

# What is an Infection?

## Infection - Words and Meanings

### Infection

An **infection** is a disease or a condition of the body that occurs when harmful germs get into the body and grow in number.

### Germs

**Germs** are tiny living things. They live almost everywhere - both inside and outside of our bodies. Some germs help people and others (the harmful germs) cause problems or diseases.

### Host

A **host** is an animal or a person. You will often see the word **host** used when someone is talking about infection and the spread of infection.

---

### Two Types of Infection

There are two types of infections:

#### 1. Localized

#### 2. Systemic

#### **Definition of a Localized Infection**

A **localized infection** is an infection that is only found in one part of the body and symptoms are seen only at that one part of the body.

An example of a localized infection is an infected finger.

When a finger becomes infected, it may be: Red, Painful, Hot, Puffy, Drainage coming out of it

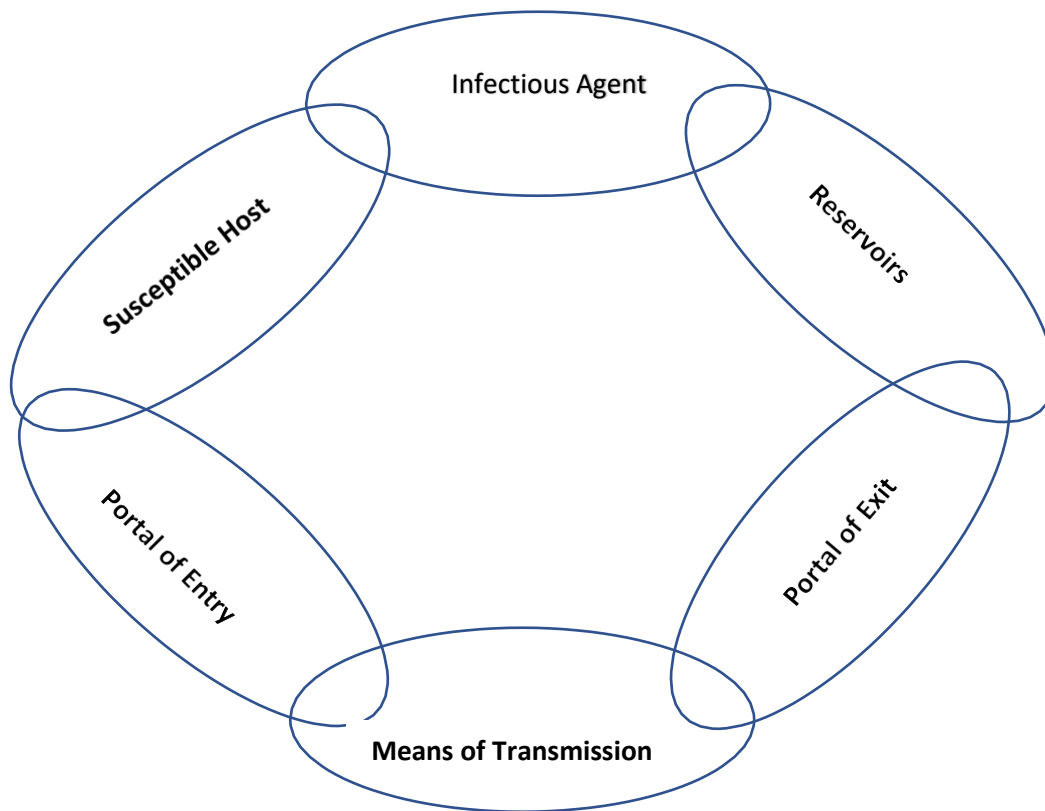
#### **Definition of a Systemic Infection**

A **systemic infection** is an infection that affects an entire body part or a whole-body system and the person will have different types of symptoms: Fever, Chills, Confusion, Feeling tired, Nausea, Vomiting. Often, people explain how an infection is passed around from one living being (or host) to another living being (or host), by using a picture of a chain. It is called **the chain of infection**. Each link of the chain stands for something (or someone) needed to pass on an infection from one to another.

