

Food Safety is Everybody's Business



Your guide to preventing foodborne illness

Washington State Food & Beverage Workers' Manual

Table of Contents

Part 1: Welcome to food safety	1
Most foodborne illnesses are caused by germs	2
Certain people get sick more often	3
Hazards in food	4
Biological hazards (germs) in food	6
Part 2: Three practices prevent almost all foodborne illnesses	8
Food safety practice: Personal hygiene	9
Handwashing	10
Avoiding bare hand contact with ready-to-eat foods	12
Personal habits	13
Food safety practice: Temperature Control	14
Thermometers	15
Cooking and keeping hot foods hot	16
Cooling and keeping cold foods cold	18
Food safety practice: Prevention of Cross Contamination	20
Washing, rinsing, and sanitizing	21
Additional food safety issues	22
Special reminders for food workers	24

The information provided in this manual is based on the Washington State Retail Food Code WAC 246-215 and is intended to be used in conjunction with approved Food Worker Training. This handbook does not represent all requirements provided in the Washington State Retail Food Code. For more information, contact your local health department.



DOH 332-036 May 2013

For people with disabilities, this document is available on request in other formats.
To submit a request, please call 1-800-525-0127 (TDD/TTY call 711).

Thank you.

We appreciate that you are taking an active role in learning to prepare and serve safe food. As a food worker, you will be making food for other people. They trust you to do all that you can to keep their food safe. **It is your responsibility to safely prepare and serve food to them so they will not get sick.**

The information in this manual will give you tips to safely store, prepare, and serve food at work and home.

The manual is divided into two parts:

Part 1 Introduction to foodborne illness

Part 2 How to keep food from causing illness

By the time you have finished this manual you will:

1. Understand there are many causes of foodborne illness.
2. Identify the importance of clean hands and healthy food workers.
3. Know how avoiding the Danger Zone helps prevent foodborne illness.
4. Learn several tips to help you remember food safety basics.
5. Recognize your responsibilities as a food worker.

Food safety knowledge can help you protect yourself and others. Please take what you learn from this manual and use it at your workplace and in your home. If you have any questions, please call your local health department.

Remember that food workers using proper food safety practices are the most important ingredient in safe food. Welcome to the food safety team in Washington State.

Foodborne Illness

Foodborne illnesses do not just happen at restaurants. Everyone that handles food can spread foodborne illness.

People can get sick if the food they eat has harmful chemicals or germs. This is called foodborne illness. Most foodborne illnesses are either food poisonings or foodborne infections.

When people talk about foodborne illness, they often call it **food poisoning**. Chemicals, bacteria, or certain foods like poisonous mushrooms can cause food poisoning. Symptoms of food poisoning are usually noticed within hours after eating, and often include **vomiting**.

Germs that cause foodborne illness are usually bacteria, viruses, or parasites.

The most common foodborne illnesses, however, are *not* caused by food poisoning. They are **foodborne infections** caused by germs that grow in food or inside of our bodies. Symptoms of foodborne infections include **diarrhea, vomiting**, fever, headache, and stomach aches. Symptoms may be noticed from several hours to several weeks after eating the food.

In the United States, the Centers for Disease Control estimates that about 48 million Americans get sick and up to 3,000 people die each year from unsafe food. Following the food safety practices in this manual can help you prevent the most common causes of foodborne illness.



Person in Charge: Someone at each establishment must be in charge during all hours of operation and must make sure that all food safety steps are followed. The person in charge must know the Washington State Retail Food Code and the procedures used in the establishment. If you have questions, ask the person in charge. If you are the person in charge, you should be able to give food workers training or information needed to perform their jobs correctly.

Highly Susceptible Populations

Certain foods are more likely to cause foodborne illness in highly susceptible people.

These foods include:

- **undercooked meats**
- **raw oysters**
- **undercooked eggs**
- **sprouts**
- **unpasteurized milk or juices**

Although anyone can get sick from food handled unsafely, certain people usually get sick more often or have more serious illnesses. These people are called the Highly Susceptible Population. They are:

- Younger than 5 years old.
- Older than 65 years old.
- Pregnant.
- Immune-compromised (due to cancer, AIDS, diabetes, certain medications, or other conditions).

In order to remember the people in the group, the group is sometimes called by the name YOPI (yo ' pē).



Facilities like hospitals, child care centers, preschools, nursing homes, and adult care homes that provide food and services to a Highly Susceptible Population have additional food safety requirements. Several of these requirements are highlighted throughout this manual. For more information, call your local health department.

Hazards in Food

The goal of food safety is to prevent the hazards that cause foodborne illness or injury. Most of the hazards in food are things you cannot see, smell, or taste.

