

**In the Know Inservice Club
presents
An Infection Control Module:
An Infection Control Update**

We hope you enjoy this Inservice, prepared especially for nursing assistants like you. You work very hard, and we appreciate the effort you make to complete these educational materials. It shows your desire to continue learning and growing in your profession.

After finishing this inservice, you will be able to:

- Discuss the importance of proper handwashing as part of your daily infection control practices.
- Describe the purpose of standard and additional infection control precautions.
- Discuss the importance of flu vaccine in the prevention of influenza.
- Describe the best ways to stop the spread of tuberculosis, HIV, hepatitis C and drug resistant bacteria.
- Demonstrate proper infection control procedures throughout your daily work.

Instructions for the Learner

If you are studying the inservice on your own, please:

- Read through all the attached materials. You may find it useful to have a highlighting marker nearby as you read. Highlight any information that is new to you or that you feel is especially important.
- If you have questions about anything you read, please ask _____.
- Take the quiz. Think about each statement and circle the best answer.
- Check with your supervisor for the right answers. You pass the quiz with at least eight correct answers! Print your name, write in the date, and then sign your name.
- Keep the inservice information for yourself, and turn in the quiz page to _____ no later than _____.
- Show your Inservice Club Membership Card to _____ so that it can be initialed.

THANK YOU!

In The Know

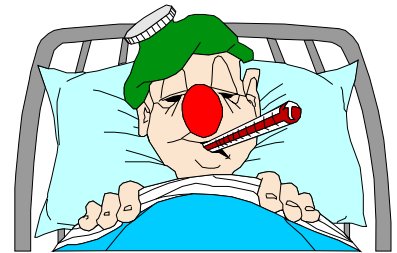
The Inservice Club for Nursing Assistants

Did You Know...?

- Studies have shown that most health care workers think they wash their hands more often than they really do.
- For example, for one study, doctors were asked how often they washed their hands between patients. Most doctors answered that they washed their hands at least 57% of the time. However, when they were secretly watched, some of them only washed their hands 9% of the time!

An Infection Control Update

Do you ever feel like infection control procedures waste too much time during your work day? Shouldn't it be enough to wash your hands a few times during the day? After all, how dirty can they get, especially when you're wearing gloves? Well, consider these facts:



- Eleven health care workers in one hospital came down with hepatitis A because they didn't wash their hands after caring for a patient with hepatitis.
- An epidemic of yeast infection spread through an intensive care unit for newborns because several staff members failed to wash their hands after playing with their pet dogs.
- At least half of all cases of food poisoning are caused by people not washing their hands before preparing food.
- Treating people for infections that they pick up while in the hospital can cost up to \$30 thousand—*per person!* Nearly all of these infections could be prevented if health care workers used proper infection control techniques.
- Studies show that over 1.5 million nursing home residents catch an infection every year from germs spread by health care workers' hands.
- Every year, thousands of health care workers catch a cold, the flu or other infection from their clients because they fail to follow proper infection control procedures.

Infection control is never a waste of your time! So, keep reading to review the basics about handwashing, standard precautions, common infectious disease and more.

Interesting Facts About Infections

- A disease is “infectious” if it can be spread by contact with infected people, animals, food, water or objects.



- If a disease can be spread by contact with an infected person, it is considered “contagious”.
- So, don’t “infectious” and “contagious” mean the same thing? No. Consider this example: Rabies is “infectious” because you can catch it from an infected animal. But, rabies is not “contagious” because you can’t catch it from an infected person.
- Before the discovery of penicillin in 1928, infectious diseases were the main cause of death in America. Today, infectious diseases still cause many severe illnesses and deaths.
- Every year, at least two million people catch an infection during their stay in a health care facility. 88,000 of them don’t survive the infection.
- Nearly 200 million doses of antibiotics are given to hospital patients every day in America.
- There are over 150 different antibiotics...and some germs are resistant to all of them!
- Health care workers use over 22 million pairs of gloves every year!
- Fresh flowers can pose a risk to your clients—especially if they have wounds. Bacteria build up in the water inside the flower vase. These bacteria can cause a serious wound infection.
- In the last ten years, over 700 antibacterial products have been developed for people to use in their homes. These products include antibacterial cleaners, plastic bags, underwear and bedding. Most scientists believe that all these products are making the drug resistance problem worse.
- One case of drug resistant tuberculosis can cost up to \$1 million to treat.
- Around the world, one person dies of TB every ten seconds.
- People are not protected against the flu until about two weeks after they’ve had a flu shot.
- Around the world, five young people (ages 15 to 24) become infected with HIV every minute!
- Worldwide, over 80% of all adults with HIV became infected with the virus through *heterosexual* intercourse.
- The first AIDS case was diagnosed in 1982 in Los Angeles. Since that time, nearly 22 million people around the world have died from AIDS.
- In the year 2000 alone, HIV caused the death of approximately three million people worldwide, including half a million children.
- There is still only *one* reported case of a nursing assistant acquiring HIV because of an on-the-job exposure.



