

Foodborne Illnesses

A foodborne illness is a disease transmitted to people by food. An illness is considered an outbreak when:

- To or more people have the same symptoms after eating the same food.
- An investigation is conducted by state and local regulatory authorities
- The outbreak is confirmed by a laboratory analysis.

Operations face many challenges for food safety

- <u>Time</u>-pressure to work quickly
- <u>Language and Culture</u>-staff speak different languages or how different cultures handle food
- <u>Literacy and Education</u>-different levels of education makes it more challenging
- <u>Pathogens</u>-illness-causing microorganisms are more frequently found on food than in the past
- <u>Unapproved suppliers</u>-receiving food from suppliers that don't practice food safety
- <u>High-risk customer</u>-for example elderly, preschoolers and people with poor immune systems
- <u>Staff turnover</u>-constantly having to retrain new employees

Practices related to foodborne illness

- <u>Time-Temperature Abuse</u>- Food has suffered time temp-abuse when it has stayed too long attemps that are good for the growth of pathogens
 - Food is not held or stored at the correct temperature
 - Food is not cooked or reheated enough to kill pathogens
 - Food is not cooled correctly
- <u>Cross-contamination</u>- Pathogens can be transferred from one surface or food to another.
 - Contaminated ingredients are added to food that receives no further cooking
 - Ready-to-eat food touches contaminated surfaces
 - Contaminated food touches or drips fluids onto cooked or ready-to-eat food
 - A food handler touches contaminated food and then touches ready-to-eat food
 - Contaminated wiping cloths touch food-contact surfaces
- <u>Poor Personal Hygiene</u>- Food handlers can cause foodborne illness if they do any of thefollowing:
 - Fail to wash hands correctly after using the restroom
 - Cough or sneeze on food
 - Touch or scratch wounds and then touch food
 - Work while sick



- <u>Poor Cleaning and Sanitizing</u>- Pathogens can be spread to food if equipment has not beencleaned and sanitized correctly between uses
 - Equipment and utensils are not washed
 - Food-contacts surfaces are wiped clean rather than being washed, rinsed and sanitized
 - Wiping cloths are not stored in a sanitizer solution between uses
 - Sanitizing solutions are not at the required levels to sanitize objects

Ready-to-Eat Food

- Ready-to-eat food is exactly what it sounds like: foods that can be eaten without furtherpreparation, washing, or cooking. Ready-to-eat foods include:
 - Cooked food
 - Washed fruit and vegetables (whole and cut)
 - Deli meat
 - Bakery items
 - Sugars
 - o Spices
 - Seasonings

FORMS OF CONTAMINATION

<u>How contamination happens</u>- Food handlers who do not wash their hands after using the restroom maycontaminate food and surfaces with feces from their fingers. This is called **fecal-oral route** of contamination.

- Other ways to pass on contaminates
 - From person to person
 - Through sneezing or vomiting onto food or food-contact surfaces
 - From touching dirty food-contact surfaces and equipment, and then touching food
- Simple mistakes can happen
 - Ready-to-eat foods can become contaminated when it touches a surface that hadcontact with raw meats, seafood, and poultry
 - Storing food incorrectly or cleaning produce incorrectly
 - Failure to spot signs of pests

Symptoms of Foodborne Illness

- Diarrhea
- Vomiting
- Fever
- Nausea
- Abdominal Cramps
- Jaundice (yellowing of the skin and eyes)



THE SAFE FOOD HANDLER

At every step in the flow of food, food handlers can contaminate food. They might not even realize it.Some examples are:

- When they have a foodborne illness
- When they have wounds or boils that contain a pathogen
- When sneezing or coughing
- When they have contact with a person who is ill
- When they use the restroom and do not wash their hands
- When they have symptoms such as diarrhea, vomiting or jaundice

Other actions that can contaminate food are:

- Scratching the scalp
- Running fingers through hair
- Wiping or touching the nose
- Running an ear
- Touching a pimple or an infected wound/boil
- Wearing and touching a dirty uniform
- Coughing or sneezing into the hand
- Spitting in the operation

<u>Hand washing and hand care</u>- proper hand washing and hand care are critical to preventing the spreadof pathogens. Hand washing is the most important part of personal hygiene. And many food handlers do not wash their hands correctly or as often as they should.

