

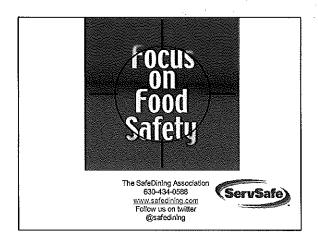
A Food Service Managers Food Safety and Sanitation Certification Seminar Presented By:

The SafeDining Association P.O. Box 637 Downers Grove, IL 60515 630-434-0588, email us at <a href="mailto:info@safedining.com">info@safedining.com</a> Follow us on Twitter @safedining

The information provided in this handbook and is intended to be used in conjunction with attendance in the

Focus on FoodSafety Servsate Certification Training Class.

This does not represent all regulations provided for in any local jurisdictions Food Code and where the Food Code differs or expands on the information provided herein, the Food Code shall be followed.



## WHY STUDY ABOUT FOOD SAFETY & SANITATION?





TO PROTECT OUR CUSTOMERS FROM FOODBORNE ILLNESS.







## IT'S THE LAW.



All food service establishments must be under the supervision of an Illinois Department of Public Health Certified Sanitation Manager at all times that food is handled.







The Certification Process.



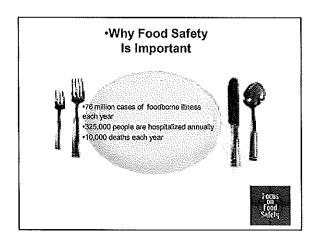






Foodborne illness may cause mild to serious disease in your customers. Foodborne illness may cause an upset stomach, vomiting, cramps, diarrhea, or many other more serious consequences.





Foodborne outbreaks could bring about: Stiff penalties from regulatory agencies Negative publicity Lost revenues Loss of customers which could ultimately result in law suits and possibly the closing of a foodservice operation. Outbreaks of foodborne illness usually result from the staff taking shortcuts and unsafe food handling practices. chapter 1 Providing Safe Food (ServSafe)

## Challenges to Food Safety 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
- If an outbreak is confirmed the manager must notify the regulatory authority





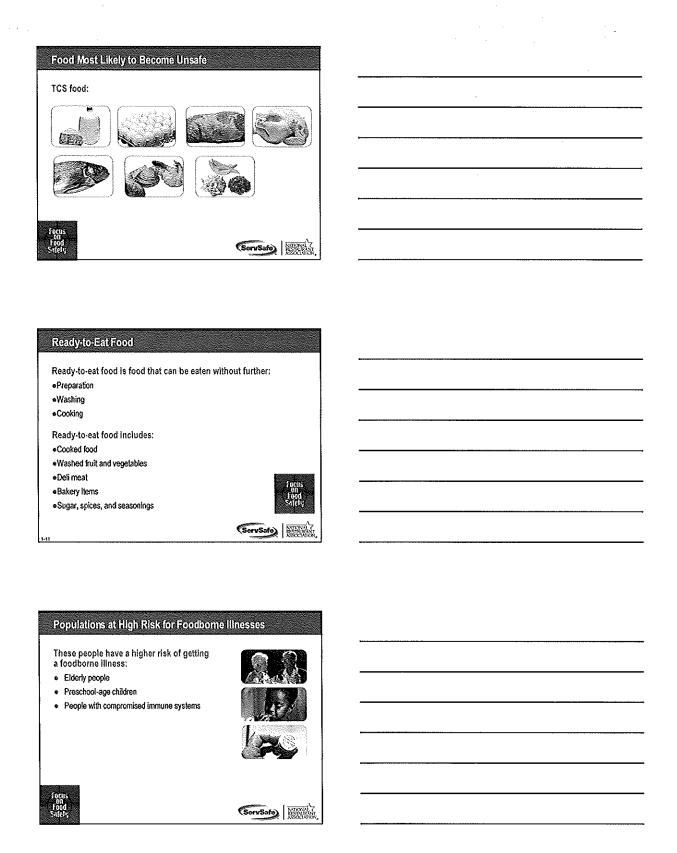


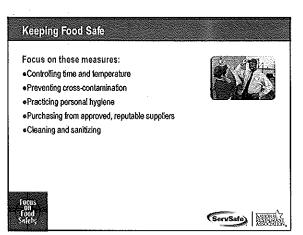
## How Food Becomes Unsafe Time-temperature abuse Cross-contamination Poor personal hygiene Poor cleaning and sanitizing (ServSafe)

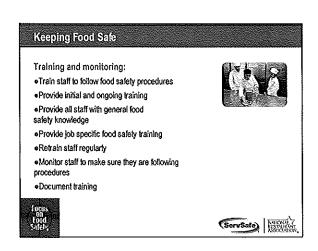
Potentially Hazardous Foods (TCS, Time Temperature controlled for safety) are foods that can support the rapid growth of bacteria:
To be considered potentially hazardous foods must be:
Chemically neutral or only slightly acidic.
Moist.

