

## Transmission-Based Precautions

Transmission-based precautions are to be used in addition to standard precautions and respiratory hygiene/cough etiquette when caring for patients with documented or suspected infection or colonization with highly transmissible or epidemiologically important pathogens for which additional precautions are needed to prevent transmission. The duration of isolation should be extended for immune-suppressed patients with viral infections due to prolonged shedding of viral agents.

### A. Airborne Precautions

Use airborne precautions for specific disease processes for patients known or suspected to be infected with infectious agents transmitted person-to-person by the airborne route (e.g., tuberculosis, measles, chicken pox, small pox)

#### a. Patient Placement

- 1) Private room with the door closed.
- 2) Continuous negative air pressure.
- 3) A minimum of 6-12 air changes per hour.
- 4) Air exhausted to the outside (portable units may be used).
- 5) Positive pressure rooms should not be used for patients with Airborne isolation requirements.

#### b. Barrier Precautions

- 1) Hand hygiene or hand washing – mandatory.
- 2) N-95 respirator use is:
  - Mandatory for all HCW entering room if the isolation is for tuberculosis (Healthcare workers must be fit-tested by Employee Health to use N-95 respirators).
  - Mandatory for non-immune HCW for measles (rubeola), chicken pox or disseminated zoster/disseminated shingles (Varicella)
  - Not required for personnel immune to the infectious condition. Examples include measles (rubeola), chicken pox or disseminated zoster/disseminated shingles (Varicella) which provide immunity through vaccination or natural disease.
    - a) Encourage patient to utilize respiratory hygiene/cough etiquette.
    - b) The number of people entering airborne isolation is restricted. All those who enter the room, including visitors, must wear appropriate respiratory protection (N-95 respirators. Visitors shall be assisted to wear N-95 respirators.
    - c) Dedicate equipment to a single patient. If not possible, equipment must be thoroughly cleaned and disinfected with an approved low-level disinfectant upon removal from the isolation room and before use on another patient.

NOTE: Susceptible healthcare workers should not enter the rooms of patients known or suspected to have rubeola (measles), varicella (chicken pox), disseminated zoster, or smallpox if other immune healthcare personnel are available.

### Droplet Precautions

Use Droplet Precautions for specific disease processes for patients known or suspected to be infected with microorganisms transmitted by respiratory droplets (large particle droplets that can be generated by the patient during coughing, sneezing, talking or the performance of cough-inducing procedures).

1. Patient Placement
  - a) Private room (door may remain open)
2. Barrier Precautions
  - a) Standard Precautions.
  - b) Hand hygiene – mandatory.
  - c) Don a mask when entering the patient room.
  - d) Eye protection is strongly encouraged upon entering the room, and required if cough, splatter, splash, etc. is anticipated.
  - e) Dedicate equipment to a single patient. If not possible, equipment must be thoroughly cleaned and disinfected with an approved low-level disinfectant upon removal from the isolation room and before use on another patient.

#### Contact Precautions

Use Contact Precautions for specific disease processes and for patients with known or suspected infections or evidence of syndromes that represent an increased risk for contact transmission, including colonization or infection with Multidrug-resistant Organisms (MDROS).

1. Patient Placement
  - a) Private room
2. Barrier Precautions
  - a) Standard Precautions.
  - b) Hand hygiene is mandatory.
  - c) Gloves (if it is reasonably anticipated that hands will have contact with patient, environment or contaminated items).
  - d) Gown (if significant contact or contamination of clothing is anticipated [e.g., changing dressing, contact with environmental surfaces, turning patient, patient has ostomy, incontinent, has diarrhea, wound drainage not contained by a dressing, etc.]).
  - e) Dedicate equipment to a single patient. If not possible, equipment must be thoroughly cleaned and disinfected with an approved low-level disinfectant upon removal from the isolation room and before use on another patient.

Remove gown and gloves and perform hand hygiene before leaving the patient environment. After gown removal, be sure that clothing and skin do not contact potentially contaminated environmental surfaces to avoid transfer of microorganisms to other patients and environmental surfaces.

#### Resources:

1. Siegel JD, Rhinehart E, Jackson M, Chiarello L, and the Healthcare Infection Control Practices Advisory Committee, 2007 Guideline for Isolation Precautions: Preventing Transmission of Infectious Agents in Healthcare Settings, **June 2007**.  
[http://www.cdc.gov/ncidod/dhqp/gl\\_isolation.html](http://www.cdc.gov/ncidod/dhqp/gl_isolation.html)

Accountability: (list those who review by job title)