# The Chain of Infection

As long as the links of the chain are joined together, an infection will be passed from one person, to another person, to another person, and so on.

Below is a picture of the chain of infection:



The first link in the chain of infection is the **infectious agent**. An **infectious agent** is a **harmful germ** that causes an infection. The **harmful germ** can be bacteria, a virus, a fungus, or a parasite. The second link in the chain of infection is the **reservoir**. A **reservoir** is the place where harmful germs live, grow, and increase in numbers. Think about it as a home of germs.

A reservoir or hiding place for harmful germs can be:

- A person
- An animal
- Dirt, water, or other places in the environment

When the reservoir is a person, some places where harmful germs may be living include:

- Blood
- Skin
- Digestive tract (mouth, stomach or intestines)

- Respiratory tract (nose, throat or lungs)

The third link in the chain of infection is the **portal of exit**. The **portal of exit** can be any way that harmful germs escape from the reservoir (where they have been living).

**Portals of Exit Include:**

- Nose and mouth (allows harmful germs to leave in mucous droplets and saliva or spit)
- Gastrointestinal tract, or the "guts" (allows harmful germs to leave in stool, or vomit)
- Skin (allows harmful germs to leave through direct contact or in blood, pus, or other liquids that come from inside of the body)

The fourth link in the chain of infection is the **mode of transmission**. The mode of transmission is how the harmful 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.** We get germs on our hands after coughing, sneezing, wiping our noses, or using the restroom and then we spread them to someone else or to an object that someone else might touch. We touch the blood, infected wound, stool, or vomit of an infected person and then we do not clean our hands properly before going to the next person we support or before touching something that someone else might touch. This is the number one way that we spread infection.

One way that harmful germs travel is by **direct contact** with body fluids where these germs live.

These fluids could include:

- Blood
- Sputum (mucous that is coughed up)
- Pus or wound fluid (from a cut or sore)
- Saliva (or spit)
- Stool (or bowel movement)

**Direct contact** includes:

- Needle sticks
- Contact with skin that has a rash, cuts or scratches
- Splash or spray to the mucous membranes of the eyes, nose and/or mouth

Another way for the person to get infected by body fluids is by **indirect contact**. **Indirect contact** means that the harmful germs were spread by an object that had touched **body fluids from an infected person**. **When another person touches the object, that person might get the infection.** Infections can be spread by lots of different objects such as dirty needles or instruments, or used bandages. They can also be spread by the hands of family members or care-givers who didn't practice good hand washing.

Some harmful germs (like the flu) can be spread or travel by way of **droplets**. Droplets are spread after being sprayed from the nose or mouth when the infected person sneezes, coughs, sings, talks, or laughs. These droplets might land on another person (direct contact), or they might land on a doorknob, railing, or other surface that another person might touch (indirect contact).

The fifth link in the chain of infection is the **portal of entry**. The **portal of entry** is any body opening on a person who does not have an infection that allows harmful germs to enter into the body.

**Portals of Entry Include:**

- Nose and mouth (when the person breathes in harmful germs)

- Gastrointestinal tract, or the "guts" (when the person eats food or drinks liquids that have harmful germs in it)
- Any breaks in the skin (that allows harmful germs to get past the skin)
- Open sore
- Cut
- Needle stick
- Cracked skin

The sixth link in the chain of infection is the **susceptible host**. A **susceptible host** is a person who does not have an infection now, but is at risk for becoming the next person to get infected from harmful germs.

# Infection Prevention

## Two Levels of Precautions in Infection Prevention

**Standard Precautions** is the **first level** of precaution used to prevent and control infections. Standard precautions mean that you must treat **ALL** body fluids, non-intact skin, and mucus membranes, as if they were infected.

