

Understanding Common Communicable Diseases

It is important to protect yourself and your consumer from diseases that are easily spread between people.

The best ways to prevent the spread of germs are to wash hands frequently, properly disinfect surfaces with an anti-bacterial cleaning spray, and wear a mask and gloves when working with your consumer if either of you might have one of the following contagious conditions. More specific precautionary measures for common communicable diseases can be found below.

In this document:

- Cold and Flu
- Head Lice
- Hepatitis
- HIV
- Meningitis
- MRSA
- Tuberculosis

Cold and Flu

The **common cold** is an infection of the upper respiratory tract: the nose, nasal passages, and throat. There are more than 200 viruses that can cause colds. Cold symptoms usually show up two days after a person becomes infected and usually include sore throat, sneezing, and runny nose. Headache, cough, chills, and general ill-feeling may last from two to seven days. People are usually most contagious right when symptoms start. Colds can be contracted through inhalation of contaminated droplets produced when someone else coughs or sneezes, or by handling something contaminated with a cold virus (such as a door knob) and then touching the inside of the nose or rubbing the eyes.

Influenza, commonly called “the flu,” is a contagious disease caused by viruses that infect the respiratory tract, including nose, throat, and lungs. It can cause severe illness and life-threatening complications in many people including the elderly. Flu symptoms include fever, cough, sore throat, runny nose, headache, muscle aches, and fatigue. Flu viruses are spread from person to person through droplets produced while coughing or

sneezing. The viral particles in these droplets enter the mouth or nose of another person directly or by indirect contact with a contaminated object or surface. Viruses can survive on surfaces for up to eight hours.

Ways to protect against getting or spreading a cold or the flu:

- **Ask a doctor about the flu vaccine.** The flu can be prevented by an annual vaccination. It is especially recommended for people over the age of 65 years; people with chronic conditions such as diabetes, cancer, and kidney disease; and those who come in contact with these groups.
- **Wash hands properly and frequently.**
- **Cover mouth when coughing or sneezing.**
- **Be mindful when blowing nose.** Wipe noses using disposable tissues such that secretions are contained by the tissue without contaminating the hands.
- **Keep hands away from eyes and mouth.** Avoid rubbing the eyes with dirty hands, biting nails, or putting fingers in the mouth.

Head Lice

Head lice are wingless insects spending their entire life on the human scalp and feeding exclusively on human blood. 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 and do not live on pets. Most infestations occur in children 1-12 years old but anyone can be infected. The primary means of transmission occurs when sharing hats, combs, clothing, or bedding. Head lice require a blood meal every 4 to 5 hours and die in 1 or 2 days when off of a person.

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.

How to prevent against head lice:

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.

- Only infested household members should be treated and all on the same day.
- Wash hair with a cleansing shampoo without any type of conditioners.
- Towel dry hair thoroughly (use a fresh towel at each stage).
- Saturate hair with an over-the-counter lice/nit treatment product. 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 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 hairclip. 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 beds and mattresses, pillows, base boards 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.

Hepatitis

There are several types of viral hepatitis. In the U.S., the main threats are hepatitis A, hepatitis B, and hepatitis C. They cause similar symptoms, including fever, fatigue, loss of appetite, nausea, vomiting, abdominal pain, joint pain, clay-colored bowel movements, and jaundice (yellow skin or eyes).

Almost all people with hepatitis A recover fully in weeks or months. In contrast, hepatitis B and C can become chronic infections that lead to cirrhosis of the liver, liver cancer, and even death. The three types differ in the way they spread from person to person.

Hepatitis A

Hepatitis A is one of the most common strains of hepatitis, and is found in the feces of an infected person. It is spread as a result of poor personal hygiene and/or proper sanitation. The hepatitis A virus can be contracted by eating food that has been prepared by someone with the virus or by drinking hepatitis A contaminated water. One can also contract hepatitis A through close physical contact.

Hepatitis B

The hepatitis B virus (HBV) is found in the blood, semen, vaginal secretions, and other body fluids of people who have hepatitis B and is contracted through direct contact with infected blood or bodily fluids of an infected person. Infection occurs when there is contact with these, such as during sex with an infected person or exposure to contaminated needles or personal items. Those with a Hepatitis B virus will always be carriers of the virus even after treatment.