A foodborne hazard is a physical, chemical, or biological object in food or drink that can cause injury or illness. **Most foodborne illnesses are caused by biological hazards (germs).**

Hazard	Examples	It happened in Washington...
Physical	Hard or soft objects in food that can cause injury. <i>Examples include broken glass, jewelry, adhesive bandages, staples, and fingernails.</i>	Several staples were found in a birthday cake from a bakery in Eastern Washington. The cake was prepared below papers stapled to a memo board.
Chemical	Poisonous substances that occur naturally or are added during food handling. <i>Examples include cleaning agents, pesticides, and certain metals.</i>	Due to a broken valve in a soda machine, several Western Washington customers got copper poisoning within minutes after drinking soft drinks.
Biological	Germs that cannot be seen without a microscope. <i>Examples include parasites, bacteria, and viruses.</i>	Several customers became infected with hepatitis A after eating sandwiches prepared by an ill food worker in Western Washington.

Physical Hazards Physical hazards are objects in food that may cause injury if eaten. Physical hazards usually happen because of unsafe food handling practices or accidental contamination. To prevent physical contamination:

- Wash fruits and vegetables carefully.
- Look closely at the foods you prepare.
- Keep the food preparation area free of things that can fall into the food.

Chemical Contamination

Chemicals may cause foodborne illness if they get into food. All chemicals such as soaps, cleaners, sanitizers, and pesticides must be stored away from food, utensils, and food preparation areas.

If a chemical needs to be stored in the kitchen area, the chemical must be stored below food or food-contact surfaces so that it does not drip onto food. If a chemical is not needed in the establishment, then the chemical should not be there at all.

All chemical containers must have easy-to-read labels and easy-to-follow directions.



Food Storage Containers

Some containers are not approved for food storage. Unapproved containers include garbage bags, galvanized cans, and containers once used for chemicals. Food may not be stored in these containers because chemicals can get into the food.

Galvanized containers have a layer of zinc so the container will not rust. They should not be used to store food.

To keep your food safe from chemicals:

- Only keep chemicals in the establishment that are approved for use near food.
- Store all chemicals below or away from food and work surfaces.
- Label all chemicals.
- Only use approved containers to store food.
- Make sure equipment is working properly.
- Make sure food is protected when you clean the kitchen.

Biological Contamination

We live in a world with lots of germs. Most germs are good for us, but some can make us sick. This manual focuses on the harmful germs that cause most foodborne illnesses: parasites, viruses, and bacteria.

Parasites

Parasites in food are usually tiny worms that live in fish, pork, or meat. They can be killed if frozen or cooked to the right temperatures. Different kinds of parasites may be found in contaminated water.

To keep your food safe from parasites:

- Cook all pork, beef, and fish to the proper temperatures.
- Use fish that has been frozen to kill parasites for raw dishes like sushi.
- Use approved sources of water.

Viruses

Although viruses are small, it only takes a few to make you sick. Unlike parasites, viruses are not destroyed by freezing.

We've all had an illness from a virus. Chicken pox, the common cold, and influenza are all caused by viruses spread from people coughing or sneezing. The viruses that we get through food usually come from the unclean hands of someone that touched our food. Unfortunately, the person's hands were probably not washed well enough to remove germs from vomit or feces. We call it the fecal-oral route of transmission. Everyone else calls it gross.

As gross as it might be, you've probably heard of a few of the viruses we spread this way, like hepatitis A and Norovirus. To prevent these common illnesses, we must be careful about personal hygiene, especially when working with food.

To keep your food safe from viruses:

- Do not work with food when you have **diarrhea, vomiting**, or fever.
- Wash your hands twice after using the toilet – once in the restroom, and then again when you get back in the kitchen.
- Use gloves or utensils instead of bare hands when handling ready-to-eat food.

Bacteria Unlike viruses, bacteria *can* grow in food. They are found everywhere and can grow when food workers are not careful about time, temperature, and cleanliness. Bacteria can spoil food **or** cause foodborne illness.

Bacteria that cause foodborne illness come from sources like soil, animals, raw meat, and people. Although they can come from lots of places, these bacteria usually only grow in certain foods. These foods are called POTENTIALLY HAZARDOUS FOODS. **Keep potentially hazardous foods hot or cold to keep bacteria from growing.**

Potentially Hazardous Foods

Potentially Hazardous Foods include:

Animal Products

- Meat, fish, poultry, seafood, eggs.
- Dairy products.

Cooked Starches

- Cooked rice, beans, pasta, potatoes.

Fruits and Vegetables

- Cooked vegetables.
- Tofu.
- Sprouts (such as alfalfa or bean sprouts).
- Cut melons, cut tomatoes, and cut leafy greens.
- Garlic or herbs bottled in oil.



