

The Basics of Standard Precautions



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Learning Objectives

Identify the key principles of Standard Precaution in health care environments

Describe appropriate and effective personal protective equipment (PPE) use



Preventing Transmission with Standard Precautions

Infection prevention practices used to avoid the transmission of infectious agents

One of the most important strategies to prevent transmission of infectious agents

First line of defense to break the chain of infection

Effectiveness of Standard Precautions depends on how well steps are followed

(Siegel JD, CDC Guidelines for Isolation Precaution, 2007)



Standard Precautions

Used with any patient, regardless of their known or suspected infection status

Assumes any patient's blood or body fluid may be infectious

Consider what type of infection control practices should be used based on the level of anticipated contact with the patient

(Siegel JD, CDC Guidelines for Isolation Precaution, 2007)



Key Points About Personal Protective Equipment Use

Selection of PPE is based on the nature of the patient interaction and potential for exposure to infectious material

Put on (don) PPE prior to coming into contact with the patient

Be aware of self-contamination when PPE is used

Perform hand hygiene after PPE removal

(Siegel JD, CDC Guidelines for Isolation Precaution, 2007)



Glove Use in Standard Precautions

Wear gloves when anticipating contact with a patient's:

- Blood or body substances (i.e., fluids or solids)
- Mucous membranes (e.g., nasal, oral, genital area)
- Non-intact skin (e.g., wound or surgical incision)
- Insertion point of a patient's invasive or indwelling device

(Siegel JD, CDC Guidelines for Isolation Precaution, 2007)

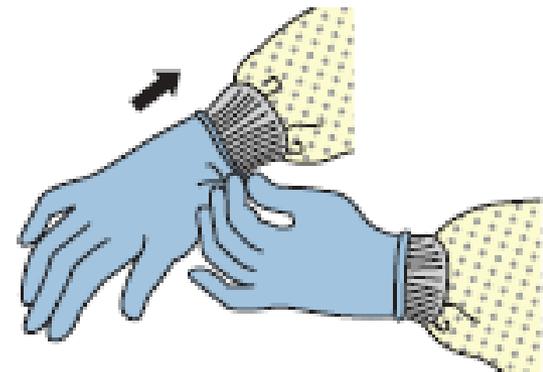


Donning Gloves

Select correct type of glove and size

Extend to cover wrist, over isolation gown if worn

Sequence of PPE donning, ***gloves are often the last item to be put on***



(CDC, Sequence for Personal Protective Equipment, <https://www.cdc.gov/hai/pdfs/ppe/ppe-sequence.pdf>)

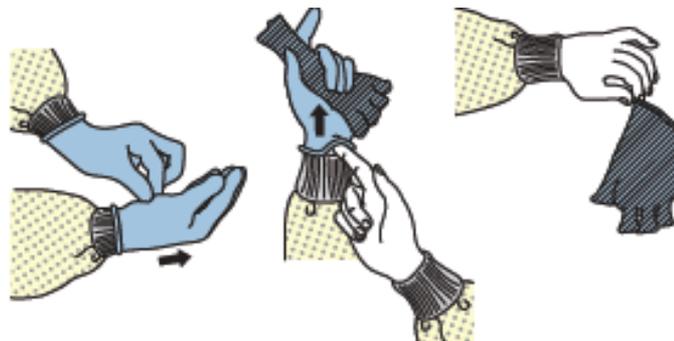


Doffing Gloves

There are a variety of ways to safely remove gloves, one option is:

- With the gloved hand, grasp the palm area of the other gloved hand and peel off
- Hold removed glove in gloved hand; slide fingers of ungloved hand under remaining glove at wrist, peel off and discard

Sequence of PPE doffing, **gloves are *usually the first item to be removed***



(CDC, Sequence for Personal Protective Equipment, <https://www.cdc.gov/hai/pdfs/ppe/ppe-sequence.pdf>)



Gown Use in Standard Precautions

Wear when contact between clothing or skin with patient blood or body substances is expected.

