

# TEXAS APPROVED FOOD HANDLER PROGRAM



**PROPERTY OF:**  
**TX FOOD SAFETY SOLUTIONS INC., DBA FOOD SAFETY DIRECT**  
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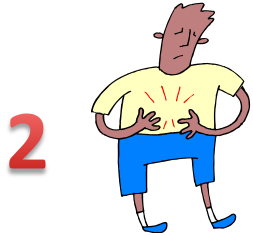
# *How Food Becomes Unsafe*

## ***Definitions:***

- A foodborne illness is a disease transmitted to people through food.

- An illness is considered an outbreak when:

- Two 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 laboratory analysis



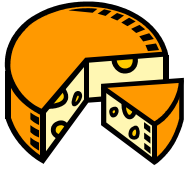
# **TCS** *Foods are foods most likely to become unsafe and* **Temperature Control for Safety**

*41° or lower for cold, 135° or higher for hot to prevent time and temperature abuse and control pathogen growth, which will prevent people eating it from getting sick*

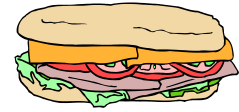
## ***TCS foods includes the following:***

- Milk and dairy products
- Shell eggs (except those treated to eliminate *Salmonella* spp.)
- Meat: beef, pork, and lamb
- Poultry
- Fish
- Shellfish and crustaceans
- Baked potatoes
- Heat-treated plant food, such as cooked rice, beans, and vegetables
- Tofu or other soy protein; synthetic ingredients, such as textured soy protein in meat alternatives
- Sprouts and sprout seeds
- Sliced melons; cut tomatoes; cut leafy greens
- Untreated garlic-and-oil mixtures

## Ready To Eat Food



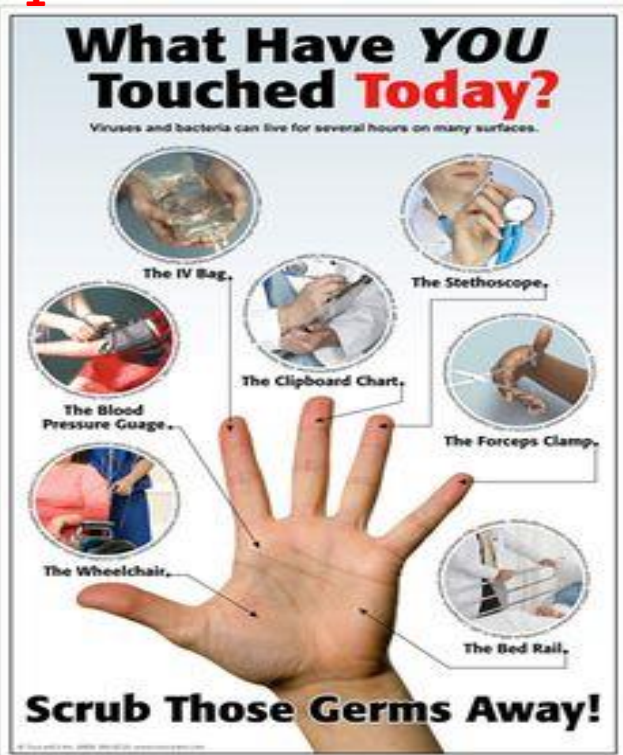
- Can be eaten without further preparation, washing or cooking and it includes:
- Cold cuts for sandwiches
- Washed fruits & vegetables
- Bakery items
- Sugar, spices and seasonings
- Cooked food



