

ELEMENT IV
SELECTION AND USE OF BARRIERS AND/OR PERSONAL PROTECTIVE EQUIPMENT
FOR PREVENTING PATIENT AND HEALTHCARE WORKER CONTACT WITH
POTENTIALLY INFECTIOUS MATERIAL

LEARNING OBJECTIVES

Upon completion of course work or training on this element, the learner will be able to:

- Describe the circumstances that require the use of barriers and personal protective equipment to prevent patient or healthcare worker contact with potentially infectious material; and
- Identify specific barriers or personal protective equipment for patient and healthcare worker protection from exposure to potentially infectious material.

DEFINITIONS

Personal protective equipment (PPE): Specialized clothing or equipment worn by an employee for protection against a hazard.

Barriers: Equipment such as gloves, gowns, aprons, masks, or protective eyewear, which when worn, can reduce the risk of exposure of the health care worker's skin or mucous membranes to potentially infective materials.

CONTENT OUTLINE

I. Types of PPE/barriers and criteria for selection.

A. Gloves:

1. Types (sterile, non-sterile, utility);
2. Material (e.g., natural rubber latex, vinyl, nitrile).

B. Cover garb:

1. Types (gowns, aprons, laboratory coats);
2. Characteristics (fluid impervious, fluid resistant, permeable);

C. Masks:

1. Types (surgical, procedure, particulate respirators)

D. Face shields.

E. Eye protection (goggles, safety glasses).

II. Choosing PPE based on reasonably anticipated interaction:

A. Potential contact with blood or other potentially infectious material via:

1. Splashes;
2. Respiratory droplets;
3. Airborne pathogens.

B. Volume of fluid expected (minimal, large volumes).

III. Choosing barriers/PPE based on intended need:

A. Patient safety:

1. Sterile barriers for invasive procedures;
2. Masks for the prevention of droplet contamination.

B. Employee safety:

1. Barriers for prevention of contamination.
2. Masks for prevention of exposure to communicable disease.

IV. Guidance on proper utilization of PPE/barriers:

A. Proper fit (including fit-testing for particulate respirators);

B. Integrity of barrier;

C. Disposable versus reusable;

D. Potential for cross-contamination if not changed/properly reprocessed between patients;

E. Implications of over/under utilization;

F. Supply availability and accessibility;

G. Appropriate user education: Selection, donning, doffing, and disposal.