Infection Control
Learning Objectives:

At the end of this presentation, you will be able to:

- Identify evidence-based measures to prevent and control the transmission of infection
- Identify nursing actions and the application of nursing judgment to infection prevention and control
- Discuss infection prevention and control measures
What is Infection Control?

Infection control is a term that describes ways we can prevent the spread of infection.
Why is Infection Control Important?

- Infections can cause pain, suffering and often, permanent scarring.
- Infections can also lead to hospital admissions, increasing the cost of healthcare for the client or their family.
- In the worst cases, death can occur.
How Are Infections Spread?
Each link in the chain must be present in order for infection to be spread. If one link is removed, the infection is contained.
Infectious agents are any microorganisms capable of causing illness or disease, that can be spread from person to person. Can be viruses, bacteria, fungus, or parasite. Cannot be seen with the naked eye.
Chain of Infection

Reservoir

- The reservoir is the person that is currently infected.
- They may not show signs or symptoms of being infected.
- The infectious agent depends on the reservoir for its survival.
Portal of Exit

- The portal of exit is a way for the infectious microorganism to leave the reservoir.
- May exit through the nose or mouth when someone sneezes, or in the exudate of an infected wound.
- Any substances that come from the body may be an exit.
Chain of Infection

Mode of Transmission

- The infectious agent can be spread by direct contact with infected people, by sharing food, drink, or eating utensils
- Also through coughing, sneezing, or vomiting
- May be spread on inanimate objects as well, such as telephones, keyboards, and glucometers
Portal of Entry

- The point of the body where the microorganism enters the host
- May be through the nose or mouth, but also through breaks in skin, or punctures
- Frequent portal of entry for UTI’s is through contaminated urinary catheters
The host must be susceptible to the microorganism to become infected.

Once in the body, the agent multiplies, overwhelming the immune system and causing an infection.

After infection occurs, the chain is complete and the host becomes the reservoir.
Infection Prevention and Control:
Standard Precautions

- Designed to reduce the risk of transmission of infectious agents
- Basic, minimum level of infection control precautions
- To be used on all patients all the time
- Includes hand hygiene, personal protective equipment (PPE), and respiratory hygiene/cough etiquette
Standard Precautions
Hand Hygiene
The simplest and most effective practice for reducing contamination and the spread of infection is proper hand hygiene.

- Soap and water or alcohol-based hand rubs may be used.
- Use soap and water if hands are visibly dirty and after using the restroom, or if certain spore-forming bacteria such as C-diff are suspected or confirmed.
Thorough hand hygiene should be performed:

- At the beginning and end of each shift
- Before and after patient contact
- Before and after food preparation, and after eating
- After coughing, sneezing, or touching your face or hair
- After removing gloves
- After using the restroom
Standard Precautions
Personal Protective Equipment (PPE)
Standard Precautions
Personal Protective Equipment (PPE)

- PPE includes all supplies and equipment designed to assist in the prevention of spreading contamination between the patient, nurse, and surfaces
- Non-sterile gloves, fluid-resistant gowns, masks, and eye-protection are all PPE
- Assess the risk of exposure to body substances or contaminated surfaces before any health-care activity
Clean non-sterile gloves for any activity in which the hands may come in contact with body fluids, or other potentially contaminated substances

Mask, and/or eye protection for activities that may involve splashes or sprays of blood, body fluids, secretions, or excretions

Clean, non-sterile fluid resistant gown to protect your body during activities that may involve splashes or sprays
Person with respiratory symptoms should cover their nose and mouth with tissue or a mask when coughing/sneezing
Dispose of used tissues and masks in trash
Perform hand hygiene after contact with respiratory secretions
To protect yourself from blood borne pathogens including Hep B, Hep C, and HIV:

- Use Standard Precautions
- Use PPE and Engineered Safety Devices (this includes syringes with built-in needle covers) appropriately
- NEVER recap needles
- Dispose of all sharps in appropriate container
- Have accurate information on blood borne pathogens by completing the Blood Borne Pathogen module of your annual review
The nurse is preparing to do an intermittent cath on a trached and vented patient that just started antibiotics for pseudomonas pneumonia. She has just gotten her gloves on when the patient asks to be suctioned. The nurse suctions the patient’s trach, and returns to her previous task. Her gloves do not appear visibly soiled, so she decides not to waste a pair. She performs the cath, and inadvertently gives the patient a UTI of guess what? PSEUDOMONAS!!!!
Scenarios:
What did the nurse do wrong?

By not changing gloves and performing hand hygiene between activities, she cross-contaminated the patient. Never go from dirty to clean without good hand hygiene between activities.
Disposal of Biohazardous Waste

- Biohazardous waste describes waste that has been contaminated with blood or body fluids
- Should be disposed of in appropriate containers/bags in accordance with OSHA and CDC guidelines
- Needles and disposable sharps in approved puncture proof container
- Not to go out with ordinary trash
Infection Control is a set of practices designed to limit and help prevent the spread of infection

As important in the home setting as in the hospital

Proper hand hygiene is the simplest and most important infection control practice!

Use PPE to protect yourself while being potentially exposed to blood or other body fluids
Click the Link Below to Take the Test

Infection Control Quiz
References

- PHI Clinical Policy N–130 Hand washing
- PHI Clinical Policy N–100 Standard Infection Control Procedures for Home Care