### Standard Precaution Rules That You Should Follow

- **Wash your hands:** Wash, wash, wash your hands. Because hand washing is so **VERY** important in the prevention and control of infections. **The hands are the single most common way people who provide and receive direct support services pass germs back and forth. So washing your hands is the single most important thing you can do to prevent the spread of infection.**

- **Wear Personal Protective Equipment. PPE** is a group of items used to block harmful germs from getting on your skin and clothes. PPE at the day program includes gloves, that protect your skin on your hands and masks, that protect your nose and mouth. Wear gloves: **ANY** time you will or think you will come into contact with blood, body fluids, non-intact skin, or mucus membranes (linings of natural body openings). **ALWAYS** wash your hands after you take off PPE.

### Gloves

- Gloves are the most common type of PPE that you will wear while working at the day program.
- Gloves come in different sizes.
- Gloves are made using different materials, such as vinyl or latex. If you are allergic to latex, you need to wear non-latex gloves.
- Gloves should be worn once and then thrown away.
- When you wear gloves, always work from (or touch) a clean area, before you touch the contaminated area.
- Change gloves if your hands are going to move from a body part that is contaminated, to a body part that is not contaminated.

- Change gloves right away if they get dirty or tear.
- Take gloves off carefully and do not touch your skin or clothes with the dirty sides of the gloves.
- Do not touch anything with your dirty gloves that anyone may touch without gloves, like a doorknob.
- The fit should be comfortable - not too loose or not too tight.

### **Proper Glove Removal**

- Grasp outside edge near wrist.
- Peel away from hand turning glove inside-out.
- Hold in opposite gloved hand.
- Slide ungloved finger under the wrist of the remaining glove, be careful not to touch the outside of the glove.
- Peel off from inside, creating a bag for both gloves.
- Discard.
- Wash hands thoroughly.

### **Masks**

**Note:** *During the COVID-19 pandemic, wearing masks at all times while in the building is required for every person. All of the information listed below applies to masks worn during this time.*

**A mask** protects you from breathing in harmful germs through your nose and mouth. Even during non-pandemic times, wearing a mask may be needed under certain circumstances.

- Disposable masks should be worn only once and discarded immediately after use.
- **Masks should fit snugly over your mouth and nose.**
- Change mask right away if it gets wet, dirty, or tears.
- Take mask off carefully and do not touch your skin or clothes with the dirty side (the outside) of the mask.

● **Handling Sharps:** Wear gloves and be careful when using or handling anything that is sharp such as: Needles from injections, Diabetic testing equipment, Anything else that is sharp that could have touched blood or body fluids **ALWAYS** put anything sharp that has been used on in a biohazard container (needle disposal or "sharps" box) which is: only used just for sharps; hard and leak-proof; and labeled with a warning that the contents of the container are harmful.

● **Clean all surfaces.** Anytime blood or body fluids get on any surface at the day program. You must clean the surface with bleach and water solution.

**Hand hygiene** is the new term that you will be hearing about all the time in health care. The CDC, Centers for Disease Control and Prevention, defines hand hygiene as washing your hands with soap and water, or alcohol-based rubs. Alcohol-based rubs (or hand rubs) may be gels, rinses, or foams that do not need water to use.

**Hands should be washed with soap and running water:**

- If hands have visible soil on them
- After using the restroom
- After blowing your nose
- After sneezing in your hands
- After changing incontinence briefs
- After cleaning a spill of blood or other bodyfluids
- Before and after using shared medical equipment

**Alcohol hand rubs may be used:**

- Before and after eating
- Before and after handling food
- Before and after routine care of people we support

**Proper handwashing includes:**

- Removal of rings and watches before washing
- If hands-free paper towel dispenser is not available, get your paper towels before washing
- Wet your hands
- Apply soap
- Rub your hands together for 10-15 seconds being sure to wash all surfaces (backs of hands, wrists, between fingers and under nails)
- Rinse well
- Dry hands, turn off water, and open door with paper towel.
- Throw paper towel in the trash can.