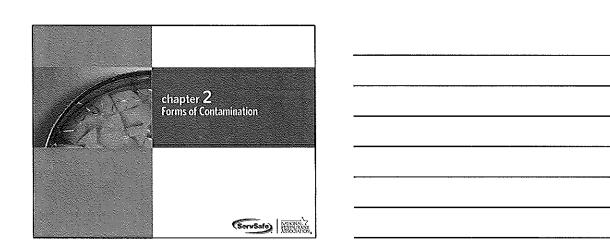
High in protein.











## Food Safety Hazards The unintended presence of any harmful substance or micro-organism is contamination Food safety hazards or contaminations are commonly grouped into three categories: physical hazards chemical hazards biological hazards

## Physical Contaminants Sources: Common objects that get into food Metal shavings from cans Wood Fingernals Staples Bandages Glass Jewelry Dirt Naturally occurring objects such as fruit pits and bones

Biological Hazards
Living organisms, (infection) or the waste of living organisms (intoxication) that contaminate food.
Includes microorganisms such as <u>bacteria</u>, <u>viruses</u>, parasites, mold and yeasts as well as biological toxins found in certain types of seafood, plants and mushrooms.

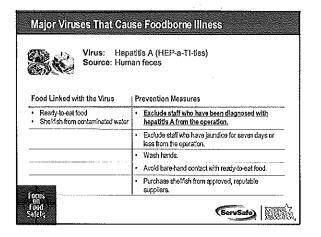
<u>Biological hazards are responsible for more foodborne</u>

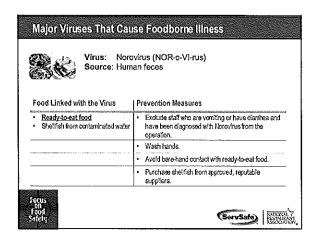
Bacteria and viruses are considered the single greatest threat to food safety.

illnesses that any other type of hazard,



## **Biological Contamination** Common symptoms of foodborne lilness: Diamhea Vomiting •Fever Nausea Abdominal cramps Jaundice (yellowing of skin and eyes) Onset times: Depend on the type of foodborne iliness Can range from 30 minutes to six weeks Bacteria For bacteria to grow and reproduce, they must have: a food source, a suitable pH above 7.0 to 14.0 is considered low acid and potentially hazardous, Time to grow, the proper temperature (room temperature) and the appropriate amount of oxygen and moisture. M O food acidity time temperature oxygen moisture E. coli O157:H7 (enterohemorrhagic and shiga-toxin producing E. coli) Can be fatal in small children and the elderly Found in: Undercooked Ground Beef, Lettuce and Spinach. Prevention: Proper hand washing Washing produce - especially produce that will not be further processed Proper cooking procedures Prevent cross-contamination





## Chemical Hazards



Chemical substances that can contaminate food.

Examples include pesticides, cleansers, food additives and preservatives.

Toxic Metals or enamel coating:

Toxic metal poisoning can occur when:

Utensils or equipment containing
toxins like copper or brass, pewter or
enamel coated containers are used to
prepare and store food (especially acidic
food)





## **Food Allergens**



- Foods that cause allergic reactions.
  The most common food allergens are milk and milk products, eggs, fish, wheat proteins, shellfish( like shrimp or lobster) and peanuts
- Avoid cross-contact of equipment or utensils, like separate fryers for foods
- Labels on food items can help identify allergens. Have a manager on duty that can answer alergy related guestions.