The Facts About Handwashing

Basic Information About Handwashing:

- The purpose of handwashing is to get rid of dirt and “transient” germs. (There are many tiny “bugs” that live on our hands all the time. But, “transient” germs contaminate our hands and may cause disease.)
- Scientists have known for over 100 years that handwashing helps prevent infection. Yet, people continue to get sick because hands are not washed often enough.
- The handwashing procedure at your workplace probably calls for you to wash your hands for 30 to 60 seconds. Yet, studies have shown that most health care workers spend *less than 15 seconds* washing their hands.



The Latest Information About Handwashing:

- Studies continue to show that health care workers wash their hands less than half as often as they should. Why? The reasons given include:
 - *“I don’t have time to keep washing my hands all the time.”*
 - *“My skin gets dry if I wash my hands too often.”*
 - *“There’s never a sink around when I need to wash my hands.”*
 - *“I don’t need to wash my hands. I wear gloves.”*
- Studies have shown that more bacteria live on dry, chapped skin. In addition, washing damaged skin is less effective at removing bacteria. (So, if the soap at work causes your hands to become chapped and dry, ask your supervisor about using an alternate soap.)
- The CDC is proposing guidelines for 2002 that approve the use of alcohol-based, waterless hand cleaner to sanitize health care workers’ hands. They feel that this will save time, be more convenient and help decrease the spread of germs.

Remember!

- Follow your workplace policy for washing your hands...or for using waterless hand cleaner.
- Don’t make the mistake of thinking that wearing gloves takes the place of washing your hands!
- Most of the germs on your hands hide *under* and *around* your fingernails. Be sure to clean under your nails when you wash your hands.



The Facts About Standard Precautions

Basic Information About Standard Precautions:

- Standard precautions are basic infection control guidelines for you to follow as you perform your daily work. These guidelines help prevent the spread of bloodborne diseases like AIDS and hepatitis C.
- Additional precautions are guidelines for protecting yourself and/or clients who need more than just basic infection control. These extra precautions are divided into categories according to how a disease is spread:
 - Airborne: These germs travel long distances in the air and cause diseases such as TB, measles and chickenpox.
 - Droplet: These germs travel short distances in the air and cause diseases such as influenza, strep throat and the mumps.
 - Contact: These germs are spread by touch and cause diseases such as scabies, cellulites and hepatitis A.
- Standard precautions also cover the proper way to handle client care equipment and to dispose of hazardous waste. Be sure to follow your workplace procedures for these tasks.



The Latest Information About Standard Precautions:

- Some people experience allergic reactions to latex gloves. Doctors are also seeing an increase in work-related asthma due to the powder inside some gloves. Be sure to let your supervisor know if you have any sensitivity to the gloves at your workplace.
- Gowns, masks and gloves are all types of “personal protective equipment”. These items are used to protect you from infectious diseases. However, you must also keep your clients’ welfare in mind. For example, if you don’t change your gown in between clients or you rinse off dirty gloves instead of using new ones, you run the risk of spreading germs from one client to another. Be sure to follow your workplace procedure for the proper use (and disposal) of personal protective equipment.

Remember!

- Standard precautions apply to all your clients, no matter what their diagnosis—even if they don’t seem sick!
- Don’t be shy about reminding your coworkers to use standard precautions. If they don’t, they could spread germs to you!
- Ask your supervisor if you’re not sure which additional precautions might be necessary for a specific client.



The Facts About Influenza

Basic Information About Influenza:

- Flu season in the United States ranges from October through March, but most people tend to “catch” the flu in either December, January or February.
- The flu can break out anywhere in the world. It doesn’t matter if you live in a warm or a cold climate.
- In general, the best time to get a flu shot is during October or November. However, it’s not too late to be vaccinated in December or January.
- Approximately 90 million Americans get the flu every year. 100 thousand people need to be hospitalized and over 20 thousand of them die.
- In general, the flu hits very suddenly. All the symptoms seem to come at once: fever, chills, headache and muscle aches. The fever is often *higher* than 101 degrees.



