

VII. INFECTION PREVENTION

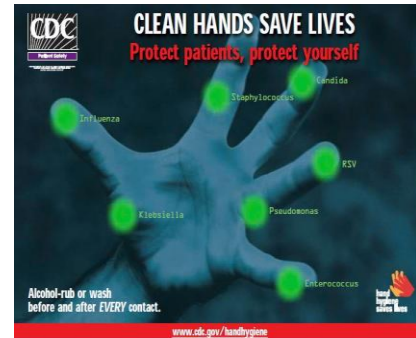
Prevention of Healthcare-Associated Infections



What is Infection Prevention?

Infection prevention is a scientific approach and practical solution designed to prevent harm caused by infection to patients and health workers. It includes infectious diseases, epidemiology, social science and health system strengthening.

Every year, lives are lost because of the spread of infections in hospitals. Health care workers can take steps to prevent the spread of infectious diseases. These steps are part of infection control. **Proper hand washing is the most effective way to prevent the spread of infections in hospitals.**



Healthcare-Associated Infection

- Sometimes, patients come to the hospital with infections. These are **community-acquired** infections.
- More often patients do not have infections when they come to the hospital. Sometimes, these patients develop infections after being treated or admitted.
- An infection that develops in the hospital or after treatment is a **Healthcare-Associated Infection (HAI)**.

Preventing Hospital Acquired Infections (HAI's)

- **To stop the spread of infection, we must break a link in the chain of infection. The weakest link is the mode of transmission.**
- This is where infection PREVENTION focuses to prevent hospital acquired infections.
- Before looking at preventing the infection through transmission what are some of the risk factors for the patient?

TRANSMISSION IN THE WORKPLACE

Bloodborne pathogens are micro-organisms such as viruses or bacteria that are present in human blood that can cause disease in humans. These pathogens include, but are not limited to:

- Hepatitis B (HBV)
- Hepatitis C (HCV)
- Human immuno-deficiency virus (HIV)
- Malaria, syphilis, West Nile virus, Ebola

Bloodborne pathogens can be transmitted when blood or OPIM is introduced into the blood stream of a person. This can happen through:

- Non intact skin (acne, scratches, cuts, bites, blisters, wounds)
- Contact with mucus membranes found in the eyes, nose and mouth
- Contaminated instruments such as needles and sharps

In addition to human blood, bloodborne pathogens can be found in other potentially infectious material such as:

- Blood products (plasma/serum)
- Saliva
- Semen
- Vaginal secretions
- Skin tissue/cell cultures
- Any body fluid that is contaminated with blood

ALL BODY FLUIDS SHOULD BE REGARDED AS POTENTIALLY INFECTIOUS!!!

METHODS TO PREVENT BLOODBORNE PATHOGEN EXPOSURE

Standard Precautions

Use standard precautions EVERY TIME you anticipate contact with blood, body fluids, secretions/excretions, broken skin and mucous membranes

Use appropriate personal protective equipment

Decontaminate spills

Personal Protective Equipment

Include: gloves, gowns, laboratory coats, face shields or masks, eye protection, mouthpieces, resuscitation bags, pocket masks, or other ventilation devices.

Housekeeping and Environmental Services

Environment maintained in clean and sanitary condition and cleaned with EPA -hospital approved disinfectants Use of appropriate cleaning agents such as bleach or antiseptic wipes that have a kill claim for HIV, Hep B and Hep C when cleaning equipment between patients (i.e.glucometers)

Sharps

Approved sharp containers that are easily accessible, upright, and not overfilled. Close immediately prior to removal. Do not open, empty, or clean manually.

Offer Hepatitis B vaccine to all employees who have the possibility of occupational exposure

Breaking the Mode of Transmission: Hand Hygiene

Alcohol Based Hand Hygiene

- Alcohol based hand gels may be substituted for hand-washing with soap and water when hands are **not** visibly soiled or contaminated with blood or body fluids.



REMEMBER: You must use soap and water when caring for a patient with *C. difficile*



Breaking Transmission: Transmission Based Precautions

- A second level of precautions is used in addition to standard precautions to prevent the spread of other infectious or drug resistant organisms. These **Transmission Based Precautions** include:
 - Contact Precautions
 - Droplet Precautions
 - Airborne Precautions

**VOLUNTEERS SHOULD NOT ENTER
PRECAUTION ROOMS!!!**

