

An Infection Control Module: Handwashing

Instructions for the Learner

What will you learn?

After finishing this inservice, you will be able to:

- Discuss the five steps of proper handwashing.
- List at least four different situations when you should wash your hands.
- Name the three different types of soap, and what type is best.
- Discuss the connection between handwashing and preventing infection.
- List up to six different causes and symptoms of dermatitis.

We hope you enjoy this Inservice, "Handwashing". It's been 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.

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

- Read through all the material. You may find it useful to have a highlighting marker nearby as you read. Highlight any information that is new to you or that your feel is especially important.
- If you have questions about anything you read, please ask
- Take the quiz. Think about each statement and pick the best answer.
- Check with your supervisor for the right answers. You need <u>8</u>
 <u>correct</u> to pass!
- 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!



An Infection Control Module: Handwashing

Infection Control: It's in Your Hands!

Inside this issue:

| The Five Steps of Proper Handwashing | 2 |
|---|---|
| When to Wash your Hands | 3 |
| Gloves: Good or Bad | 4 |
| Dermatitis | 5 |
| Handwashing Facts | 6 |
| Costs of Infectious Disease | 7 |
| Do's and Don'ts of Handwashing | 8 |

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Do you ever get so busy on the job that you forget to wash your hands? It takes a lot to stop and scrub your hands all the time, right? It doesn't hurt to skip the routine once in a while, right?

WRONG!

Germs gather on your hands as you perform daily activities. By not washing your hands you can catch, or pass on, a number of illnesses—from the common cold to a more serious disease like hepatitis. Most cases of diarrhea and vomiting are caused by improper handwashing. Handwashing is the single most important means of preventing the spread of infection!

The germs we carry on our hands can cause illnesses like diarrhea, colds, salmonella and other serious infections. Many people never realize how many of these germs are alive on their hands, or how dangerous some of the germs can be. It is very important to get the word out there about how important handwashing really is!



"Wash your hands and away goes infection down the drain!"

Never forget that with a little soap and water you can prevent many diseases. Wash your hands and away goes infection down the drain!

This inservice will provide you with a step by step guide to successfully washing your hands. A simple rinse does not always do the trick. It just takes a few pennies worth of soap to make a huge difference in your clients' and your health.

Proper Handwashing is Only Five Steps Away!



Since you deal with many different clients everyday, it is extremely important to keep your hands clean. Even by touching a doorknob or a telephone, you can pick up and pass on thousands of different germs. Here are the five suggested steps to follow to properly wash your hands, whether you are at home or at the workplace.

- 1. Begin by wetting each hand thoroughly. **Use an antibacterial soap**. It can be in either a liquid form or a bar of soap. If using a bar of soap, make sure that it is placed on a clean rack when you are finished. All water will drain off the soap and keep it free from germs.
- 2. Once you have applied soap, **rub your hands together** making sure you don't miss any spots. Scrub all surfaces, including in between each finger.

One out of three people do not wash their hands after using the restroom!

- 3. Resume scrubbing each hand for 15 seconds. Do not rub so hard that your skin becomes irritated, as this can lead to certain skin conditions.
- 4. Rinse both hands well in warm, but not scalding, water. There are studies proving that very warm water can do a lot of harm to your skin, and even add to infection!
- 5. **Dry hands thoroughly**. As paper or cloths towels work, the best way to dry is by using a motion activated dryer.

 These dryers are touch free, which means less infection!

How Do Dirty Hands Contribute to Sickness?

- The easiest way germs are transferred is by coughing or sneezing into your hands and rubbing your eyes, nose, or mouth. Many times, people don't realize they are at risk. Only thirty percent of people wash their hands after sneezing or coughing! No wonder so many people get sick every year.
- Another way germs are transferred is through food. It is extremely important

to wash your hands before and while you are cooking for a client. If unclean hands touch food, germs are immediately transferred to that food, and then to your client. Bacteria also thrives on toilets, doorknobs, railings, sinks, and other commonly used objects. Think about all of the objects you touch before visiting a client. Now, think about caring for your client without washing your hands. (Even if you wear gloves all day long, your clients are still at risk for developing an infectious disease.)

When Should You Wash Your Hands?