The Latest Information About Influenza:

- There are antiviral medications that help treat the flu. They don’t work against every strain of the flu and should not be considered a substitute for the flu vaccine.
- The antiviral medications must be given within two days of getting sick with the flu and should not be taken for longer than five days.
- It’s important for high risk people (the elderly, people with chronic illnesses, health care workers) to receive the flu vaccine first—especially if there is a vaccine shortage. For example, for the 2001-2002 flu season, there were only three manufacturers working to produce flu vaccine for the entire United States. This caused a delay in flu vaccine production.

True or False?

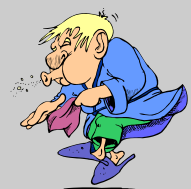
Take a guess to see how much you know about flu shots.

1. **True or False?** The flu shot can give you the flu.
2. **True or False?** The side effects of a flu shot are worse than the flu itself.
3. **True or False?** Only old and sick people need a flu shot every year.
4. **True or False?** The flu shot is not 100% effective.

1. F 2. F 3. F 4. T

Remember!

- Encourage your clients to get a flu shot every year.
- Protect yourself by getting the flu shot, too.
- Watch your clients for signs of the flu, especially clients who are *over 65*, who have *chronic diseases* or who have *weakened immune systems*.



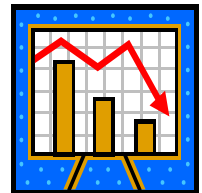
The Facts About Tuberculosis

Basic Information About Tuberculosis:

- Around the world, two *billion* people are infected with TB. Two million of them die every year.
- The bacteria that cause TB have been around since prehistoric times. However, in recent years, these germs have learned how to outsmart our best TB drugs. This new kind of “super” TB germs like to attack people with weakened immune systems—like people with AIDS.
- People who have a positive TB skin test but who are *not* sick are said to have TB infection. These people show no signs of the disease and can’t spread it to others. (However, they may need to take anti-TB medications to prevent the disease.)
- People who are actually *sick* with tuberculosis are said to have TB disease. They have *active* or *infectious* tuberculosis disease—and can spread it to other people.
- Tuberculosis bacteria die very slowly, so people with TB must take medications for many months—even after they stop feeling sick.

The Latest Information About Tuberculosis:

- Health departments across the country have worked hard to control the spread of TB. Their hard work has paid off! Tuberculosis has been on the decline in the U.S. for the last ten years. However, this is no time to relax! To win the war against TB, we must continue to practice proper infection control techniques.
- Ten years ago, about 25% of our tuberculosis cases involved people who had moved to the United States from other countries. Today, that number has doubled! If you work with clients who have recently immigrated to the United States, be sure to watch for signs of tuberculosis.



Remember!

- People are *exposed* to tuberculosis when they share the same air as a person who has infectious TB.
- The best way to control the spread of TB is to make sure infected people take their TB medication. For some, this means actually *watching* them swallow their pills.
- Watch your clients for the symptoms of TB: fever, night sweats and a hacking cough that often produces mucus or blood.



The Facts About HIV & AIDS

Basic Information About HIV & AIDS:

- AIDS is a disease that attacks the immune system. It's caused by a virus known as HIV.
- HIV is carried by the blood and other body fluids. It can be spread through unprotected sex with an infected person, by sharing drug needles, during childbirth or from an accidental exposure to body fluids.
- HIV is *not* spread by air, dishes, silverware, food, clothes, toilets, insects or animals. In fact, HIV is not easily spread.
- Every person with AIDS has been infected with HIV, but not everyone with HIV has developed AIDS.



The Latest Information About HIV & AIDS:

- The CDC estimates that nearly one million U.S. residents have become infected with HIV. One third of these people don't even know they are HIV+.
- About 350,000 Americans are living with AIDS.
- AIDS cases among people over age 50 are on the rise. Many of the cases come from heterosexual sex. (For example, many older people fail to use condoms because they are no longer worried about pregnancy.)
- HIV is also on the rise among young people in America. Studies show that many young people are not practicing safe sex because they believe that HIV will never happen to them.
- The treatment for HIV continues to change as new drugs are developed—and doctors learn how to use these new drugs. This is important since at least half of all Americans being treated for HIV are now resistant to the standard AIDS drugs. (For example, the AIDS drug AZT is no longer effective for 70% of AIDS patients.)

Remember!

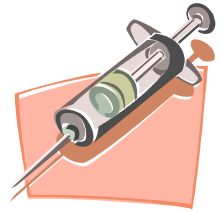
- People with HIV are infected for life and are capable of spreading the virus to others. However, they may live for many years without developing AIDS—or even feeling sick.
- On the job, HIV exposure usually comes from a one-time accident. Follow the post-exposure procedure for your workplace if you are exposed to the virus.
- The best way for you to stop the spread of HIV & AIDS is to follow standard precautions with all your clients—whether they seem sick or not.