Potentially Hazardous Foods

To keep your food safe from bacteria:

- Keep potentially hazardous foods out of the Danger Zone between 41°F and 135°F.
- Do not work with food when you are ill (diarrhea, vomiting, or fever).
- Wash your hands twice after using the toilet – once in the restroom, and then again when you get back in the kitchen.
- Use gloves or utensils instead of bare hands when handling ready-to-eat food.
- Wash, rinse, and sanitize all equipment used for food preparation.

Part 2 The Top 3 Food Safety Defenses **Preventing** **Illness**

Now that you know germs cause almost all foodborne illnesses, let's talk about what you must do to keep germs from causing illness through food. Because people cannot usually see, smell, or taste germs in food, it is important to practice food safety even when the food looks fine.

The next few pages will go over the top three food safety concepts – **personal hygiene, temperature control, and cross contamination** – that must be combined to keep food safe from germs.

The Top 3 Food Safety Defenses



Food workers with
good personal hygiene



Food cooked to or held at
correct temperatures



Prevention of
cross contamination

Personal Hygiene

Food workers, even if they look and feel healthy, may accidentally spread harmful germs to food if they do not have good hygiene. **Food workers with good personal hygiene help keep germs from getting into food.**

Proper food worker hygiene includes:

- **Not working with food when you are sick.**
- **Washing your hands the right way and at the right time.**
- **Using clean gloves and utensils when handling food.**
- **Keeping fingernails trimmed so hands can be easily cleaned.**

Food Worker Health

A healthy food worker is one of the most important ingredients in preventing foodborne illness. When you feel sick, you should not work with food. The germs making you sick may be spread to the food and other people.

Too Sick to Work with Food

Food workers may not work with food if they have:

- **Diarrhea, vomiting, or jaundice.**
- **Diagnosed** infections that can be spread through food such as *Salmonella*, *Shigella*, *E. coli*, or hepatitis A.
- **Infected**, uncovered wounds.
- **Continual** sneezing, coughing, or runny nose.

Food workers must tell the Person in Charge when they are sick. **Sick food workers should go home.** If sick food workers cannot go home, they may be given duties that do not involve handling food or clean food-contact surfaces. These other duties include taking out the trash, mopping, sweeping, cleaning restrooms, or bussing tables.

Highly Susceptible Populations

Food workers that work in facilities that serve a Highly Susceptible Population (YOPI group) **may not** work in the facility if they have diarrhea, vomiting, or jaundice. Sick food workers **MUST NOT COME TO WORK** until all symptoms are gone.

Handwashing Clean hands are the most important food safety tool, but just because your hands look clean doesn't mean they don't have germs on them. Handwashing gets rid of the germs on hands that can make people sick. **It is important to wash your hands often throughout the day, even when they look clean.**

Washing your hands often is the most important thing you can do to keep germs out of your body and out of the food you prepare. Food workers must know when and how to wash their hands.

When to Wash Food workers are required to wash their hands *before they begin food preparation and any time hands may be contaminated.* The times of heaviest contamination include:

- After using the restroom.
- After handling raw meat, fish, or poultry.
- After handling garbage or dirty dishes.
- After taking a break, eating, or smoking.
- After sneezing, coughing, or blowing the nose.
- After handling animals or using chemicals.

Hand Sanitizers Hand sanitizers work best on hands that are clean. In food service, you may use hand sanitizers after washing your hands if you'd like, but you may *not* use them instead of washing your hands.

How to Wash You must wash your hands at a handwashing sink that has hot and cold running water, soap, and paper towels (or other single-use drying method). From start to finish, all food workers must wash their hands for at least 20 seconds.



Step 1: Get your hands wet so the soap will work.



Step 2: Apply soap and scrub. Be sure to scrub under the fingernails, between the fingers, and all the way up to the lower arm. **Hands need to be scrubbed for at least 10-15 seconds.** Time yourself until you get used to it. This scrub time is longer than most people wash!



Step 3: Rinse hands to send the soap suds and germs down the drain.



Step 4: Dry hands completely with a paper towel, or other single-use method. Paper towels are preferred because rubbing with the towel helps remove more germs.



Preventing Bare Hand Contact

Even when food workers wash their hands well, they are not allowed to touch ready-to-eat foods with their bare hands. This is to keep germs that might remain on the hands from getting onto ready-to-eat foods.

Ready-to-eat foods are foods that are served without additional washing or cooking to remove germs.

Ready-to-eat foods include:

- **Rinsed fruit and vegetables that are eaten raw.**
Such as sliced fruit, salads, garnishes.
- **Bakery or bread items.**
Such as breads, cakes, pies, tortilla chips.
- **Foods that have already been cooked.**
Such as pizza, hamburgers, hot dogs, tacos.
- **Foods that will not be cooked.**
Such as sandwiches, sushi, deli salads.

