Section 2
What is an Infection?

Objectives
- Recognize symptoms of localized and systemic infections.
- Relate the chain of infection to the work of a care worker in an adult care home.
- Describe each link in the chain of infection.
- Explain the concept of breaking the chain of infection and its importance to infection prevention.
- Explain why residents in adult care homes are at risk for infection.

Infection Prevention
All of the things that people do to control and prevent the spread of infection.
Infection

A disease or a condition when harmful germs get into the body and grow in numbers

EXAMPLES?

Two Types
1. Localized
2. Systemic

Localized Infection

- One body part and symptoms limited
- Example - infected finger
- Symptoms - red, painful, hot, puffy, drainage

Systemic Infection

- Entire body part or system
- Symptoms are fever, chills, fatigue, nausea, vomiting, other specific symptoms
- Example?
How do you feel when someone coughs or sneezes on you?

How do you feel when someone hands you a moist, crumpled up, used tissue with yellow, thick, slimy globs of mucus on it to throw away?

What kind of symptoms do you think a female resident would have if she had...

a bladder infection?
Bladder Infection - Symptoms

- Fever and chills
- Pain when using bathroom
- Bad or strong smelling urine and might look like it contains blood
- “My urine stinks and it hurts when I have to go to the bathroom”
- Confusion and changes in behavior may occur

A Person with a Stomach Infection will Probably...

Have you ever had someone vomit on you?

Have you ever had to clean up after someone who has vomited?
How would you feel if you got the vomited liquid on your hand?
What would you do?
Would gloves be helpful?
Microorganisms
- Also called germs or pathogens
- Live almost everywhere
- Some help and others harm
- Requirements to survive?
- Examples?

Medical Asepsis
- Also called clean technique
- Used to remove or destroy microorganisms and prevent spread of infection

Host
- An animal or a person
- Used when describing infection and spread of infection
**1st Link - Infectious Agent**

- A harmful germ that causes an infection
- Can be bacteria, a virus, a fungus, or a parasite
2nd Link - Reservoir

- Place where harmful germs live, grow, and increase in number
- Can be a person, an animal, dirt, water, or other places in the environment

When reservoir is a person, some places where harmful germs may be living include:
- Blood
- The skin
- Digestive tract
- Respiratory tract

Can you look at a person and ALWAYS tell if he has an infection that can be given to you, a co-worker, or another resident?

“NO, NOT ALWAYS!”
2nd Link - Reservoir

People as Reservoirs for Harmful Germs

- 1st group – not infected
- 2nd group – infected and are showing symptoms of being sick
- 3rd group – carriers; are not showing symptoms of being sick, but can still infect you

People We Know Who Are Infected

Carriers - People Who Are Infected That We Do Not Know About

2nd Link - Reservoir

The key to prevent you, your co-workers, and your residents from getting infected is to treat everyone, EVERYONE as possible reservoirs or hiding places for harmful germs.
3rd Link – Portal of Exit

Any way that harmful germs escape from the reservoir and include:

- The nose and mouth
- The GI tract
- The skin

4th Link – Mode of Transportation

How germs travel or “get around” from place to place

THE NUMBER ONE WAY A HARMFUL GERM TRAVELS FROM PLACE TO PLACE IS BY OUR HANDS
How do our hands provide transportation for germs?

Harmful germs travel by Direct Contact with body fluids where germs live

- Blood
- Sputum
- Pus or wound fluid
- Saliva
- Stool
- Vomit

Examples of Direct Contact?

Harmful germs travel by Indirect Contact

INDIRECT CONTACT means that the harmful germs were spread by an object that had touched body fluids from an infected person

Examples of Indirect Contact?
Respiratory Hygiene/ Cough Etiquette

Infection prevention measures to decrease transmission of respiratory infection:

- Covering mouth and nose with tissue when coughing or sneezing
- Using nearest trashcan to throw tissue away
- Performing hand hygiene
- Coughing or sneezing into upper sleeve or elbow (not hands) if you do not have a tissue
- Staying at least three feet away
The key to prevent you, your co-workers, and your residents from getting infected is to treat **ALL** body fluids, every single one, as possible carriers of harmful germs.

---

**4th Link – Mode of Transportation**

Other ways that germs travel or get around from place to place.

---

**5th Link – Portal of Entry**

Any body opening on a person that allows harmful germs to enter into the body. Examples include:

- The nose and mouth
- The GI tract
- The skin
A person who does not have an infection now, but is at risk for becoming infected from harmful germs.

What are some reasons why a person's body cannot fight off an infection?

AGE
POOR NUTRITION
STRESS
CHRONIC ILLNESSES
Reasons Why a Person's Body Cannot Fight Off Infection
NO VACCINATIONS
OPEN CUTS/ SKIN BREAKDOWN
FATIGUE

Residents living in adult care homes are more likely to get an infection than other people who live in our community.

Why?
If **YOU** can break any link in the Chain of Infection, **YOU** can prevent the occurrence of new infection.