

SECTION 3

PERSONAL HYGIENE

- Hair restraint
- Only plain wedding band
- No nail polish
- Properly covered abrasions and skin disease
- When sick with norovirus, hepatitis A virus, enterohemorrhagic or shiga-toxin-producing *E. coli*, *Shigella* spp., or *Salmonella typhi* – STAY HOME.
- If spouse or children are ill, GET HEALTH DEPARTMENT OR DOCTOR'S PERMISSION to work with food.



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Personal Hygiene

Employee personal hygiene is important for food safety and customer satisfaction.

Hair

All people lose up to 100 hairs daily from their heads. Hair that falls into food does not add enough pathogens to make people ill, but it does cause immediate customer dissatisfaction. Hair on the arms is also a problem.

Many types of hair restraints are unreliable. Concerned food production and foodservice personnel recognize their responsibility to keep their hair out of food. Personnel must wear chef hats or equivalent covering to keep hair out of food. People with long hair should wear hairnets. People with beards and mustaches should use beard or mustache nets or bags. People who mix salad or dough with their arms should wear gauntlet-length plastic gloves. Anyone, including managers and inspectors, who handles or is around open food should show the courtesy of wearing hair restraints.

Personal Cleanliness

Employees should bathe daily to control body odor. Customers do not like to smell or see dirty, untidy employees. Employees should be permitted to wear only light perfumes or colognes. Strong perfumes hide the food's aroma. Employees' hands should be kept free of all foreign odors. Perfumed hand lotions and heavy perfumes, etc., can change the perception of a food's flavor and should not be used by foodservice personnel when working.

Uniforms

Foodservice employees should wear clean, closed-toe shoes and clean uniforms or full aprons or smocks over street clothing. Aprons should be removed before using the bathroom and put back on after leaving the bathroom. Dirty uniforms or aprons have never been shown to be a food safety problem. However, customers are not impressed by employees who wear heavily soiled clothing.

Physical Hazards (Hard Foreign Objects)

Employees should not keep hard foreign objects such as pens and pencils in outside pockets where they might easily fall into food. Jewelry, nail polish, and artificial fingernails are also hazardous when they fall into food. Wedding bands are the only jewelry acceptable for wear in a foodservice. Stones may fall out of jewelry and into food, causing customers to break their teeth. Fingernails should be kept clean and trimmed to less than $\frac{1}{16}$ inch of the fingertip.

Foodservice employees should not chew gum while working. It could fall from the mouth into food. Smoking should not be allowed in the kitchen or serving areas because butts and ashes may get into food. Employees should not eat or drink while handling foods.

Cuts and Abrasions

Employees should inform manager(s) / supervisor(s) of any skin infections or abrasions. Infected cuts, abrasions, and skin disease must be cleaned with soap and disinfectant, bandaged, and gloved before any employee is allowed to prepare or serve food. Many serious illnesses have resulted from pus-filled cuts under finger bandages or by someone squeezing a pimple and then touching food without thoroughly washing the hands.

PREVENTING PREPARED FOOD CROSS-CONTAMINATION BETWEEN MONEY, USED DINNERWARE AND RAW FOOD

1. Do not directly handle food.
Use paper, wrap, utensils.
2. Touch non-food surfaces, edges of plates, utensil handles.
3. Separate jobs such as warewashing, raw and cooked food utensils, food tasting.



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Cross-contamination

Cross-contamination can occur when prepared food is handled after an employee has handled raw food or soiled dinnerware. Food being served to customers should not be touched with hands. Tongs, knives, plastic gloves, or interleaf paper should be used to serve food.

Note, the FDA has declared that handling money and then food is not a safety problem. Money has been shown to have so few pathogens on the surface that it is not considered to be a source of cross-contamination. However, customers are still upset when they see employees serving food and handling money without washing their hands or changing gloves.

Employees must also be aware that touching knife handles, refrigerator doors, and drawer handles can transfer pathogens. To avoid cross-contamination between raw and cooked foods, use separate cutting boards and utensils for these types of food.

To avoid contaminating food contact surfaces, tableware and utensils should always be handled on the "touch areas" of plate rims, cup handles and glass bottoms, and utensil handles.

Food contact surface wiping cloths should be used to wipe food contact surfaces only. Towels used to wipe drips on plate edges should not be used for anything else. Food cloths should never be used to wipe the body.

Fingers should never be used to taste food. To taste food during cooking or preparation, put some of the food into a clean saucer with a clean spoon. Use a clean spoon and clean saucer each time the food is sampled.

Cleaning and Storage of Dishware

If only one employee is responsible for dish washing, that person must be careful to wash his/her hands after handling dirty dishes in order to avoid leaving fingerprints on clean dishes. It is better to have two people to wash dishes; one to handle soiled dishes and one to handle the clean ones. Nonetheless, fingerprints on clean dishes and tableware are filth problems, not safety problems.

