# Wash Up! It's In Your Hands

A Personal Hygiene Program for Grades 4-9





TEACHER'S GUIDE written by Mary Cubello

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## WASH UP! IT'S IN YOUR HANDS

#### SYNOPSIS:

Hands spread 80% of common infectious diseases like the common cold and flu. So how can we prevent this. It's simple!

Hand washing is the most important thing we can do from getting sick. It's a fact! Health Canada and the Centers for Disease Control and Prevention have proven it.

This 12 minute video gives students in Grades 4-9 simple facts about hand washing - why it's important, when to do it, and most important how to do it properly. Along the way, they also learn about microorganisms, viruses, and bacteria.

In addition, students learn about other simple things they can do to stay clean - washing their hair, caring for the clothes they wear, brushing their teeth (braces included!). Simple things, but all too often forgotten!

#### LEARNING OBJECTIVES:

Following the viewing of this video program, students should:

- Understand why correct hand washing is important.
- Understand when to wash hands.
- Demonstrate correct hand washing technique.
- Understand why personal hygiene like hairwashing, brushing teet, changing clothes is important.
- Describe the increasing importance of personal hygiene during and following puberty.
- Understand what microorganisms are.
- The students will be able to list two germs; virus and bacteria.

## DEFINITIONS

**Antibacterial** - Anything that destroys bacteria or suppresses their growth or their ability to reproduce.

Antibiotic - A drug used to treat infections caused by bacteria and other microorganisms.

**Bacteria** - One-celled, microscopic, living organisms, some of which can cause disease. They also play a role in fermentation, putrefaction, and nitrogen fixation. They are responsible for diseases like typhoid, cholera, meningitis, tuberculosis and tetanus. Of the billions of types of bacteria, only about 50 are known to cause infection.

**Contaminate** - To make impure or unclean by contact or mixture.

**Germs** - Germs are microorganisms, tiny living things that can only be seen with the help of a microscope. Billions of microorganisms live on your skin or in your body. Most of them are harmless; some actually help keep you healthy. Disease germs (which scientists call pathogens) are the exception.

Friction - Force that resists movement between two objects in contact.

Hygiene - Conditions and practices that serve to promote or preserve health.

**Immune System** - The immune system is a network of organs, glands, and tissues that protects the body from foreign substances. These substances include bacteria, viruses, and other infection-causing parasites and pathogens.

**Microorganisms** - A living organism that can only be seen under a microscope. Microorganisms include bacteria, protozoans, and certain algae and fungi. They are everywhere in our environment, on and in our bodies. Every square centimeter of our body surface is covered by thousands of these organisms. We do need them to survive. They help us digest food and enable the normal development of our immune system. Kept in balance, they form an essential system that helps protect our body. Sometimes this balance can be harmed and that's when we get sick.

**Puberty** - The period of human development during which physical growth and sexual maturation occurs.

**Sweat** - A transparent colourless acidic fluid with a peculiar odour. It contains some fatty acids and mineral matter. It is also called perspiration.

**Sweat Glands** - Any of the numerous small, tubular glands that are found nearly everywhere in the skin of humans and that secrete perspiration externally through pores to help regulate body temperature.

**Viruses** - are even smaller than bacteria. They are very simple life forms that cannot reproduce except inside another living cell. That can be us! We're a host cell. Colds, the flu and sore throats are short-lived viral infections. Others like hepatitis and AIDS are life-long. Viruses cause far more illnesses than bad bacteria because they are spread more easily.



## It's In Your Hands!

**Step One:** Wet your hands with warm running water.

**Step Two:** Apply Soap. Hard soap, or liquid soap from a dispenser both do the trick.

**Step Three:** Lather. Rub your hands together for at least 20 seconds. You have to create "friction". Scrub between your fingers, the backs of your hands, around your fingernails, your wrists and forearms. If it helps, sing a song while you're doing it. Sing your ABC's. Even though you're older, it still works.

**Step Four:** Rinse thoroughly under running water.

**Step Five:** Dry your hands with paper towel. If you're at home, use a towel but change it frequently.



**Step Six:** Turn off the tap using the same paper towel or towel to avoid recontamination.

## When?

- After using the bathroom.
- After coughing or sneezing.
- Before and after eating or cooking.
- After touching pets or other animals and cleaning litter boxes.
- After outdoor activities like gardening or taking out the garbage.
- After handling money.
- After changing a diaper or helping a child use the toilet.
- After playing with toys.

## How well do you know your handwashing procedure? True/False Quiz

#### For each of the following statements, please indicate if you think it is true or false.

1.	Drying hands is part of proper handwashing procedures.	[] True	[]False
2.	You should always use soap to properly wash your hands.	[] True	[] False
3.	You should wash your hands before preparing food.	[] True	[] False
4.	You do NOT need to wash your hands after you take out the trash.	[] True	[] False
5.	You should wash your hands for at least 10 seconds.	[] True	[] False
6.	You do NOT need to wash your hands before preparing raw meat.	[] True	[] False
7.	You do NOT need to wash your hands after preparing raw meat if the meat is going to be cooked.	[] True	[] False
8.	You should wash your hands immediately after wiping up a spill on the floor.	[] True	[] False
9.	You do NOT need to wash your hands after answering the phone before you prepare food.	[] True	[] False
10	. You do NOT need to wash your hands after you sneeze unless you sneeze directly on your hands.	[] True	[] False
11	. Gloves keep your hands clean so you do not need to worry about spreading germs.	[] True	[] False

Answer key on page 11.