For example:

- Contact with patient's non-intact skin (e.g., wounds)
- During procedures likely to generate a splash or spray of blood or body fluid
- Handling containers or patient fluids likely to leak, splash or spill

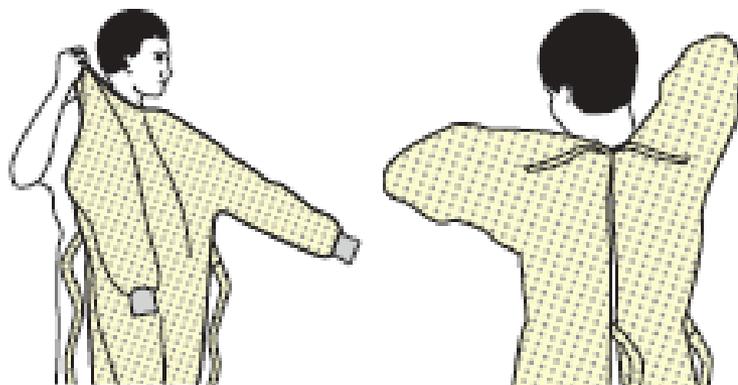
(CDC, *Sequence for Personal Protective Equipment*, <https://www.cdc.gov/hai/pdfs/ppe/ppe-sequence.pdf>)



Donning Gowns

Gowns should cover the torso, the legs to the knees, the arms to end of wrist and wrap around the back

Slide gowns on with the opening at the back, fasten around the back of the neck and the waist



(CDC, Sequence for Personal Protective Equipment, <https://www.cdc.gov/hai/pdfs/ppe/ppe-sequence.pdf>)



Doffing Gowns

Unfasten gown

Pull away from neck and shoulders, touching inside of gown only

Turn gown inside out

Fold or roll into a bundle and discard

Remove gown and perform hand hygiene before leaving the patient's environment (e.g., exam room)

Do not wear the same gown between patients



(CDC, Sequence for Personal Protective Equipment, <https://www.cdc.gov/hai/pdfs/ppe/ppe-sequence.pdf>)



Face Mask and Eye Protection Use in Standard Precautions

Wear when anticipating potential splashes or sprays of blood/body substances during patient care

Face Masks—protect nose and mouth

Goggles—protect eyes

Face shields—protect face (i.e., nose, mouth and eyes)

Personal eyeglasses and contact lenses are *not* considered adequate eye protection

(CDC, Sequence for Personal Protective Equipment, <https://www.cdc.gov/hai/pdfs/ppe/ppe-sequence.pdf>)



Donning a Face Mask or Respirator

Secure ties or elastic bands at middle of head and neck

Flexible band should fit to bridge of nose

Face mask should fit snug to face and below chin

Fit-check respirator



(CDC, *Sequence for Personal Protective Equipment*, <https://www.cdc.gov/hai/pdfs/ppe/ppe-sequence.pdf>)



Doffing a Face Mask or Respirator

Grasp bottom ties or elastics of the face mask/respirator, then the ones at the top, and remove without touching the front

Discard in waste container



(CDC, *Sequence for Personal Protective Equipment*, <https://www.cdc.gov/hai/pdfs/ppe/ppe-sequence.pdf>)



Donning and Doffing Goggles and Face Shield

Don:

- Place over face and eyes and adjust to fit



Doff:

- Remove from the back by lifting the head band over the ear piece
- Place in designated area for reprocessing or disposal



(CDC, *Sequence for Personal Protective Equipment*, <https://www.cdc.gov/hai/pdfs/ppe/ppe-sequence.pdf>)



Key Points of PPE Removal

The key for PPE removal is to limit opportunities for environment and self-contamination

Outside front of the PPE is the area most likely to be contaminated

Perform hand hygiene after PPE removal

An example sequence of doffing PPE is as follows:

- Gloves
- Face shield/goggles
- Gown
- Face Mask

(CDC, Sequence for Personal Protective Equipment, <https://www.cdc.gov/hai/pdfs/ppe/ppe-sequence.pdf>)



Scenario 1

You are working in your hospital's emergency department and you enter a room to assess a patient who has fallen from a bicycle. You see that the patient has a 2-inch arm laceration that is oozing blood. Before cleaning the wound, what PPE should you do?

