Soap, a short history
The first written recipe for soap dates back over 4000 years, but the use of soap (and the practice of bathing) has gone in and out of favor throughout history. In the 12th century, soap was taxed as a luxury item and only available to the rich. Today, in the United States, many low-cost soaps are available as well as access to fresh, clean, running water.

How does soap work?
Basically, in the presence of friction and water, soap mixes with the skin oil on the hands to loosen grease and dirt.

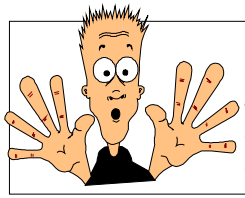
Occasionally, antibacterial agents are added to soap as preservatives (so the soap doesn't let bacteria grow). Some of these agents may also leave a residue on the hands that can continue to kill bacteria for a short time. Antibacterial soaps can be more irritating to the skin than other soaps and are not required for adequate handwashing.

How much time is needed to wash?
A good handwash should take about 1 minute. Make sure you get a good lather and scrub your hands all over—common spots missed are the thumbs, backs of hands and under the fingernails. Scrub with your hands away from the running water so the lather is not washed away. When you rinse, it is important to scrub—friction is one of the requirements for germ removal.

How many times a day do I need to wash?
Unfortunately, there is no magic number of handwashings desired per day. One washing only lasts until you touch something; the key is frequency.

Studies have shown that increased handwashing results in decreased illnesses. Wash often!

Infection Prevention Reminder:



If you are sick with vomiting or diarrhea, do not prepare or handle food. The germs that are making you sick can be easily passed to your family and friends.

What about hand sanitizers?
The most common hand sanitizers are alcohol-water formulas that destroy many bacteria, fungi, and viruses. Although hand sanitizers are often easier to use than finding an adequate sink, they can also have drawbacks:

- ◊**They are not good cleaning agents** (they work best when your hands are free of visible dirt)
- ◊**They can be drying and cause irritation** (because many of them use 60-70% alcohol, which also makes them flammable)
- ◊**They must be used according to directions** (you must use a sufficient quantity to get thoroughly wet, and you should let it air-dry/evaporate)
- ◊**They may not be effective against all germs** (although they are very effective against certain viruses and bacteria, hand sanitizers do not work well against some viruses, bacteria or parasites)

Handwashing fun for kids
There are many ways to teach handwashing to children. A simple, fun activity is to rub petroleum jelly on the hands. Try to wash it off using three different methods:

1. Put hands under cold water (the water just runs off).
2. Put hands under warm water (a little of the jelly comes off).
3. Use soap and warm water and scrub hands (all of the jelly should come off).

**Modifications to this activity include using craft glitter or cinnamon to show how germs spread by touching.

Another education product available is a powder that is invisible under white light, but fluoresces under ultraviolet (or "black") light. Two commercial suppliers of the powder are Brevis (www.brevis.com) and Glo Germ (www.glogerm.com).

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Handwashing

Facts and Tips Series

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According to the Centers for Disease Control, "Handwashing is the single most effective means of preventing the spread of disease." Despite our awareness that clean hands prevent disease, it is estimated that inadequate handwashing may cause up to 40% of our nation's foodborne illnesses, 20 thousand hospital-acquired deaths, and millions of dollars spent for sick leave each year.

Do you wash your hands each time you use the restroom?
In 2007, the American Society for Microbiology sponsored a survey of American handwashing habits through a telephone survey and by observing people in public restrooms.

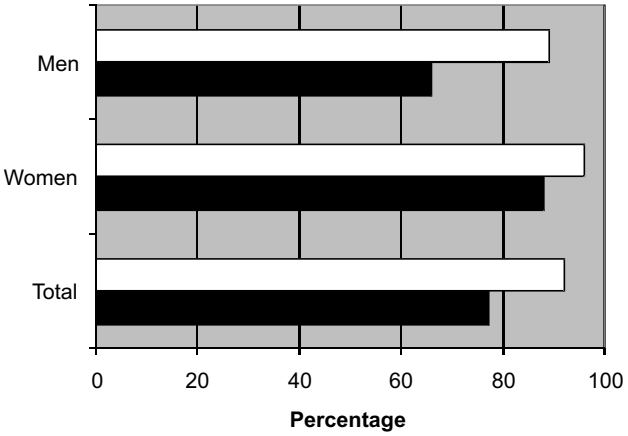
A handwasher was someone that:

