Principles of Caregiving: Fundamentals

Chapter 7 – Infection Control

CONTENTS

OBJECTIVES

1. Explain how infectious diseases are spread, and list common preventive measures.
2. Identify and describe common bloodborne diseases.
3. Identify and describe other communicable diseases and conditions.
4. Explain the role of immunizations for direct care workers.
5. Identify components of the Bloodborne Pathogen Standard.
6. Explain the purpose of infection control measures and describe techniques for infection control.

SKILLS

1. Hand washing
2. Applying gloves / removal and disposal of gloves

KEY TERMS

Bloodborne pathogen

Confidentiality

Hepatitis B and C

HIV

Infectious disease

Lice

Pathogen

Personal protective equipment (PPE)

Scabies

Sharps

Standard precautions

Symptom

Tuberculosis (TB)

Transmission

Universal precautions

A. THE SPREAD OF DISEASES AND PREVENTION

Preventing the spread of disease depends on how the disease is transmitted and the source of the infection. Germs, also called *microorganisms*, are tiny living particles. They can be found anywhere: in the air, on the ground, in our bodies. *Pathogens*—the germs that cause diseases—often live in a specific environment. Some diseases are spread by touching objects that an infected person has touched. Other diseases are spread when you come into contact with the body fluids of an infected person, for example blood or saliva.

Sources of infection

- Air
- Eating and drinking utensils
- Dressings
- Food
- Personal hygiene equipment
- Insects
- Water
- Direct contact
- Animals

Healthy individuals with healthy immune systems will stay healthy because their immune system will fight the germs. To help the body fight off diseases, there are simple things you can do every day. You can reduce the spread of infectious microorganisms by:

- Washing your hands after urinating, having a bowel movement, or changing tampons, sanitary napkins or pads.
- Washing your hands after contact with any body fluid or substance, whether it is your own or another person's.
- Washing your hands before handling, preparing, or eating food.
- Washing fruits and raw vegetables before eating or serving them.
- Covering the nose and mouth when coughing, sneezing or blowing the nose.
- Bathing, washing hair, and brushing teeth regularly.
- Washing cooking and eating utensils with soap and water after use.
- Germs multiply rapidly in warm, dark, moist environments so keep those areas on a person's body (for example, groin folds) and in living areas (shower corners) clean.

Risk factors

People are at greater risk for getting infections if they:

- Have weakened immune systems such as very young or elderly persons. Young children have not yet developed a strong immune system. The immune system becomes less efficient as a person ages. That is why very young children (age 6 months to 2 years) and elderly persons should get flu shots annually.
- Are on medication that suppresses the immune system (for example, organ transplant patients).
- Are on prednisone or similar medications.
- Have HIV/AIDS.
- Are not eating healthy foods, not sleeping enough, and are under increased stress.

B. COMMON BLOODBORNE PATHOGENS

Bloodborne pathogens are disease-causing microorganisms present in human blood or other potentially infectious material (OPIM). These pathogens include, but are not limited to, hepatitis B virus (HBV), hepatitis C virus (HCV), and human immunodeficiency virus (HIV). According to the Centers for Disease Control and Prevention (CDC), hepatitis C is the most common chronic bloodborne infection in the United States. Some symptoms are similar for these diseases, but not all.

Symptoms of Hepatitis B and C	Symptoms of HIV
Flu-like	Flu-like
Fever	Fever
Lack of energy	Weight loss
Dark urine	Rash
Yellow skin & sclera	Diarrhea
Abdominal discomfort	Night sweats
	Swollen lymph nodes

Note: Hepatitis B: 30% of cases have no signs and symptoms.
Hepatitis C: 80% of cases have no signs and symptoms.

1. Hepatitis B

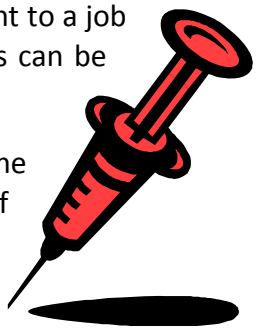
Hepatitis B virus (HBV) is a potentially life-threatening bloodborne pathogen. The CDC estimates there are approximately 280,000 HBV infections each year in the U.S. Approximately 8,700 health care workers each year contract hepatitis B, and about 200 will die as a result. In addition, some who contract HBV will become carriers, passing the disease on to others. Carriers also face a significantly higher risk for other possibly fatal liver ailments, including cirrhosis of the liver and primary liver cancer. HBV infection is transmitted through exposure to blood and other infectious body fluids and tissues. Anyone with occupational exposure to blood is at risk of contracting the infection.

