

Part 1 of 2



Communicable Diseases

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 Section 7. Let's take a closer look at some communicable diseases.



Head Lice

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.



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.

- It is important to remember that no one is immune to head lice.
- All infested household members should be treated 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.



2. Treat Head Lice

- Wash hair with a cleansing shampoo, i.e. Prell or Johnson's Baby Shampoo, 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 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.

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.

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 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

Hepatitis C:

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

Hepatitis D: (Individuals must already have Hepatitis B)

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

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 include:

- 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 the blood infections that pose the greatest infectious disease risks to healthcare workers.
- Job-related hepatitis infection occurs much more often than jobrelated HIV infection among healthcare workers.

Caregiving Tips:

<u>Always</u> use Universal Precautions when exposed to blood or bodily fluids.







HIV and AIDS

Human Immunodeficiency Virus (HIV) and Acquired Immune Deficiency Syndrome (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.

<u>HIV</u>

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 viruses. 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.

<u>AIDS</u>

Acquired Immune Deficiency Syndrome is the 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?

HIV 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:



Caregivers 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) 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. When an infected person not taking tuberculosis medication coughs or sneezes, bacteria is released into the air. 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 the 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 suffering from TB since it is spread through the air.
- Caregivers should remind their consumer to cover their mouth and nose when coughing or sneezing.
- Wash your hands frequently with hot water and soap.
- Have a Tuberculosis Screening Test *
 - * Recommended once a year for caregivers and people who work with the public.





Many changes you may see in elderly consumers are a normal part of the aging process.

Normal Changes to the Heart:

- Decreased cardiac output (decreased cardiac reserve)
- Decreased blood vessel elasticity

Normal Changes to the Lungs:

- Tissue between ribs becomes less elastic, breathing capacity decreases
- Increased residual air in lungs (less effective expiration)
- Decreased number of cilia; drying of tissue of bronchi
- Decreased effectiveness of cough

Normal Changes to Digestion/Taste/Smell:

- Decreased number of taste buds (leaving sensation of bitter and sour intact longest)
- Decline in sense of smell
- Decrease in production of saliva, enzymes, and digestive acids
- Decrease in absorption of nutrients
- Decrease in ability of liver to filter toxins

Normal Changes to Urinary Tract:

- Marked decrease in kidney function
- Kidneys less able to regulate salt and filter out waste products
- Often a decrease in bladder capacity
- Prostate gland in men enlarges



Normal Changes to Muscle, Bones, Tendons, and Ligaments:

- Cartilage shrinks between vertebrae of spine. Discs compress with time. Loss of average of 2" in height is common.
- For those who don't exercise:
 - Bones become brittle and porous
 - Muscles lose tone and strength
 - Joints become stiff and less flexible

Normal Changes to Skin, Hair, and Nails:

- Circulation to skin is decreased
- Skin loses oil glands
- Sweat glands are lost
- Epithelial layer of skin thins
- Less fatty tissue below skin in periphery
- Hair loses color and becomes coarser
- Hair thins, often disappears on body
- Nails become thicker and more brittle

Normal Changes to Vision:

- Decreased ability to see small details
- Loss of accommodation (depth perception, light to dark)
- Visual field is smaller
- Changes in color perception (trouble distinguishing one color from another, colors less clear because of lens)
- Eye problems such as cataracts, glaucoma, and macular degeneration

Normal Changes to Hearing:

Hearing loss is potentially the most damaging of all sensory impairments. Approximately 30-50% of all older people suffer a significant hearing loss that impacts their life. Hearing loss can cause problems in communication and relationships leading to isolation, anxiety, and depression.



Caregiving Tips:

- Do not shout; lower the pitch of your voice.
- Speak clearly and distinctly.
- Face the person. Place yourself at the same height as the person's eyes.
- Remove things from your mouth: gum, food, cigarettes, and hands.
- Use facial expressions, gestures, touch, and objects to clarify what you need to say.
- Reduce background noise.
- Speak toward persons' good ear (if there is one).
- Encourage effective hearing device use.

Normal Changes to the Nervous System:

- Nerves respond more slowly to stimulation, especially when exposed to multiple stimulations.
- Nerve impulses travel more slowly to and from the brain.
- Sleep patterns change (less deep sleep, less dream sleep).
- Reduced sensitivity to pain or other discomforts (delayed response to being touched)
- Decreased production of antibodies
- Decrease of all hormones (estrogen, thyroid, insulin)
- Decreased effectiveness of ankle jerk reflex

Normal Changes to the Brain, Intelligence, Learning, and Memory:

- Speed of recall and perfect recall decrease slowly after the age of 22.
- It takes longer for the brain to search for and retrieve information.
- Intellectual capacity, judgment, comprehension, retention of learned material does not change with age.

A stroke or cerebrovascular accident (CVA) occurs when there is a stoppage of blood to brain tissue by a clot, clogging of an artery, or bleeding into the brain. Because a part of the brain is damaged, the body part or function controlled by that part of the brain is affected. Weakness, language problems, behavior problems, swallowing problems, or other things may be involved.

Caregiving tips:

Much of how the caregiver can assist and support the consumer will depend on what functions the stroke has affected.

With one sided weakness -

- Refer to "right" or "left", not "good" or "bad."
- Assist with ambulation and transfer by supporting the weaker side.
- Assist with dressing by dressing the weaker side first and undressing the stronger side first.
- Use adaptive equipment and clothing as appropriate.
- Allow plenty of time for any activity.
- Make sure that the home is free of tripping hazards.





With speech or language difficulty -

- Keep your questions and directions simple and one at a time.
- Try to use "yes" or "no" questions.
- Use a picture board.
- Use more nonverbal language, such as gestures, facial expressions, pointing to objects.
- Give the consumer a pencil and paper if he/she is able to write.



With swallowing difficulty -

- Use soft foods or thickened liquid, as thin liquids like water are very hard to swallow without choking.
- Allow plenty of time for meals.

A stroke can be devastating to the consumer and cause frustration, anger and depression. Learning to do things again that they have always been able to do is a difficult and slow process. Be supportive and positive whenever the person makes progress.

Support the consumer in keeping their therapy appointments and doing their exercises.