1. used soap
2. rubbed hands together
3. used a drying device

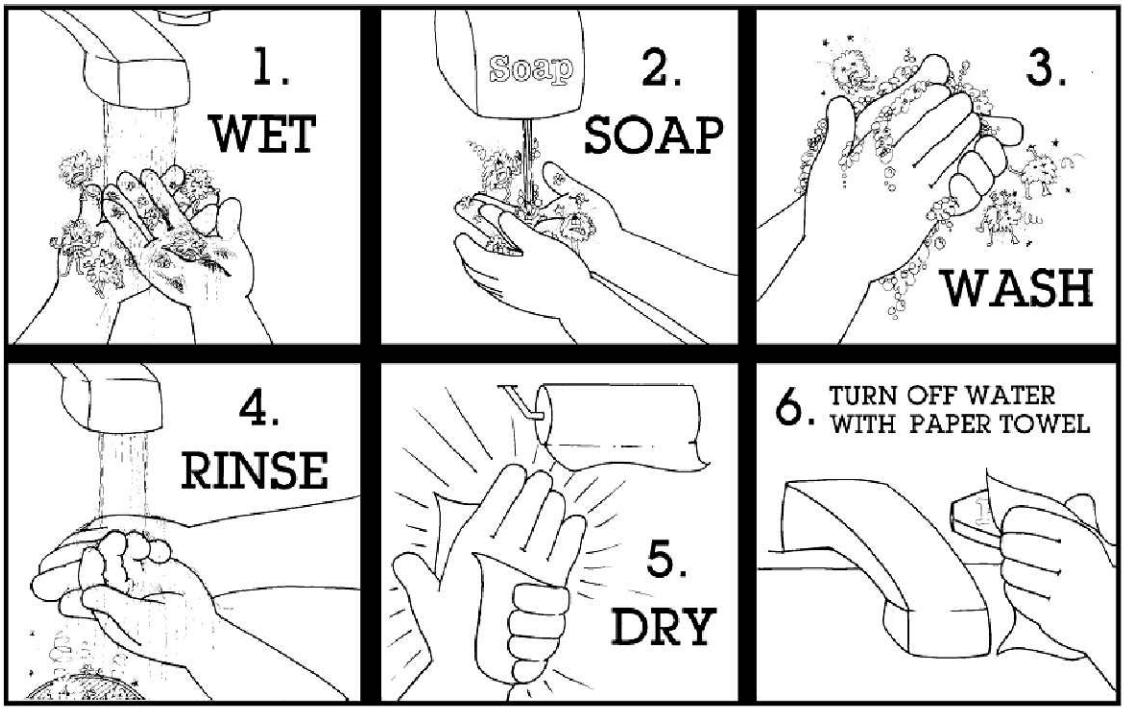
The study is available on the American Society for Microbiology's handwashing education website: www.washup.org. Here is a portion of the study's results:

Percentage of U.S. adults who...

- ☐ Say they wash their hands (1001 phone-surveyed)
- ■ Actually do (6076 observed in public restrooms)



Be a Germ-Buster...
WASH YOUR HANDS!



Why is handwashing important?
Other than to get rid of visible dirt and debris, handwashing is important to remove germs that can cause illness to you or others. The human body (as well as other animals and our environment) is a host to many germs that can be spread. Germs generally come out of our body when we cough, sneeze, go to the restroom, and, occasionally, bleed. Many of these germs can survive on surfaces for hours, days, or weeks until they can get into a new host. Handwashing is required to break the chain, and prevent the germs from causing more illness.

Is the goal to get rid of all the germs?
No. You will never be rid of all of the germs on your skin. Most germs, including many that are always on your skin, do not harm you; some benefit you. The goal is to get rid of most of the germs that you have picked up (and that can cause illness) before you get infected or pass them to other people.

When should you wash your hands?
To keep from spreading illnesses to others, the most important times to wash are:

- ☑ Before preparing, serving, or eating food
- ☑ After going to the restroom
- ☑ After diapering a child
- ☑ After caring for an ill or bleeding person
- ☑ After feeding or touching animals
- ☑ After coughing or sneezing
- ☑ After handling raw meat

To reduce your chance of illness wash your hands:

- ☑ All of the above, plus
- ☑ Before touching your eyes or contact lenses
- ☑ Before touching your nose or mouth

*The average person touches their eyes, nose, and mouth over 200 times a day! These are the 3 easiest ways for germs to enter the body.