Employers must provide engineering controls; workers must use work practices and protective clothing and equipment to prevent exposure to potentially infectious materials. However, the best defense against hepatitis B is vaccination.

Vaccination

The new OSHA standard covering bloodborne pathogens requires employers to offer the three-injection vaccination series free to all employees who are exposed to blood or other potentially infectious materials as part of their job duties. This includes health care workers, emergency responders, first-aid personnel, law enforcement officers, and others.

The vaccination must be offered within 10 days of initial assignment to a job where exposure to blood or other potentially infectious materials can be "reasonably anticipated."



The hepatitis B vaccination is a noninfectious, yeast-based vaccine given in three injections in the arm. There is no risk of contamination from other bloodborne pathogens nor is there any chance of developing HBV from the vaccine. The second injection should be given one month after the first, and the third injection six months after the initial dose. More than 90 percent of those vaccinated will develop immunity to the hepatitis B virus. To ensure immunity, it is important for individuals to receive all three injections. At this point it is unclear how long the immunity lasts, so booster shots may be required at some point in the future.

The vaccine causes no harm to those who are already immune or to those who may be HBV carriers. Employees may opt to have their blood tested for antibodies to determine need for the vaccine.

Workers who decide to decline vaccination must complete a declination form. Employers must keep these forms on file so that they know the vaccination status of everyone who is exposed to blood. At any time after a worker initially declines to receive the vaccine, he or she may opt to take it.

Adapted from: "Hepatitis B Vaccination – Protection for You." Bloodborne Fact Sheet No. 5. U.S. Department of Labor, Occupational Safety and Health Administration (OSHA). www.osha.gov/OshDoc/data_BloodborneFacts/

2. Hepatitis C

Hepatitis C is a liver disease, caused by the hepatitis C virus (HCV), found in the blood of persons infected with this disease. Hepatitis C can be serious for some persons, but not for others. Most people who get hepatitis C will carry the virus the rest of their lives. Many do not feel sick from the disease, but most of these persons will have some liver damage. Eventually, some patients may develop cirrhosis of the liver and liver failure.

There is no vaccination for hepatitis C. However, many persons with hepatitis C are at risk for hepatitis A and hepatitis B, and should be vaccinated for these dieseases.

Preventing the spread of hepatitis C

Hepatitis C is spread through contact with the blood of an infected person. Sharing of needles, syringes and other equipment used in intravenous drug use can spread the disease. Do not share razors, toothbrushes or other personal care articles that may have blood on them. Rarely, it may be spread by unprotected sex.

Hepatitis C is NOT spread by breast feeding, hugging, kissing, food or water, sharing eating utensils or drinking glasses, casual contact, sneezing, coughing.

DCWs should follow barrier precautions and use caution with needles, syringes and other sharps.

Adapted from: Hepatitis C Prevention, Department of Health and Human Services, August 2003, http://www.cdc.gov/hepatitis/HCV/index.htm.

3. Human Immunodeficiency Virus (HIV)

If you are going to be caring for someone with HIV infection, you need to understand the basic facts about HIV and AIDS. Acquired immunodeficiency syndrome (AIDS) is caused by the human immunodeficiency virus (HIV). People who are infected with HIV can look and feel healthy and may not know for years that they are infected. HIV slowly wipes out parts of the body's immune system. The HIV-infected person gets sick because the body can't fight off diseases.

Signs of HIV infection are like those of many other common illnesses, such as swollen glands, tiring easily, losing weight, fever, or diarrhea. Different people have different symptoms.

HIV is in people's blood, semen, vaginal fluid, and breast milk. The only way to tell if someone is infected with HIV is with a blood test. There is no vaccine to prevent HIV infection and no cure for AIDS. There are treatments that can keep infected people healthy longer and prevent diseases that people with AIDS often get. Research is ongoing.