---

**Transmission Based Precautions** are the **second level** of precautions used to prevent and control infections.

**The three types of transmission based precautions are**

- Airborne Precautions;
- Droplet Precautions; and
- Contact Precautions .

**Airborne Precautions**

- Prevent the spread of harmful germs that travel in air at a distance.
- Harmful germs can float around for a while and can be carried by dust, moisture, and air currents.
- PPE - follow Standard Precautions

### **Droplet Precautions**

- Prevent the spread of harmful germs that travel by droplets in the air.
- Droplets usually do not go farther than three feet, but could travel farther.
- Droplets are spread when an infected person coughs, sings, sneezes, or laughs.
- PPE - follow Standard Precautions

### **Contact Precautions**

- Prevent the spread of harmful germs spread by direct contact.
- PPE - follow Standard Precautions

**Note:** *Social distancing is being practices at all times as practical during programming hours. Staff will continue to assist with the needs of the folks we support as needed.*

### **Housekeeping**

**Note:** *Additional cleaning regimes are implemented during the COVID-19 pandemic and may be updated as needed. Staff are required to follow all cleaning and hygiene practices implemented and to be aware of changes in those procedures as they are announced.*

A clean environment is important in the prevention of infection. Routine cleaning is important to make sure that you have a clean and dust-free environment. There could be harmful germs present in dirt that can be seen and regular cleaning helps to get rid of these germs.

- Clean surfaces (floors, walls, tabletops) regularly.
- Clean and disinfect high-touch surfaces more often. These include door knobs, hand rails, light switches, and surfaces in and around toilets.

## **MSS INFECTIOUS & COMMUNICABLE DISEASE POLICY**

Morgan Support Services shall comply with NC Statute 27G 0201.i by developing and implementing procedures for identifying, reporting, investigating, and controlling infectious and communicable diseases of the people we employ and those we support.

An infectious and/or communicable disease is carried by microorganisms and can be transmitted through people, animals, surfaces, foods, or air. They often rely on fluid exchange, contaminated substances, or close contact to travel from an infected carrier to a healthy individual. The Center for Disease Control and Prevention ([www.cdc.gov](http://www.cdc.gov)) has identified the following as common infectious/communicable diseases:

- Conjunctivitis (Pink eye)
- Diphtheria (upper respiratory infection)
- Herpes simplex
- Meningococcal infections
- Pertussis (Whooping cough)
- Streptococcal infection
- Zoster
- Enteroviral infections
- Mumps
- Rubella
- Cytomegalovirus infections
- Tuberculosis
- Viral infections
- Varicella

Throughout the time of staff employment, there may be instances that staff will be ill or deemed to have a communicable disease. This policy has been developed to identify those instances and to delineate appropriate action when they occur. These procedures will assist in ensuring the safety of the all staff, and all persons we support.

### **If staff believes to have a Communicable Disease, the following procedures should occur:**

1. Staff should notify the Program Director before being absent from work.
2. Staff should immediately report to Emergency Room, Urgent Care center or personal physician for evaluation.
3. If staff suspects having a communicable disease, direct support services should not be provided until the signs and symptoms resolve, particularly if staff is febrile.
4. Staff should not return to work if febrile, until fever has returned to normal.
5. If staff will miss a work shift due to a communicable disease a written documentation from a physician must be provided upon return. Lack of documentation may result in an unexcused absence



Please note that this training is general, and specific procedures as they relate to different settings in which the agency provides will be shared with you depending on the settings in which you are working.

If you are comfortable that you understand all of the information provided in the Infection Control training materials and know that you will be able to apply the information correctly and effectively in the course of your various job duties, proceed to this link to complete a quiz of this information:

<https://mssconfidential.online/infectioncontrolquiz>

If you have any questions at all about the material, wish to have anything clarified, or want to know more about how the information contained in the training applies to your job, you may speak to your supervisor or to Shawna Patterson prior to completing the quiz.