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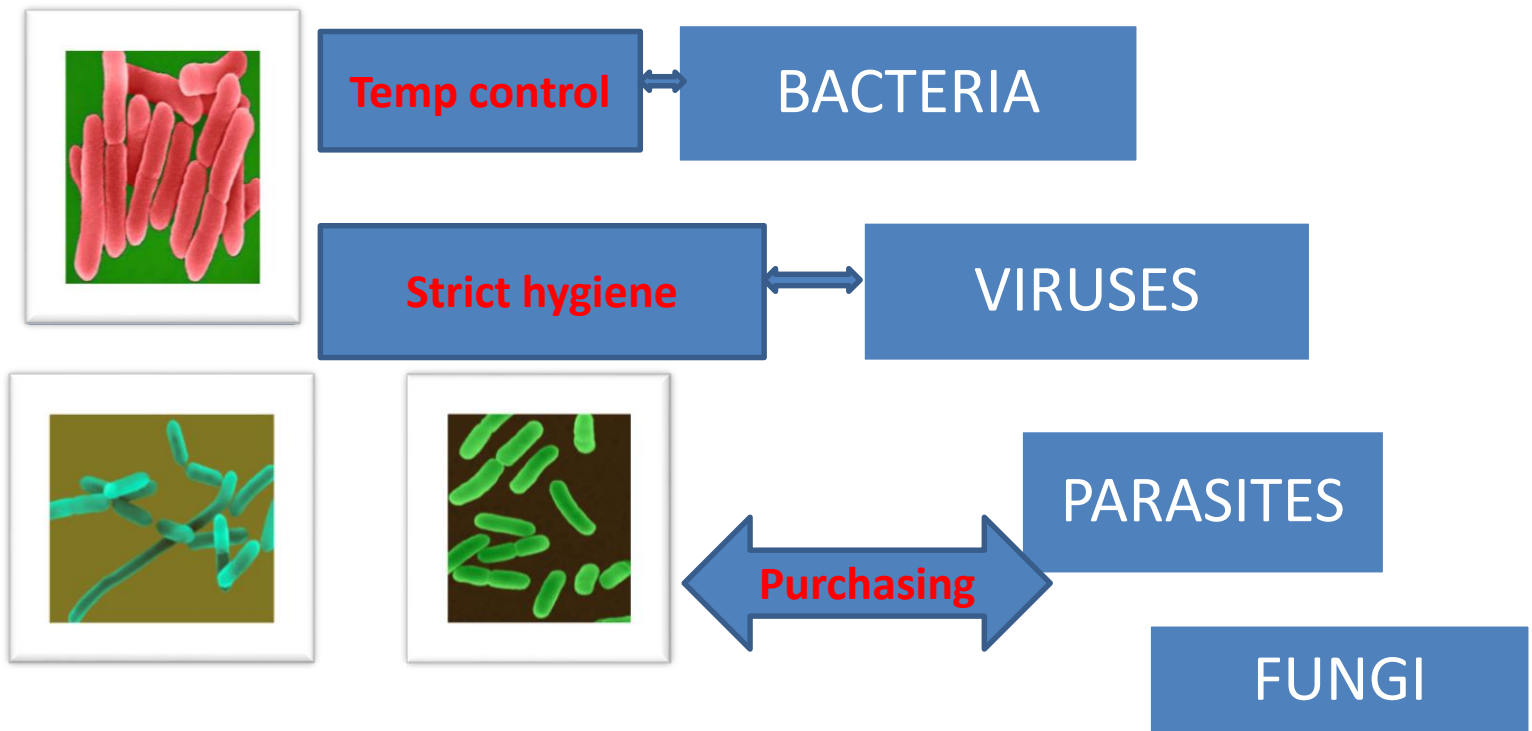
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# Biological Hazards

Microorganisms that can make people sick known as pathogens



*Cannot be seen tasted or smelled, can be in the food and make people sick*

# Chemical Hazards



- Cleaners
- Sanitizers
- Lubricants
- Pesticides
- Toxic Metals

## To prevent food contamination from Toxic Materials:

- **Store** them in an area **away, separated or below** food and food preparation areas
- Follow manufacturers instructions
- **Label** chemicals taken out of the original containers
- Use only **approved commercial** equipment and utensils, preferably with the **NSF** seal

# Physical Hazards

***Objects can get into the food including naturally occurring ones:***  
Keeping food covered, following strict personal hygiene and purchasing  
From approved suppliers will prevent physical contamination



- Bandages
- Glass
- Bones & fruit pits
- Metal shavings
- Fibers from dishwashing scrubbers
- Dirt
- Staples
- Jewelry
- Wood
- Hair



# Foodborne Illness Risk Factors

These are the 5 most common risk factors for Foodborne Illness

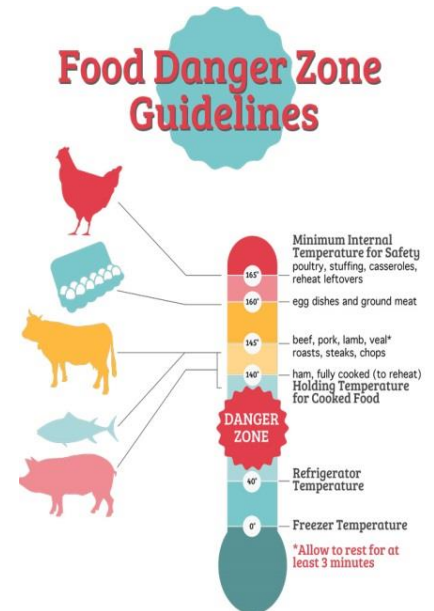


- Purchasing from unsafe sources
- Inadequate cooking of food
- Holding food at incorrect temperatures
- Using contaminated equipment
- Poor personal hygiene



