

MARYLAND DEPARTMENT OF HEALTH

Transmission-based Precautions to use in a Longterm Care Facility

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**LTC
Webinar
Series
Webinar#6
PPE and
Precautions**

Objectives

- Describe the 2 different types of hand hygiene available in a Longterm Care facility and when you use each type.
- List the 3 types of Transmission-Based Precautions recommended by the CDC for use in addition to Standard Precautions in Acute-Care Hospitals as well as Longterm Care facilities.
- Define the term competency validation and why we want to use it when talking about educational activities.

Specific Indications for Hand Hygiene

Before:

- Entering a patient room
- Having patient contact
- Donning gloves
- Touching patient valuables/items in a room

After:

- Contact with a patient's skin
- Contact with body fluids or excretions, non-intact skin, wound dressings
- Removing gloves
- Exiting a patient room

When can you use ABHR and when must you wash at the sink?

Alcohol gel/foam

- Before gloving/gowning
- After leaving a patient room
- Before eating
- After eating
- Between resident care tasks that don't involve bathroom functions

Wash at the sink

- Always appropriate as a substitute for alcohol-based hand rubs (ABHRs)
- After going to the bathroom
- After working with a patient with infectious diarrhea (Norovirus, C.difficile)
- After working with a patient that has norovirus
- After working with a patient that has Clostridium difficile
- After hands are visibly soiled in any way

Transmission-Based Precautions

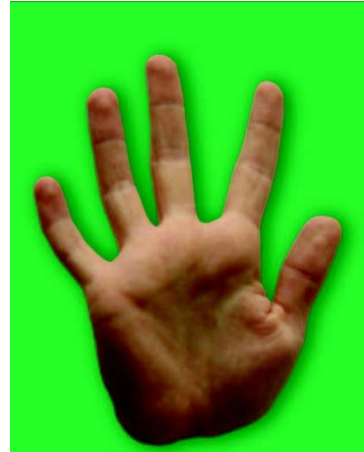
There are three categories of “extra” precautions that are recommended to take in addition to Standard Precautions:

- ❑ Contact Precautions
- ❑ Droplet Precautions
- ❑ Airborne Precautions

Transmission-Based Precautions are used in addition to Standard Precautions – the basic method used to prevent transmission of infection from one host to another. These additional precautions come into play when we suspect or know from lab testing what organism(s) a patient has and we want to use extra precautions so it does not spread.

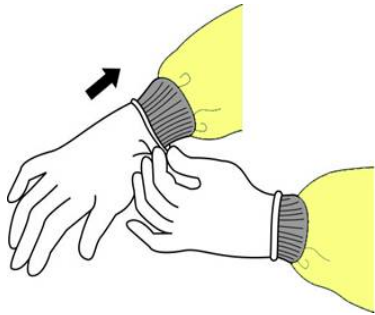
Contact Precautions

- To prevent transmission of infectious agents spread by hands primarily
 - **Direct contact** – means by touching hands, skin to skin transfer of organisms
 - Eg-VRE from fecal incontinence on your hand
 - MRSA from excessive wound drainage on your hand
 - CRE from patients ET tube on your hand
 - **Indirect contact** – means touching an object, or **fomite**, contaminated by someone's hand that contained organisms
 - Eg – doorknobs
 - Elevator buttons
 - Bars along walls to grab
- Can be contact with a regular skin organism like *Staph.aureus*, or a multiply drug resistant organism like MRSA (methicillin-resistant *Staph. aureus*)



CONTACT PRECAUTIONS

(in addition to Standard Precautions)



To enter this room, you **MUST** wear **GOWN** and **GLOVES**



- ☐ Clean your hands before entering & when leaving this room, & between procedures in this room
- ☐ Discard gown and gloves before leaving room
- ☐ Limit patient transport

VISITORS: Please report to nurse before entering!

Personal Protective Equipment

PPE – Contact Precautions

- **Gown**



- **Gloves**



Healthcare personnel caring for patients on Contact Precautions wear a gown and gloves for all interactions that may involve contact with the patient or potentially contaminated areas in the patient's environment. Donning PPE upon room entry and discarding before exiting the patient room is done to contain pathogens.

