FOOD BANK of ALASKA

Food Safety Training Manual

Updated July 2024

Contents

Definitions

Bacteria: Living single-celled organisms. They can be carried by water, wind, insects, plants, animals, and people. Bacteria survive well on skin and clothes and in human hair. They also thrive in scabs, scars, the mouth, nose, throat, intestines, and room-temperature foods.

Biological Hazard: Refers to the danger of food contamination by disease-causing microorganisms (bacteria, viruses, parasites, or fungi) and their toxins and by certain plants and fish that carry natural toxins.

Contamination: The unintended presence of potentially harmful substances, including microorganisms in food.

Certified Food Protection Manager: An individual who has successfully completed a food safety examination for food managers from an accredited program. If your agency is preparing food for public consumption, you must have one person on site while cooking who is a Certified Food Protection Manager; this class does not fulfill this requirement.

Cross-Contamination: The transfer of harmful substances or disease-causing microorganisms to food by hands, food-contact surfaces, sponges, cloth towels, and utensils that touch raw food, are not cleaned, and then touch ready-to-eat foods. Cross-contamination can also occur when raw food touches or drips onto cooked or ready-to-eat foods.

Demonstration of Knowledge: The ability to show through words or actions that an individual understands how to store, prepare, and serve food safely.

Foodborne Illness or Disease: Disease or illness that resulted from eating one or more contaminated foods.

Food Contact Surface: Any equipment or utensil that normally meets food or that may drain, drip, or splash on food or on surfaces normally in contact with food. Examples: cutting boards, knives, sponges, countertops, and colanders.

Fungi: A group of microorganisms that includes molds and yeasts.

Highly Susceptible Population: Those who are more likely than the general population to experience a foodborne illness. Pre-school children, the elderly, pregnant women and those with weak immune systems are highly susceptible to foodborne illness.

Incidence: The number of new cases of foodborne illness in a given population during a specified period (e.g., the number of new cases per 100,000 population per year).

Microorganism: A small life form, seen only through a microscope, which may cause disease. Examples: bacteria, fungi, parasites, or viruses.

Outbreak: An incident in which two or more people experience the same illness after eating the same food.

Parasite: A microorganism that needs a host to survive. Examples: Cryptosporidium, Toxoplasma.

Pathogen: A microorganism that is infectious and causes disease.

Potentially Hazardous Food: A food that requires time or temperature control to limit bacterial growth. These foods are also referred to as Time/Temperature Control for Safety Foods. (Dairy, poultry, meat, shellfish, fish, alfalfa, cut melon, eggs, cook rice, pasta, beans, baked potato, and tofu)

Ready to Eat: Food that can be consumed without further washing, cooking, or processing.

Spore: A thick-walled protective structure produced by certain bacteria and fungi to protect their cells. Spores often survive cooking, freezing, and some sanitizing measures.

Toxins: Poisons that are produced by microorganisms, carried by fish or released by plants.

Virus: A protein-wrapped genetic material which is the smallest and simplest life-form known. Example: Norovirus, Hepatitis A.

Welcome to Food Safety

We appreciate that you are taking an active role in learning to prepare, serve, and protect safe food. As a person who handles and serves food, you will be taking an active role in ensuring that it has been safely handled and served. People, especially the young, the elderly, and the ill, trust you to do all that you can to keep their food safe. It is your responsibility to safely prepare, serve, and protect food to ensure it will not cause illness or harm.

The information in this manual will give you tips on how to safely store, prepare, serve, and defend food at work and home. The manual is divided into three parts:

- **Part 1 - Introduction to Foodborne Illness**
- **Part 2 - How to Keep Food from Causing Illness**
- **Part 3 - Food Defense**

By the time you have finished this manual, you will:

- Understand there are many causes of foodborne illness.
- Identify the importance of clean hands and healthy food workers.
- Know how avoiding the Danger Zone helps prevent foodborne illness.
- Learn several tips to help you remember food safety basics.
- Understand the importance of food defense and your role in preventing intentional adulteration.

Food safety knowledge can help you protect yourself and others. Please take what you learn from this manual and use it at your facility and in your home. If you have any questions after this training, please ask your instructor for additional resources.

Remember that food workers using proper food safety practices are the most important ingredients in safe food!

Part One: Intro to Foodborne Illness

Foodborne Illness

A foodborne illness is a disease caused by consuming contaminated food or drink. Most foodborne illnesses are common referred to as food poisoning or the “stomach flu.” Chemicals, bacteria, or certain foods like poisonous mushrooms can cause food poisoning.

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

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:

- Preschool-aged children
- Elderly
- Pregnant.
- Immune-compromised (due to cancer, AIDS, diabetes, certain medications, or other conditions).

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.

Facilities like hospitals, childcare centers, preschools, nursing homes, and adult care homes that provide food and services to a Highly Susceptible Population have additional food safety requirements. Several

If an employee or volunteer is suffering from a foodborne illness that person may not enter the facility and the health department should be notified.

of these requirements are highlighted throughout this manual. For more information, contact 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).

