



INFECTION CONTROL AND PREVENTION



Learning Objectives

- Describe the basic concepts of infection control and why it is important
- Identify various infectious illnesses and diseases and how they are transmitted from one person to another
- Apply standard and transmission-based precautions to prevent the transmission of various infectious illnesses and diseases



In long-term care, the most common infections are urinary tract, respiratory, and skin and pressure injury infections (Centers for Medicare & Medicaid, 2017). The chain of infection is a sequence of events that allows infections to be transmitted. Breaking any of the links in this chain will help stop the spread of infection. If you know how to break the chain of infection, you can help save lives!

It is important to be familiar with some terms associated with the chain of infection for better understanding. Each term can be thought of as a *link* in the chain of infection, according to the CDC (2012)

Infectious agents are microorganisms capable of causing illness or disease

Chain of Infection

Infectious Agent:

- Bacteria
- Viruses
- Fungi
- Parasites



Chain of Infection

- Reservoir
- Portal of Exit
- Method of Transmission
- Portal of Entry
- Susceptible Host



Types of Transmission

- Contact transmission is spread through contact with the infectious agent.
 - MRSA and VRE
 - Herpes simplex virus
 - Scabies
 - C. Diff
 - Rotavirus
- Contact precautions are used to prevent the transmission of illnesses easily spread through contact with residents or contaminated items in their environment
- Direct Transmission is transmitted from person to person through direct contact.
 - MRSA
 - VRE
 - Infectious Mononucleosis
 - Gonorrhea
- Direct contact occurs when performing resident care activities when your hands come into contact with a residents' non-intact skin, mucous membranes, or body fluids.
- Droplet transmission is also considered direct transmission and includes coughing, sneezing, or even talking



Indirect Transmission

- Occurs when an infection is transmitted through a contaminated object or person.
 - Thermometers
 - Telephones
 - Light switches
 - Television remotes
 - Toilet handles
- Airborne Transmission occurs through tiny droplets or particles floating in the air which are inhaled by another person.
 - Chicken pox
 - Tuberculosis
 - Measles



- Every day, people encounter any number of harmful pathogens such as bacteria, viruses, fungi, and parasites, which, given the right circumstances, can result in an infection or illness. Certain types of harmful pathogens are called bloodborne pathogens.
- Bloodborne pathogens are transmitted via contact with blood or other potentially infectious fluids, such as semen, saliva, and other body fluids. Exposure to a bloodborne pathogen occurs when blood or other potentially infectious materials come into contact with non-intact skin or mucous membranes, such as the eyes, nose, or mouth.

Bloodborne Pathogens

- HIV/AIDS
- Hepatitis B
- Hepatitis C



Exposure to bloodborne pathogens is of critical concern for healthcare workers. As such, the Occupational Safety and Health Administration (OSHA) requires all healthcare organizations to have a plan in place to prevent their employees from exposure to these pathogens. This is called an Exposure Control Plan. This plan will outline:

- An employee's risk for exposure
- Methods taken to reduce this risk
- Response if an exposure occurs

As a healthcare worker, it is vital that you know about your organization's Exposure Control Plan. Plans can and do differ between organizations. Take a moment to locate your organization's Exposure Control Plan. Can't find it? Don't be shy – the Plan is for YOUR protection. Ask your supervisor about this plan and any elements of it about which you are unsure.



- Standard Precautions
- Transmission Based Precautions
 - Contact
 - Droplet
 - Airborne

Infection
Prevention



Conclusion

NOW THAT YOU HAVE FINISHED REVIEWING THE COURSE CONTENT, YOU SHOULD HAVE LEARNED THE FOLLOWING:

HEALTHCARE-ASSOCIATED INFECTIONS CAN HAVE A SIGNIFICANT IMPACT ON AN INDIVIDUAL'S HEALTH, SAFETY, AND OVERALL WELL-BEING. AS A HEALTHCARE WORKER, YOU ARE RESPONSIBLE FOR ENSURING THAT YOU USE THE APPROPRIATE STRATEGIES TO PREVENT THE SPREAD OF INFECTIONS FROM ONE PERSON TO ANOTHER. NOW THAT YOU KNOW THE CHAIN OF INFECTION AND THE INFECTION CONTROL STRATEGIES THAT BREAK THE CHAIN, YOU'RE IN A BETTER POSITION TO PREVENT THE TRANSMISSION OF INFECTIOUS ORGANISMS AND POTENTIALLY PREVENT ILLNESS, DISEASE, AND EVEN DEATH.