The Patient Environment

Patient Care Equipment

- Remove unneeded equipment and supplies from patient rooms after wiping them down with a suitable disinfectant wipe
- Provide a dedicated stethoscope and blood pressure cuff for patients in contact precautions
- Glucometers often stay in some isolation rooms during the patient's stay – especially in the AICU
- Check on the disinfectant wipe you are considering:
 - ❖ What organisms do you want to eliminate?
 - ❖ Streaks are often eliminated when surfaces are wiped down with a clean paper towel that is moistened with plain water (if equipment is not sterile) after the disinfectant has stayed wet for the necessary “dwell time” and then air-dried.

Droplet Precautions



- Intended to prevent transmission of pathogens spread through close respiratory or mucous membrane contact with respiratory secretions. This includes but not limited to:

- Influenza
- Meningitis (bacterial-meningococcal only)
- Mumps
- Pertussis

Droplet Precautions PPE
Contact Precautions
+
Surgical Mask
+
Eye Protection



Gloves
Gown
Surgical
Mask, Eye
Shield or
Goggles



Droplet Precautions require staff to wear a surgical mask when 3 to 6 feet from contact with infectious patients – example the distance from their mouth; the mask is donned upon room entry and discarded on exiting.

New mask must be used with every patient every time the room is entered. **Do not reuse!**

Patients on Droplet Precautions who must be transported outside of the room should wear a surgical mask and follow Respiratory Hygiene/Cough Etiquette



DROPLET PRECAUTIONS

(in addition to contact precautions)

☐ To **enter** this room, you **must** wear a gown and gloves.



☐ When within 3 feet of the patient, you **must** wear a mask/faceshield also.

If transport is necessary, place a surgical mask over patient's mouth and nose (if patient has a trach, place mask over trach as well).

☐ Remove and discard gown, gloves, and mask before leaving room.

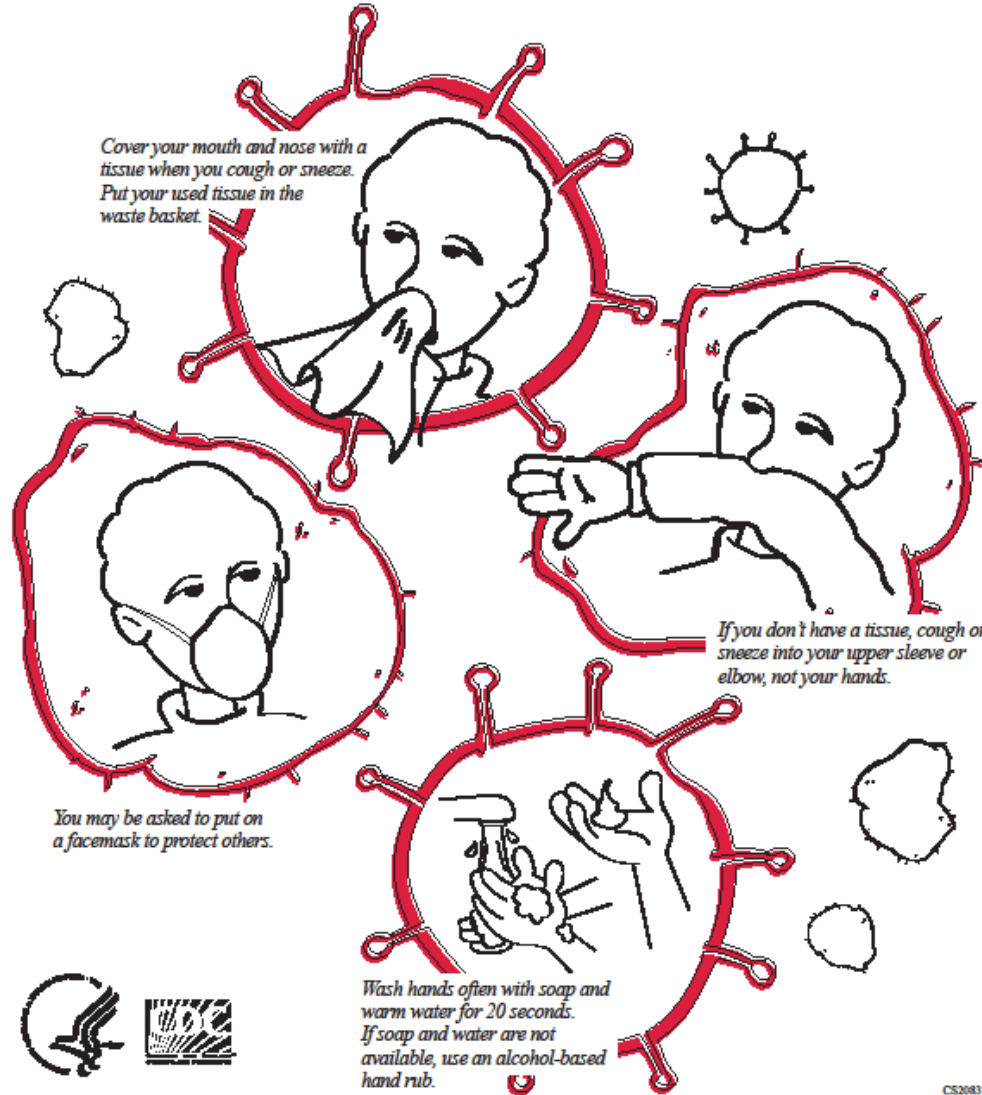
VISITORS: Please report to nurse before entering!