Germs are invisible to the eye, and because of this, not many people think about washing their hands throughout the day. Here are a few times when it is **absolutely necessary** to wash your hands thoroughly:

- After lengthy contact with any client.
- Before and after situations in which your hands are likely to be contaminated, including bathroom breaks, your lunch break, and before and after your workday.
- After touching contaminated items such as urine-measuring devices.
- After gloves are removed (since the gloves may have a hole). Bacteria multiplies quickly when your hands are inside gloves.
- If a client asks you to wash your hands, do so, and don't be offended. People are learning more about handwashing and preventing infections.

- Whenever you are preparing food for a client.
- If a client has pets, wash your hands frequently while visiting.

 Many animals leave invisible germs all around the house that go completely unnoticed!
- If someone in your family is sick, keep your hands as clean as possible all day long, so you don't pass on germs to your clients.
- After sneezing or coughing. Even if you use a tissue when you sneeze, germs can still seep onto your hands.
- When you arrive to see a client, and once again when you leave.
- Before and after you put on gloves.
- Anytime you think it might be a good idea!

Are Some Soaps Better Than Others?

There are three main types of sanitizers used for hands, some are better than others. Keep reading to learn which types you should use!

- Antimicrobial Soap: This type of soap not only removes the dirt and residue from your skin, but also uses an agent that kills microorganisms. Sometimes, the agents that are used in the soap continue to kill microorganisms even after your hands are dry!
- **Plain Soap:** Although plain soap gets rid of surface residue, it does not have the power to kill microorganisms that are on the skin. It can "suspend" the microorganisms from infecting, but it can't kill them.
- Antiseptic Handrubs: These types of disinfectants are water free and consist of a "gel" that decreases the number of microorganisms on your skin. Always use soap and water when you can.

Do Gloves Do More Harm Than Good?

You should always wear gloves whenever you are likely to come into contact with any bodily fluids, blood, mucous membranes, contaminated materials, or broken skin. For these reasons, gloves are essential. Are they harmful as well?

 Wearing gloves constantly can irritate your hands, and possibly lead to dermatitis.

- No glove, no matter how tough, is completely resistant to infectious diseases.
- Gloves can protect the wearer, but what about the client? Microorganisms can still be passed from the outside of the glove to the client!
- Gloves are essential, but don't put <u>all</u> your trust in them. Nothing can take the place of proper hygiene.

Did You Know?

- A surprising statistic from The Association for Professional Infection Control and Epidemiology (APIC) states that regular handwashing for general patient care only occurs about half the time.
 To make things worse, the half of healthcare workers that DO wash their hands, don't do a good enough job!
- The Center for Disease Control (CDC) advocates proper handwashing at all times.
 They also advise a through handwashing after gloves are removed.
- When using a new disinfectant on your skin, you should always read the label first. Some antibacterial soaps, or handrubs have specific instructions that may help you get your hands cleaner.
- According to the <u>Chicago Tribune</u>, the yearly deaths due to germs from unclean hands in hospitals are higher than deaths due to fires, drownings, and car accidents combined!

- There are cotton liners that can be worn underneath latex gloves to protect your hands from developing dermatitis. If you feel you are at risk for dermatitis, check into these liners; they could save you a lot of time and pain. For more information about dermatitis, turn to page 5.
- Gloves and handrub sanitizers should never take the place of proper handwashing. As these types of preventive measures are important, they are only meant to aide infection control. Handwashing still remains in first place.
- It is said that you should wash your hands under water at least 110 degrees F. It's important to keep the water hot enough to remove bacteria, but cool enough to not cause any damage to your hands. A tip for water temperature is to turn it as hot as you can stand and still be comfortable. Don't forget the soap!

Dermatitis

- Dermatitis is an inflammation of the skin and can be a very frustrating condition for healthcare workers. It is a chronic disease, but is not contagious (cannot be passed from one person to another). The cause of dermatitis is not known, but the disease seems to result from a combination of genetic and environmental factors.
- Eczema, one type of dermatitis, occurs when an irritating material comes in contact with the skin. For hospital workers, this material

- is often in the form of a glove! Excessive handwashing and chemicals can also irritate the skin and cause dermatitis to worsen.
- According to the National Institute for Occupational Safety & Health, skin injuries and illnesses (including dermatitis) make up a huge amount of all occupational injuries and illnesses!
- Insurance companies pay anywhere from \$580 to \$1,250 a year for patients with dermatitis related conditions.