Gloves

Food workers must use utensils such as tongs, scoops, deli papers, or single-use gloves to keep from touching ready-to-eat foods. For example, tongs should be used to put sliced vegetables into salads and scoops should be used to get ice out of an ice bin.

Single-use gloves may be used to prepare foods that need to be handled a lot, such as when making sandwiches, slicing vegetables, or arranging food on a platter. It is important to remember that gloves are used to protect the food from germs, not to protect your hands from the food. Gloves must be changed often to keep the food safe.

Gloves must be worn if you have sores, bandages, or cuts on your hands and you're working with food.



Important Rules for Using Gloves:

- Wash hands **before** putting on gloves.
- Change gloves that get ripped.
- Change gloves that might be contaminated.
- Never wash or reuse gloves.
- Change gloves between working with raw and ready-to-eat foods.
- Throw gloves away after use.
- Wash hands after taking gloves off.

**Personal Habits
Affect
Food Safety**

Eating, Drinking and Smoking

Food workers may not eat, drink, or use any type of tobacco in food preparation areas. This is to prevent spills onto food and to reduce the chance of contamination.

Exception: Food workers may drink from a covered container with a straw. The drink must be stored so that it cannot spill onto food or food-contact surfaces.

Hair Restraints

Hair restraints are intended to keep hair out of food and food out of hair. Hair must be effectively restrained whenever you are working around food or food preparation areas. Hair restraints include hairnets, hats, barrettes, ponytail holders, and tight braids. Long beards must also be restrained.

Fingernails

Fingernails must be trimmed so they are easy to clean. If nail polish or artificial nails are worn, the food worker must wear gloves when preparing all foods, not just ready-to-eat foods. For example, a food worker with artificial nails would need to wear gloves when mixing batter with a spoon.

Jewelry

Jewelry can hide germs that cause foodborne illness and make it hard to wash hands. Jewelry can also fall into food. While preparing food, food workers must remove watches, rings, bracelets, and all other jewelry on the arms or hands.

Exception: Wedding rings may be worn if they are covered with a glove when the food worker is preparing food.

Personal Items

Personal items like medicine, coats, and purses must be stored away from food, dishes, and linens.

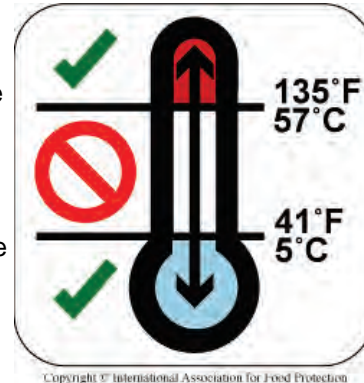
Temperature Control

Proper temperatures are required for the safety of potentially hazardous foods. **A thermometer must be used to make sure that food is delivered, cooked, cooled, and stored at the correct temperature.**

Danger Zone between 41°F and 135°F

Most bacteria do not grow in hot or cold temperatures. To keep food safe, cold foods must be kept 41°F or colder. Hot foods must be kept 135°F or hotter. **The range of temperatures between 41°F and 135°F is called the Danger Zone.**

When potentially hazardous foods are left in the Danger Zone, bacteria can grow fast or make poisons that can make people sick.



Time is ticking...

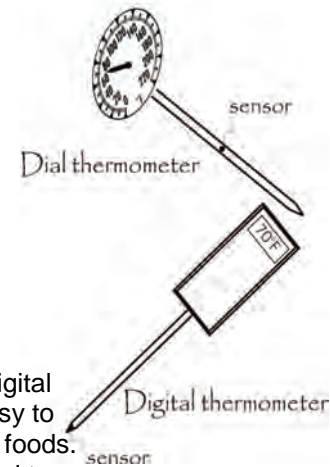
By the time you begin to prepare it, food has been through a lot of steps. It has been grown, shipped, purchased, received, and stored before you begin preparation. You may thaw, mix, cook, cool, serve, or reheat it. All of the time that the food spends in these steps adds up and helps bacteria grow to dangerous numbers. Work with food quickly to keep it out of the Danger Zone between 41°F and 135°F.

Potentially hazardous food may be at room temperature for up to two hours while you are preparing it. When you are preparing food, only take a little of the food at a time. Keep the rest of the food hot or cold until you're ready to prepare it. **If the food has been left out at room temperature, or you do not know how long it has been in the Danger Zone, you should throw the food away.** It may not be safe to eat.

Thermometers Two types of food thermometers are usually used in food service.

Metal Stem Thermometer

The metal stem “dial” thermometer is the most common thermometer used in food service. Dial thermometers work well for taking temperatures of thick foods. The stem must be pushed several inches into the food and left in for at least 20 seconds. Because they need to go deep into the food to be accurate, dial thermometers should not be used for thin foods such as hamburger patties.