Respiratory Etiquette

Cover Cough

— Stop the spread of germs that can make you and others sick! —

Cover your mouth and nose with a tissue when you cough or sneeze. Put your used tissue in the waste basket.



If you don't have a tissue, cough or sneeze into your upper sleeve or elbow, not your hands.

You may be asked to put on a facemask to protect others.

Wash hands often with soap and warm water for 20 seconds. If soap and water are not available, use an alcohol-based hand rub.



Private Room

Droplet

Precautions

Private Room

Airborne



Airborne Precautions

Prevents transmission of infectious agents that remain viable over long distances when suspended in the air such as:

- Measles
- Chickenpox
- *Mycobacterium tuberculosis*

AIRBORNE PRECAUTIONS

(in addition to Standard Precautions)

This is a private, negative air pressure room.

Door must remain closed at all times!

- ☐ All healthcare personnel must wear an N 95 mask to enter this room
- ☐ If transport is necessary, patient must wear a blue surgical mask over nose and mouth (if patient has a trach, place a mask over trach as well)
- ☐ All visitors must wear a blue surgical mask to enter room



VISITORS: Must report to nurse before entering!

Mycobacterium tuberculosis

- Bacteria
- Spread from person to person through the air by “droplet nuclei”-particles ≤ 5 microns in diameter
- Patients should be placed in negative air pressure rooms if possible or if you have none-sent out to the hospital
- If you suspect TB-have the resident wear a surgical mask until they are transferred out; **ALTERNATIVE** : portable HEPA filter



HEPA

 Share

High-efficiency particulate arrestance (HEPA), also sometimes called high-efficiency particulate arresting or high-efficiency particulate air, is a type of air filter. Filters meeting the HEPA standard have many applications, including use in medical facilities, automobiles, aircraft and homes.

PPE for Airborne Precautions

Both mask types require an initial “medical certification questionnaire”

- Airborne Precautions are used when the germs are spread long distances on tiny particles in the air.
- Examples: Measles, Chicken Pox, Active or Suspected Tuberculosis.
- N95 Respirator masks (specially fitted) or PAPRs (Powered Air Purifying Respirators) are worn for Airborne Precautions.



N95



PAPR

Additional Facts About N95's

- The N95 requires annual fit testing
- Must retest earlier if there is a change in face, i.e. weight loss, surgery or tooth extraction.
- Men must be clean shaven.
- If Fit Test is failed, the employee will be instructed on the use of a PAPR or Powered air-purifying respirator



If you have a resident with possible TB

1. First choice, place the patient in an Airborne Isolation Room if you have one
2. Place them in a Private Room with a portable HEPA filter unit and send them out to a hospital emergency room.
3. If you are unable to do this, put a surgical mask on the suspected patient, keep them in a private room with a closing door.
4. Last choice, if the patient is uncooperative with the surgical mask, you may want to take the patient outside to dissipate the TB germs in a wide open space until they can be transported safely to the hospital.

Another way of looking at the chain of infection!



Develop “Hands-on” Infection Prevention Strategies



“Wash your hands”,
and remember
transmission-based
precautions!

Why is Proper Hand Washing so Important?