Symptoms of Dermatitis

 Do you wear gloves for hours at a time? Do your hands feel irritated the majority of the time? You could have Dermatitis.

Watch out for these signs...

Persistently itchy, red, swollen skin
Tender, hot, or painful skin
Dry, scaly, sensitive skin
Blistered and/or crusty skin

• If dermatitis remains untreated, the skin could become thicker and/or a darker color. And, as dermatitis heals, the skin may begin to flake and/or scale. Sometimes this healing process is confused with dry skin.

Harsh soaps, detergents, chemicals, and not completely drying your hands can lead to dermatitis.

Preventing Dermatitis

- Even though dermatitis is sometimes hard to avoid, there are a few ways to try to prevent it:
 - Use mild antibacterial soaps.

Rinse hands thoroughly and do not leave any excess soap residue.

Dry hands completely after handwashing.

- Apply moisturizers to your hands frequently.
 Keeping your skin healthy and moisturized is one of the key ways to prevent dermatitis.
- Keep in mind that you may be allergic to latex and not even know it! There are alternative gloves you can use that will protect you and your clients just as well. If you do find out that you are allergic to latex, check into finding different gloves.

Handwashing Facts

Did you know that...

- Most of the germs on your hands are hiding under and around your fingernails. Be sure to scrub your nails well when you wash your hands. According to nurseweek.com, long artificial or natural nails have been blamed for numerous outbreaks of infectious diseases around the country.
- Scientists have known for over 100 years that handwashing helps prevent infection. Yet, infections continue to get spread around because hands are not washed often enough.
- Artificial nails are difficult to clean with proper handwashing. It's best to avoid them if you are providing patient care.
- The way you wash your hands is just as important as how often, so be sure to follow the handwashing policy at your facility.
- Jewelry on your fingers and wrists can serve as a nest for germs. Think about leaving your rings at home and sliding your watch above your wrist when you wash your hands.



- Many healthcare workers remember to wash their hands after giving client care, but some forget to wash before they touch a client. How about you?
- Washing your hands with plain soap removes the "top layer" of germs, but you need to use antimicrobial soap to get at the stubborn germs.

Germs are removed when you rub your soapy hands together—it's the rubbing that is important. Soap alone won't get rid of the germs.



- Turning off the faucet with a dry paper towel helps prevent new germs from getting on your clean hands.
- Millions of germs live on your body all the time. Handwashing won't make your hands germ-free, but it will remove many of the harmful germs.
- Rinsing all the soap off your hands is very important. The water will carry away the germs that you have loosened by rubbing your hands together.
- Bacteria are much more widespread than many people are aware of. They can reproduce every 20 minutes!
- Right now, there are more bacteria on your body than the number of people in the United States. That's more than 290 million!
- Bacteria that live on your skin are called "resident" bacteria. This type of bacteria are found on healthy people and normally are not harmful. On the other hand, "transient" bacteria are "just visiting". They transfer from foreign objects on to your skin and are the kind of germ that can be harmful to your body.

The Costs of Infectious Diseases

If you think that handwashing isn't really such a big deal, think about this:

- The cost of treating infections, that antibiotics can't cure, is \$4 billion every year! (Regular handwashing can reduce the spread of some of these tough
- Two out of the ten leading causes of death in the U.S. are HIV and pneumonia which are both infectious diseases. The CDC also states that an estimated 160,000 people in the U.S. die from an infectious disease every year.

bacteria.)

- Over 88,000 patients die every year from infections they acquired *after* being admitted to a health care facility. At least 20% of these infections (called nosocomial) could be avoided with proper handwashing techniques.
- Nosocomial infections are the most common immediate cause of death in nursing home clients. In addition to costing people their lives, these infections cost the U.S. billions of dollars every year.
- Between 5% and 18% of all patients have an active infection right now!
 Help save lives and money by washing your hands according to your agency's policy.
- There are 80 million cases of food poisoning in the U.S. every year. At least half of them could be prevented with proper handwashing.
- Infectious diseases are the leading cause of death in the world! Handwashing is the best defense against all infectious diseases.

Food-Borne Illnesses

A serious public health issue, food-borne bacteria contributes to 76 million illnesses, 300,000 hospitalizations, and 5,000 deaths each year in the US only.