The Facts About Hepatitis C

Basic Information About Hepatitis C:

- Hepatitis C spreads by contact with an infected person's blood. It is the most common bloodborne infection in the United States.
- Hepatitis C is *not* spread through hugging, sneezing or by sharing eating utensils.
- Health care workers are at risk for hepatitis C. So are people who received blood transfusions before 1992 and those who use IV drugs.
- Many people with Hepatitis C have no symptoms until late in the disease. Others have flu-like symptoms, fatigue, dark urine, abdominal pain and nausea.
- *Acute* hepatitis causes a sudden inflammation of the liver that lasts several weeks. Hepatitis is considered *chronic* if the liver inflammation lasts longer than six months.
- Liver disease is on the rise in the United States. However, experts guess that more than half of all liver disease could be prevented if people follow proper infection control procedures.



The Latest Information on Hepatitis C:

- There is *still* no vaccine to protect against hepatitis C.
- Doctors are finding that if they treat patients soon after they become infected with hepatitis C, they can prevent the disease from getting worse in 98 out of 100 patients. The key is to begin the treatment *early*—instead of waiting until the disease has become chronic.
- Thousands of Americans donated blood for the first time in response to the terrorist attacks of September 11, 2001. Unfortunately, some of them got bad news after the blood bank screened their blood. For every thousand people who donated blood, two of them were notified that they have hepatitis C.

Remember!

- Wear gloves if you have to touch anyone's blood.
- Don't let your clients share personal care items—such as razors, scissors, toothbrushes, nail clippers or tweezers. (Tiny bits of blood can remain on these items.)
- If you have tested positive for hepatitis C, using standard infection control precautions will protect you and your clients.



The Facts About Drug Resistant Bacteria

Basic Information About Drug Resistant Bacteria:

- Over the past fifty years, bacteria have learned how to survive—even when they are attacked by strong antibiotics.
- MRSA is a “staph” infection that is resistant to antibiotics. People who are very sick, elderly or who have wounds are most at risk for MRSA. Staph germs can be found on the skin, in the nose, in blood and in urine.
- VRE is a drug resistant infection caused by germs that live in the intestines. It is spread by unwashed hands or dirty gloves.
- Salmonella germs live in the ovaries of most chickens. People who eat raw or undercooked eggs are most at risk for being poisoned by salmonella.
- E. Coli germs live in the intestines of most animals (and humans). They show up most often in raw milk and undercooked beef. People have died from E. Coli food poisoning.



The Latest Information About Drug Resistant Bacteria:

- Doctors used to prescribe antibiotics freely, hoping that they *might* make a patient feel better. Now, doctors are becoming more cautious about prescribing antibiotics. For example, if they feel that a patient’s illness is caused by a virus, they often prefer to “watch and wait”.
- MRSA and VRE continue to be the most common drug resistant bacteria in nursing homes and other long term care facilities.

Remember!

- Unlike TB germs, MRSA and VRE germs do not travel through the air, so wearing a mask when working with infected clients is not necessary.
- The best way to prevent the spread of drug resistant bacteria is to use standard precautions with every client—and contact precautions as necessary.
- If your client has a wound, keep an eye out for signs of infection: redness, warmth, fever, drainage and a foul odor. Report problems right away.
- Always wash your hands before and after handling food—especially raw meat. Clean food preparation surfaces well with soap and water.
- Watch your clients for signs of food poisoning: nausea, cramps, diarrhea, fever and vomiting.
- Encourage clients to finish all antibiotics as prescribed by their doctors.



The Facts About Biological Terrorism

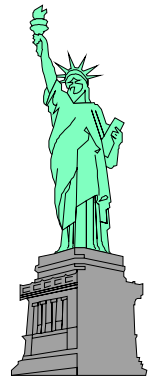
Basic Information About Biological Terrorism:

- Many of the germs used as biological weapons cause symptoms similar to the flu.
- Anthrax can cause an infection in three different areas of the body: the skin, the lungs or the intestines. All three forms of the disease can be deadly if untreated.
- People can be exposed to anthrax without getting sick.
- Anthrax is *not* contagious—so it can't be spread by contact with an infected person.

Your risk of being exposed to a biological weapon is low. However, it's a good idea to be prepared by learning about bioterrorism.