- Gloves



Scenario 2

You are working in your hospital's emergency department and you enter the trauma room to assist with the irrigation of a large, actively bleeding thigh wound of a patient who has been in a motor vehicle accident. What PPE would you anticipate using?

1. What PPE would you anticipate using?
 - Gloves, gown, mask/goggles or face shield
2. What's the sequence for donning these items?
 - Gown
 - Face Mask/Goggles or face shield
 - Gloves
3. What's the sequence for doffing?
 - Gloves
 - Face Mask/Goggles or face shield
 - Gown
4. What might happen?



Standard Precautions –Key Points

Standard Precautions are infection prevention practices used to avoid the transmission of infectious agents

Standard Precautions are used with any patient, regardless of known or suspected infection status

PPE is selected based on the nature of patient interaction and anticipated exposure to blood or bodily fluids

Effectiveness of Standard Precautions depends on how well each step is followed



References

Respiratory Hygiene/Cough Etiquette in Healthcare Settings. Centers for Disease Control and Prevention. Available at <https://www.cdc.gov/flu/professionals/infectioncontrol/resphygiene.htm>

Sequencing for Personal Protective Equipment (PPE). Centers for Disease Control and Prevention; CS250672-E. Available at <http://www.cdc.gov/hai/pdfs/ppe/ppe-sequence.pdf>

Siegel JD, Rhinehart E, Jackson M, et al. 2007 Guideline for Isolation Precautions: Preventing Transmission of Infectious Agents in Healthcare Settings. Centers for Disease Control and Prevention. Available at <http://www.cdc.gov/hicpac/pdf/isolation/isolation2007.pdf>



Speaker Notes



Speaker Notes: Slide 1

Welcome to this module titled “The Basics of Standard Precautions.” We will review the critical role of Standard Precautions as a foundation for preventing healthcare-associated infections (HAIs).



Speaker Notes: Slide 2

This module was developed by national infection prevention experts devoted to improving patient safety and infection prevention efforts.



Speaker Notes: Slide 3

This module will identify key principles of Standard Precautions in healthcare environments and describe appropriate and effective personal protective equipment, or PPE, use. Understanding these two core objectives will set the groundwork to improve the culture of safety related to infection prevention in your health care organization.



Speaker Notes: Slide 4

It's not uncommon to see patients with infections in healthcare settings. Standard Precautions are infection prevention practices used to avoid the transmission of infectious agents, or harmful microbes by Healthcare Personnel and others. Standard Precautions are one of the most important strategies to prevent disease transmission. So, how well do Standard Precautions work to prevent the transmission of disease? Well, that will greatly depend on the healthcare worker's adherence to the steps involved in Standard Precautions.



Speaker Notes: Slide 5

Standard Precautions assumes that all patients have potentially infectious blood and body fluids. In addition, Standard Precautions adds the focus on preventing Healthcare personnel from acting as vectors for Health care associated infections (HAI) pathogens. Healthcare personnel choose PPE based on the nature and type of anticipated contact with each patient. Healthcare personnel do this several times a day without giving it much thought. An experienced healthcare worker will be able to quickly determine what PPE is needed, gathering that equipment before coming into contact with the patient or performing a task.



Speaker Notes: Slide 5 Continued

An example would be wearing gloves prior to performing a blood draw. The likelihood of coming into contact with patient blood would be high during venipuncture and gloves offer an enhanced level of protection for individuals performing that task. Afterwards hand hygiene prevents the healthcare provider from spreading pathogens to the environment or their next patient.