Physical Hazards

Physical hazards are hard or soft 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.

Examples of physical hazards include broken glass, jewelry, adhesive bandages, staples, and fingernails.

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 product 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.

Examples of chemical contaminants include cleaning agents, pesticides, and certain metals.

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 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, bacteria, and viruses are good examples of biological contamination that cannot be seen without a microscope.

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 at the proper temperature.
- 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 have 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 have 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 to 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 include:

- Animal products such as meat, fish, poultry, seafood, eggs, and dairy products.
- Cooked starches such as cooked rice, beans, pasta, and potatoes
- Fruits and vegetables such as cooked vegetables, tofu, sprouts (such as alfalfa or bean sprouts), cut melons, cut tomatoes, cut leafy greens, and garlic or herbs bottled in oil

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 to 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.

Food Allergens

An allergic reaction to food can sometimes cause serious illness and/or death. If handling these items and a client has an allergy, please wash your hands, and change gloves to ensure cross-contamination does not happen.

The “BIG 9”:

1. Milk
2. Eggs
3. Peanuts
4. Tree Nuts
5. Fish
6. Shellfish
7. Wheat
8. Soy
9. Sesame Seeds & Oil

Part Two: Preventing Foodborne Illness

Top 3 Food Safety Defenses

Now that you know germs cause almost all foodborne illnesses, let us review 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.

Next, we 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.

1. 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 spread to the food and other people.

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 cleaning 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 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 does not mean they do not 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 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 would 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.

1. Get your hands wet so the soap will work.
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!
3. Rinse hands to send the soap suds and germs down the drain.
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, and garnishes.
- Bakery or bread items such as cakes, pies, breads, 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, and 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 are 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

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 hands out of hair and hair out of food. 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.

2. 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.

Most bacteria do not grow in hot or cold temperatures. To keep food safe, cold foods must be kept at 40°F or colder. Hot foods must be kept 140°F or hotter. **The range of temperatures between 40°F and 140°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.

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 does not 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.

Keeping 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 (140°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 at 140°F or hotter.

Tips for keeping food hot:

1. Cover pans
2. Stir food often to distribute heat
3. Never mix cold foods with cooked food

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 Temperature Table

Ham, fully cooked (to reheat) & holding temp for cooked food	140°F
Beef, pork, lamb, roasts, steaks, chops	145°F
Egg dishes and ground meat	160°F
Poultry, stuffing, casseroles, reheat leftovers	165°F

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.

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.

3. Prevention of Cross Contamination

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.

Good-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 tablespoon 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 nonfood-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 in how to make sure the machine is washing and sanitizing properly. Temperature gauges and sanitizer levels must be monitored.

Repackaging

Food repackaging only can occur in a facility with handwashing facilities and ware washing facilities (3-comp sink or approved dish machine), approved area for food processing. Labels are required with the name of food, manufacturer, dates, ingredients, net quantity.

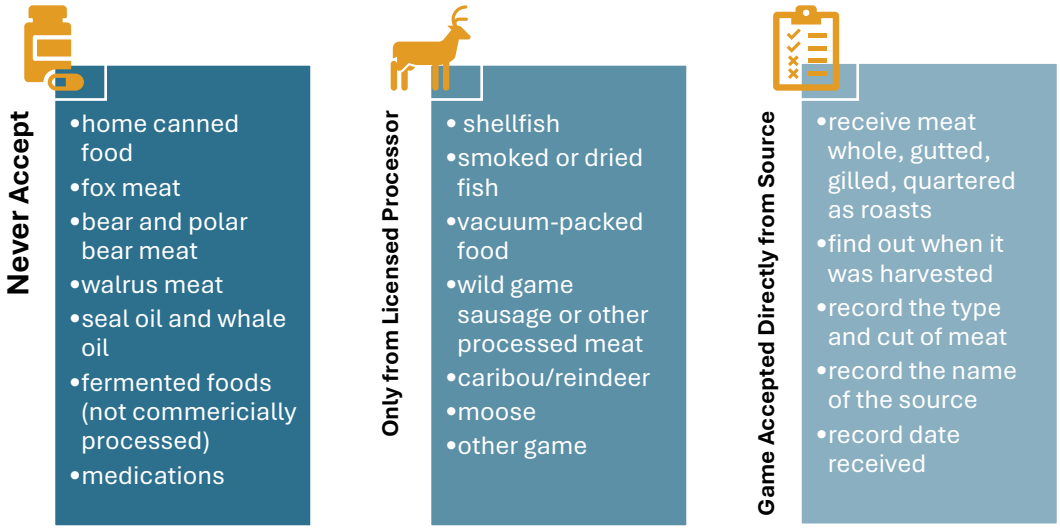
If you are working with frozen food keep track of your temperature control, avoid the item being in jeopardy of the danger zone.

Food Storage

Practice FIFO (first in, first out). When stocking your food storage areas, place recently purchased items behind existing food. This will help ensure food is consumed before spoilage occurs and before the best if used by date passes.

Receiving Food

Be very careful to inspect incoming donations.



