

Donning and Removing Personal Protective Equipment Practicum

Goal of this Practicum

To learn the correct order to put on and remove biological personal protective equipment.

- Participants will achieve this goal by:
 - Reviewing the correct order of donning and removing PPE
 - Reviewing the precautions surrounding use of PPE
 - Performing donning and removing PPE during the practicum

Let's Start



How did you do?

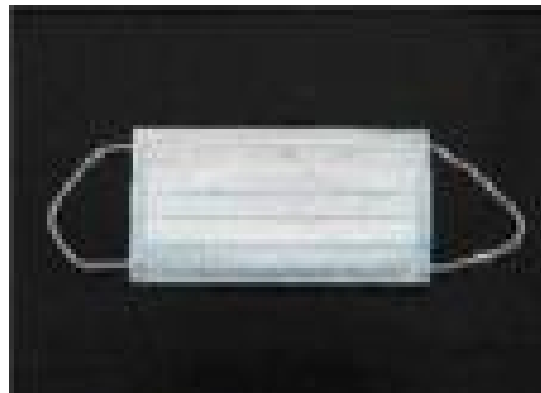


The most important infection control measure?



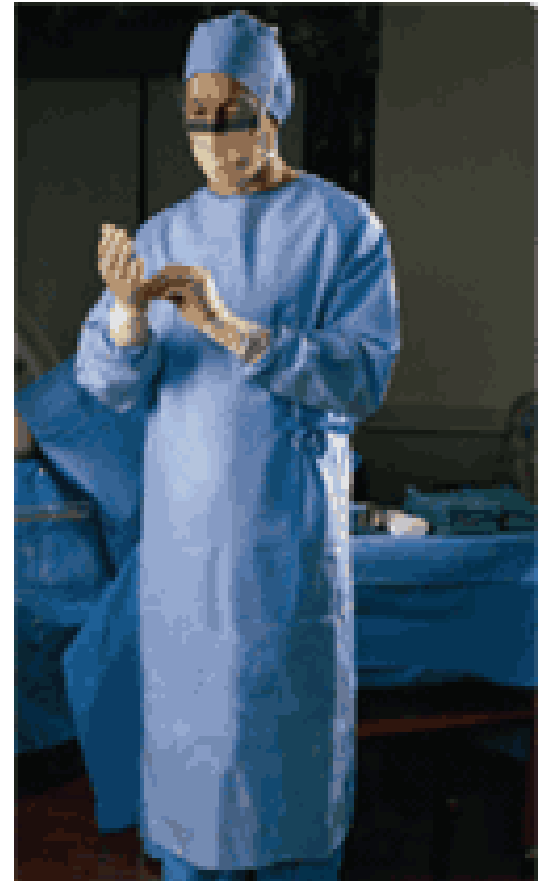
What is PPE?

- Personal Protective Equipment (PPE):
“specialized clothing or equipment worn by an employee for protection against infectious materials”
(OSHA)



Which PPE do we use?

- Gloves
- Gowns
- Goggles/Face Shield
- Particulate Respirator/Surgical masks



How do I know what type of PPE to wear?

- Type of exposure anticipated
 - Splash/spray versus touch
- Category of isolation precautions
- Disease (known vs unknown)
- If in doubt, ASK!
 - Medical/Clinical Director, Infection Control

What type of PPE would you wear?

- Transporting patient in a wheelchair?
- Responding to an emergency where blood is spurting?
- Drawing blood from a vein?
- Cleaning an incontinent patient with diarrhea?
- Taking vital signs?

- Generally none needed
- Gowns, gloves, goggles/face shield, mask
- Gloves
- Gloves with or without gown
- Generally none needed

Types of Precautions

- **Standard** (*formerly “Universal Precautions”*)
- **Expanded** (*formerly “Transmission-based Precautions”*)
 - **Contact**
 - **Droplet**
 - **Airborne**

Standard Precautions

- Always applicable, no matter what other Precautions are required;
- Treats ALL moist body substances – except sweat – as potentially infectious;
- The basis of all infection control efforts.