HIV slowly makes an infected person sicker and sicker. Someone with AIDS can feel fine in the morning and be very sick in the afternoon. It can seem like riding a roller coaster, slowly climbing up to feeling good, then plunging down into another illness.

How HIV is spread

HIV is commonly spread by:

- Having unprotected anal, vaginal, or oral sex with one who is infected with HIV.
- Sharing needles or syringes ("works") with someone who is infected with HIV.
- Mothers to their babies before the baby is born, during birth, or through breast-feeding.

Early in the AIDS epidemic some people became infected through blood transfusions, blood products (such as clotting factors given to people with hemophilia), or organ or tissue transplants. This has been very rare in the United States since 1985, when a test for HIV was licensed. Since then, all donated blood and donors of organs or tissue are tested for HIV.

How HIV is NOT spread

You don't get HIV from the air, food, water, insects, animals, dishes, knives, forks, spoons, toilet seats, or anything else that doesn't involve blood, semen, vaginal fluids, or breast milk. You don't get HIV from feces, nasal fluid, saliva, sweat, tears, urine, or

vomit, unless these have blood mixed in them. You can help people with HIV eat, dress, even bathe, without becoming infected yourself.

Adapted from "What You need to Know About HIV and AIDS." Centers for Disease Control and Prevention, Division of HIV/AIDS Prevention, http://www.cdc.gov/hiv/resources/brochures/careathome/care3.htm

4. Other Bloodborne Pathogen Diseases

There are other diseases caused by bloodborne pathogens such as malaria, syphilis, and Ebola, but all these are much less common than hepatitis B and C, or HIV.

Did you know?

1. Some diseases can spread through air ..... True False
2. Children and older adults are more at risk for infection ..... True False
3. You can get hepatitis B from another person's blood ..... True False
4. You can get vaccinated to protect against hepatitis B ..... True False
5. You can get HIV/AIDS from another person's sweat. ..... True False

C. OTHER COMMON CONDITIONS

There are many other diseases that are not caused by bloodborne pathogens. These diseases may spread through the air, perhaps when someone sneezes. Other pathogens live on the skin or other surfaces. Some conditions are caused by small parasites, such as lice.

1. Tuberculosis (TB)

Tuberculosis (TB) is still a problem. Eight million new cases occur each year in the world. In the U.S., the 30-year decline in TB cases has ended. Since 1985, the number of U.S. cases reported each year has remained above 22,000. Millions of people have TB infection and have no symptoms of the disease, but they can transmit the disease to others. An estimated 10-15 million persons in the U.S. are infected with TB bacteria. That is why TB screening is needed, especially for those who work in a health care setting.

Anyone can contract TB, but those at high risk include:

- People living in substandard housing and the homeless.
- Immigrants from areas where TB is common.
- Residents of supervised living facilities and group homes (especially nursing homes).
- Prisoners.
- People who have immunosuppressant diseases, such as HIV/AIDS, or those who have had a recent organ transplant.
- IV drug abusers.

Health care workers

TB is transmitted via the airborne route. This means that the TB pathogens are in the air and can be inhaled. Repeated, prolonged exposure is usually necessary to contract TB. The disease is not spread through sharing belongings or touching something that a sick person has touched.

Symptoms of the disease include:

- Cough
- Fatigue
- Weakness
- Fever
- Weight loss
- Night sweats
- Blood in sputum

Screening for the disease is done with a skin test. If the result of the skin test is positive, it means you have been exposed to TB bacteria. **THIS DOES NOT MEAN YOU HAVE AN ACTIVE CASE OF TB. You will need to seek medical advice to see if you have active TB. Once you have a positive skin test, you will need a chest x-ray to screen for the presence of TB even if you are healthy.** A chest x-ray and possibly a sputum analysis are done to determine if TB disease is present and what kind of treatment is indicated. In some areas, active TB cases are reported to the county health department.

2. Lice

Lice are tiny insects (one is called a *louse*) that live on humans and survive by feeding on blood. When a large number of lice live and reproduce on a person, it is called an infestation. Three different kinds of lice infest humans: head lice, pubic lice ("crabs") and body lice. Infestations are easily spread from one person to another through close bodily contact or through shared clothing or personal items (such as hats or hair brushes). Lice cannot jump or fly.

