

Practicing Good Hand-Hygiene for Food Workers



A 2010 shigellosis outbreak originating in an Illinois fast food restaurant infected 21 people and hospitalized 7. Health investigators suggested the source was an ill food handler who worked while sick and did not practice proper handwashing after visiting the restroom

Public Health Reasons

The U.S. Centers for Disease Control and Prevention estimates that human noroviruses (HuNoV) are responsible for 58% of foodborne illness cases of known etiology. The U.S. Food and Drug Administration has classified human noroviruses, hepatitis A virus, *Salmonella* Typhi, enterohemorrhagic and shiga toxin-producing *Escherichia coli*, and *Shigella* spp. as “the big five” microorganisms of greatest concern in foodservice establishments. These microorganisms, as well as most other common enteric pathogens, frequently make their way into food through the poor hygiene practices of infected or colonized food workers.

Observational studies of foodservice worker behavior have shown relatively poor compliance with recommended hand-hygiene practices. For example, Green et al. observed the handwashing practices of 321 food workers in conjunction with their work activities, such as food preparation and handling dirty equipment. They found that workers made handwashing attempts (i.e., removed gloves, if worn, and placed hands in running water) in only 32% of these activities and washed their hands appropriately only 27% of the time. The rates for both attempted and appropriate hand washing were highest when related to food preparation and lowest when related to touching the body, as compared to other work activities.

Practices

All employees who handle food must use the following procedure in the order stated to clean their hands and exposed portions of their arms including surrogate prosthetic devices for hands and arms.

- Turn on water to a warm, comfortable temperature, between 60°F and 120°F (16°C and 49°C).
- Moisten hands with water and apply soap to hands.
- While hands are out of the water stream, rub hands together vigorously until a soapy lather appears and continue for 10 to 15 seconds.

- Pay particular attention to removing soil from underneath the fingernails.
- Create friction on the surfaces of the hands, arms, surrogate prosthetic devices for hands and arms, fingertips, and areas between the fingers.
- Rinse hands under running water, between 60°F and 120°F (16°C and 49°C), until they are free of soap and dirt. Leave the water running while drying hands.
- Immediately following handwashing, thoroughly dry hands with one of the following:
 - individual, disposable, paper towels;
 - a continuous towel system that supplies the user with a clean towel;
 - a heated-air hand drying device; and
 - a hand drying device that employs an air-knife system that delivers high velocity, pressurized air at ambient temperatures.
- If taps do not shut off automatically, turn them off with a single-use towel.
- Throw the single-use towel into a lined trash container. Use hand lotion to prevent chapping of hands, if desired.
- Kitchen workers who need to open a door to leave a bathroom or enter the kitchen must open the door with a single-use towel to avoid possible recontamination of clean hands.

Kitchen workers must clean their hands:

- immediately before engaging in food preparation including working with exposed food, clean equipment and utensils, and unwrapped single-service and single-use articles;
- after touching bare human body parts other than clean hands and clean, exposed portions of arms;
- after using the restroom;
- after caring for or handling service animals or aquatic animals;
- after coughing, sneezing, using a handkerchief or disposable tissue, using tobacco, eating, or drinking;
- after handling soiled equipment or utensils;
- during food preparation, as often as necessary to remove soil and contamination and to prevent cross contamination when changing tasks;
- when switching between working with raw food and working with ready-to-eat food;
- before donning gloves for working with food;
- after handling cleaning chemicals; and
- after engaging in any other activities that contaminate the hands.

It is also important to emphasize that in a child-care setting, food workers should not perform any task that involves coming in contact with feces or other bodily fluids, such as diapering, cleaning soiled clothing, or cleaning up vomit. In addition, diapering or cleaning of anything soiled should not be performed on surfaces where food is stored, prepared, or served.

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