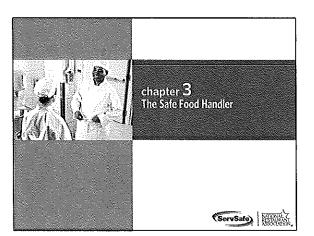
## Responding to a Foodborne-Illness Outbreak

- Gather information
  - o Ask the person for general contact information
  - o Ask the person to identify the food eaten
  - Ask for a description of symptoms
  - Ask when the person first got sick (onset)
- Notify authorities
  - Contact the local regulatory authority if an outbreak is suspected





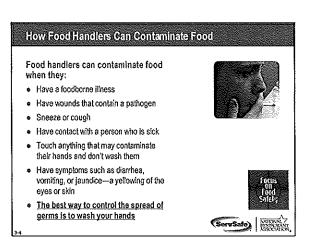


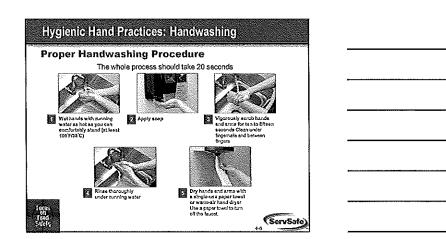


4	4

## Work Attire Food handlers even dishwashers must: • Wear a clean hat or other hair restraint • Wear clean clothing daily • Remove aprons when leaving food-preparation areas • Remove jeweky from hands and arms before prepping food or when working around prep areas

SerySafe





# When Should Hands Be Washed Before they start work • After using the restroom • Before and after handling raw food After touching the hair, face or body • After handling money When Should Hands Be Washed • After sneezing, coughing or using a tissue After

 After sneezing, coughing or using a tissue After smoking (because of saliva), eating, drinking from a covered container. chewing gum or tobacco After using any cleaning, polishing or sanitizing chemical





911	(2)	N' 1	111	Ti C	8	ľ
		2	200			ėz,

Infected wounds or cuts:

- Contain pus
- Must be covered to prevent pathogens from contaminating food and food-contact surfaces

How a wound is covered depends on where it is located:

- Cover wounds on the hand or wrist with an bandage or finger cot and then a single-use glove
- Cover wounds on the arm with an impermeable cover, such as a bandage
- Cover wounds on other parts of the body with a dry, tight-fitting bandage





_	
(ServSafe)	

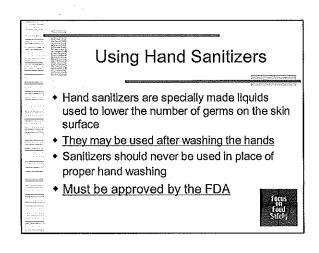
-	-
- 1	•
- 1	

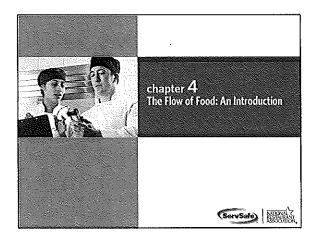
## Single-Use Gloves Single-use gloves: Wash hands before putting gloves on Wash hands in between glove changes Should be used when handling ready-to-eat food Must NEVER be used in place of handwashing Must NEVER be washed and reused Must fit correctly ServSafe) Bare-Hand Contact with Ready-to-Eat Food Bare-hand contact with ready-to-eat food must be avoided: · Some jurisdictions allow it but require o Policies on staff health o Training in handwashing and personal hygiene practices NEVER handle ready to eat food with bare hands when you primarily serve a high-risk population (ServSafe) KURNET Handling Staff llinesses lf: The food handler has a sore throat with a fever •Restrict the food handler from working with or around food · Exclude the food handler from the operation if you primarily serve a high-risk population · A written release from a medical practitioner is required before returning to work

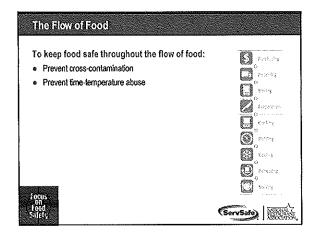
(ServSafe)

## Handling Staffillnesses The food handler has at least one of these symptoms Vomiting Fever Diarrhea Must be reported to the manager Exclude the food handler from the operation Before returning to work, food handlers who vomited or had diarrhea must meet one of these requirements o Have had no symptoms for at least 24 hours o Have a written release from a medical practitioner Handling Staff Illnesses The food handler has jaundice · Food handlers with Jaundice must be reported to the regulatory authority • Exclude food handlers who have Jaundice from the operation . Food handlers must have a written release from a medical practitioner and approval from the regulatory authority before returning to work Handling Staff Illnesses las Jest The food handler has been diagnosed with a foodborne illness caused by one of these pathogens and has symptoms Hepatitis A Salmonella Typhi · Enterohemorrhagic and shiga toxin-producing E. coli Norovirus Shigella spp. Then: Exclude the food handler from the operation . Work with the food handler's medical practitioner and/or the local regulatory authority to decide when the person can go back to work