Symptoms

The most common symptom of lice infestation, called *pediculosis*, is itching in the affected areas. Symptoms vary depending on which type of lice is present.

Diagnosis and treatment

A close visual examination for live lice or their eggs, called *nits* in the hair is usually all that is needed to diagnose an infestation of head lice. A health professional may confirm the diagnosis with microscopic examination. Pubic lice and body lice can also be diagnosed with a close visual examination of the affected areas or the person's clothing. Use a fine tooth dark colored comb and comb the person's hair. Nits are like very small grains of rice.

Both lice and nits must be destroyed to get rid of an infestation. The most common treatment is a topical nonprescription or prescription cream, lotion, or shampoo to kill the lice and eggs. Sometimes a second treatment is needed to make sure that all the eggs are destroyed. When two or more topical treatments have failed to get rid of the lice, a prescription pill called ivermectin can be taken.

> **!** **Call your supervisor to get directions on how to proceed if you suspect there is an infestation.**

3. Scabies

Scabies are tiny, eight-legged mites that are hard to see without a magnifying glass. They dig underneath the skin and cause itching so severe it may make it difficult for the person to sleep at night. An early scabies rash will show up as little red bumps, (looks like hives), tiny bites, or pimples. Later the bumps may become crusty or scaly. Scabies usually starts between fingers, on elbows or wrists, buttocks, or waist. Sometimes the person will have long red marks from where the mite has been crawling under the skin and the person has been scratching.

People in group settings such as nursing homes or group homes are more likely to get scabies.

Diagnosis and treatment

Usually a dermatologist will be able to tell if a person has scabies just from looking at the skin. If not, he/she can do a simple diagnostic test.

- Scabies is easy to treat with special creams and lotions.
- Wash all of the person's clothes, sheets, and towels in hot water. Dry the clothing and linens completely in the dryer.
- Vacuum the whole house and throw out the vacuum cleaner bag.
- ***Treat all family members for scabies at the same time, whether they itch or not. That will keep scabies from spreading.***

D. POLICIES AND GUIDELINES

Direct care workers, like all health care professionals, must take precautions to help prevent the spread of diseases and infestations. There are policies and guidelines that describe the actions required or recommended. The Occupational Health and Safety Administration (OSHA) is concerned with transmission of all bloodborne pathogens, and has created guidelines specifically for preventing or minimizing an employee's exposure to hepatitis B (HBV) and HIV. OSHA regulations mandate the implementation of *universal precautions* and the *Bloodborne Pathogen Standard*.

1. The Bloodborne Pathogen Standard

On December 6, 1991, OSHA issued its final guideline on occupational exposure to bloodborne pathogens (29 CFR 1910.1030). It is called the *Bloodborne Pathogen Standard* and explains what agencies have to do to help prevent the spread of infections. The standard covers these topics:

- Exposure control plan
- Training
- Maintaining training records
- Labels
- Implementation and monitoring compliance with guidelines (e.g. universal precautions)
- HBV vaccination
- Post-exposure follow-up
- Personal protective equipment (PPE)

Your agency will provide more information about the Bloodborne Pathogen Standard if it is needed for the work you will be doing.

2. Universal precautions

Universal precautions, sometimes called *standard precautions*, are infection control procedures. As a DCW, you use precautions every day:

- Washing your hands properly.
- Keeping your work environment clean.
- Using PPE, such as gloves.

Universal precautions are designed to prevent health care workers from transferring infections to patients, and from infecting themselves. Disease causing agents may be present in body substances, even when a person does not look or act sick. Therefore, universal precautions should be used whenever you come into contact with body fluids from any other person.

- The purpose of universal precautions is to prevent or minimize exposure to bloodborne pathogens. To be safe, universal precautions apply to any fluid emitted from the body.
- Approach all clients as if they were HIV or HBV infectious.
- Universal precautions apply to tissues, blood, and other body fluids containing visible bloods.
- Blood is the single most important source of HIV, HBV, and other bloodborne pathogens in the workplace.
- Plan ahead when you are working with a client and use the appropriate personal protective equipment (PPE), such as gloves.
- Know the limitations of the PPE you are using, when the equipment can protect you and when it cannot.
- Do not recap needles. Do not break or otherwise manipulate needles.
- Place contaminated sharps in puncture-resistant containers.
- Wash hands immediately after contamination or removing gloves.