This module focuses on proper PPE selection and use in Standard Precautions.



Speaker Notes: Slide 6

Selection of appropriate PPE is based on what type of interaction is planned or expected. As a reminder, infectious material can include secretions and excretions, and may be solid or liquid. The putting on or “donning” of PPE should be done before coming into contact with the patient or situation. If PPE becomes contaminated during the course of patient care, healthcare personnel must be cautious not to contaminate themselves or their surroundings. Removal and replacement of PPE may be needed if it is grossly contaminated during patient care.



Speaker Notes: Slide 6 Continued

And remember PPE, specifically glove use, is not a substitute for proper hand hygiene. While PPE use is extremely effective at disrupting the chain of infection, it does not guarantee 100 percent protection from contamination. There is a chance of inadvertent self-contamination during the removal of PPE. That is why appropriate hand hygiene should be performed immediately following PPE removal.



Speaker Notes: Slide 7

Gloves are the most commonly worn piece of PPE. Examples of when gloves must be worn are shown on this slide. Besides blood and body fluids, mucous membranes, non-intact skin and the insertion area of a patient's invasive device should only be touched with gloved hands. Gloves should also be worn if the patient's surroundings or environment are contaminated. Different types of gloves may be available and should be chosen based on the planned activity. For Standard Precautions we are discussing non sterile examination gloves. Other activities, such as environmental cleaning might require different types of gloves (e.g., heavy cleaning gloves).



Speaker Notes: Slide 8

For most encounters requiring glove use, a single pair of non-sterile gloves made of vinyl, nitrile or latex are worn. It's important to select the size that best fits the healthcare worker—not too tight to be uncomfortable and possibly tear, and not too loose that they reduce dexterity and potentially increase exposure risk. If gloves are worn with a PPE gown, the gloves should extend over the gown cuffs. Although they are the first item of PPE discussed here, they are often the last piece of PPE to be donned if other PPE are worn.



Speaker Notes: Slide 9

Removing, or doffing gloves must be done carefully to prevent contamination of the hands. There are a variety of ways to safely remove gloves and other PPE. One option is for the healthcare worker to grasp the palm area of one gloved hand with the other gloved hand and peel it off carefully. The other glove will be held in the remaining gloved hand. The ungloved-hand finger will be slid under the remaining glove at the point of the wrist, and then peel off the glove. The gloves can then be rolled together and discarded into a waste container. Gloves will usually be the first item to be removed.



Speaker Notes: Slide 10

Gowns should be used if there is a risk of contamination to healthcare worker clothing or skin. For the purpose of Standard Precautions, non-sterile gowns are used. Examples of when a gown would be appropriate to don would be a procedure during which clothing may come into contact with a patient's non-intact skin, during procedures when splashes or sprays could occur, or when handling containers of patient fluids when leaking or spilling could happen, such as disposing of the contents in a bedpan.



Speaker Notes: Slide 11

Gowns should cover the torso and be secured behind the body allowing free movement with sleeves that fit snugly at the wrist. The material of the gown should be selected based on whether fluid penetration is likely; if there is a chance of this happening, a fluid-resistant gown should be chosen. Gowns should be secured at the back of the neck and waist. If the gown isn't large enough to provide coverage, it's recommended to wear the first gown with opening in the front and second gown over the first, with the opening toward the back.



Speaker Notes: Slide 12

Gowns should be carefully unfastened and removed without touching the outer surface, slowly pulling away from the face. Remember to always remove and discard a gown before leaving the patient's environment, which is usually near the point of exit. A gown should not be worn in hallways or corridors, or between patients, as pathogens can be transferred on the gown from one patient to another. When doffing the gown after use, remember that gloves are typically removed first. However, as an alternative you can doff gloves and gown together.