Dishware should be checked for a clean, spot-free appearance before it is used. Unsatisfactory dishware should be returned to

the dishwashing area. Chipped, cracked, or surface-scarred dishware should never be used.

Clean glasses, cups, and other utensils should be stored covered or in an inverted position and at least 6 inches above the floor in a clean, dry location. Clean equipment and utensils should not be stored under exposed sewer lines, waste lines, or water lines, except fire protection sprinkler heads. Clean equipment and utensils should never be stored in toilet rooms, vestibules, lockers or dressing rooms, janitorial areas, or soiled or unapproved areas. Knives, forks, and spoons should be loaded onto the holders with handles up, on approved, nonabsorbent surfaces.

Single-service Items

Single-service (disposable) items should be stored in a closed carton or plastic bag. In-use boxes may be stored open, if the box is placed on its side with one end opened and not stored under or adjacent to cleaning agents or toxic materials. Utensils should be dispensed in a sanitary manner so that surfaces that come in contact with food or the mouth are protected from contamination. Handles should be presented to the user. Sanitary straw dispensers should be used for wrapped straws. Sanitary disposable cup dispensers should be used for customer service.

INFECTED PERSONS AND/OR PERSONAL HYGIENE

One in 50 persons working in retail food operations each day is shedding pathogens. They may not feel ill. They:

- May not have symptoms and do not stay home.
- Contaminate foods that do not receive further cooking with fecal, nose, mouth, and skin pathogens.
- Cough and sneeze over food or into hands touching prepared food.
- Fail to control bacteria from infected cuts, burns, and skin diseases.



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The Body as a Source of Pathogens

Transmission of bacteria and viruses to food from human feces or the body is caused by contaminated hands. People with diarrhea are embarrassed to tell the manager or do not want to miss a day's pay, so they go to work. Infected people and poor personal hygiene cause a significant number of reported foodborne illness outbreaks.

The FDA Food Code says that employees who are diagnosed by a health practitioner with norovirus, enterohemorrhagic or shiga-toxin-producing *E. coli*, *Salmonella typhi*, *Shigella* spp., or hepatitis A should call their supervisor and should not come to work until cleared by a health practitioner.

Shedding Pathogens when Feeling Fine

People do not always know when they are carrying infective pathogens because they do not feel sick. For example, people can shed hepatitis A virus for 21 or more days before they feel ill, and may also shed pathogens for days to months after their symptoms are gone, as can be the case with *Salmonella*. One in every 50 people in foodservice sheds high levels of pathogens in his/her feces each day and never reports feeling ill.

Controlling Bacteria and Viruses in Sneezes and Coughs

Sneezing or coughing into hands or tissue and then touching food can cause pathogen transfer. Pathogens can survive on tissues and handkerchiefs for 30 days. Facial tissue and handkerchief use should be restricted to the area by the hand sink. When employees need a tissue, they must get it at the hand sink where they can wash their hands after using it.

If people must sneeze or cough, they can direct the sneeze or cough away from food toward the floor or into their shoulders to assure that a hazardous number of bacteria do not get onto the food. If employees do sneeze or cough into their hands, they must wash their hands immediately.

Skin Infections

If an employee has a cut on his/her hand, the employee must first wash and disinfect the wound and secondly, cover it with a bandage and glove. Since the wound is clean and disinfected, the main purpose of the glove is to keep the wound clean and dry, and to keep the bandage on the hand. The employee who

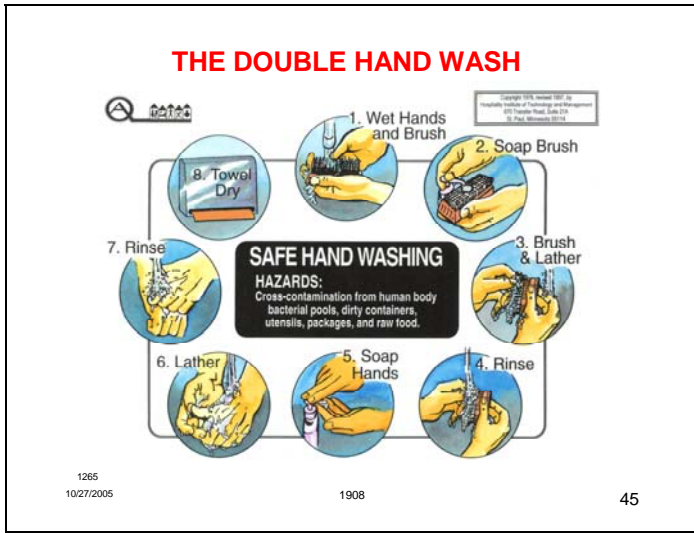
uses this procedure is ready to begin work. If the cut cannot be scrubbed and disinfected to eliminate the pathogens, the person must not be allowed to work around food preparation. Gloves break and leak, and are not an assured control method. Only one glove should be worn so that as the employee feels the ungloved hand getting dirty, he/she will wash his/her hands and keep them clean.