Where to wash your hands- Do you know which kitchen sink is made for hand washing?

- Front sink is the "dirty" sink, made for dishes and hand washing
 - Back sink is for food only
 - o Defrosting and washing produce

How to Wash Hands (See Handout)

SERVSAFE FOOD

HANDLERS GUIDE (Summarized)



<u>When to Wash Hands</u>- Food handlers must wash their hands before preparing food or workingwith clean equipment and utensils, before putting on single-use gloves. They must also wash their hands after the following activities:

- Using the restroom
- Touching the body or clothing
- Coughing, sneezing, blowing nose, or using handkerchief or tissue
- Eating, drinking, smoking, or chewing gum or tobacco
- Handling soiled items
- Handling raw meat, seafood, or poultry
- Taking out garbage
- Handling service animals or aquatic animals
- Handling chemicals that might affect food safety
- Changing tasks (before beginning a new task)
- Leaving and returning to the kitchen/prep area
- Handling money
- Using electronic devices, such as phones or tablets (the kitchen is not a place forphones)
- Touching anything else that may contaminate hands, such as dirty equipment, worksurfaces, or clothes

<u>Corrective Action</u>- if you see food handlers who are not following proper hand washing procedures, correct the situation immediately.

- Dispose of any contaminated food
- Clean potentially contaminated equipment and utensils
- Refrain or coach who are not following proper hand washing procedures if necessary

Hand Antiseptics- Only use hand antiseptics AFTER hand washing. NEVER use them in place of

Hand Care Guidelines (See Handout 3.1)

Infected Wounds or Boils

- If the wound or boil is located on the hand or wrist. The food handler must cover it with animpermeable cover like a finger cot (or bandage). Then apply single-use gloves
- If the wound or boil is located on the arm. The food handler will need to cover it with an impermeable cover such as a bandage
- If the wound or boil is located on another body part. The food handler will need to cover it with a dry, durable, tight-fitting bandage.



<u>Single-Use Gloves</u>- Single-use gloves are intended to be used once then thrown away. Single-usegloves should NEVER be used in place of hand washing.

How to use Gloves:

- Wash hands before putting on gloves when starting new tasks. You do not need to rewash your hands each time you are changing gloves if you are performing the same task and yourhands have not become contaminated
- Select the correct glove size
- Hold gloves by the edge when putting them on. Avoid touching the glove as much aspossible
- Once you have them on, check the gloves for rips or tears
- NEVER blow into the gloves
- NEVER roll gloves to make them easier to put on
- Never wash and reuse gloves

NEVER handle ready-to-eat food with bare hands!!!

Exceptions to handling ready-to-eat foods with bare hands:

- The food will be added as an ingredient to a dish that does not contain raw meats, seafood,or poultry but will be cooked to at least 145 degrees F. For example, cheese on pizza
- The food will be added as an ingredient to a dish containing raw meats, seafood, or poultryand the dish will be cooked to the required minimum internal temperature. For example, adding salt and pepper to raw meat and carrots to a roast

<u>Personal Hygiene Practices</u>- Wearing dirty clothes or neglecting to shower probably will not go overwell with guests. Keeping food safe means paying attention to personal hygiene.

<u>Personal Cleanliness</u>- Pathogens can be found on hair and skin. There is a greater risk of these pathogens being transferred to food and food equipment if the food handler does not follow a personal hygiene program. Make sure food handlers shower or bathe before work.

NEVER eat, drink, smoke, and CHEW GUM or tobacco while doing the listed below

- While prepping or serving food
- Working in prep areas
- Working in areas used to clean utensils and equipment

Employees can drink from a covered container if they handle the container carefully to prevent contamination of their hands, the container, and exposed food, utensils and equipment

- A correctly covered container will include a lid with a straw, or a sip-lip top
 - Do Not use pop/water bottles with twist top lids (hand to mouth contamination)
 - Do Not use pop cans or energy drinks. May pour into correctly covered container



The Flow of Food

<u>Time-Temperature Control</u> – Most foodborne illnesses happen because TCS (Time and Temp Controlled Safety) food has been time-temperature abused. Remember TCS food has been time temp abused any time it remains between 41 F and 135 F. This is called the 'temperature danger zone' because pathogens grow in this range. Most pathogens grow much faster between 70 F and 125 F.