Standard precautions: HANDS



- ***GLOVES***: when touching blood, body fluids, secretions, excretions, contaminated items;
- ***HAND HYGIENE*** before putting on gloves and after taking off gloves.
- Make it a practice to wash hands before examining patient (whether or not gloves will be worn) and after examining patient.



Standard Precautions:

FACE

- ***Mask and eye protection (goggles or a face shield)***
 - Protect the mucous membranes of the eyes, nose, and mouth during procedures and activities that are likely to generate splashes or sprays of blood, body fluids, secretions, excretions.

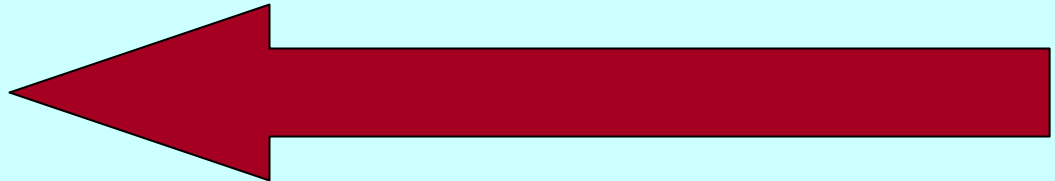


Standard Precautions: *SKIN and CLOTHING*

- **GOWN:**
 - Protect clothing and to prevent soiling of clothing during procedures and patient care activities that are likely to generate splashes or sprays of blood, body fluids, secretions, or excretions;
 - Do NOT wear for non-clinical reasons: e.g. warmth, looks

Types of Precautions

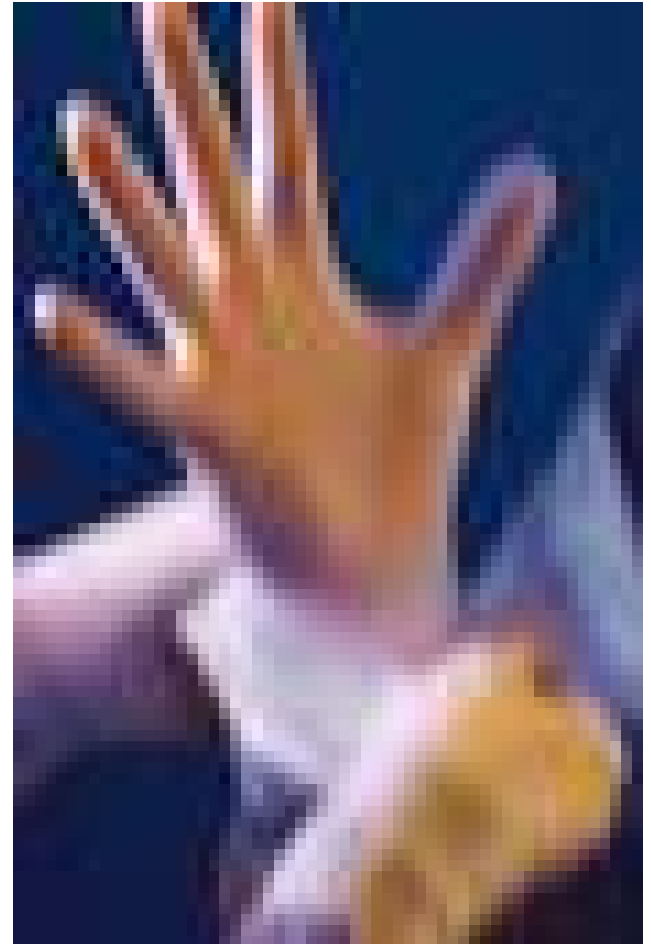
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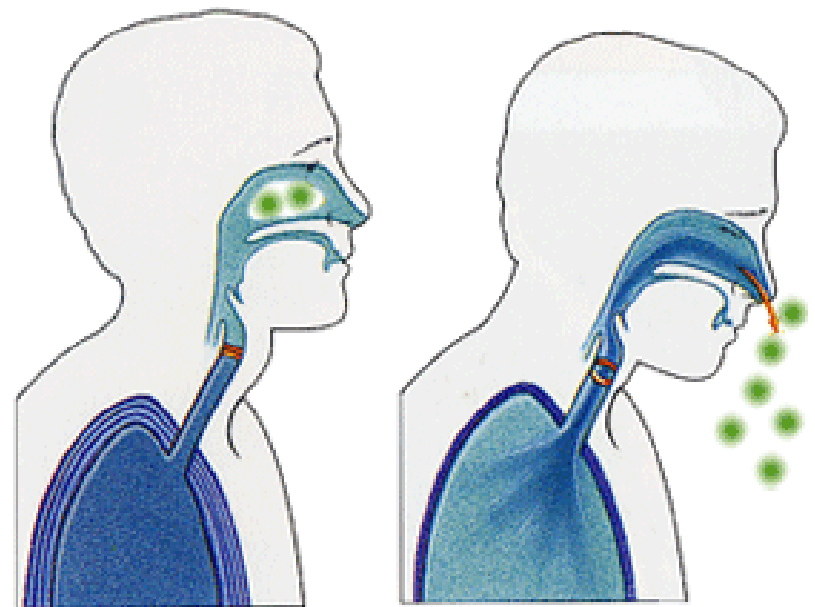
Contact Precautions