E. PROCEDURES

1. Hand Washing

Hand washing is one of the easiest and most effective ways to prevent the spread of infection when proper techniques are used at the appropriate times when working with clients. It is imperative that all steps are demonstrated for proper hand washing techniques.

Wash your hands:

- Immediately upon arrival and before leaving a client's home.
- Immediately if contaminated by blood or any other bodily fluid.
- Before and after contact with a new client.
- Before and after use of gloves.
- After handling soiled linens or waste.
- Before and after contact with any wounds.
- After using the restroom.

Procedure: Hand Washing

1. Collect items needed for hand washing.
2. Remove all jewelry on hands, fingers, wrists - *recommended*.
3. Turn on the water and adjust the temperature. Water should be warm but not hot.
4. Wet hands under running water with fingertips pointed down.
5. Apply soap to hands (liquid soap in a pump is best).
6. With fingertips pointing down, lather hands well. Rub your hands together in a circular motion to generate friction. Wash carefully between fingers, palms, the back of hands and under/around any jewelry.
7. Rub your fingernails against the palm of the opposite hand to push soap under the nails.
8. Remember: You need to wash your hands a minimum of 20 seconds. (Sing "Happy Birthday" twice, or "Twinkle-Twinkle Little Star", to yourself as a timer.)
9. Wash a full hand's distance up both wrists as well.
10. With fingertips pointed down, rinse off all soap thoroughly.
11. Dry hands with a clean paper towel.
12. Use paper towel to turn off the water and to open the restroom door if needed.
13. Drop paper towel in trash container.

Practical Tips

- Use soap – it breaks the surface tension of the water, making the water work harder.
- Friction (rubbing hands together) loosens bacteria and dirt. Remember it is the friction that kills and loosens the germs, not the soap or water temperature.
- Use plenty of water to wash away the contaminants: dirt, germs and the soap.
- Do not use chemicals such as bleach or alcohol to wash hands. They may damage the skin.
- Do not use a nail brush or any kind of brush. This can damage the skin and cross-contaminate.

Don't forget!

- You must wash your hands for at least 20 seconds for effective decontamination.
- Keep fingers pointed down into the sink. Do not allow water to run up the arm, off the elbows.
- Don't forget to wash the wrists.
- Either remove jewelry or wash under items. Germs hide under rings and bracelets.
- Don't touch the faucet, sink, surfaces, or doorknobs with hands after washing. This will re-contaminate your clean hands.

!	**Remember: Intact skin is your best defense against bacteria. Treat your hands well!**

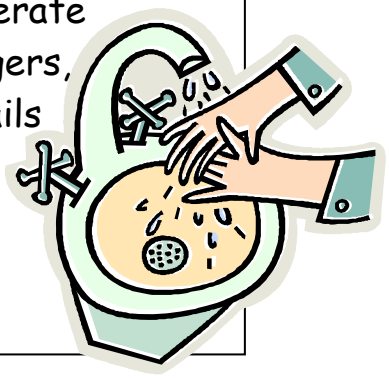
Are you washing your hands correctly?

1. Collect the items needed for hand washing.

2. Use a clean paper towel to turn on water and adjust temperature. Wet hands with fingertips pointed down.

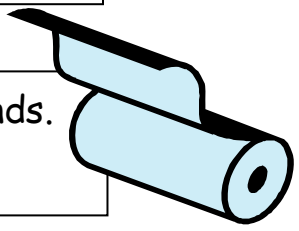
3. Apply soap – liquid soap in a pump is best

4. With fingertips pointing down, lather well. Rub your hands together in a circular motion to generate friction. Wash carefully between your fingers, palms, and back of hands, and rub fingernails against the palm of the other hand to force soap under the nails. Keep washing for 20 seconds (Sing "Happy Birthday" 2 times).