## REDUCING OR ELIMINATING THE RISK FACTORS:

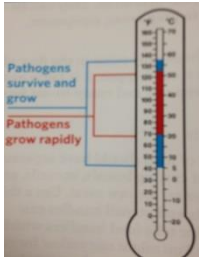
- Purchasing from approved and reputable suppliers
- Cooking at the minimum required temperature
- Holding TCS foods at the correct temperature
- Adequate cleaning and sanitizing of all food contact surfaces
- Following strict personal hygiene







## ***Behaviors associated with Foodborne Illness and Foodborne Outbreaks***



- ***Poor personal hygiene:*** Transferring pathogens from your body to food.
- ***Time and Temperature Abuse:*** Letting food stay too long at temperatures that favor pathogen growth(Bacteria).
- ***Cross-contamination:*** Transferring pathogens from one surface or food to another.



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## ***Good Personal Hygiene***

***Food Handlers must follow strict personal hygiene in order to prevent food contamination***

- Clean hat or other hair restraint
- Clean clothing including the apron
- Remove apron when leaving the preparation area(especially when going to the restroom or to take the trash)
- Remove all jewelry from arms and hands including medical bracelets (only a smooth metal band may be worn)
- Clean hands and short fingernails without nail polish
- Cover all cuts or injuries with a clean bandage or band aid and an appropriate glove

***To prevent food contamination, hands and arms should always be kept clean.***

***Hand washing should take at least 20 seconds***



**1. Wet hands and arms.** Use running water as hot as you can comfortably stand. It should be at least 100° F (38° C).



**2. Apply soap.** Apply enough to build up a good lather.



**3. Scrub hands and arms vigorously.** Scrub them for 10 to 15 seconds. Clean under fingernails and between fingers.



**4. Rinse hands and arms thoroughly.** Use running warm water.



**5. Dry hands and arms.** Use a single-use paper towel . Use the paper towel to turn off the faucet and open the restroom door.

## ***When to Wash Hands***



***•Food handlers must wash their hands before they start work and after:***

- Using the restroom
- Handling raw meat, poultry, and seafood (*before and after*)
- Touching or scratching the hair, face, or body
- Sneezing, coughing, or using a tissue
- Eating, drinking, smoking, or chewing gum or tobacco
- Handling chemicals that might affect food safety

# ***When to Wash Hands***

## ***Food handlers must wash their hands after:***

- Taking out garbage
- Clearing tables or busing dirty dishes
- Touching clothing or aprons
- Handling money
- Leaving and returning to the kitchen/prep area
- Handling service animals or aquatic animals
- Touching anything else that may contaminate hands
- Touching the phone
- Shaking someone's hands
- Touching clothing or aprons



# *How to use Hand Antiseptics*

*When using Hand Antiseptic:*

*It must be **approved by the FDA***

- **Never** use it instead of hand washing
- Should be used **only after** handwashing
- Should be allowed to dry before touching food or equipment
- Follow manufacturer's instructions



## *Where to Wash Hands*



***Food handlers must wash their hands only in a designated hand washing sink***

- Do not place anything blocking the hand washing sink.
- Do not empty any beverages or dirty water in the hand washing sink.
- Do not prepare food in the hand washing sink
- Do not place any dirty dishes or cleaning tools in or in front of the hand washing sink.
- Do not rinse towels in the hand washing sink.
- Make sure the hand washing station is equipped with Hot water, soap, paper towels, and a hand washing reminder sign





# Using Gloves Correctly

Gloves will **NOT** prevent food contamination if not used correctly



These guidelines must be followed when using gloves:

- Wash hands before putting gloves on when starting a new task
- Select the correct glove size
- Hold gloves by the edge when putting them on
- Once gloves are on, check for rips or tears
- **NEVER** blow into gloves
- **NEVER** roll gloves to make them easier to put on
- Change the gloves after touching raw meats, seafood, and poultry and before touching ready to eat food and as often as necessary.
- **NEVER** wash hands with the gloves on
- Wear only one pair of gloves at a time



**DON'T**



**THEN**





# Hand and Fingernail Care



- ❑ -Keep fingernails short and clean

- ❑ -Do NOT wear false nails

- ❑ - Do NOT wear nail polish, rhinestones, or designs

- ❑ - Do NOT wear exposed Band-Aids

- ❑ - Cover all cuts or injuries with a clean waterproof bandage or band aid as required



