

## What is a Communicable Disease?

A communicable disease is one that is spread from one person to another through a variety of ways that include: contact with blood and bodily fluids; breathing in an airborne virus; or by having contact with a little bug called lice. For the most part, communicable diseases are spread through viruses and bacteria that live in blood and body fluids. For instance, hepatitis and Human Immunodeficiency Virus (HIV) are examples of infections that can be carried in blood and bodily fluids. On the other hand, tuberculosis is an airborne disease. A person with Tuberculosis (TB) can spread tiny germs that float in the air if they cough or sneeze without covering their nose or mouth. And, there are some communicable diseases like head lice that are caused by a live lice bug that is spread by using an infected comb or wearing a hat that is infested with lice. For more information about how to reduce potential exposure to communicable diseases, see Chapter 12 on Safety. Let's take a closer look at some communicable diseases.

### Head Lice

#### Facts about Head Lice

- Adult lice are 2 to 3 mm long (about the size of a sesame seed) and brownish to grayish white in color.
- Lice crawl; they do not jump or fly.
- Head lice do not live on pets.
- Most infestations occur in children 1-12 years old.
- Primary means of transmission occurs when sharing hats, combs, clothing, etc.
- Head lice require a blood meal every 4 to 5 hours and die in 1 or 2 days when off of a person.

### How is Head Lice Spread?

Head lice can infest people of all ages and economic standing. Head to head contact or simple exchange of hats, clothing, combs and other personal items

can lead to the transmission of lice from one person to another. Head lice are contagious. If someone you know has head lice, do not panic.

- It is important to remember that no one is immune to head lice.
- Only infested household members should be treated and all on the same day.
- If you see lice walking around after treatment, do not panic. It is not unusual to see lice moving around the head after treatments. Lice control products may take a while to kill the adult lice.

### Caregiving Tips:

1. *Inspect for Lice and Nits.* Using a magnifying glass and natural light, carefully examine hair, scalp, sideburns, eyebrows, beards and mustaches of all household members for lice and their eggs, called “nits.” Nits, which are yellowish-white in color and oval shaped, can be easier to locate than lice. Nits are glued to the side of the hair shaft and can be found throughout the hair, especially at the back of the neck, behind the ears, and at the top of the head. Do not confuse nits with dandruff or hair casts (material from the hair follicles). Unlike a nit, dandruff can be flicked or blown out of the hair and hair casts can slide easily along the hair shaft.
2. *Treat Affected Individuals*
  - Wash hair with a cleansing shampoo, i.e., Prell or Johnson’s Baby Shampoo, something without any type of conditioners.
  - Towel dry hair thoroughly (use a fresh towel at each stage).
  - Saturate hair with a lice/nit treatment product; for example, common over-the-counter products are NIX and RID. People with long, thick, or curly hair may have to use several bottles to saturate hair completely.
  - Leave product on the hair only for the time stated in the directions.
  - Rinse product out over sink, never in the shower. This limits exposure of pesticide to the head area.
  - Do not apply any so-called nit (egg) removers or vinegar after rinsing out the lice/nit treatment product.

- Comb out all nits with a metal fine-tooth nit comb.
- Separate the hair into 1-inch sections (as if you were setting pin curls), comb each section with metal nit comb, and pin back with a metal hair clip. This will help you keep track of what you have already combed.

### 3. Clean the Environment

- Vacuuming is the most effective tool against lice in the home. Remember to vacuum:
  - Bed & mattress
  - Pillows
  - Base board around bed
  - Couches
  - Chairs
  - Stuffed animals (tightly close in plastic bag for 2 days)
  - Back packs
  - Car seats
  - Helmets/hats
- Launder washable clothing, bed linens, blankets, pillow cases.
- Soak all hair brushes and combs in hot water for 10 minutes.
- Insect sprays often sold with lice/nit products are not recommended. They are ineffective and expose household members to pesticides unnecessarily.

## **Hepatitis**

Hepatitis is a liver disease that makes your liver swell up and stop working well. Hepatitis can be mild and last for a short time, or it can be very serious and cause liver failure and death.