The Latest Information About Biological Terrorism:

- Since the terrorist attacks on September 11, 2001, the CDC is warning health care workers to watch out for possible cases of food poisoning, smallpox, anthrax and viruses such as Ebola.
- In the first six weeks following the September 11th attacks, the FBI investigated over 3000 biological threats. 2500 of them were anthrax threats.
- There is a vaccine for anthrax, but it is generally given to military personnel only. Certain government and postal workers were vaccinated after the cases of anthrax terrorism in the fall of 2001.
- All health care workers should watch for any unusual circumstances such as a number of clients with flu-like symptoms (and it's not flu season).
- Anthrax can be treated with antibiotics such as Cipro and doxycycline. However, people should never take antibiotics unless absolutely necessary. For example, if people take Cipro out of fear—and not because they have been exposed to anthrax—the anthrax bacteria could become *resistant* to antibiotics.



Remember!

- Know what you are supposed to do if your workplace declares a disaster.
- Follow correct infection control procedures for clients who must be kept in isolation.
- If you are exposed to a biological weapon, your first step should be to bathe with soap and water and change your clothes as soon as possible.



Basic Infection Control Tips!

- The key to washing your hands is *not* the kind of soap or the temperature of the water. It's the energy you put into scrubbing your hands. *Friction* gets rid of bacteria—not soap.



- Teach your clients to ask you if you have washed your hands. (*They should also ask everyone else who works with them.*) And, then, when they do ask you, don't get defensive. Just be grateful for the reminder!
- Gloves should be worn to protect your hands from becoming contaminated with blood or body fluids. Wear gloves when you:
 - Perform tasks that you think might involve blood or body fluids.
 - Touch equipment that may have been contaminated by blood or body fluids.
 - Have cuts, scratches or other breaks in the skin of your hands.
- Remember that gloves primarily protect you—not the client. If you have dirty hands when you pick up a pair of gloves, you'll contaminate them—and your client. It's important to wash your hands *before* you put on gloves!



- Don't rub your eyes or nose during client care. You don't want to expose your mucous membranes to unwanted infections.

- Never shake dirty linens. Instead, roll them up, hold them away from your body and place them in a hamper or bag for cleaning.
- Remember that you can't catch TB from handling the dishes, clothing or linens of a client with TB. Tuberculosis is spread through the air, not by touching things.
- Keep in mind that you can't catch HIV by hugging or shaking hands with someone. Don't be afraid to touch a client who is HIV positive.
- Consider getting the vaccine injections for hepatitis B (if you haven't had them already). That way, if you happen to be positive for hepatitis C, you won't have to worry about doing additional damage to your liver with hepatitis B.
- Be sure to have your TB skin test and/or your chest x-ray on schedule. Getting tested on time could make a difference to you, your clients, your coworkers and your family.
- Help your clients understand how diseases are spread so that they can participate in proper infection control practices, too.
- The single most important thing you can do to help control the spread of infection—including *drug resistant diseases*—is to **wash your hands!!**



Are You "In the Know" About Infection Control?



Circle the best choice and then check your answers with your supervisor!

1. If your client's temperature is normal:

- A. You don't have to wear gloves during client care.
- B. She does not have an infection.
- C. Her linen should be changed only once a week.
- D. You need to use standard precautions during client care.

2. True or False

Handwashing is the single most important way to prevent infection.

3. Treatment with anti-TB medications:

- A. Is the best way to prevent spreading the disease.
- B. Is not necessary unless someone has active TB.
- C. Can be discontinued when the person feels better.
- D. Usually lasts 10 to 14 days.

4. True or False

It's okay to wear the same gloves all day if you rinse them with warm water in between clients.

5. You are at risk for developing Hepatitis C if you:

- A. Came in contact with infected saliva.
- B. Have cirrhosis of the liver.
- C. Failed to get vaccinated against hepatitis C.
- D. Received a blood transfusion before 1992.

6. Bacteria have become drug resistant because:

- A. Antibiotics only work against viruses.
- B. Most people ignore the signs of a wound infection.
- C. People eat too much chicken.
- D. Doctors have prescribed too many antibiotics.

7. True or False

It's especially important to protect people with HIV & AIDS from the flu.

8. True or False

Health care workers who test positive for hepatitis C or HIV should not continue to work with clients.

9. True or False

Many people have lived with HIV for ten years or more before getting sick with AIDS.

10. True or False

If a disease is contagious, it means that you can catch it from another person.

EMPLOYEE NAME _____

DATE _____

I understand the information presented in this inservice. I have completed this inservice and answered at least eight of the test questions correctly.

Employee Signature _____

Inservice Credit: 60 minutes

Supervisor Signature _____

Self Study _____

File completed test in employee's personnel file.

Group Study _____