## **Suggested Student Activities**

There are numerous ways you can incorporate "handwashing" into your classroom curriculum. Besides being an important part of the Health curriculum, the importance of handwashing can be used in the math, science, english, art and drama curriculum. Here are some suggestions:

#### Art:

Have students create their own handwashing posters. These can demonstrate proper handwashing methods; the importance of handwashing - how it protects against the spread of germs; or when to wash your hands. Posters can then be placed in strategic locations (washrooms, cafeteria) around the school.

#### **Communication:**

Have students prepare brief public service announcements to be used over the school's public address system. Here's an example:

*"It's 9:15 a.m. Have you washed your hands today. Please remember, washing your hands several times a day stops the spread of germs and helps keep us all healthy."* 

#### Drama:

Haves students in grades 4 to 8 create short skits about the importance of handwashing to share with younger students. Incorporate a 20 second poem or jingle that reminds younger students to scrub their hands for at least 20 seconds.

#### Health/Math & Science:

Washing hands with water alone is significantly less effective than washing hands with soap in terms of removing germs, and handwashing with soap is seldom practiced. Around the world, the observed rates of handwashing with soap at critical moments range from zero percent to 34 percent. Using soap adds to the time spent washing, breaks down the grease and dirt that carry most germs by facilitating the rubbing and friction that dislodge them and leaves hands smelling pleasant (which creates an incentive for soap's use). With proper use, all soaps are equally effective at rinsing away the germs that cause disease.

A simple handwashing experiment can be conducted using water-soluble paint, soap and water, and some smocks to keep clothes clean. Have students put one teaspoon of paint on their hands and rub it in - front and back of hands, between all fingers, around the fingernails. Let it dry for a couple of minutes, then have different students wash for various time intervals (5, 10 & 20 seconds), first using water only. Students can log on a simple data chart how clean their hands are after each time interval.

Repeat the experiments using soap, water and friction (rubbing hands together). Again, have students record data on a chart.

#### Math:

Research and calculate handwashing facts and statistics. Possible computations include: microbe transmissions from person-to-person and the speed of bacteria multiplication.

#### **Social Studies:**

According to the United nations, every year, more than 3.5 million children1 do not live to celebrate their fifth birthday because of diarrhea and pneumonia. Yet, despite its lifesaving potential, handwashing with soap is seldom practiced and not always easy to promote. Turning handwashing with soap before eating and after using the toilet into an ingrained habit could save more lives than any single vaccine or medical intervention, cutting deaths from diarrhea by almost half and deaths from acute respiratory infections by one-quarter.

Have students research and write a 1-page essay on how they would promote handwashing in third world countries with little financial resources, little access to clean water.

Some interesting information and facts can be found on www.globalhandwashingday.org

#### Writing/English:

Have students research handwashing and then write a 3 or 4 paragraph press release on the importance of handwashing.

## **Additional Personal Hygiene Tips**



**Daily routines:** 

Good hygienic habits are easy to begin and maintain. Starting with a few of these ideas will help you start on your way to developing good hygiene for both you and your family.

• Brush your teeth. Twice a day is best, and use only a pea-sized dab of toothpaste. Don't skip the bedtime brushing. (Those bacteria like to feast in a sleeping mouth.) In order to have and maintain good oral hygiene, it is critical to visit your dentist at least every six months. In addition to regular brushing, it is critical to floss your teeth at least once a day, usually before you go to bed. This will enable you to reduce plaque in the more difficult to reach places—between teeth and at the back of your

molars. Flossing also keeps your gums healthy and strong, and will help protect your mouth from a variety of diseases that could eventually cost you your teeth.

- Wash and carefully dry five body zones: feet, face, hands, armpits and bottom.
- Remember to scrub under your fingernails.
- Trimming Your Nails. Keeping your nails trimmed and in good shape is also important in maintaining good health. Going to a professional to learn proper nail care will help you get on the right track to trimming your fingernails as well as toenails. Proper trimming techniques will also help you avoid hangnails and infected nail beds.
- Wear clean socks and underpants.
- Put on shoes that have aired out overnight (or longer).
- Wash Your Hair. It's so important to keep your hair clean and conditioned to ensure it stays healthy and strong. Washing your hair at least every other day is important to keeping your hair healthy and in good shape. If you wash it too frequently, your hair will become brittle and dry, making it difficult to grow and keep strong. If you wash it too infrequently, it will become greasy and will also stunt its growth. Getting your hair cut frequently is critical to healthy hair. The longer you wait to get your hair cut, the more frail and brittle your hair can become, especially if it is longer.
- If you are thinking about removing body hair, make that choice carefully. Before shaving, waxing or plucking, talk to Mom or Dad. What sounds easy often isn't.
- Don't share personal items with other people (not even your brother or sister)! Personal items include toothbrush, hairbrush, washcloth, towel, cup and razor.

#### Answeer Key:

1. Т Т 2. Т 3. 4. F F - you need to wash your hands for at least 20 seconds 5. 6. F F 7. Т 8. Т 9. F 10. 11. F





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