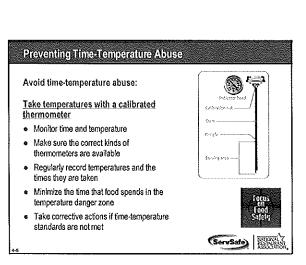
ServSafe STORES

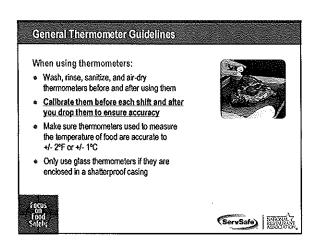




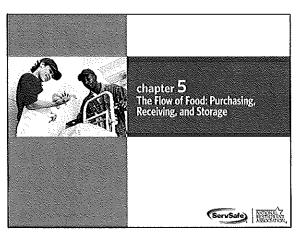


## Preventing Time-Temperature Abuse Time-temperature control: Food held in the range of 41°F to 135°F (5°C to 57°C) has been time-temperature abused Food has been time-temperature abused whenever it is handled in the following ways: Cooked to the wrong internal temperature Held at the wrong temperature Cooked or reheated incorrectly





# General Thermometer Guidelines When using thermometers: • Insert the thermometer stem or probe into the thickest part of the product (usually the center) • Take more than one reading in different spots • Wait for the thermometer reading to steady before recording the temperature



# \*\* RECEIVING \*\* No home- prepared food is ever allowed. \*\* All cold food shall be received at 41° or below all hot food shall be received at 135° or above \*\* Exceptions are shell eggs, milk, shell fish and bagged prepared produce can be delivered at 45° \*\* All frozen food shall be received at 0° or below and checked for large ice crystals or water marks. (Indicates thawing and re-freezing \*\* Shell fish must come with shellstock I.D. Tags and must be kept for 90 days.



## Milk, Dairy Products and Eggs

- Milk and shell eggs can be received at 45°F or below. All other dairy products must be received at 41° or lower.
- Expiration date is for last day to sell or use the product
- Fluid milk must be Grade A and pasteurized.
- Eggs that have cracks should be rejected.
- Liquid eggs must be pasteurized and must be used when serving high risk customers.
- A menu item like eggs benedict should not be served to high risk customers.







## Fresh Fruits and Vegetables



- · Must be from a reputable dealer
- · Check for signs of insect contamination
- Fruits and vegetables with bruises or signs of rotting should be rejected.



- Fresh fruit and vegetable juice made onsite does not have to be pasteurized.
- (You must inform the customer that it is not pasteurized)
- May be contaminated with soil bacteria, e.g., Clostridium botulinum.

## Storage



## **General Storage Guidelines**



- Keep potentially hazardous food out of the
- Steep potentiary nazardous four temperature danger zone Store deliveries after inspection Take out only as much food as can be prepared at one time Put prepared food away until needed

until needed
Property cool and store cooked
food when it's no longer needed
Food prepared in-house or leftovers should
have a shell life of no more than 7 days and
should be labeled with the common name
and date the food should be discarded,
If you are notified of a food recall remoye the
food from your inventory and keep it
separate from the rest of the stock until
you send if back.



## Storage

## Preventing cross-contamination:

- · Store food items in the following top-to-bottom order:
  - A. Cooked and ready-to-eat food
  - B. Seafood
  - C. Whole cuts of beef and pork
  - D. Ground meat and ground fish
  - E. Whole and ground poultry
- . This storage order is based on the minimum internal cooking temperature of each food







Refrigerators must have a temperature-measuring device located outside and inside to measure the air temperature of the warmest part of the unit.







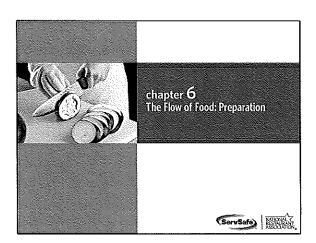
## Storage

Dry food and disposable plates and cups should be stored in a clean, dry location away from dust and other contaminants.