Food is being temp abused whenever it is handled in the following ways:

- Cooked to the wrong internal temp
- Held at the wrong temp
- Cooled or reheated incorrectly

If food is held in the 'temp danger zone' for four or more hours, you must throw it out.

Guidelines for Preventing Cross-Contamination between Food (See handout 4.1)

Avoiding Time-Temp Abuse (See handout 4.2)



Purchasing, Receiving, and Storage

Receiving and inspecting

- Inspect food before signing off
 - Sever dents in can seams
 - Deep dents in the can body
 - Missing labels
 - Swollen or bulging ends
 - Holes and visible signs of leaking
 - o Rust
 - Leaks, dampness, or water stains
 - Signs of pests
 - Expired expiration use by or sell by date
- Food must be stored away as quickly as possible in the correct areas
 - o Put temp sensitive foods away first before dry goods

Rejecting Items

- If anything is found wrong with the packaging. Do not except the item. Have the supplierreturn the food and get a refund or credit to the account
- Reject any frozen food for the following reasons:
 - Fluid or water stains appear in case bottoms or packaging
 - There are large ice crystals or frozen liquids on the food or packaging. This may be vidence of thawing and refreezing, which shows time-temp abuse.

Date Marking

- Label food with name and date
 - All left over food should be used or thrown out within 3 days of the date the food wasmade
 - Any reheated left overs that were not used, will need to be thrown away
 - Only reheat the amount of leftovers needed, not the whole container, otherwise you will have to throw any reheated left overs away.

Rotation

- First-in, First-out (FIFO) rotation system
 - Identify the food items use-by or expiration date
 - Store items with the earliest use-by or expiration date in front of the items with laterdates
 - \circ $\,$ Once the items are shelved, sue those items stored in front first
 - Throw out food that has passed its manufactures use-by or expiration date

Supplies

- Store all items in designated storage areas
- Store items away from walls at least 6 inches off the floor
- Store single-use items (cups, gloves) in original packaging



Cleaning

- Clean dollies, carts, transporters and trays often
- Store food in containers that have been cleaned and sanitized
- Store dirty lines away from food

Food Storage in Coolers

- Storage from top to bottom
 - Ready-to-eat food
 - Seafood
 - Whole cuts of beef and pork
 - Ground meat and ground fish
 - Whole and ground poultry

The Flow of Food: Preparation

Methods and Guidelines for Thawing TCS Foods (See Handout 6.1)

Side Note: Thawing reduced-oxygen packaging such as fish

- The fish should be removed from the packaging
 - Before thawing it under refrigeration
 - Before or immediately after thawing it under running water

Ice Scoop

• Use and ice scoop, NEVER touch the ice with your bare hands

Cooling Foods

- Methods for cooling foods. NEVER cool large amounts of food in a cooler
 - Ice-water bath-divide food into smaller containers and put them in an ice water bath.
 - This will cool the food faster and more evenly
 - Separate food into smaller containers

Reheating Food

- You must heat TCS food for hot holding to an internal temp of 165 F for 15 seconds. Thefood must reach this temp within two hours
- Reheat commercially processed foods to 135 F (i.e. cheese sticks, deep fried foods)

(See handout for How to Check Temperatures)

Cooking Requirements for Specific Types of Food (see handout 6.2)



The Flow of Food: Service

Holding Food Temps

- Hold hot foods at 135 F or higher
- Hold cold foods at 41 F or lower

Serving Food (See Handout Service Staff Guidelines)

- Bare hand contact with food
 - Food handlers must wear single-use gloves when handling ready-to-eat foods
 - Or use spatulas, tongs, deli sheets or other utensils
- Serving Utensils
 - Store serving utensils with handles above the rim of the containers
 - Use different utensils for different food items

Re-Serving Food

- Do not re-serve food returned by one guest to another guest
- NEVER re-serve uncovered condiments
- Do NOT combine leftover condiments with fresh ones
- Throw away opened portions or dishes of condiments after serving them to guest. Salsa, butter, mayo for example that are put in separate serving dish
- Do Not re-serve uneaten bread to other guests
- NEVER re-serve plate garnishes such as fruit or pickles
- In general, you may re-serve only unopened, prepackaged food in good condition such ascondiment packets or wrapped crackers. You may re-serve bottles of ketchup, mayo, etc.