Digital Thermometer

Digital thermometers are also used to measure food temperatures. They have a metal stem too, but have digital numbers instead of a dial. Digital thermometers are easy to read and are better for measuring temperatures in thin foods. They can read temperatures quickly and should be used to take temperatures of thin foods such as hamburger patties.

Accuracy

Thermometers should be checked often to make sure they read the correct temperature. One way to check for accuracy is to put the thermometer’s sensor in a cup of crushed ice and water. The mixture should be 32°F. If the thermometer doesn’t read 32°F, the thermometer needs to be adjusted or replaced. Read the thermometer package or call your local health department for more information.

Using a thermometer:

- Make sure it is clean, sanitized, and accurate.
- Insert into the thickest part of the food – usually the center of the food.
- Take the temperature for several seconds until the numbers stop changing.

Keep Hot Foods Hot

Cooking **Cooking food to the right temperature is the best way to kill germs that might be in the food.** Temperatures must be taken with a food thermometer that is inserted into the thickest part of the food. Cooking temperatures depend on the type of food and the cooking time. For proper cooking times and temperatures, see the chart on the next page.

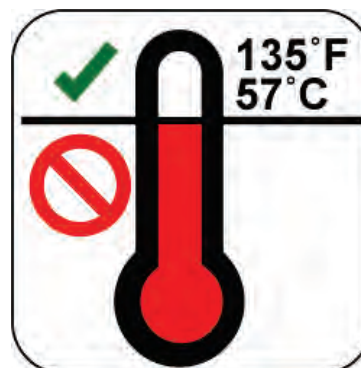
Microwave All raw animal products cooked in a microwave oven must be cooked to at least 165°F. The food must be covered to maintain moisture, stirred at least once during cooking, and allowed to stand covered for two minutes before serving. Because microwave ovens do not cook food evenly, it is important to measure the food's temperature in several places. These procedures are also used for foods that are reheated in a microwave.

Hot Holding (135°F or hotter)

Because cooking does not kill all bacteria, cooked potentially hazardous food must be kept hot until served. This way the surviving bacteria will not grow back again. Steam tables, soup warmers, and other hot holding units must be turned on and heated up before hot food is put into them. **Use a thermometer to check the temperature of the food. HOT food must be kept 135°F or hotter.**

Tips for keeping food hot:

- Cover pans.
- Stir food often to distribute heat.
- Never mix cold foods with cooked foods.

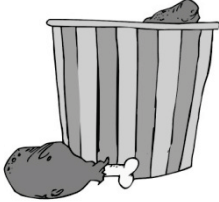
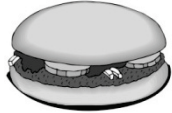
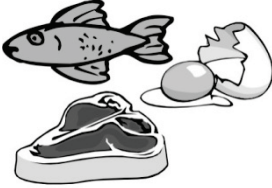



Copyright © International Association for Food Protection

Reheating Food that is cooked and then cooled may be reheated later to be served again. Properly cooled foods that will be served immediately may be reheated to any temperature.

Cold food that will be hot held must be reheated to at least 165°F quickly (within two hours).

Cooking Temperatures

<p>165°F (for 15 seconds)</p>		<ul style="list-style-type: none"> • Poultry (chicken and turkey) • Stuffed foods or stuffing • Casseroles • All raw animal products cooked in a microwave • All reheated potentially hazardous foods
<p>155°F (for 15 seconds)</p>		<ul style="list-style-type: none"> • Hamburger • Sausage
<p>145°F (for 15 seconds)</p>		<ul style="list-style-type: none"> • Eggs • Fish • Beef • Pork
<p>135°F</p>		<ul style="list-style-type: none"> • Vegetables that will be hot held • Packaged ready-to-eat foods (such as hot dogs and canned chili) that are heated for hot holding

Note: Additional cooking times and temperatures are available. Beef or pork roasts have additional cooking requirements. Please see the Washington State Food Rule or contact your local health department for more information.

Keep Cold Foods Cold

Cold Holding

Remember, bacteria grow quickly when food is in the Danger Zone. Keep cold food cold in a refrigerator, in ice, or other approved method to keep bacteria from growing. When using ice to keep food cold, the ice must surround the container to the top level of the food. **COLD food must be kept 41°F or colder.**

Cold salads

Potentially hazardous salads made from food at room temperature (such as canned tuna) must be cooled to 41°F within 4 hours of preparation. It is better to make salads and sandwich fillers with cold ingredients when possible.

Thawing

Frozen foods must be thawed safely to keep bacteria from growing. Unsafe thawing can let bacteria grow in the outside layers of the food while the inside layers are still frozen. **There are three safe methods for thawing food:**



- **In the refrigerator.**

Put frozen food in the refrigerator until it is thawed. This method is the slowest and the safest. Be sure that raw meats are on the bottom shelf or in a container so they do not drip onto other foods.