# ***Outer Clothing and Jewelry***

***Dirty clothes may contain pathogens that can make people sick***

***You can prevent this by following these guidelines:***



## **Food handlers must:**

- ☐ Wear a clean hat or other hair restraint to keep hair from falling in the food, and to keep from touching the hair when:
  - a. Serving
  - b. Preparing
  - c. Working around food preparation
  - d. Washing dishes
- ☐ Wear clean clothing daily, including the apron and uniform
- ☐ Remove aprons when leaving food-preparation areas, especially when going to the restroom or taking out the trash
- ☐ Remove jewelry from hands and arms before prepping food or when working around prep areas(no watches, medical ID bracelet or any other bracelets allowed). Only a smooth metal band may be used



# Eating, Drinking, Smoking, and Chewing Gum or Tobacco

Food handlers must **NOT**:

Eat, drink, smoke, or chew gum or tobacco

When:

- ☐ Prepping or serving food
- ☐ Working in prep areas
- ☐ Working in areas used to clean utensils and equipment  
(washing dishes)

*The facility may allow drinking, provided that it is done from a covered container with a straw.*



# ***Animal Handling Prohibition***



## **Food Employees:**

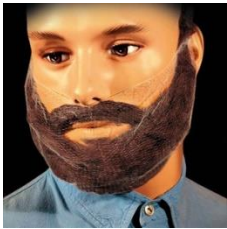
- **May not care for or handle animals that may be present such as patrol dogs, service animals, or pets that are allowed as specified in the rule relating to physical facilities.**
- **Food employees with assistance animals may handle or care for their assistance animals provided that they wash their hands correctly after doing so.**
- **food employees may handle or care for fish in aquariums or molluscan shellfish or crustacea in display tanks if they wash their hands correctly immediately after and before handling food or food contact surfaces.**



## **Hair Restrain Effectiveness**



**Food Employees shall wear hair restraints such as hats, hair coverings or nets, beard restraints, and clothing that covers body hair, that are designed and worn to effectively keep their hair from contacting exposed food; clean equipment, utensils, and linens; and unwrapped single-service and single-use articles.**



# What to do if you are sick

It is the Food Handler's responsibility to immediately report the following symptoms to their Manager



## REPORTABLE SYMPTOMS:

- Diarrhea(**Restrict** from food handling position)
- Vomiting(**Restrict** from food handling position)
- Jaundice (yellowing of skin and eyes), **Exclude** from establishment.
- Sore Throat with fever(**Restrict** to nonfood handling position)
- When Serving **high risk population**, **Exclude** with sore throat with fever
- Infected lesions or injuries(**Restrict** from food handling)
- Fluids from the nose or eyes or mouth( **Restrict** from food handling)

# ***THE BIG SIX Foodborne Illnesses***

***If the food handler has been diagnosed with or has been exposed or exhibit symptoms or is recovering from:***

- Hepatitis A- **Strict hygiene**
- *Salmonella* Typhi- **Strict hygiene & prevent cross contamination**
- Nontyphoidal *Salmonella*(NTS) **Cook chicken & eggs to temp**
- Enterohemorrhagic and shiga toxin-producing *E. coli*- **raw/undercooked ground beef**
- Norovirus- **Strict hygiene**
- *Shigella* spp. **Strict hygiene**

***Then:***

- **Exclude** the food handler from the operation and **Report** illness to the local regulatory authority.
- Work with the food handler' s medical practitioner and/or the local regulatory authority to decide when the person can go back to work

## *Bare-Hand Contact with Ready-to-Eat Food*

***Bare-hand contact with ready-to-eat food must be avoided:***

- Food Employees may handle ready to eat food with bare hands provided that there is documentation in the facility about:
  - Policies on staff health
  - Training in handwashing and personal hygiene practices
  - The risks associated with bare hand contact and ready to eat food
- **NEVER** Handle ready-to-eat food with bare hands when you primarily serve a high-risk population





## ***Bare hand contact control measures***

**Documentation** is maintained at the food establishment that food employees contacting ready-to-eat foods with bare hands utilize **two or more** of the following **control measures** to provide additional safeguards to hazards associated with bare hand contact:

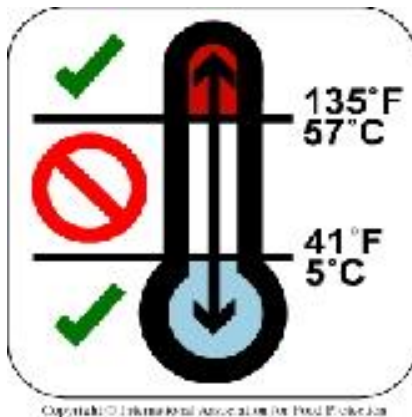
- Double hand washing( Repeat the correct hand washing steps one more time)
- Nail brushes
- A hand sanitizer after hand washing
- Incentive programs that assist or encourage food employees not to work when they are ill, such as paid sick leave
- Other control measures approved by the regulatory authority
- Documentation is maintained at the food establishment that corrective actions are taken when the hand washing, hygiene, and health rules are not followed.