5. With fingertips pointed down rinse off all the soap.

6. With clean paper towel or clean hand towel dry hands. Use a clean paper towel and turn off the faucet.



2. Gloves and Other Personal Protective Equipment (PPE)

Personal protective equipment (PPE), such as disposable gloves, allows you to create a barrier between yourself and germs. By using disposable gloves you are preventing the spread of infectious diseases like the common cold, the flu, MRSA or HIV, just to name a few. Wearing gloves is not just for your protection but the protection of others as well.

Disposable gloves should be worn when:

- Touching blood or body fluids.
- You or the individual you are caring for has cuts, sores or other skin openings.
- There is possible contact with feces, urine, vomit or wound drainage.
- Handling soiled clothing or linens.
- Cleaning the bathrooms.

Procedure: Putting on Gloves

1. Wash and dry your hands following proper procedures.
2. Remove a pair of gloves from the glove box.
3. Use care when pulling gloves on. If a glove tears or becomes punctured take it off and start again with a new glove.
4. Interlace fingers to remove wrinkles, air pockets and achieve a comfortable fit.
5. You may want to consider double gloving if your nails are longer and at risk of puncturing the gloves or if the gloves will become heavily soiled. Double gloving simply means wearing two pairs of gloves.

Procedure: Removing and Disposing of Gloves

1. From the outside, pinch the rubber glove just below the cuff using your thumb and index finger to lift the glove away from your wrist area.
2. Using your middle and ring fingers, scoop the glove away from the wrist; pulling it off inside out. Ball that glove tightly into palm of gloved hand.
3. Now with ungloved hand slide your index and middle finger under the cuff of the other glove; again pulling it off inside out. The first glove you removed should now be inside the second glove.
4. Follow your agency's policies in disposing of the gloves.
5. Wash your hands following proper procedure.

Practical Tips

- Disposable gloves should NEVER be washed or re-used.
- Always replace if they become ripped, torn or contaminated.
- Always wash hands *before* and *after*.
- Know your agency's policies on disposing of gloves. Policies may differ between agencies.
- Wear gloves that fit properly. If they are the wrong size, they can tear or fall off.

Don't forget!

- Contamination can happen when:
  - touching unclean areas (the wrist, other surfaces)
  - placing gloves on contaminated surfaces or in your pocket
- removing gloves
- You must wash hands when you replace gloves
- Long nails can puncture gloves

General rule: Touch the outside of a glove only with a glove.

3. Handling and Disposal of Infectious Wastes

Home medical sharps disposal

In a person's home, you may see syringes, needles or lancets. They are used by individuals with certain medical conditions. These items are called *sharps* and need to be disposed properly.

- Do not touch sharps (for example, syringes) with your bare hands. Use gloves, and if possible use a tool to pick them up.
- Sharps need to be thrown away properly so that nobody is injured or infected. This includes DCWs and garbage haulers.
- Ask your supervisor if you are responsible for disposing of sharps. If yes, follow these guidelines for Arizona:
  - Use a purchased medical sharps container (from a pharmacy or health care provider) or a heavy-plastic or metal container. Do not use a clear or glass container. The containers should be puncture-proof with a tight-fitting lid. Household containers such as plastic detergent bottles can be used if the following precautions are observed:

- Write the words "Not Recyclable" on the container with a black indelible marker. This helps to ensure the container will not be inadvertently mingled with recyclable materials.
- Fill the medical sharps container to approximately 3/4 full. Do not over-stuff the container.
- Keep out of reach of children and pets.
- When full, use heavy-duty tape to secure the lid to the container (duct tape or electrical tape). Then throw away with regular trash.
- Always wash your hands after handling or touching medical sharps.

Source: Arizona Department of Environmental Quality, http://www.azdeq.gov/environ/waste/solid/ic.html#sharps

Handling of wastes other than sharps

- Body wastes such as urine need to be flushed down the toilet.
- Soiled incontinent pads or disposable gloves need to be placed in plastic bags, tied, and taken out to trash immediately so that they do not create odors or grow bacteria in the home.
- Mop water needs to be flushed down the toilet or thrown outside—**never put it down the kitchen sink.**

Syringe and Paper Towel Did Not Mix

"Ouch!" is what I heard coming from the room of Mary, who was my client. Her granddaughter was visiting and she went to pick up a crinkled paper towel and stuck herself from the syringe that was inside the paper towel. I told her granddaughter that she needed to call her doctor or go to a medical facility to tell them what happened. I then called my supervisor and told her of the incident.