Speaker Notes: Slide 13

Next we will discuss the use of mask and eye protection in Standard Precautions. Face and eye protection will help to prevent splashes or sprays from reaching susceptible mucous membranes of the face. Face masks, goggles, and face shields (with or without a combined face mask) offer different levels of protection to the healthcare worker's nose, mouth and eyes. The decision to use a face mask to protect the nose and mouth with goggles to protect the eyes; or a face shield to protect the whole face should be based on the expected exposure. For example, a full face shield without a mask might not be sufficient if splashing from below is likely (e.g., when emptying a bucket of waste water).



Speaker Notes: Slide 14

Face masks may have ties or elastic bands. Ties should be secured at the middle of the back of the head and the neck. Elastic bands should be separated and stretched around the head to cover the nose, mouth and chin. It's important that the flexible band is pressed to form over the nose. This will allow for a better fit by preventing gaps in the mask. The mask should fit snug to the face and below the chin. A particulate respirator, such as an N95 used during Airborne Isolation Precautions also functions as a barrier to splashes to the nose and mouth.



Speaker Notes: Slide 15

Remove the face mask by grasping the ties or elastic bands and lifting the face mask away from the face. The bottom tie or elastic bands should be lifted over the head first, followed by the top elastic. It's then discarded into a waste container. After handling the used face mask, perform Hand Hygiene.



Speaker Notes: Slide 16

Goggles provide protection to the eyes; a face shield will offer protection to the entire face. These should be secured with the attached ear pieces or headband. It's important that they fit comfortably to avoid touching or readjustment during patient care. To remove goggles or a face shield, the ear or forehead pieces should be lifted away from the face and placed into a designated area for reprocessing or disposal.



Speaker Notes: Slide 17

The sequence for doffing PPE is meant to limit the chances for self-contamination.

It's very important to realize which areas of PPE are at greatest risk to become contaminated. What is most likely to become contaminated during PPE use? Besides gloves, the outside front and sleeves of the isolation gown and the outside front of the goggles, face mask and face shield at most risk of being exposed. After PPE removal, hand hygiene must be performed with soap and water or alcohol-based hand rub.



Speaker Notes: Slide 17

Since healthcare personnel hands have the greatest potential to become contaminated, gloves are usually removed first. The face shield or goggles are often the next to be removed as they may interfere with removal of other PPE, followed by the gown and then face mask or respirator. However, the gown and gloves are sometimes doffed together.



Speaker Notes: Slide 18

Before we wrap up our discussion about Standard Precautions and PPE let's work through two examples to illustrate some of the key points highlighted during this module.

You are working in your hospital's emergency department and you enter a room to assess a patient who has fallen from a bicycle. You see that the patient has a 2-inch arm laceration that is oozing blood. Before cleaning the wound, what PPE should you don?

When anticipating potential contact with blood or bodily fluids—in this case blood—gloves must be worn.



Speaker Notes: Slide 19

For our second example, you have been asked to assist with the bedside irrigation of a large wound. What PPE would you anticipate using?

- For this procedure you would plan on using gloves, gown and a face mask and goggles or face shield.

Now that you know which PPE to use, what is the correct sequence for donning these items?

- First, you would put on the gown, followed by the face mask and goggles or face shield and put on the gloves last.



Speaker Notes: Slide 19 Continued

After you assist with the wound irrigation, in which sequence should you doff these PPE?

- Your gloves are most likely to become contaminated, so they should be removed first, followed by the face mask and goggles or face shield and then by the gown.

Lastly, the possibilities include splashing direct contact with blood and body fluids



Speaker Notes: Slide 20

As we conclude this module, let's highlight the following key points about Standard Precautions and personal protective equipment use. Standard Precautions are infection prevention practices used to disrupt the transmission of infectious agents, and they should be used with any patient, regardless of known or suspected infection status. PPE is selected based on the nature of patient interaction and the anticipated exposure to blood or body fluids. Lastly, the effectiveness of Standard Precautions depends on how well each step is followed by healthcare personnel.



Speaker Notes: Slide 21

No notes.