## ***Time and Temperature Control***

**Controlling time and temperature is very important in order to prevent pathogen growth and to keep food safe**

### ***Temperature Danger Zone***

***Temperature Danger Zone is when food is in between 41° and 135°***



***To prevent time and temperature abuse, all TCS foods must be maintained:***

- ☐ Cold at 41° or lower from receiving to serving
- ☐ Hot at 135° or higher in every step in the flow of food
- ☐ Frozen fully frozen
- ☐ Must be cooked correctly
- ☐ Must be cooled correctly
- ☐ Must be thawed correctly
- ☐ Must be reheated correctly

# EXAMPLES OF TCS FOODS

***TCS Foods are those foods that require Temperature Control for Safety and must be held hot at 135° or higher or cold at 41° or lower***



MEAT



FISH



POULTRY



GROUND MEAT



SAUSAGE



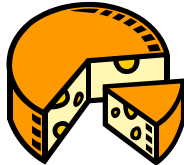
SEAFOOD



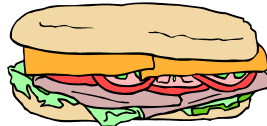
EGGS



MILK



CHEESE



COLD CUTS



HOT DOG



Tacos



Chorizo



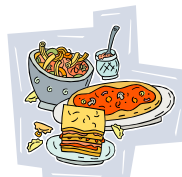
COOKED Veg.



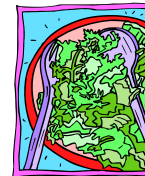
STIR FRY



GARLIC & OIL



Pastas



SALADS



Cut tomatoes



Cut Melons

# Food Thermometers

***Correct use of thermometers is critical to ensure food is being received, cooked, held, cooled, and reheated appropriately***



- Must be used to check the temperature of food
- Must be calibrated before each shift by:
  - a. Filling a glass of ice and water to create a slush
  - b. Insert thermometer in slush for 30 sec.
  - c. Adjust with nut if not 32°
- Must be washed, rinsed, and sanitized
- Must be inserted into the thickest part of the food and remain there for 15 seconds for temperature reading to stabilize.



## ***Food Receiving***

- Food must be received from a safe/approved source
- Must be inspected at receiving in order to identify signs of contamination, which may include pests.
- Must be rejected if not at the right temperature, Hot at 135° or Cold at 41°, and
- frozen fully Frozen without ice crystals(sign of thawing and re-freezing)
- Check quality of food

## ***Food Storage***

All TCS Food must be stored at the correct temperature:

- Cold Food must be stored and held at 41° or below
- Hot Food must be stored and held at 135°
- Any TCS Food prepared in the establishment and **held for 24 or longer, should be labeled with the name of the food and the use by date, not to exceed 7 days if held at 41° or lower**
- All Food received should be rotated according to the date on the product, whatever is due to expire first, should be stored in front, also known as **FIFO**
- Check all food in storage for expired dates, and remove it from inventory

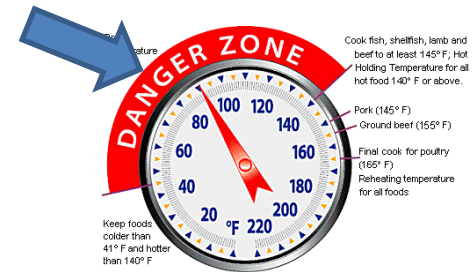
# Defrosting Food

In order to prevent time and temperature abuse, TCS food must be thawed the right way



1. The best way to thaw food is under refrigeration at 41° or below.
2. Under cold running water not to exceed 70° and do not leave it there for longer than 4 hours.
2. In the microwave as long as you finish cooking it immediately after.
3. Or thaw food as part of the cooking process

**NEVER** thaw food at room temperature



# ***Food Preparation***

**To prevent Cross-Contamination and Time and Temperature abuse during preparation:**



- Before any food preparation begins, all work surfaces, tableware, equipment and utensils must be washed rinsed and sanitized before coming in contact with food.
- All Food Handlers should follow strict personal hygiene.
- When preparing food, only take out the temperature small amounts of food and return it to the temperature as quickly as possible
- All raw meat fish and poultry must be kept separate by type of meat.
- All prep tables for preparing raw meat, fish, and poultry must be kept separate from the ready to eat food prep tables.
- If not enough prep tables, foods may be prepared at a separate time once the prep tables are washed, rinsed and sanitized.