- **Submerged under cold running water.**

Keep the food covered in cold (70°F or colder), running water until it is thawed.

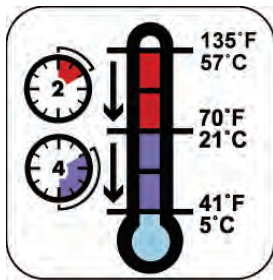
- **As part of the cooking process or in the microwave.**

Small items, such as frozen burritos, may be thawed while they cook.

Cooling

Cooked leftovers that were not served to customers may be cooled to be served again. Because bacteria can grow quickly in cooling food, cooling is often the riskiest step in food preparation. **It is important to cool food through the Danger Zone as fast as possible to keep bacteria from growing.** Please take cooling seriously; certain bacteria can make poisons that are not destroyed by reheating temperatures.

Improper cooling is a leading contributor to foodborne illness.



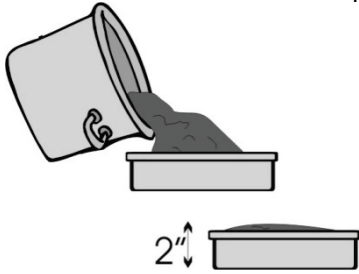
Copyright © International Association for Food Protection

There are three approved cooling methods in Washington:

1. Shallow pan method (food no more than 2 inches deep).
2. Size reduction (cutting solid food into smaller pieces).
3. Time and temperature monitored (forcing food to cool in a short amount of time).

Cooling Method 1: Shallow Pan

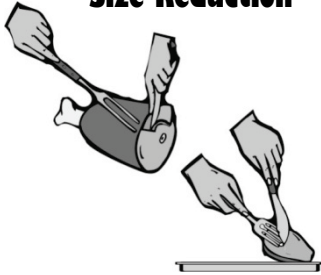
Divide large containers of food into several shallow pans to cool. This method works well for foods like refried beans, rice, potatoes, casseroles, ground meat, meatloaf, and chili. **Here are the steps for the shallow pan method.**



1. Put hot food into shallow pans. **Make sure the food is not more than 2 inches thick or deep.**
2. Put the pans in the refrigerator on the top shelf where nothing can drip into them.
3. Let air move around the pans – do not stack or cover the pans.
4. Cover the pans after the food is 41°F or colder.

Cooling Method 2: Size Reduction

A large *whole* food like turkey or ham may be cut into slices to be cooled. This method may not be used for meat that is ground or restructured such as meatloaf or gyro meat. **Here are the steps for the size reduction method.**



1. Cut the cooked meat into pieces no more than 4 inches thick. Be sure to wear gloves if you handle the food.
2. Spread the slices out on a tray so they are not touching each other.
3. Put the trays in the refrigerator on the top shelf where nothing can drip into them.
4. Let air move around the trays – do not stack or cover them.
5. Cover the pans after the food is 41°F or colder.

Cooling Method 3: Time and Temperature Monitored

Food may also be cooled using a 2-step process as long as you monitor the temperature of the food and make sure it cools down in a certain amount of time.

Step 1: Food must cool from 135°F to 70°F in 2 hours.

Step 2: Food must finish cooling to 41°F within a total of 6 hours.



An example of the 2-step method is called an ice bath. An ice bath works well for soups, sauces, and gravy. **Here are the steps for an ice bath.**

1. Close the drain in the sink. Put the pot of hot food in the sink.
2. Fill the sink with ice up to the level of the food in the pot. Add cold water to the ice.
3. Stir the food often. Make sure it cools down to 70°F within 2 hours.
4. Add more ice as the ice melts.
5. Finish cooling the food to 41°F within 6 hours.
6. Once the food is 41°F, cover it and put in the refrigerator.

Prevention of Cross Contamination

Cross contamination is the spread of bacteria from raw meat to other foods.

Cross contamination happens when bacteria from raw foods get onto other foods. **Raw meat is the main source of cross contamination.** When blood or juice from raw chicken or other meat gets onto a counter, cutting board, utensils, or hands, bacteria can spread to other food.

It is important to keep raw meat away from other food.

Tips to avoid cross contamination:

- Wash hands after handling raw meat.
- Wash and sanitize all food-contact surfaces that touch raw meat.
- Prepare raw meat in an area away from other foods.
- Use a separate cutting board for raw meat.
- Store raw meat below other foods in the refrigerator and freezer.
- Store meat with a higher cooking temperature (like chicken) *below* meat with a lower cooking temperature (like fish).

