



# FOOD SAFETY UPDATE

## Importance of Hand Washing

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Just how important is hand washing? There is a concerted effort worldwide to prevent and control infections. The 4th Decennial International Conference, sponsored by the Center for Disease Control (CDC), has brought together over 2,000 international experts in disease prevention to share information and develop strategies



for infection control. Dr. Gerberding, director of CDC's Hospital Infections Program said, "It's an astonishing amount of knowledge and expertise gathered in a single building. But for all our expertise and the tremendous advances we've made in technology and new treatments, we constantly remind ourselves of the basics in infection control...wash your hands!"

### "Discovering" the Importance

Dr. Ignaz Semmelweis first demonstrated over a hundred years ago that routine hand washing can prevent the spread of disease.

Dr. Semmelweis worked in a hospital in Vienna whose maternity patients were dying at such an alarming rate that they begged to be sent 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 did not wash their hands between touching the dead and the living (*hand washing was an unrecognized hygienic practice at the time*), pathogenic bacteria from the

cadavers regularly were transmitted to the mothers via the students' hands. The result was a death rate five times higher for mothers who delivered in the hospital than for mothers who delivered at home.

In an experiment, Dr. Semmelweis insisted that his students wash their hands before treating the mothers. Deaths on the maternity ward fell fivefold. This was the beginning of infection control.

Today the value of hand washing in preventing disease is recognized in the community, schools, child care settings, and eating establishments as well as in healthcare settings.

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## Preventing Contamination

The following are five common scenarios in which germs can be transmitted by contaminated hands:

- **Hands to food:** Germs are transmitted from unclean hands to food, usually by an infected food preparer who didn't hand wash after using the toilet.
- **Infected infant to hand to other children:** During diaper changing, germs are passed from an infant with diarrhea to the hands of a parent. If the parent 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

Wash  
your  
hands  
often!

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 others.
- **Food to hands to infants:** Germs from uncooked foods are transferred to hands and then to infants. If a parent handling raw chicken, for example, doesn't wash his or her hands before tending to an infant, they could transfer germs such as salmonella from the food to the infant.

Whether or not you deal with infants, these scenarios demonstrate how easily germs can spread. The solution is easy—wash your hands with warm, soapy water for at least 20 seconds.

## What Types of Diseases Can Hand Washing Prevent?

- ➔ Diseases spread through fecal-oral transmission such as: **shigellosis, hepatitis A, E. coli 0157:H7, and enterovirus.** Because these



diseases are spread through the ingestion of even minute particles of fecal material, it is very important to wash hands right after going to the bathroom.

- ➔ Diseases spread through indirect transmission such as: **influenza, streptococcal disease, respiratory syncytial virus (RSV), and the common cold.** Because these diseases may spread indirectly by hands freshly soiled by respiratory discharges of infected people,

illness may be avoided by washing hands after coughing or sneezing.

- ➔ Diseases may also be spread when hands are contaminated with urine, saliva, or other moist body substances. Infections which may be transmitted by one or more of these substances include: **cytomegalovirus (CMV), staphylococcal organisms, and typhoid.** These germs may be transmitted from person to person, or indirectly by contamination of food, or inanimate objects such as toys.