## Controlling Time and Temperature during cooking

***Cooking food to the correct temperature is critical for controlling or reducing pathogens to safe levels and prevent Foodborne Illness***

**In order to maintain Time and Temperature Control, follow the minimum cooking requirements:**



**Poultry whole or ground** 165° for <1 seconds



**Ground** meat—beef, pork, veal, lamb, seafood including chopped or minced 155° for 15 seconds



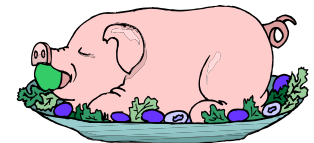
**Whole** cuts of fish, Roasts, Steaks, or chops of beef, pork, veal, lamb 145° for 15 seconds



**Fruits and Vegetables** for hot holding 135° for 15 seconds  
**Commercially processed** food re-heating 135°



**Roasts** of Pork, beef veal, and lamb 145° for 4 minutes





# Time and Temperature Control

***Time and Temperature control is critical to the prevention of bacteria growth***

## Cooking in the Microwave



1. Before using the microwave, make sure that it's clean.
2. Cover the food before placing in the microwave to cook
3. Stir or rotate halfway thru the cooking process
4. Let the food stand covered for 2 minutes after cooking it.
5. Measure the temperature of the food to make sure it reaches 165°

**Hot TCS** Foods must be held at or above **135°** during:

**Hot**

- Receiving
- Storage
- Preparation
- Holding
- Displaying
- Serving

**Cold TCS** Foods must be held at or below **41°** during:

**Cold**

- Receiving
- Storage
- Preparation
- Holding
- Displaying
- Serving

## Cooling food correctly

**Total time is  
6hrs from  
135° to 41°**

Cool from 135° to  
70° within 2hrs.(use  
ice water bath)

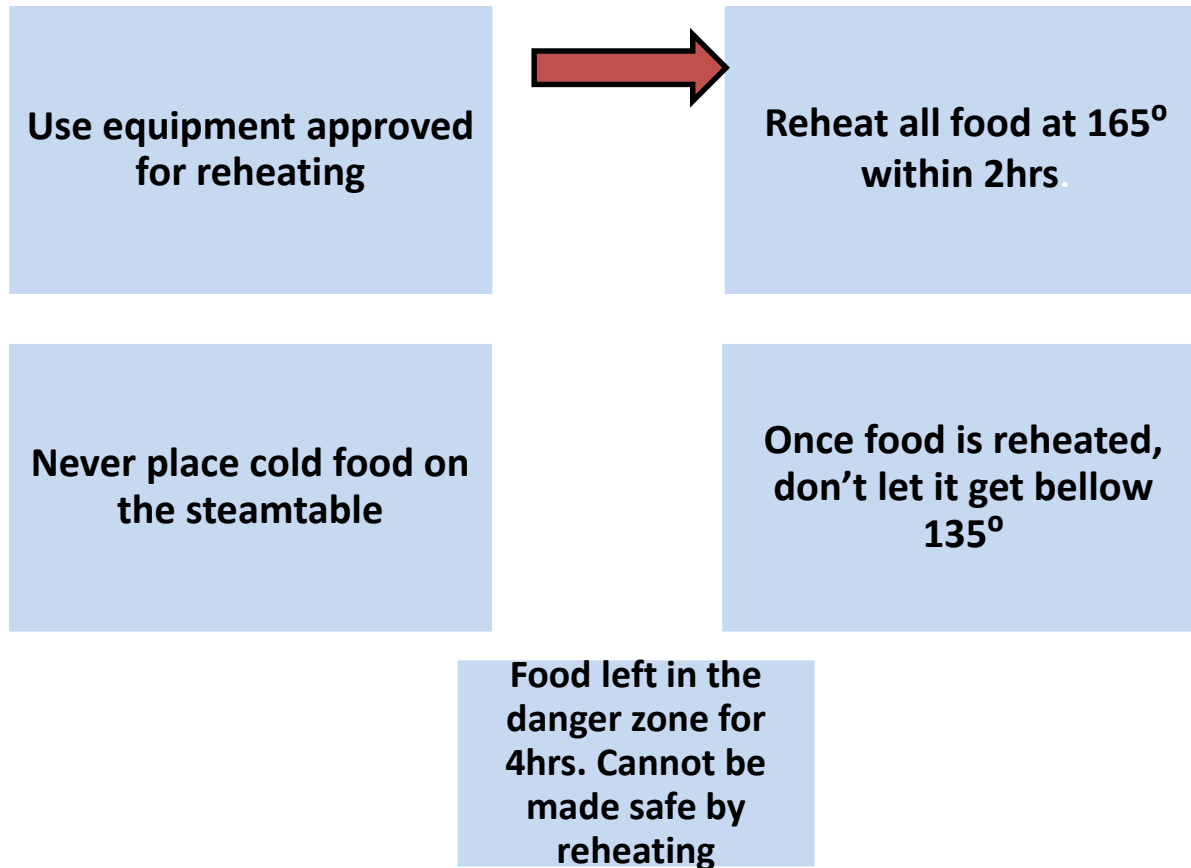
Cut large items into  
smaller pieces or  
divide large amounts  
into smaller amounts