- To prevent contamination, NEVER store food in these areas:
  - Locker rooms or dressing rooms
  - Restrooms or garbage rooms
  - o Mechanical rooms
  - 6 Under unshielded sewer lines or leaking water lines
  - Under stairwells







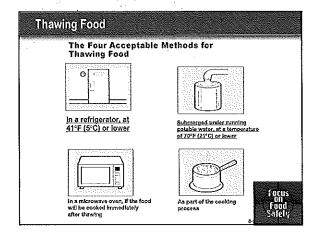
## **Corrective Actions**

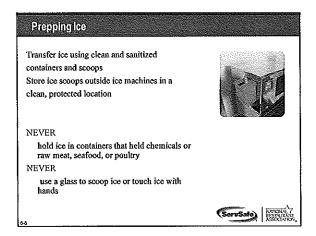
Food must be thrown out in the following situations:

- When it is handled by staff who have been restricted or excluded from the operation due to litness
- When it is contaminated by hands or bodily fluids from the nose or mouth
- When it has exceeded the time and temperature requirements designed to keep food safe.
- Hot food that is held for 2 hours or more without temperature control.









## Managing Potentially Hazardous Foods -Time and Temperature Cooking

(Internal temperatures for 15 seconds):

• 165°F (74°C) = poultry, leftovers, stuffed meals

• 155°F (88°C) = ground meat, eggs that are not being cooked for a consumer's order or immediate use

• 145° For fish

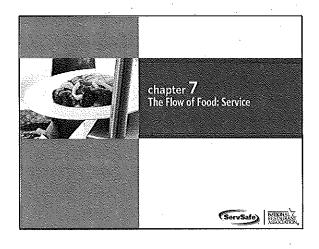
• 145°F = roast beef, eggs, fish, roast pork

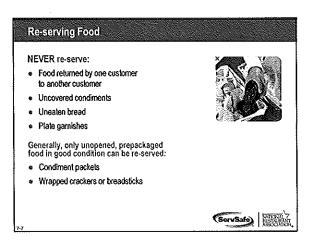
• 130°F [54°C) = rare roast beef—
112 minutes

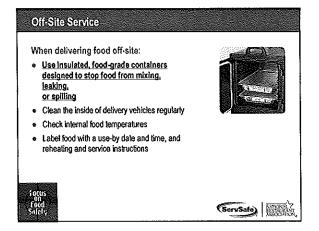
When using shell eggs for preparing egg dishes keep the eggs in their shell and under refrigeration until needed.



Food cooked in the microwave must be cooked to 165°. Midway through the cooking process the food must be stirred or rotated. After the cooking process is complete let the product stand for two minutes The two step cooling process · · According to the FDA Food Code, cooked potentially hazardous foods must be cooled from: 135°F to 70°F within 2 hours, and from 70°F to 41°F, or below, within 4 hours. · If this guideline cannot be met of if it has been violated dispose of the product Reheating Food Food reheated for immediate service: · Can be reheated to any temperature if it was cooked and cooled correctly Food reheated for hot-holding: · Must be reheated to an internal temperature of 165°F (74°C) for 15 seconds within two hours