- Gowns and gloves for contact with patient or environment of care.
- Importance for housekeeping staff in clinical settings (fomites).
- Examples: scabies, patients with resistant organisms, herpes simplex virus.



Droplet Precautions

- Surgical masks within three (3) feet of patient.
- Droplet transmission usually involves contact transmission;
- Examples: influenza, SARS



Airborne isolation Precautions

- Use of Particulate Respirator (e.g., N95)
- Use of negative pressure room, if available
- Examples: chickenpox, tuberculosis, measles



Donning PPE

- Gowns
- Mask or Respirator
- Goggles or Face shields
- Gloves

Don a Gown

- Select appropriate type and size
- Opening is in the back
- Secure at neck and waist
- Do not tie in the front



Don a Mask

- Place over nose, mouth and chin
- Fit flexible nose piece over nose bridge
- Secure on head with ties or elastics
- Adjust to fit



Don a Particulate Respirator

- Select a fit tested respirator
- Place over nose, mouth and chin
- Fit flexible nose piece over nose bridge
- Secure on head with elastic
- Adjust to fit
- Perform a fit check –
 - Inhale – respirator should collapse
 - Exhale – check for leakage around face



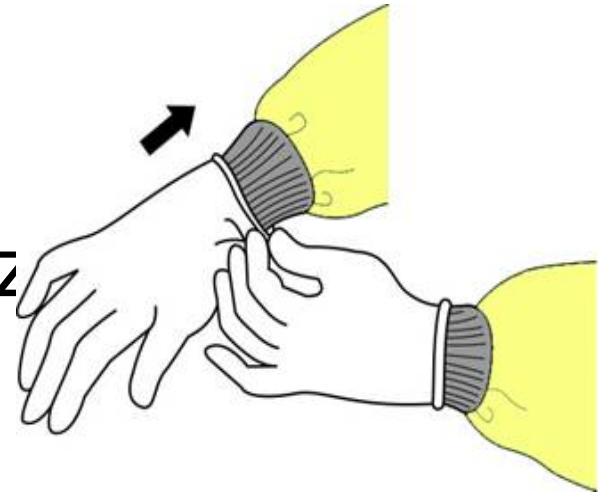
Don Eye and Face Protection

- Position goggles over eyes and secure to the head using the ear pieces or headband
- Position face shield over face and secure on brow with headband
- Adjust to fit comfortably



Don Gloves

- Don gloves last
- Select correct type and size
- Insert hands into gloves
- Extend gloves over isolation gown cuffs



Removing PPE

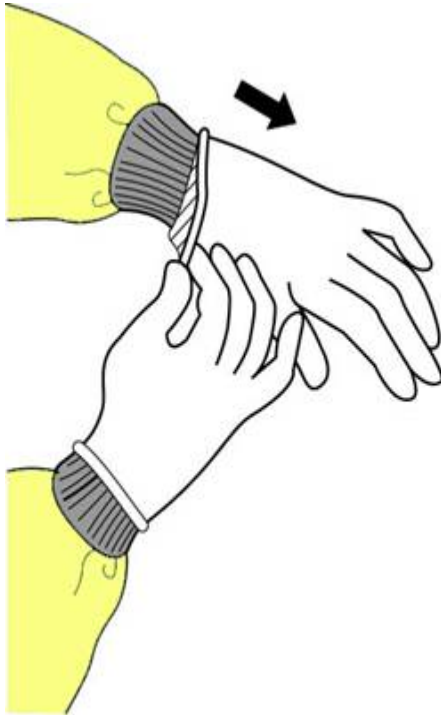
- Gloves
- Goggles or Face Shields
- Gown
- Mask or Respirator