Then cool from 70° to  
41° in 4 more hrs.  
In the refrigerator

Never leave food to  
cool at room  
temperature

NEVER PLACE HOT  
FOOD IN THE  
REFRIGERATOR

# **REHEATING FOOD**



# **Cross-Contamination:**

**When pathogens are transferred from one surface or food to another**

***Cross-contamination can cause a foodborne illness when:***

- **Contaminated ingredients are added to food that receives no further cooking**
- **Ready-to-eat food touches contaminated surfaces**
- **A food handler touches contaminated food and or surfaces, then touches ready-to-eat food**
- **Contaminated cleaning cloths touch food-contact surfaces.**
- **Using the same serving utensil for more than one food item**
- **Food contact surfaces are just rinsed or wiped instead of washed, rinsed and sanitized.**







# ***To prevent Cross-Contamination***

## ***During storage:***

- **Store food in clean covered containers**
- **Store food in approved food storage containers(not in chemical containers)**
- **Store ready to eat food above raw seafood, meat, and poultry**
- **Store food only in designated food storage areas.**
- **Store food, equipment, utensils, single service items, clean linens, and gloves at least 6” off the floor and away from the wall.**
- **Store silverware with the handles up**
- **Store glasses and cups upside down on a clean surface**
- **Store toxic materials away from food preparation and storage areas**





		<b>Ready-to-Eat Foods, Fully cooked Foods and Produce</b> Alimentos listos para el consumo, cosinados y verduras
cook 145°		<b>Raw Seafood, Fish</b> Pescado y Mariscos crudo, Huevos
cook 145°		<b>Raw Steak -145°F</b> Carne de vaca crudo
cook 145°		<b>Raw Pork -145°F</b> Carne de Puerco crudo
cook 155		<b>Raw Ground Beef - 155°</b> Carne de res molida crudo
cook 165		<b>Raw Poultry -165°F</b> (Pollo) Carne de Aves crudo

# Preventing Cross-Contamination During Service

## Service:

Servers must follow these strict guidelines during serving:



- Wash hands before starting work
- Do not hold glasses by the rim
- Do not place thumbs on the plate, hold it by the edge instead
- Touch the silverware by the handle
- Avoid touching food with bare hands, use a clean utensil instead
- Use a scoop to serve ice, **DO NOT** use a glass or touch ice with hands
- Store ice scoop outside the ice in a clean protected location
- Use clean utensils to serve food
- Do not use ice as an ingredient if it was used to cool beverages

## Self Service:



**\*There must be sneeze guards on the self service**

- All food must be labeled, including salad dressing ladles
- Use one utensil for each food item
- Clean and sanitize utensils after each task
- Clean and sanitize utensils at least every four hours
- All raw meats must be kept separate from the ready to eat foods

# Food Allergens

A food allergen is a food protein that causes an adverse immune response and can possibly cause death.

The 8 specific foods that are known as major food allergens include:



DAIRY



EGGS



SOY



PENUTS AND TREE NUTS



FISH AND SHELFISH  
LIKE LOBSTER SHRIMP AND CRAB



WHEAT



any food ingredients that contain protein derived from these foods.



