional Information

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Instructions for donning and removing PPE may be found at: <http://www.cdc.gov/HAI/prevent/ppe.html>

Pathogen-specific infection prevention guidelines: <http://www.cdc.gov/hicpac/2007IP/2007isolationPrecautions.html>

Standard and transmission-based precautions (VDH HAI Program): <http://www.vdh.virginia.gov/epidemiology/surveillance/hai/StandardPrecautions.htm>

# Contact Precautions

## Contact precautions are used in addition to standard precautions

Standard precautions are the basic level of infection prevention that should be used in the care of all patients at all times.

Contact precautions are used in the care of patients known or suspected to have a serious illness easily transmitted by direct patient contact or by indirect contact with items in the patient's environment. Contact precautions are used to protect against either direct or indirect contact transmission.

### *Direct Contact*

- Means body-surface to body-surface contact and physical transfer of microorganisms from an infected or colonized person to a susceptible person.
- Can occur when a healthcare worker touches an infected patient (or dressings or other contaminated materials from that patient) and contaminates his/her hands.

### *Indirect Contact*

- Means contact of susceptible person with a contaminated intermediate object such as needles, dressings, gloves or contaminated (unwashed) hands.

## Contact precautions include:

### Standard precautions PLUS:

#### **Private room**

The patient should be housed in a private room, if possible, or in a room shared by a patient infected or colonized with the same organism.

#### **Gloves**

Gloves are worn anytime there is a possibility of contact with an infected or colonized patient and his environment. Wear gloves upon entry into the patient's room.

#### **Gown**

A gown is worn anytime contact with the patient or his environment is anticipated. Wear gown upon entry into the patient's room.

#### **Patient care equipment**

Use disposable non-critical patient-care equipment (e.g., blood pressure cuffs) or dedicate equipment to a single patient. If common use of equipment for multiple patients is unavoidable, clean and disinfect the equipment before use on another patient.

#### **Additional Information**

Refer to the section on Standard Precautions

Hand hygiene instructions: <http://www.who.int/gpsc/tools/GPSC-HandRub-Wash.pdf> and additional hand hygiene resources: <http://www.cdc.gov/handhygiene/>

Instructions for donning and removing PPE may be found at: <http://www.cdc.gov/HAI/prevent/ppe.html>

Pathogen-specific infection prevention guidelines: <http://www.cdc.gov/hicpac/2007IP/2007isolationPrecautions.html>

Standard and transmission-based precautions (VDH HAI Program): <http://www.vdh.virginia.gov/epidemiology/surveillance/hai/StandardPrecautions.htm>

Management of Multidrug-Resistant Organisms in Healthcare Settings (2006): [http://www.cdc.gov/hicpac/mdro/mdro\\_toc.html](http://www.cdc.gov/hicpac/mdro/mdro_toc.html)

# Droplet Precautions

## Droplet precautions are used in addition to standard precautions

Standard precautions are the basic level of infection prevention that should be used in the care of all patients at all times.

Droplet precautions are used when working within approximately 3-6\* feet of an individual who is infected or suspected of being infected with an organism that is transmitted by droplets.

- Droplets can be generated from the source person during coughing, sneezing, talking and during the performance of certain procedures such as suctioning or bronchoscopy.
- Droplets generally travel no more than 3-6\* feet from the patient. These droplets can be deposited on the host's nasal mucosa, conjunctivae or mouth.

## Droplet precautions include:

### Standard precautions PLUS:

#### Private room

The patient should be housed in a private room, if possible, or in a room shared by a patient infected or colonized with the same organism. If sharing a room, ensure that patients are physically separated (i.e., >3 feet apart)

#### Surgical mask

A surgical mask should be worn when working within 3-6\* feet of the patient. Wear the mask upon entry to the patient's room.

\* CDC Guideline for Isolation Precautions: Preventing Transmission of Infectious Agents in Healthcare Settings, 2007 use 3 feet; recent CDC influenza guidelines (e.g., Prevention Strategies for Seasonal Influenza in Healthcare Settings, 2013) use 6 feet for influenza.

#### Additional Information

Refer to the section on Standard Precautions

Hand hygiene instructions: <http://www.who.int/gpsc/tools/GPSC-HandRub-Wash.pdf> and additional hand hygiene resources: <http://www.cdc.gov/handhygiene/>

Instructions for donning and removing PPE may be found at: <http://www.cdc.gov/HAI/prevent/ppe.html>

Pathogen-specific infection prevention guidelines: <http://www.cdc.gov/hicpac/2007IP/2007isolationPrecautions.html>

Standard and transmission-based precautions (VDH HAI Program): <http://www.vdh.virginia.gov/epidemiology/surveillance/hai/StandardPrecautions.htm>

Droplet precautions and other infection control measures for patients with seasonal influenza: <http://www.cdc.gov/flu/professionals/infectioncontrol/maskguidance.htm>

# Airborne Precautions

## Airborne precautions are used in addition to standard precautions

Standard precautions are the basic level of infection prevention that should be used in the care of all patients at all times.

Airborne precautions are required to protect against airborne transmission of infectious agents.

Airborne transmission can occur by the dissemination of either:

- airborne droplet nuclei [small-particles (5 micrograms or smaller) of evaporated droplets containing microorganisms that remain suspended in the air for long periods of time], or
- dust particles that contain an infectious agent.

Microorganisms carried by the airborne route can be widely dispersed by air currents and may become inhaled by a susceptible host in the same room or over a long distance from the source patient – depending on environmental factors such as temperature and ventilation.

## Airborne precautions include:

### Standard precautions PLUS:

#### Personal respiratory protection

N95 respirator OR powered air-purifying respirator (PAPR).

***N95 respirator use requires training and fit testing before use  
PAPR use requires training and regular maintenance of the PAPR  
Both N95 respirator and PAPR users require periodic re-training.***

#### Airborne Infection Isolation Room (AIIR)

At a minimum, AIIRs must:

- Provide a negative pressure room with a minimum of 6 air exchanges per hour
- Exhaust directly to the outside or through HEPA (High Efficiency Particulate Air) filtration

If the healthcare facility does not have an AIIR, place the person in a private room with the door closed until the person is transferred to another facility with an AIIR.

#### Additional Information

Refer to the section on Standard Precautions

Hand hygiene instructions: <http://www.who.int/gpsc/tools/GPSC-HandRub-Wash.pdf> and additional hand hygiene resources: <http://www.cdc.gov/handhygiene/>

Instructions for donning and removing PPE may be found at: <http://www.cdc.gov/HAI/prevent/ppe.html>

Pathogen-specific infection prevention guidelines: <http://www.cdc.gov/hicpac/2007IP/2007isolationPrecautions.html>

Standard and transmission-based precautions (VDH HAI Program): <http://www.vdh.virginia.gov/epidemiology/surveillance/hai/StandardPrecautions.htm>

Guidelines for Environmental Infection Control in Healthcare Facilities (includes information on AIIR rooms): [http://www.cdc.gov/hicpac/pdf/guidelines/eic\\_in\\_HCF\\_03.pdf](http://www.cdc.gov/hicpac/pdf/guidelines/eic_in_HCF_03.pdf)

Information on tuberculosis and respiratory protection in healthcare facilities: <http://www.cdc.gov/tb/publications/factsheets/prevention/rphcs.htm> and

<http://www.cdc.gov/mmwr/pdf/rr/rr5417.pdf>