Cleaning and Sanitizing

Cleaning and sanitizing are not the same. Cleaning uses soap and water to remove dirt and food from surfaces. Sanitizing uses chemicals or heat to kill germs. It is important to remember that surfaces that look clean may still have germs on them that you can't see. Sanitizing reduces these germs to safer levels.

Sanitize: To use chemicals or heat to reduce germs on surfaces to safe levels

Food-contact surfaces should be washed, rinsed, and sanitized after each use to remove germs that can cause illness.

Other areas in food establishments, like the floors and walls, should also be kept clean. Keeping equipment and kitchens clean will help reduce workplace accidents and the potential for food contamination.



Sanitizers Sanitizers are chemicals used to kill germs. Sanitizers must be mixed by following the directions on the label. Soap should not be added to sanitizers. Use test strips to make sure the sanitizer is not too strong or too weak.

The most common sanitizer used in food establishments is a bleach solution made by mixing **1 teaspoon unscented bleach with 1 gallon of cool water**.

Wiping Cloths Wet wiping cloths can be used to sanitize work surfaces that have been cleaned and rinsed. Wiping cloths should be stored in sanitizer when they are not in use. **The sanitizer should be changed often because grease, dirt and food pieces make the sanitizer less effective.**

Tips for using wiping cloths:

- Store wiping cloths in clean sanitizer.
- Use a different wiping cloth for cleaning up after raw meat.
- Use different cloths for food and non food-contact areas.
- Clean and rinse dirty wiping cloths before putting them back into the sanitizer.
- Use test strips to check the sanitizer strength.



Washing Dishes by Hand All dishes and food-contact surfaces must be washed, rinsed, and sanitized between uses. When washing dishes by hand, follow this procedure:

- **Clean** and sanitize the sink.
- **Scrape** leftover food into the garbage.
- **Wash** dishes in hot, soapy water in the first sink.
- **Rinse** dishes with clean, hot water in the second sink.
- **Sanitize** by soaking the dishes in the third sink filled with warm water and an approved sanitizer.
- **Air dry** all dishes and utensils instead of using a towel.

Washing Dishes in a Dishwasher Some establishments have a mechanical dishwasher that will wash, rinse, and sanitize the dishes. When using a dishwasher, you must scrape leftover food from the dishes before putting the dishes on the rack. Dishwashers use chemicals or heat to sanitize. Food workers that use the dishwasher must be trained on how to make sure the machine is washing and sanitizing properly. Temperature gauges and sanitizer levels must be monitored.

Food Sources All food served to customers must come from a source approved by the health department. You may not serve food prepared at home. Meat, poultry, and dairy products must be inspected by the United States Department of Agriculture or the Washington State Department of Agriculture.

Shellfish & Wild Harvested Mushrooms Shellfish like clams, oysters, or mussels must have an identification tag attached to the container. Wild harvested mushrooms also must have source information on site. The tags and information must be kept for 90 days after the shellfish or mushrooms are sold.

Receiving Food Food should not be spoiled. Packaged or canned foods must be returned or thrown away if they are opened, rusty, or severely damaged. Potentially hazardous food should be 41°F. Do not accept food delivered at an unsafe temperature or in an unsafe condition.

Consumer Advisory Animal products such as chicken, hamburger, seafood, and pork are more likely to cause foodborne illness if they are not cooked to the right temperature. Customers must be told which menu items can be ordered undercooked and that the undercooked food can cause illness. Talk with the person in charge or your local health department for more information.

Food Allergies Just as some people are allergic to bee stings, some people have allergies to food. Food allergies are often serious and can cause sudden, life-threatening reactions. Symptoms of an allergic reaction include a tingling sensation, hives, swelling of the mouth and throat, difficulty breathing, and loss of consciousness. **Get the person in charge immediately if any customers have these symptoms.**

Foods that cause the most allergies include milk, soy, eggs, wheat, peanuts, nuts, fish, and shellfish. Even a small amount of the food can make the person very ill.

People that have food allergies must AVOID any source of the food that makes them sick. For example, someone that is allergic to eggs must avoid cakes, pastas, mayonnaise, or even foods that are prepared on equipment used with eggs. Customers may ask you about menu items, how the food is prepared (to make sure the equipment used for their meal is not used with the foods that they are allergic to), and information from the labels on the food. Their safety depends on accurate answers from you and safe preparation steps in the kitchen. Talk with the person in charge if you have questions.

Pest Control Pests like rodents, cockroaches, and flies must be kept out of food areas because they may spread germs. Pesticides should only be used as a last resort and applied by licensed pesticide applicators when the food is protected. It is easier to keep pests out than to use pesticides once they are there.

To keep pests out of food establishments:

- Keep doors closed or screened and cover holes in walls.
- Cover garbage cans with lids and throw away used boxes.
- Keep food covered and clean all spills quickly.