# ***To prevent Cross-Contamination***

***Cleaning and sanitizing correctly is a must for all Food Handlers***

## ***The difference between cleaning and sanitizing***



1. Cleaning is the process of using an approved detergent or cleaner to remove visible food debris and grease from surfaces. If the surface will not come into contact with food, then you can clean it this way
2. Sanitizing is using an approved sanitizer to reduce pathogens from surfaces to safe levels after cleaning them. This procedure must be followed for all surfaces that will touch food
3. Whether using a 3-compartment sink, a dishwasher, or the 3 buckets, the steps are the same. wash, rinse and sanitize all food contact surfaces:
  - a. Before they touch food.
  - b. In between tasks ( after preparing raw meat and before preparing ready to eat food).
  - c. After a task is interrupted
  - d. At least every four hours if used continuously

# Clean in Place



Soap and  
water

**All Stationary equipment that cannot be taken to the sink or dishwasher must be cleaned in place before it comes in contact with food, after contact with raw meats and before touching ready to eat food, and at least every four hours when it is used continuously:**



Clean  
water to  
rinse



Sanitizer  
and water

- Unplug electrical equipment before you start cleaning it
- Take the removable parts to the 3 compartment sink or dishwasher
- Bring buckets with soapy water and clean water for rinsing
- Bring a bucket or a spray bottle with sanitizer
- Soak or scrub if needed
- Wash with soapy water
- Rinse with clean water
- Sanitize and allow it to air dry
- Place parts back together after air drying

# Approved sanitizers:

1. Chlorine(bleach)
2. Iodine
3. Quaternary Ammonium Compound

## *How to make sure sanitizers are effective:*

- Make sure the water is at the right temperature
- Make sure you mixed the correct amount of sanitizer by using a test kit to measure the concentration
- Use the appropriate test kit for the sanitizer being used
- Make sure you leave items in the sanitizer for the right amount of time
- Follow manufacturers recommendations



**Detergents and Sanitizers can be ineffective due to hard water**

# Cleaning & Sanitizing in a 3 compartment sink

## Three-Compartment Sink



### HOW TO SANITIZE

#### Chlorine Solution

- minimum temperature 75°F - 100°F
- 7-10 seconds in 25 - 100 ppm

#### Quaternary Ammonium Solution

- minimum temperature 75°F
- 30 seconds in 200 - 400 ppm

#### Iodine Solution

- minimum temperature 75°F
- 30 seconds in 12.5 - 25 ppm

*All chemical solutions should be tested for effectiveness using a test kit strip.  
Use according to manufacturers directions and the Texas Food Establishment Rules*



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1. Make sure sink and drain boards are clean & sanitized
2. Fill the first sink with hot water 110° and detergent
3. Fill the second sink with clean water for rinsing
4. Fill the third sink with water and the correct concentration of an approved sanitizer

## ***Steps for cleaning and sanitizing in a 3 compartment sink***

- 1. Rinse, scrape or soak items before washing them.**
- 2. Clean the items in the first sink by using a brush or nylon scrubbing pad to loosen stuck on food and grease**
- 3. Make sure to change the water when is dirty or the suds are gone**
- 4. Rinse the items in the second sink by dipping them in the water.**
- 5. Change the water hen it becomes dirty or full of suds.**
- 6. Sanitize the items in the third sink by soaking them in a correctly mixed sanitizing solution.**
- 7. Never rinse the items after sanitizing them. This could contaminate the surfaces.**
- 8. Air dry all the items by placing them upside down.**
- 9. Do **NOT** use towels to wipe them dry**

# DISHWASHER

## Using the dishwasher:



1. Make sure the dishwasher is clean including the water tank
2. Fill the soap and sanitizer dispensers
3. Soak the dishes if necessary
4. Use the appropriate racks
5. Load up the racks(don't overload the racks)
6. Check dishes to make sure they came out clean and re-wash if needed
7. Allow the dishes to air dry

## Maintaining the dishwasher:

1. De lime the dishwasher often
2. Use only approved detergents for dishwasher used
3. Check the machine's temperature regularly
4. Report to supervisor if dishwasher is not working correctly

# Storing chemicals and cleaning supplies

Chemicals and cleaning supplies must be stored the right way to prevent food contamination



- *store chemicals away from where the food is being prepared, stored, or served.*
- Make sure to label all chemicals taken out of the original container with the name of the chemical.
- Store all your cleaning tools in a well-lit area away from where food is being prepared, served or stored.
- Use the utility sink service sink for cleaning tools and to empty dirty water
- **NEVER** dump dirty water into toilets or urinals



## PEST CONTROL

Pest can carry pathogens and can make people sick

Deny food and shelter and working with a licensed pest control operator will help prevent a pest infestation

Report signs of pest to your supervisor:

1. Roaches: Shiny black capsule shaped eggs and a strong oily smell
2. Rats/mice: **Black droppings**, nests, holes on walls



Ways to prevent a pest infestation:

1. Inspect deliveries for signs of insects
2. **Seal all gaps** inside or out of building
3. **Clean** up spills quickly
4. Keep all food **covered**
5. Keep trash cans covered when not in use
6. Take out trash as soon as it gets full
7. **Clean** floors including under all equipment

