Proper handwashing is the simplest and most effective means of preventing spread of disease. Most of the handwashing studies that have been performed have been associated with infection rates among hospital patients, however, we can extrapolate the message of proper hand washing techniques into the work setting and change the focus from preventing patient infection to preventing disease in the laboratory environment. Compliance with hand washing varies due to many factors. Some of which are perception of its importance, convenience of hand washing facilities, and access to “tools” that foster hand washing. The single most important barrier to proper hand washing is the lack of education.

There are two major groups of microorganisms that reside on the skin: resident flora and transient flora. Resident flora are those organisms that normally reside on the skin whereas transient flora are generally regarded as contamination. Unless introduced into the body by traumatic means such as a cut, scrape or puncture, the pathogenicity of resident flora is very small. Transient flora, on the other hand, cause the most problems due in part to the fact they are considered contaminants and would not ordinarily be found on the skin. It is ironic that transient flora are perhaps the easiest to remove by mechanical means such as hand washing.

This Safety Short is designed to not only underscore the importance of hand washing but also to provide techniques and procedures that you can use.

**What is good handwashing technique?**

The following page has been designed to print and post near handwashing sinks
Proper Handwashing Technique

1. Wet your hands with warm water

2. Add soap, and then rub your hands together making a soapy lather. Do this away from the running water for at least 20 seconds, being careful not to wash the lather away.

3. Wash the front and back of your hands, as well as between your fingers and under your nails.

4. Rinse your hands well, under warm running water. Let the water run back into the sink, not down your elbows.

5. Dry hands thoroughly with a single service towels or a hot-air dryer
When should you wash your hands?
- Before you eat, and after you use the restroom
- When your hands are visibly dirty
- Before applying cosmetics
- More frequently when someone you know is sick
- After handling animals or animal waste
- After you remove your laboratory gloves
- Before you leave the lab at the end of your work shift

What type of soap should be used?
- Liquid soap is preferred
- Bar soap tends to create “scum” build-up in the holder which can foster microbial growth

What happens if you do not wash your hands frequently?
- You can infect yourself by rubbing your eyes, nose and mouth
- You can spread microorganisms to others

What are some things to avoid regarding handwashing?
- Don't use a common hand washing cloth.
- Don't use a standing basin of water to rinse hands.
- Don't use a common hand towel. Always use disposable towels or hot-air dryer.
- Don't use sponges or non-disposable cleaning cloths unless you launder them on a regular basis, adding chlorine bleach to the wash water.

Remember microorganisms can thrive on moist surfaces! In addition to colds, some cases of pretty serious diseases – like hepatitis A, meningitis, and infectious diarrhea – can easily be prevented if people make a habit of washing their hands.