Emergencies Food businesses must stop serving food and call the health department when there is a health hazard that can make the food unsafe. Health hazards include:

- Fire, flood, or sewage backup.
- No hot water or electricity.
- Possible foodborne illness outbreak or chemical contamination.

Food Protection During Service Unwrapped, ready-to-eat foods that are on display for customer self service must be protected from contamination. Protection includes:

- Condiment dispensers or single-use packets.
- Utensils at each item on the salad bar or buffet.
- Display cases or sneeze guards.
- Extra plates at buffets so customers use a clean plate for each trip.
- Employees monitoring the self-service area.

Re-service of Food When a customer leaves unpackaged food on the table, you must throw it away. Uneaten food such as rolls, tortilla chips, and breadsticks may not be re-served.

Unopened, packaged food such as crackers, sugar, and jelly may be re-served in restaurants.

Prohibited Foods Certain foods may *not* be served raw or undercooked in facilities and care centers that serve a Highly Susceptible Population. These foods include:

- Undercooked fish, shellfish, beef, eggs, chicken, or pork.
- Deed sprouts, such as alfalfa sprouts.
- Packaged juices that are not labeled “pasteurized”.

Special Reminders for Food Workers



Waitstaff

- You may be responsible for checking the holding temperatures on the buffet or salad bar (see temperature control on page 14).
- Gloves or other utensils must be used for handling all ready-to-eat foods, even if you're just buttering toast (preventing bare hand contact is on page 12).
- Customers may ask you questions about how the food was prepared (read about allergies and consumer advisory on page 22).

Child care providers

- Be sure to understand the wash, rinse, and sanitize steps. Many toys and other surfaces in child care facilities use the same cleaning technique.
- Handwashing is not only important for you as a food worker, but also important for the children before they eat (handwashing instructions are on pages 10-11).
- Many dishes are served family-style. Use utensils that children can handle and be ready to replace utensils that are dropped, licked, or incorrectly used.
- Children's medications that must be refrigerated in the kitchen must be labeled and kept in a water-tight container.

Bussers

- Dirty dishes need to stay away from all clean food preparation areas and food.
- After clearing tables, you must wash your hands before you begin another activity (see more information on handwashing on pages 10-11).



Dishwashers

- The sinks and your hands might be contaminated. Be sure to wash them before you begin (check out handwashing on pages 10-11).
- Change the wash water often to better clean the dishes (see page 21).
- Routinely measure the sanitizer solution with appropriate test strips.
- If you use a mechanical dishwasher, you must know how to use it and how to check that it's sanitizing properly.
- Be sure to read and follow the directions on chemical labels.



Bartenders

- Bare hand contact is not permitted, even if it's just squeezing a lemon into a drink. Prepare garnishes like lemon twists and sliced fruits with gloves in advance rather than preparing them bare handed for each drink.
- Be sure to use an ice scoop rather than handling the ice (read more about preventing bare hand contact on page 12).

Grocery clerks

- Cross contamination can happen while you're bagging groceries. Bag meats separately and clean up meat spills with a sanitizer.
- You will likely handle unwrapped fruit and vegetables. Be sure to wash your hands often throughout the day (see pages 10-11).
- Be sure potentially hazardous foods that are left at your aisle are returned to proper temperature control immediately or discarded (see which foods are potentially hazardous on page 7).



Home cooks

- Check your refrigerator temperatures. Food should be kept 41°F or colder and cooled properly to keep your family and friends safe.
- Animals are not allowed in food preparation areas of restaurants because of germs. Keep your pets off of the kitchen counters and out of the kitchen sink at home as well.
- Hosting parties often means lots of food and people. Be sure to plan ahead so that you will be able to keep foods at proper temperatures, make sure you have enough utensils for serving, and rapidly cool leftovers in shallow pans (see cooling on page 19).

Temporary Food Vendors

- Temporary establishments often lack plumbing. Be sure to set up your handwashing station before you begin food preparation.
- Temperature control is often difficult at temporary sites. Have a back-up plan ready in case your electricity goes out or your equipment is unable to keep the food at proper temperatures.
- Plan your menu carefully to limit the number of potentially hazardous foods (see the list of potentially hazardous foods on page 7).

Food Worker Top 10

- 1. Only work when you are healthy.**
- 2. Wash your hands often and well.**
- 3. Don't touch ready-to-eat food with bare hands.**
- 4. Keep food hot or cold.**
- 5. Cook food to proper temperatures.**
- 6. Cool hot food as quickly as possible.**
- 7. Keep raw meat away from other food.**
- 8. Wash, rinse, sanitize, air dry – always follow the 4 steps in order.**
- 9. Keep food preparation areas and utensils clean and sanitized.**
- 10. Ask questions if you have them.**