Where to Remove PPE

- At doorway, before leaving patient room or in anteroom*
- Remove respirator outside room, after door has been closed*

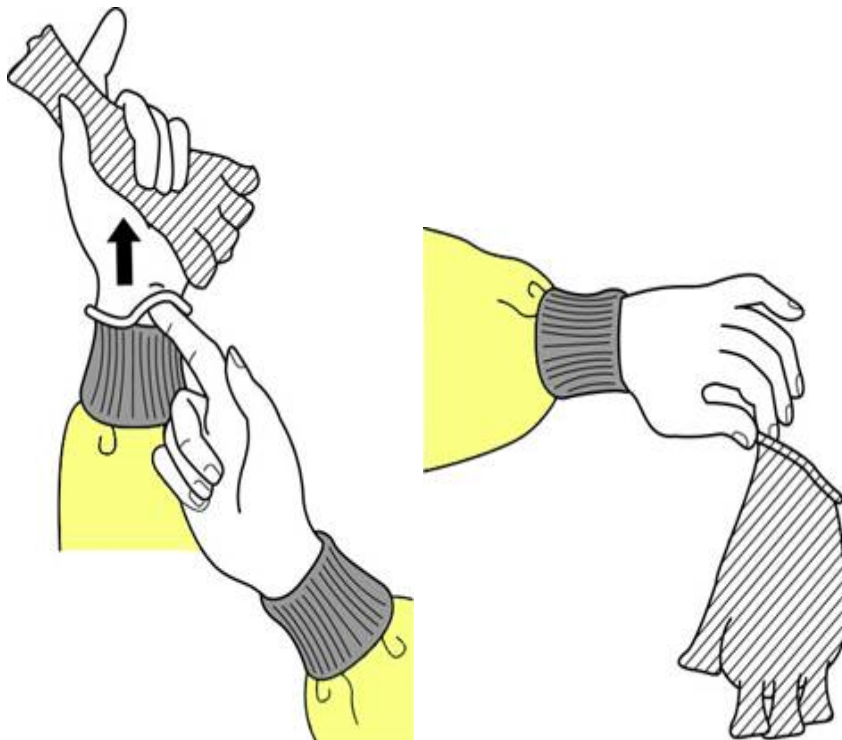
*** Ensure that hand hygiene facilities and trash receptacles are available at the point needed, e.g., sink or alcohol-based hand rub**

Remove Gloves (1)



- **Grasp outside edge near wrist**
- **Peel away from hand, turning glove inside-out**
- **Hold in opposite gloved hand**

Remove Gloves (2)



- Slide ungloved finger under the wrist of the remaining glove
- Peel off from inside, creating a bag for both gloves
- Discard

Remove Goggles or Face Shield



- Grasp ear or head pieces with ungloved hands
- Lift away from face
- Place in designated receptacle for reprocessing or disposal

Removing Isolation Gown



- Unfasten ties
- Peel gown away from neck and shoulder
- Turn contaminated outside toward the inside
- Fold or roll into a bundle
- Discard

Removing a Mask



- Untie the bottom, then top, tie
- Remove from face
- Discard



Removing a Particulate Respirator

- Lift the bottom elastic over your head first
- Then lift off the top elastic
- Discard



Summary

- The correct order of donning and removing PPE is key to protecting yourself and coworkers from contamination.
- Expanded precautions are used to supplement the standard precautions that should be practiced on all patients.
- Make it a habit to practice the correct sequence of PPE donning and removal as drills to make it second nature.

One More Time...

- You are being called to examine a febrile, coughing patient in the exam room who has a rash that might be measles.
- The recommended PPE to wear are in front of you:
 - Gloves, gowns, mask
 - Eye protection