Hepatitis C

Hepatitis C is a blood borne virus that attacks liver cells. The virus is contracted through contact with infected blood and has an incubation period of anywhere from 10 to 30 years.

Ways to protect against hepatitis:

- **Ask a doctor about vaccination.** The vaccines for hepatitis A and B are highly effective and can be given in separate injections or in a combined vaccine. No vaccine is yet available for hepatitis C.
- **Make handwashing a priority.** Always wash hands thoroughly with soap and water after using the bathroom or changing a diaper or soiled linens. Alcohol-based hand sanitizers can also be used.
- **Wear gloves if there is a possibility for contact with blood or other body fluids that could possibly contain visible blood, such as urine, feces, or vomit.** There is no way to tell if someone has hepatitis without a doctor's test. Treat blood or bodily fluids such as feces, vomit, or saliva that are contaminated with blood as if they are infectious. Wear gloves and wash hands thoroughly after contact.
- **Avoid practices that increase the likelihood of blood contact,** such as sharing of razors, toothbrushes, or blood glucose-monitoring equipment.
- **Use needles and other sharp instruments only when medically necessary and handle them according to recommendations for proper sharp disposal.** Do not put caps back on needles by hand or

remove needles from syringes. Dispose of needles in puncture-proof containers out of the reach of children and visitors.

- **Watch what you eat and drink.** It is possible to get hepatitis A from food prepared by a person infected with hepatitis who was not careful about handwashing. In general, fresh fruits, vegetables, sandwiches, salads, and other uncooked food are more likely than cooked foods to transmit hepatitis.

HIV

The human immunodeficiency virus (HIV) that attacks the human immune system and causes acquired immune deficiency syndrome (AIDS).

HIV causes disease by infecting a kind of white blood cell called the CD4+ T cells, which organize the body's response to infection. By multiplying in the CD4+ T cells, HIV spreads throughout the body while depleting the cells that the body needs to fight the virus.

Once an HIV-positive individual's white blood cell count has decreased to a certain point, the disease has progressed to AIDS and he/she is more likely to contract diseases that the body can normally control. These infections are usually the cause of death.

How to protect against HIV:

It is incredibly rare for HIV to be transmitted in a household setting. In a very few cases, HIV has been transmitted through contact between infected blood and broken skin or mucous membranes.

To prevent even such rare occurrences, you should take the following precautions when caring for someone living with HIV:

- **Wear gloves if there is a possibility for contact with blood or other body fluids that could possibly contain visible blood, such as urine, feces, or vomit.** HIV is a blood-borne pathogen, which means it needs blood to survive. If there is visible blood (red) in a fluid, treat it as if it were blood, and infected. If there is no visible blood, the amount of blood may be too small to be of real concern for HIV. However, other diseases can be transmitted through these fluids so personal protective equipment like gloves is recommended. HIV cannot be transmitted through tears, sweat, urine, feces, saliva, vomit, mucus, or earwax unless they are contaminated with blood.
- **Wash your hands and other parts of your body immediately after contact with blood or other body fluids.** Disinfect surfaces soiled with blood. Use gloves for cleaning of blood, urine, or feces, and

disinfect floors or furniture with a 1 to 10 solution of bleach (or all-purpose cleaner spray on fabric that would be stained by bleach). Never put dirty hands in mouth or eyes. After removal of gloves, wash hands with warm water and soap.

- **Cover cuts, sores, or breaks in the skin with bandages.** This applies to the caretaker and the person living with HIV/AIDS. Intact skin is an excellent barrier to HIV infection but HIV infected blood does have the potential of getting into an open cut or sore of another person and causing infection.
- **Avoid practices that increase the likelihood of blood contact,** such as sharing of razors, toothbrushes, or blood glucose-monitoring equipment.
- **Use needles and other sharp instruments only when medically necessary and handle them according to recommendations for proper sharp disposal.** Do not put caps back on needles by hand or remove needles from syringes. Dispose of needles in puncture-proof containers out of the reach of children and visitors.

