

Personal Protective Equipment: Caps and Eyewear

THE HUMAN HEAD has several pathways to transmit disease. For instance, some areas on the head can share and receive infection. Yet caps and eyewear serve to protect health care workers and patients against the spread of infection.



Objective:



Describe the use of caps and eyewear for infection control.

Key Terms:



caps
doffing
donning
face shields
goggles
mask

Infection Control Using Caps and Eyewear

The human head can transmit diseases. As mentioned above, certain areas on the head can share and receive infection. List the locations. Can you name the types of protection used to prevent transmission? Fortunately, there are different types of protective caps and eyewear.

CAPS AND EYEWEAR FOR INFECTION CONTROL

Caps are usually cotton head coverings secured to the head and hair to prevent them from falling off. They prevent the spread of microorganisms by restricting how much the hair of

health care workers is allowed to “swing.” Caps also protect patients, the health care workers’ face and clothing, other workers, and inanimate objects from aerosols and other agents that may lodge on the hair and be transferred via clothing, the face, and hands. Caps protect the hair and head against splashes from patients’ vomit, blood, and other body fluids. The hair of health care workers must be confined at all times.

Eyewear helps with infection control via the eyes. Eye protection is worn during patient care activities that are likely to generate splashes or sprays of blood, body fluids, secretions, or excretions. Eye protection provides a barrier to infectious materials entering the eye and is often used in conjunction with other personal protective equipment (e.g., gloves, gowns, and masks or respirators). Two types of protective eyewear are goggles and face shields.



FIGURE 1. Caps protect patients, the health care workers’ face and clothing, other workers, and inanimate objects from aerosols and other agents that may lodge on the hair and be transferred via clothing, the face, and hands.

- ◆ **Goggles** are devices used to protect the eyes, eye sockets, and the facial area immediately surrounding the eyes from impact, dust, and splashes. Goggles should be used in conjunction with masks for added protection. They should fit snugly over and around the eyes. Personal glasses are not a substitute for goggles. Also, goggles with anti-fog features improve clarity.
- ◆ **Face shields** are devices that protect the face from nuisance dusts and potential splashes or sprays of hazardous liquids. A **mask** is a type of face shield that protects the nose and mouth. Masks are less-protective coverings than face shields and are often used in conjunction with goggles for added protection.



FURTHER EXPLORATION...

ONLINE CONNECTION: Practice Donning and Doffing Caps and Eyewear

Read the PPE section at http://www.reproline.jhu.edu/english/4moreh/4ip/IP_manual/05_PPE.pdf. Then with cap and eyewear supplies from your instructor, practice donning and doffing until you are comfortable with the techniques and sequences.

PROPER DONNING OF EYEWEAR

The eyes are protected with the proper eyewear. **Donning** (putting on) eyewear is often a necessary step to guarantee eye safety. Goggles should be placed over the eyes and secured to the head with the ear pieces or the headband. A face shield should be placed over the face and secured on the brow with the headband. Make sure to adjust the goggles and/or face shield to fit comfortably.



FIGURE 2. The proper donning of eyewear and face shields protects the eyes from impact, dust, and splashes as well as sprays of hazardous liquids.

PROPER DOFFING OF EYEWEAR

Doffing (removing) eyewear must be done carefully. Begin by grabbing hold of the earpieces or the headpieces with ungloved hands. Lift away from the face. Then place goggles and face shields in designated receptacles for reprocessing or disposal.

Summary:



The human head has several pathways to transmit disease. Certain areas on the head can share and receive infection. Caps are usually cotton head coverings secured to the head and hair to prevent them from falling off. Caps prevent the spread of microorganisms by restricting how much the hair of health care workers is allowed to “swing.”

Eyewear helps with infection control via the eyes. Eye protection is worn during patient care activities that are likely to generate splashes or sprays of blood, body fluids, secretions, or excretions. Eye protection provides a barrier to infectious materials entering the eye and is often used in conjunction with other personal protective equipment (e.g., gloves, gowns, and masks or respirators). Two types of protective eyewear are goggles and face shields. The proper donning and doffing technique assures safety for health care workers and patients.

Checking Your Knowledge:



1. Explain how caps prevent the spread of microorganisms.
2. Explain the difference between a mask and a face shield.
3. What feature improves the clarity of goggles?
4. What are the benefits of wearing a cap for the health care worker?
5. What is the difference between donning and doffing?

Expanding Your Knowledge:



Complete some additional research on PPEs. The Center for Disease Control (CDC) is an excellent resource for this research. However, make sure you use multiple sources for a thorough understanding of PPEs.

Web Links:



Occupational Safety and Health Administration

<http://www.osha.gov>

Center for Disease Control

<http://www.cdc.gov>

Eye Protection for Infection Control

<http://www.cdc.gov/niosh/topics/eye/eye-infectious.html>

Guidance for the Selection and Use of Personal Protective Equipment

<http://www.cdc.gov/ncidod/dhqp/pdf/ppe/PPEslides6-29-04.pdf>

Guideline for Isolation Precautions

http://www.cdc.gov/ncidod/dhqp/gl_isolation.html