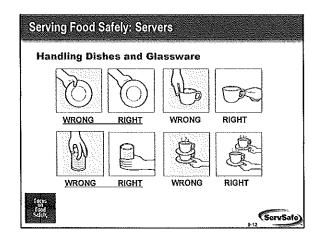


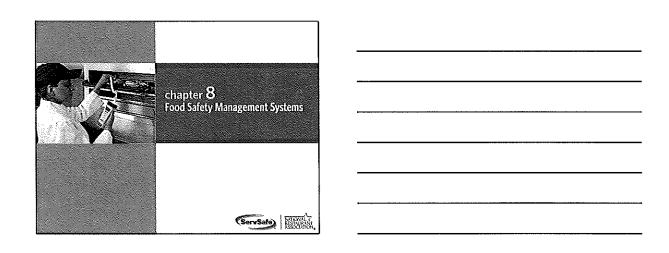


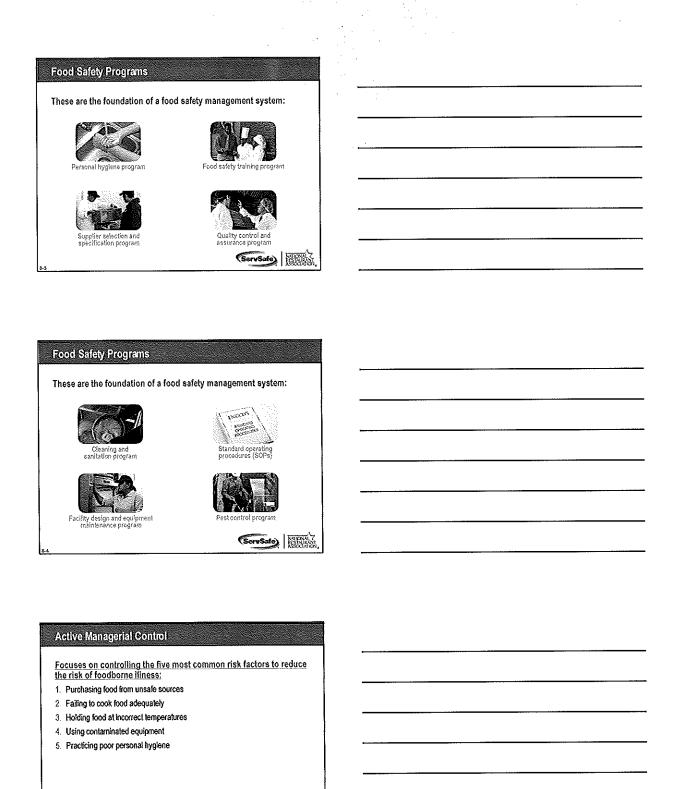


## Prevent time-temperature abuse and contamination: • Keep hot food at 135°F (57°C) or higher • Keep cold food at 41°F (5°C) or lower • Keep raw meat, fish, and poultry separate from ready-to-eat food • Do NOT let customers refill dirty plates or use dirty utensits at self-service areas • Provide sneeze guards between the customers, employees and the food

ServSafe







(ServSale)

## Active Managerial Control

There are many ways to achieve active managerial control in the operation:

- Training programs
- Manager supervision
- · Incorporation of standard operating procedures (SOPs)
- HACCP

These are critical to the success of active managerial control:

- · Monitoring critical activities in the operation
- · Taking the necessary corrective action when required
- · Verifying that the actions taken control the risks factors



(ServSafe) NATIONAL TO SERVICE OF THE SERVICE OF TH

## **HACCP or Food Defense System**

- · Hazard Analysis Critical Control Point
- A formal, documented system of assessment, plan and implementation that helps reduce the risk of hazards in the flow of food.
- Designed to protect food from the problems that cause illness by:
  - identifying possible problems stopping them (or reducing them) before they happen..
- Plan is mandatory if your restaurant produces Reduced oxygen packaging or serving high risk customers



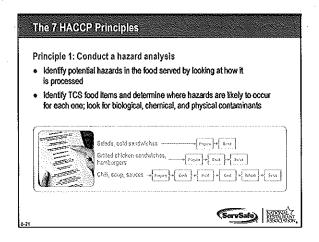
## The 7 HACCP Principles

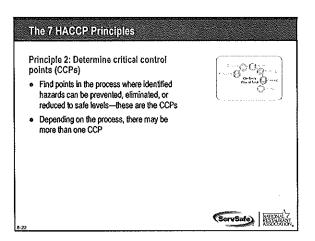
The seven HACCP principles:

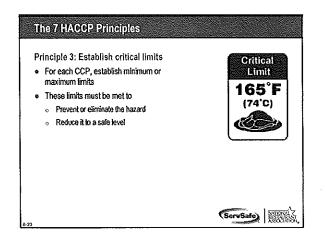
- 1. Conduct a hazard analysis
- 2. Determine critical control points (CCPs)
- 3. Establish critical limits
- 4. Establish monitoring procedures
- 5. Identify corrective actions
- 6. Verify that the system works
- 7. Establish procedures for record keeping and documentation











## The 7 HACCP Principles Principle 4: Establish monitoring procedures . Determine the best way to check critical limits Make sure they are consistently met · Identify who will monitor them and how often Example: Checking the temperature during the cooking process (ServSale) The 7 HACCP Principles Principle 5: Identify corrective actions Identify steps that must be taken when a critical limit is not met · Determine these steps in advance Example: returning an under cooked hamburger to the grill to finish cooking. ServSafe) RESTRICT The 7 HACCP Principles Principle 6: Verify that the system works · Determine if the plan is working as intended · Evaluate the plan on a regular basis using Monitoring charts o Records Hazard analysis Determine if your plan prevents, reduces, or eliminates identified hazards (ServSate)