Transmission Prevention

The critical control point for preventing the spread of bacteria from infectious employees is the kitchen hand sink. **Proper fingertip and hand washing by all foodservice and food production personnel is critical to the safety of food being prepared and served.**

Plastic gloves are not the solution to food safety, unless the gloves are changed every time before an employee touches ready-to-eat food. It is best for the employee to work without gloves and only wash hands and put on gloves immediately before handling ready-to-eat food. If people wear plastic gloves, they must be trained to realize that the gloves get dirty, just as hands do. When gloves are worn, millions of bacteria multiply on the warm, wet skin inside the glove.

When gloves are used to serve or prepare food, the gloves must be changed often and hands must be washed and dried prior to putting gloves on and after the gloves are removed. Food should be prepared and served using equipment and/or methods that prevent direct hand contact with the food as much as possible.



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Contamination of the Hands

When employees use the toilet, it must be assumed that the toilet paper slipped and millions of pathogens get on their fingertips and under their fingernails. Pathogenic microorganisms can also be brought to work from home. Changing diapers, cleaning up vomit, or cleaning up after pets can put billions of pathogens on the fingers. People can also transfer pathogens when they touch pimples or let cuts on the hands become infected. Employees' hands also become contaminated with lower numbers of pathogens when they handle raw food, particularly raw meat, fish, and poultry products. The critical control is proper hand and fingertip washing.

Resident and Transient Bacteria

There are two kinds of bacteria on the hands: **resident** and **transient**. Resident bacteria exist within the surface layer of the skin and must not be disturbed because they keep the skin healthy.

Transient bacteria are the problem. Transient bacteria on hand surfaces are a result of contact with anything the hands and fingers touch. Transient bacteria include pathogenic microorganisms from feces, skin infections, nasal discharges, and contaminated raw food.

Hand Washing Procedures

To ensure removal of high levels of pathogens from hands, the **double hand wash method (2x)** must be used.

1. Turn on the water at a temperature of 75 to 110°F at 2 gallons per minute. A lot of water must be used to wash the detergent with microorganisms from the fingertips and hands. Wet the hands and brush. Friction and dilution are critical controls.
2. Put 2 to 3 ml of plain, not medicated, hand soap or detergent on a fingernail brush. Medicated soaps and detergents are no more effective than regular soap for eliminating high levels of pathogenic transient bacteria. In fact, they can reduce the resident bacteria and thus make the skin vulnerable to infection. Bar soap and liquid soap are equally effective, but liquid soap is easier to use.
3. Produce a lather by using the fingernail brush on the fingertips. Use the fingernail brush to scrub the fingernails. Special attention must be made to the fingertips that held

the toilet paper. The purpose of using the fingernail brush is to ensure safe removal of any fecal material and any other material that harbors pathogens from the fingertips and under the fingernails.

4. Rinsing is also a critical step. The microorganisms in the lather are not dead; they are just loosened from the skin and fingertips and are suspended in the lather. The soap does not kill the microorganisms. It merely moves them into the foam. Rinsing in flowing water removes the lather and produces a 1,000 to 1 microbial reduction. Rinse the fingernail brush and put it down, placing the bristles up to dry.
5. Again, apply 2 to 3 ml of detergent to the hands.
6. Lather the hands and skin of arms up to the tips of sleeves.
7. Thoroughly rinse the lather from the hands and arms in warm, flowing water.
8. Dry hands thoroughly with clean paper towels. The second hand washing produces another 100 to 1 microbial reduction, and the paper towel about 100 to 1 reduction.

The **single hand wash method (1x)** is the same as the second part of the double wash procedure (steps 5 through 8). This single hand wash method is used by employees at work during preparation and service of food to keep food safe. The single hand wash method is sufficient to remove the transient pathogens from the hands that result from touching foods during preparation.

Hands should not be washed in a basin of water because there is no diluting and removal effect of lots of water flowing over the hands.

Examples of hand washing standards are:

- Beginning a shift, use the double hand wash method (2x) to remove pathogenic microorganisms from home
- After using the bathroom, use the double hand wash method (2x) to reduce fecal pathogens.
- After squeezing a pimple, use the double hand wash method (2x) to reduce *Staphylococcus aureus*.
- Other times, when preparing and serving food, use the single hand wash method (1x).