CANNED GOODS

- Be wary of bulged or swollen ends, loss of seal, fracture points and serve denting that could impact the seam, rut, or missing label.

PRODUCE

- Discard if you see mold, mushiness, bad smells, discoloration, wilting or signs of insects. DIRT IS OK!

REFRIGERATED/FROZEN FOOD

- Chill items should be received at or below 40°F.
- Frozen items should be received at or below 32°F.
- Discard if you see large ice crystals, thawed & refrozen, water stains, mold, bad smell, discoloration, food exposed, no label.

FOOD LEAKS

- Throw out the leaking item.
- Clean nearby items if they are in glass, plastic, or metal containers.
- Clean in warm, soapy water, let air dry, do not submerge items with screw tops!
- Throw out nearby items if they are in cardboard.

FOOD BOXES & BAGS

Damaged boxes or bags likely indicate pest contamination which could also cause mold growth. If you receive a box of cereal damaged but the bag inside the box is not damaged, you could keep the cereal and discard the box.

WHEN IN DOUBT THROW IT OUT!

REFRIGERATED AND FROZEN STORAGE DO'S AND DON'TS

- Temperature
  - Refrigerator: 32 to 40º
  - Freezer: 0º or less
- FIFO (First In, First Out)
- Do not overload or line shelves with foil.
- Do not refreeze.
- Keep doors closed.

TEMPERATURE LOGS

- Number each unit/door
- Number each log
- Separate log for each unit
- Log daily or as often as someone is there.
- Note repairs and adjustments.

IMPORTANT DATES

- Use by or Best By date
  - Dated by which a product is at peak quality
- Sell By date
  - Date in which it is the last day for retailers to sell
- Manufacturer Date
  - Used to track recalls
- Expiration Date
  - **BABY FOOD IS THE ONLY FOOD TO EXPIRE!**

FoodKeeper Website

This website was developed by the USDA's Food Safety and Inspection Service with Cornell University and the Food Marketing Institute. It will help you understand proper storage and maximize freshness and quality.

www.foodsafety.gov/keep/foodkeeperapp

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. Clients 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.

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.

Part Three: Food Defense

Introduction to Food Defense and Food Safety

The Food and Drug Administration (FDA) and the food industry share a crucial role in ensuring consumers have safe food to eat. To achieve this, the FDA has established requirements to prevent both accidental and intentional adulteration of food. These requirements are grounded in two key concepts: food safety and food defense. While both aim to prevent food adulteration, they focus on different aspects of the issue.

Understanding Food Safety vs. Food Defense

- **Food Safety**: Involves measures to protect against unintentional adulteration of the food supply. It addresses all types of contaminants that are reasonably likely to occur during food production, processing, and handling.
- **Food Defense**: Focuses on protecting the food supply from intentional acts of adulteration. It aims to prevent the introduction of biological, chemical, physical, and radiological agents into food with the intent to cause harm.

Importance of Front-Line Employees

Both food safety and food defense programs rely heavily on the vigilance of front-line employees, who play a critical role in protecting the food supply from farm-to-fork. Front-line employees are responsible for implementing mitigation strategies and reporting any unusual or suspicious activities.

Food Defense Measures

1. **Farm-to-Fork Concept**: Food defense measures span the entire food life cycle, from growing and harvesting to manufacturing, processing, packing, holding, transportation, and distribution. Each stage must be safeguarded against intentional adulteration.
2. **Mitigation Strategies**: These are specific measures implemented to reduce the likelihood of a successful intentional adulteration attempt. Front-line employees must ensure these strategies are consistently and properly applied.
3. **FIRST Acronym**: A handy reminder for front-line employees' roles in food defense:
    - **F**ollow company food defense plans and measures.
    - **I**nspect your work area and surroundings.
    - **R**ecognize anything out of the ordinary.

- **S**ecure all ingredients, supplies, and finished products.
- **T**ell management if you notice anything unusual or suspicious.

Identifying Possible Threats

1. **Unsecured Areas**: Ensure all areas are secure to prevent unauthorized access.
2. **Unescorted Visitors**: Visitors should be escorted and properly identified to avoid unauthorized access.
3. **Suspicious Activities**: Be aware of employees or individuals acting suspiciously or being in areas where they do not belong.
4. **Abnormal Changes to the Work Area**: Look for unusual changes in equipment, materials, or sanitation.
5. **Evidence of Tampering**: Check materials for signs of tampering, such as discoloration or breaches.

Reporting Procedures

When an unusual or suspicious situation is observed, it must be reported to management immediately. The facility's food defense plan should outline specific procedures, including who to contact in case of a potential threat.

Resources

Food Safety - https://www.foodsafety.gov

Center for Disease Control - https://www.cdc.gov/foodsafety

Municipality of Anchorage - https://www.muni.org/Departments/health/Admin/environment/FSS/Pages/default.aspx -

Department of Environmental Conservation State of Alaska - http://dec.alaska.gov/

USDA FoodKeeper App - FoodKeeper App | FoodSafety.gov