Food-borne bacteria can be spread by:

- An infected person preparing the food.
- Food that has not been cooked fully or properly prepared.
- Food that is not kept cold or left at room temperature for over an hour.



4 Steps to Ensure the Safety of Food

- **Clean:** Wash hands and surfaces frequently.
- **Separate:** Don't cross contaminate.
- **Cook:** Cook foods to proper temperatures.
- **Chill:** *Refrigerate foods promptly.*

Handwashing DO's And DON'Ts

There are many hidden dangers when you wash your hands.
Here are a few things to watch out for during your workday!

- DON'T use a damp cloth to take excess water off your hands. Bacteria thrive in warm, damp places, such as a wash cloth.
- DO make sure to wash the entire surface area of your hands and wrists. Many people forget to wash the tops of their hands. This skin is more sensitive than the palms of your hands, so be sure to get it clean without rubbing too hard!
- DON'T wear the same pair of gloves when treating a different client, even if they are washed or rinsed.
 Gloves can easily carry illnesses from client to client.
- hands after you wash them. Much of the bacteria is removed by the heat of a dryer, or they are simply wiped off with a dry towel. If you only shake your hands in the air, it is likely that there are still lots of tiny microorganisms all over your hands.

- DON'T use a community towel in the restroom. Who knows what type of germs call that towel home!
- DO remove all jewelry and/ or watches before washing your hands. If you don't, microorganisms can hide under your jewelry and then be free to contaminate your clients!
- DON'T directly touch the sink at any time while washing your hands. Use a dry towel to turn the faucet on and off.
- DO make sure to clean underneath your fingernails, and to remove all debris. This area of the finger is one of the areas most responsible for spreading infections.
- DON'T touch your eyes, nose or mouth after washing your hands.

- DO wipe down any soiled counters or stove tops if you cook for your client. Diseases can thrive on uncooked food, and can transfer from food to counters, then to your hands. Make sure to use a strong disinfectant spray, and not just a wet paper towel.
- DO encourage your client to wash their hands on a regular basis, if they are able. If your client keeps up with their own hygiene, it is less likely that they will become sick.
- tidy up a client's area.
 Keeping surfaces as clean as possible can help get rid of those tiny bacteria all over their house and/or personal space.
- DON'T touch or examine a client without washing your hands first. Hands should be washed immediately before you come into contact with a client, and again immediately after.



EMPLOYEE NAME (Please print):

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Are you "In the Know" about Handwashing? <u>Circle the best choice, or fill in your answer. Then check your answers with you supervisor!</u>

1. TRUE or FALSE

Even good handwashing can't remove all the germs, so following the handwashing policy is a waste of time.

| | 2. | TRUE | or | FALSE | | | |
|--|--|----------------------|-------|---------------------------------|--------------------|------------------|----------------------------|
| | Around the world, infectious diseases are the number one cause of death. | | | | | | |
| DATE: | | | | · | | | |
| | 3. | TRUE | or | FALSE | | | |
| I understand the information presented in | На | ndwash | ing i | s the single mos | t important way | to prevent infec | tion. |
| this inservice. | 4. | TRUE | or | FALSE | | | |
| I have completed this inservice and answered at least eight of the test questions correctly. | Using lots of soap during handwashing is more important than how long you rub your hands together. | | | | | | |
| | 5. | TRUE | or | FALSE | | | |
| EMPLOYEE SIGNATURE: | | s more c ent care | | | are workers to re | member to wasl | n their hands <i>after</i> |
| SUPERVISOR SIGNATURE: | | TRUE percent | | FALSE eople wash thei | r hands after sne | ezing or coughi | ng. |
| | | You sho | ould | scrub each hanc | l for this many se | econds every tim | ne you wash your |
| | | A. | 30 | B. 60 | C. 15 | D. 5 | |
| | 8. | TRUE | or | FALSE | | | |

Inservice Credit:

| Ш | Self Study | 1 hour |
|---|-------------|-----------|
| | Group Study | 1 hour |

File completed test in employee's personnel file.

9. TRUE or FALSE

Bacteria can reproduce every two hours.

Scientists learned the importance of handwashing about twenty years ago.

10. TRUE or FALSE

It is important to wash your hands after removing gloves since bacteria grow quickly inside gloves.