### What causes Hepatitis?

Hepatitis is caused by viruses, bacteria, alcohol or drug abuse, some medicines, or serious harm to the liver. Millions of people in the U. S. have hepatitis.

## What are the different kinds of Hepatitis and how is it transmitted?

### Hepatitis A:

- By eating food and drinking water infected with Hepatitis A. This can occur when food or drinks are contaminated with feces or blood of a person infected with Hepatitis A.

### Hepatitis B:

- By having unprotected sex (sex without a condom) with someone who has Hepatitis B.
- By sharing needles with someone infected with Hepatitis B.
- Being stuck by an infected needle.
- A mother passing the virus to her child during the birthing process or breastfeeding.
- Contact with bodily fluids, blood, or open wounds of a person infected with Hepatitis B.

### Hepatitis C:

- Getting blood that is infected with Hepatitis C.
- Sharing needles with someone infected with Hepatitis C.
- Accidentally stuck by a needle infected with Hepatitis C.
- Using tools for tattoos and body piercing that are infected with Hepatitis C.
- Having unprotected sex (sex without a condom) with someone infected with Hepatitis C.
- A mother passing the virus to her child during the birthing process.
- Contact with bodily fluids, blood, or open wounds of a person infected with Hepatitis C.

### Hepatitis D: (Individuals must already have Hepatitis B)

- By sharing needles with someone infected with Hepatitis D.
- Being stuck by a needle infected with Hepatitis D.
- Having unprotected sex (sex without a condom) with a person infected with Hepatitis D.
- Contact with bodily fluids, blood, or open wounds of a person infected with Hepatitis D.

## What are the signs of Hepatitis?

The most common early signs are:

- A mild fever
- Headache
- Muscle aches
- Tiredness
- Loss of appetite
- Nausea
- Vomiting

Some individuals with Hepatitis have no signs of the disease.

**Later signs of Hepatitis are:**

- Dark-colored urine and pale bowel movements
- Pain in the stomach
- Skin and whites of eyes turn yellow (jaundice)

Other serious signs of Hepatitis can include short-term arthritis-like problems, and personality changes.

**Did you know?**

- Today, Hepatitis B, Hepatitis C, and HIV are blood infections that pose the greatest infectious disease risks to healthcare workers.
- Job-related Hepatitis infection occurs much more often than job-related HIV infection among healthcare workers.

Caregiving Tips:

**Always** use Universal Precautions when exposed to blood or bodily fluids.

## **HIV and Acquired Immune Deficiency Syndrome (AIDS)**

HIV and AIDS are viruses that affect the body's immune system. A person who is infected with HIV/AIDS is at increased risk of developing infections.

### ***HIV***

Human Immunodeficiency Virus is a virus that attacks the body's immune system.

After a person is exposed to HIV, the virus attaches itself to the body's infection fighting cells in the immune system. The virus turns the immune system cells into "virus factories," making more and more of the virus. Over time, the virus weakens a person's defenses against disease, leaving them vulnerable to many infections and cancers.

Being infected with HIV does not always mean you have AIDS. Being infected means the virus is in your body for the rest of your life. You can infect others if you engage in behaviors that can transmit HIV. You can infect others even if you feel fine, have no symptoms of illness, or don't even know you are infected.

## AIDS

AIDS is a late stage of HIV infection. It is a group of symptoms and signs of the disease that are specific to this viral infection. Most AIDS defining conditions are opportunistic cancers or infections.

## How is HIV spread?

Human Immunodeficiency Virus is transmitted when infected blood, semen, vaginal fluids, or breast milk enter the body through the mucous membranes of the anus, vagina, penis (urethra), or mouth, or through cuts, sores, or abrasions on the skin. The highest concentrations of the virus are in the blood, vaginal fluid, and semen. Anyone who is infected can transmit the virus, whether or not they have symptoms of AIDS.

### Caregiving Tips:

Individual Providers should always wear gloves to avoid contact with bodily fluids. This includes wearing gloves when putting linen or clothing soaked in bodily fluids in the hamper or washing machine. Be very cautious when handling a needle or syringe.

## **Meningitis**

Meningitis is an inflammation of the membranes that surround the brain and spinal cord. Bacteria, viruses, or fungi may cause this condition. It sometimes develops as a complication of another infectious disease. Bacterial meningitis may occur following an ear infection, a sinus infection, or in connection with a skull fracture.