Safe Facilities and Pest Management

- Garbage removal
 - Garbage should be removed from areas as soon as possible to prevent odors, pests and possible contamination
 - Do not put garbage on top of food prep areas
- Cleaning of Containers
 - o Clean the inside and outside of garbage containers frequently. This will help prevent the contamination of food and food-contact surfaces
- Maintaining the Facility
 - Clean the operation on a regular basis
 - Make sure all building systems work and are checked regularly
 - Make sure the building is sound. There should be no leaks, holes, or cracks in thefloors, foundation, ceilings, or windows
 - Control pests
 - Maintain the outside of the building correctly including patios and parking lots

SERVSAFE FOOD

The Cottages Assisted Living at its Best

- HANDLERS GUIDE (Summarized)
- <u>Pest Management-</u>Pests are more than just unsightly to customers, they can damage food, supplies and facilities
 - Pest Prevention
 - Deny pests access to the facility
 - Deny pests food, water and shelter
 - Work with a licensed pest control operator

Cleaning and Sanitizing

Food can easily be contaminated if you do not keep your facility and equipment clean and sanitized. **Cleaning** removes food and other dirt from a surface. **Sanitizing** reduces pathogens on a surface tosafe levels.

- Cleaners
 - Detergents
 - Degreasers
 - Delimers
 - o Abrasive cleaners
- <u>Sanitizers</u>- Food-contact surfaces must be sanitized after they have been cleaned andrinsed. This can be done by using heat or chemicals
 - Heat Sanitizing- Soak items in hot water of at least 171 F for at least 30 seconds. Or runthrough a high temp dishwasher
 - Chemical Sanitizing- Three common types of chemical sanitizers are chlorine, iodine, orquats (we use quats)
 - Hard water, food bits and leftover detergent can reduce the solutions effectiveness.Change the solution when it looks dirty or its concentrate is too low
- <u>Cleaning and sanitizing surfaces</u>- if surfaces have not been cleaned and sanitized properly,take corrective action immediately. (See handout Cleaning and Sanitizing Surfaces)
- Cleaning and sanitizing equipment (See handout)

Dishwashing

Tableware and utensils are often cleaned and sanitized in dishwasher. Larger items such as pots and pans are cleaned by hand in a three-compartment sink.

- Dishwasher Operation
 - Keep the machines clean and functioning (check them daily, report to supervisor or puton maintenance list what needs to be fixed)
 - Prepare items for cleaning- scrape items BEFORE washing them or soak them if thefood won't come off easily
 - Loading the dishwasher- use the correct dish racks. Load them so the water will reachall surfaces. NEVER overload the dish racks
 - Drying items- Air-dry all items. NEVER use a towel to dry them. This could cause contamination. Make sure they are dry BEFORE stacking or storing them.
 - Monitor- check water temps, pressure and sanitizer levels

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HANDLERS GUIDE (Summarized)



- Manual Dishwashing
 - Preparing a three-compartment sink
 - Člean and sanitize each sink and drain board
 - Fill the first sink with detergent and water. The water temp must be at least 110F
 - Fill the second sink with clean water. This is not necessary if items will be prayed rinsed
 - Fill the third sink with water and sanitizer
 - Cleaning and Sanitizing in a Three-Compartment Sink (see handout)
- Cleaning the Premises
 - Nonfood-contact Surfaces- these surfaces need to be kept clean as well. They do notneed to be sanitized but cleaned on a regular basis. This will help with pathogens and pests.
 - Floors, walls, doors, ceilings, equipment exteriors like fridges and ovens, microwaves
- Cleaning up after People Who Get Sick
 - o Need to clean up right away. Be sure to use your company's policy on how to clean up vomit or diarrhea
- Using Foodservice Chemicals
 - Use- Only chemicals approved for use in foodservice operations should be used
 - Storage- Chemicals must be stored in their original containers and designated areas
 - $\circ\,$ Labels- Chemicals need to be labeled with appropriate labels. NO HAND MADELABELS