MRSA

Methicillin-resistant *Staphylococcus aureus* (MRSA) is a kind of bacteria responsible for difficult to treat infections. MRSA is any strain of *Staphylococcus aureus* that has developed resistance to antibiotics like penicillins (methicillin, dicloxacillin, oxacillin, etc.) and cephalosporins (cephradine, cephalexin, etc.). The evolution of resistance does not cause the organism to be more inherently dangerous but makes infections more difficult to treat. It can cause massive infections in bones, joints, the bloodstream, and wounds. MRSA is especially troublesome in hospitals, nursing homes, and in the elderly and those with disabilities, whose open wounds, invasive devices, and often times weakened immune systems are at a greater risk of infection.

Staphylococcus aureus bacteria are frequently found in the human respiratory tract and on the skin. The bacteria are harmless unless they enter the body through a cut or other wound and even then they often cause only minor skin problems in healthy people. But in older adults and people who are ill or have weakened immune systems, ordinary infections can be deadly.

Risk factors for MRSA:

- **A current or recent hospitalization antibiotic use.** A recent hospital stay or treatment with fluoroquinolones (ciprofloxacin, ofloxacin or levofloxacin) or cephalosporin antibiotics can increase the risk of MRSA.

- **Time spent in a long-term care facility.** MRSA is even more prevalent in these facilities than it is in hospitals. People admitted to a care facility are likely to carry MRSA and have the ability to spread it, even if they are not sick themselves.
- **Invasive devices.** People who are on dialysis, are catheterized, or have feeding tubes or other invasive devices are at especially high risk.
- **Young age.** The bacteria usually enter through a cut or scrape but can quickly cause a massive systemic infection. Children may be susceptible because their immune systems are not fully developed and cannot defend against common germs.

How to protect against MRSA:

- **Wash your hands.** Careful handwashing remains the best defense against germs. Scrub hands briskly for at least 15 seconds, then dry them with a disposable towel and use another towel to turn off the faucet. Carry a small bottle of hand sanitizer containing at least 62 percent alcohol for times when there is no access to soap and water.
- **Avoid unnecessary skin-to-skin contact.** MRSA can be transmitted from person-to-person by skin-to-skin contact.
- **Keep personal items personal.** Avoid sharing personal items such as towels, sheets, razors, clothing or athletic equipment, and ointment. MRSA spreads on contaminated objects as well as through direct contact. If shared gym equipment is used, wipe it down before and after use.
- **Keep wounds covered.** Keep cuts and abrasions clean and covered with sterile, dry bandages until they heal. The pus from infected sores could contain MRSA, and keeping wounds covered will help keep the bacteria from spreading. Do not touch other people's wounds or bandages without wearing gloves.
- **Sanitize linens.** If a cut or sore is present, wash towels and bed linens in hot water with added bleach and dry in a hot dryer instead of air drying.

Meningitis

Meningitis is an inflammation of the membranes that surround the brain and spinal cord. Bacteria, viruses, or fungi can cause this condition. It sometimes develops as a complication of another infectious disease. Bacterial meningitis may also occur following an ear infection, sinus infection, or in connection with a skull fracture. Symptoms may include headache, fever, vomiting, rash, sore throat, and/or stiffness of the neck.

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

How to protect against meningitis:

- **Ask a doctor about vaccination.** There are several vaccines available which can prevent the four types of meningococcal disease representing about 70 percent of the cases in the U.S. The vaccine is especially recommended for those ages 11-18, anyone who has been exposed to meningitis, and people with certain immune system disorders or who work around those who have them.
- **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 TB may include fever, fatigue, weight loss, and persistent cough. Coughing is associated with TB but may not be present at the beginning of the illness.

TB is spread person-to-person through the air. Bacteria are released into the air when an infected person coughs or sneezes. These droplets are then inhaled into the lungs of another individual. A person with active TB may remain contagious until he/she has been on appropriate treatment for several weeks.

How to protect against TB:

- **Have an annual Tuberculosis Screening test.**
- **Cover mouth when coughing or sneezing.** Properly dispose of tissues contaminated by mucous materials.
- **Wear a mask** when working with a consumer suffering from TB since it is spread through the air.
- **Remind** a person with TB to cover their mouth and nose when coughing or sneezing.
- **Wash hands** frequently with hot water and soap.