The symptoms might include:

- Headache
- Fever
- Sore throat
- Stiffness of the neck
- Rash

In all forms of bacterial meningitis, the most important consideration is early detection and the use of appropriate antibiotics. Not only the patient, but also all of those exposed to the patient should be treated with antibiotics in an attempt to get rid of the germs before they spread.

During the winter months, these germs may be present in the nose and throat of perfectly healthy persons without them being aware they are carrying the germ. These healthy carriers do not get sick, but they can spread the germ to others through saliva.

Caregiving Tips: Avoid sharing drinking cups, water and soda bottles, lipstick, eating utensils, cigarettes, etc.

## **Tuberculosis (TB)**

Tuberculosis is an airborne disease caused by *Mycobacterium tuberculosis*. Although the bacteria primarily affect the lungs, TB can attack any part of the body, including the brain and internal organs.

Symptoms of active TB may include:

- Fever

- Fatigue
- Weight loss
- Persistent cough

Coughing is usually associated with TB, but may not be present at the beginning. If your Consumer has symptoms of chronic or productive cough, fatigue, and/or weight loss, it should be reported to the person's doctor or relative.

### How is TB Spread?

Tuberculosis is spread person-to-person through the air. Bacteria are released into the air when an infected person who is not taking tuberculosis medication coughs or sneezes. These droplets of respiratory secretions are then inhaled into the lungs of another individual. Prolonged exposure is normally necessary for infection to occur.

A person with active TB may remain contagious until he/she has been on appropriate treatment for several weeks. A person with TB infection, who does not have symptoms of the disease, cannot spread the infection to others.

Tuberculosis can affect anyone. People infected with HIV/AIDS or other people with weakened immune systems, active alcoholics, and individuals who are elderly are at increased risk.

The best prevention of transmission to others is early detection. A person with active TB should also prevent the spread of droplets by covering his/her nose and mouth when coughing or sneezing and properly disposing of tissues contaminated by mucous materials.

### Caregiving Tips:

- Remember to wear a mask when working with a Consumer with TB, since it is spread through the air.
- Individual Providers should remind their Consumer to cover their mouth and nose when coughing or sneezing.
- Wash your hands frequently with hot water and soap.

- Have an annual Tuberculosis Screening Test

## **Staphylococcus (Staph Infection) or Methicillin-Resistant Staphylococcus aureus (MRSA)<sup>1</sup>**

Staph is a type of bacteria. It may cause skin infections that look like pimples or boils. Skin infections caused by Staph may be red, swollen, painful, or have pus or other drainage. Some Staph (known as Methicillin-Resistant *Staphylococcus aureus* or MRSA) are resistant to certain antibiotics, making it harder to treat. The information provided on this topic applies to both MRSA and Staph.

Anyone can get a Staph infection. People are more likely to get a Staph infection if they have:

- Skin-to-skin contact with someone who has a Staph infection
- Contact with items and surfaces that have Staph on them
- Openings in their skin such as cuts or scrapes
- Crowded living conditions
- Poor hygiene

Most Staph skin infections are minor and may be easily treated. Staph also may cause more serious infections, such as infections of the bloodstream, surgical sites, or pneumonia. Sometimes, a Staph infection that starts as a skin infection may worsen. It is important to contact your doctor if your infection does not get better.

Treatment for a Staph skin infection may include taking an antibiotic or having a doctor drain the infection. People, who are given an antibiotic, should be sure to take all of the doses, even if the infection is getting better, unless their doctor tells them to stop taking it. Antibiotics should not be shared with other people or saved in order to use them later.

### **Caregiving Tips:**

- Wash your hands often or use an alcohol-based sanitizer

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<sup>1</sup> The information regarding Staph Infections and MRSA were adapted from the Department of Health and Human Services Centers for Disease Control Prevention website:  
<http://www.cdc.gov/ncidod/dhqp/pdf/ar/MRSAPatientInfoSheet.pdf>

- Keep your cuts and scrapes clean and cover them with bandages
- Do not touch other people's cuts or bandages
- Do not share personal items like towels or razors