Now was my chance to share with Mary and her family about the importance of disposing syringes/sharps in the right containers. I found a heavy plastic laundry bottle and placed this next to Mary's bed. I told Mary that she should always place her syringe in this bottle. I then explained why this was so important. I talked about hepatitis C. They knew that hepatitis was very serious, but they were surprised when I told them that hepatitis C stays alive in dried blood for two weeks, and prior to 1989/1990 donated blood was not tested for hepatitis C. The blood banks tested for AIDS but not hepatitis C. If a person had a blood transfusion from surgery, accident, etc., at that time they could have received tainted blood with hepatitis C. I told them that a person who has hepatitis C can have it many, many years without knowing they have it. I was fortunate that Mary and the family took this serious and even thanked me for sharing the information.

I continued to provide care to Mary and there has never been another incident. Mary's family even went out to the drug store and picked up a red container that was specifically used for syringes/sharps. When it is filled up they bring the container back to the drug store for them to dispose of and then they receive a new container at no cost. I love working with the Mary and her family. I feel that we are all on the same team for all our safety.

Emily, caregiver for 14 years

4. Linens

If feces or vomit are present in laundry, put on gloves. Put linens or clothes in a plastic bag – don't put them on the floor – and take them to the toilet. Rinse off the large solids in the toilet and put the items back into the plastic bag. Wash linens and clothes immediately, separately from the rest of the household laundry. Add bleach if clothes can be bleached. Otherwise, just dry them completely in the dryer. The heat of the dryer will kill the bacteria. Hanging clothes out on a clothesline will also kill the bacteria.

MRSA - Methicillin-Resistant Staphylococcus Aureus

I have been a caregiver for many years. I am the caregiver who will often go to clients that others have refused. One time I was providing care for this client who had an incontinent rash that just got worse. I told my client that she needed to go to her doctor and get this rash re-examined. My suspicion was MRSA. Her doctor took a culture of her rash. The test came out that she did have MRSA. I was aware about MRSA and the importance of going above Universal Precautions. I double gloved myself. I used a bleach solution and washed all equipment, door knobs, counters, and light switches. I did this on a daily basis. I had a small abrasion on my arm and I made sure I had a four sided band-aid. I changed my clothes before I went to my next client and sprayed my shoes with Lysol. I kept both myself safe and my other clients safe. My client started to get better when she started her antibiotics. It is so important for caregivers to be observant with the changes of a rash and then follow through with the appropriate people.

Anita Frasier, caregiver

5. Cleaning the Environment

Universal cleaning and disinfecting solution – bleach diluted 1:10

One part bleach to 10 parts water (1:10) means that whatever measuring device you use (1/3 cup, 1 cup, a tablespoon), you mix 1 measure of bleach and 10 measures of water. For example, you could pour 1/4-cup of bleach and ten 1/4-cups of water (2-1/2 cups) into a spray bottle and label the bottle.

Contact time (the amount of time needed for the bleach to work) is the amount of time it takes the surface to air dry after you have sprayed it with the bleach solution. Bleach can act as a sanitizer in stronger solutions or a disinfectant in a weaker solution. However, remember that fragile skin can be very sensitive to bleach and water solution. If a client gets the solution on his/her skin, flush the area with water.

Bleach solution needs to be put into a spray bottle, labeled, and a fresh supply made every 24 hours.

Note: Chapter 10, Home Environment Maintenance has more information on cleaning the home. Chapter 8, Nutrition and Food Preparation covers food safety.

Did you know?

1. Hand washing helps reduce risk of infection ..... True False
2. Gloves are required only when a person is ill ..... True False
3. You should wash your hands for at least 10 seconds ..... True False
4. It is never safe to touch another person's blood ..... True False
5. To be safe from infection, use bleach on your hands ..... True False

F. RESOURCES

- For more information on diseases, visit the Centers for Disease Control and Prevention, http://www.cdc.gov/DiseasesConditions/
- Easy to read introductions to Hepatitis A, B, and C. Also in Spanish. National Institutes of Health, http://digestive.niddk.nih.gov/ddiseases/ez.asp