Handwashing: Your Best Defense Against Illness

A SHORT HISTORY LESSON
Over a hundred years ago, Dr. Ignaz Semmelweis first demonstrated that routine handwashing can prevent the spread of disease. He worked in a hospital in Vienna whose maternity patients were dying at such an alarming rate they begged to be sent home. The death rate was five times higher for mothers who delivered in the hospital than for mothers who delivered at home. Most of those dying had been treated by student physicians who worked on cadavers during an anatomy class before beginning their rounds in the maternity ward. Because the students didn’t wash their hands between touching the dead and the living, pathogenic bacteria from the cadavers were regularly transmitted to the mothers via the students’ hands. Dr. Semmelweis conducted an experiment, insisting that his students wash their hands before treating the mothers. Deaths on the maternity ward fell fivefold. Thus, the beginning of infection control (Why is handwashing important?, CDC).

WHERE DO GERMS COME FROM?
Handwashing should be number one on everyone’s list of things to do. Hands are wonderful and can do so many things. However, as they work, our busy hands also pick up dirt and germs. Look at your hands closely (try using a magnifying glass). There are cracks, wrinkles and tiny nooks and crannies where dirt and germs can hide. You may see some of the dirt, but germs are microscopic and can only be seen through a microscope.

Germs live everywhere. Billions of them grow and live on your body every day. They favor hair, under fingernails and between small folds of skin. However, most of these germs won’t hurt you and you cannot get rid of them.

Other germs come from the world around you. Some of these germs can make you sick. These are the germs that you can do something about.

FIVE COMMON WAYS TO TRANSMIT GERMS
Hands to food: germs are transmitted from unclean hands to food, usually by an infected food preparer who did not wash hands after using the toilet. The germs are then passed to those who eat the food.

Injured infant to hands to other children: during diaper changing, germs are passed from an infant with diarrhea to the hands of a caregiver; if the caregiver doesn’t immediately wash his or her hands before handling another child, the germs that cause diarrhea are passed to the second child.

Food to hands to food: germs are transmitted from raw, uncooked foods, such as chicken, to hands; the germs are then transferred to other foods, such as salad. Cooking the raw food kills the initial germs, but the salad remains contaminated.

Nose, mouth or eyes to hands to others: germs that cause colds, eye infections and other illnesses can spread to the hands by sneezing, coughing or rubbing the eyes and then can be transferred to other family members or friends.

Food to hands to infants: germs from uncooked foods are transferred to hands and then to infants. If a caregiver handling raw meat doesn’t wash his or her hands before tending to an infant, they could transfer germs such as e coli or salmonella from the food to the infant.

WASH YOUR HANDS OFTEN
Handwashing can prevent the transfer of germs.

Wash hands before:
Eating and preparing foods
Touching serving utensils
Preparing formula for infants
Handling ready to eat foods
Serving foods

Wash hands after:
Visiting the restroom
Covering your nose or mouth when coughing or sneezing
Working with raw foods
Changing diapers
Handling pets
Engaging in activities outdoors
Doing other activities that dirty hands

Scrub hands vigorously with warm, soapy water for at least 15 seconds. Wash the front and back of hands, between fingers, under fingernails and wrists. Rinse well in warm water.

Prepared and distributed by Danielle A. Gordon, Family & Consumer Sciences Agent II, University of Florida/IFAS Leon County Extension Service. Adapted from: Just Look at Those Hands!, USDA Food Safety and Inspection Service and Why is handwashing important?, Centers for Disease Control and Prevention. The Institute of Food and Agricultural Sciences is an equal employment opportunity/affirmative action employer authorized to provide research, educational information and other services only to individuals and institutions that function without regard to race, color, sex or national origin.