## The 7 HACCP Principles Principle 7: Establish procedures for record keeping and documentation Keep records for these actions: Monitoring activities Corrective actions Validating equipment (checking for good working condition) · Working with suppliers (invoices, specifications, etc.) (ServSafe) isca Sed Selet, Imminent Health Hazards An imminent health hazard poses an immediate and severe risk to proper sanitation and to human health. Could force your facility to temporarily close. The location may only be re-opened by the Health Department, (examples would be a power outage or a sewer backup) Health inspections are meant to help protect the public and they can be conducted at any time. The FDA writes The Food Code which serves as a guide for State laws. chapter 9 Safe Facilities and Pest Management

(ServSafe)

## Wiping Cloths

Store wiping cloths in sanitizing solution to reduce microbial growth.





## Floors, Walls, and Ceilings

- Cleanability is the most important factor when choosing materials for walls or flooring.
- Other important factors include <u>durability</u>, safety, (<u>floors in food prep area must be non-slip aud easy to clean</u>), comfort and cost.
- Coving is used in-between walls and floors to make sweeping and mopping easier.
- Any floor mounted equipment must be at least 6" off the floor or sealed to the floor,
- Counter mounted equipment must be 4" off the counter.

## **Equipment Selection**

Foodservice equipment must meet these standards if it will come in contact with food:



- Nonabsorbent, smooth, and corrosion resistant
- Easy to clean
- Durable
- Resistant to damage





## Handwashing Stations

Handwashing stations must be conveniently located and are required in:



- · Restrooms or directly next to them
- Food-prep areas
- Service areas
- · Dishwashing areas

Handwashing sinks must be used only for handwashing and should never be







## Cross Connections and Backflow Prevention

Cross connection occurs when a potable water supply line and a non-potable water source are directly connected.







Backflow occurs when non-potable water flows back into a potable water supply.

You must have a air gap at the prep sink, the 3 compartment sink and any piece of equipment that needs a drain line like a fountain drink machine

## Ventilation

## **Ventilation Systems:**

- If adequate, there will be little buildup of grease and condensation on walls and ceilings
- Hoods, fans, guards, and ductwork must not drip onto food or equipment
- Hood filters and grease extractors must be cleaned regularly
- Hoods and ductwork must be cleaned periodically by professionals
- A build-up of dust in the prep area could be a sign of dirty air vents.

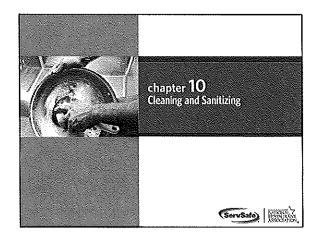


ı	^	^
	ኅ	/

## Designated storage areas: Store waste and recyclables separately from food and food-contact surfaces Storage must not create a nuisance or a public health hazard

(ServSafe)

## Integrated Pest Management The most important integrated pest management principles are: Preventing access into the facility.(tight fitting doors windows and skylights). Air curtains can help control flies. Storing foods properly and keeping the facility clean and in good repair so that vermin do not have access to food, water or places to hide. Hiring a licensed pest control operator to exterminate any pests that find their way inside.



## Sanitizing

- Hot water 3 compartment sink: 171°F (77°C) or above for 30 seconds. Dishwasher 180°
- Chemical sanitizers must have a MSDS
  - Chemical sandzers must have a MSUS blinder with proper usage instructions:

    Chlorine; 50 ppm minimum in warm water (75 100°F) (24 38°C)

    lodine; 12.5 to 25 ppm in warm water (75 100°F)

    (24 38°C) for at least 30 seconds

    Qualetmay Ammovium companied
  - Cett-36 O flot arteest of sections Quaternary Ammonium compound (QUATS): mixed according to manufacturer's instructions, usually 200 PPM for 30 seconds, Test kits must be used to test strength and concentration.



## Manual Dishwashing

Setting up a three-compartment sink:

- · Clean and sanitize each sink and drain board
- Fill the first sink with detergent and water at least 110° F (43° C)
- Fill the second sink with clean water to rinse
- Fill the third sink with water and sanitizer to the correct concentration
- · Provide a clock with a second hand to let food handlers know how long items have been in the sanitizer









## Sanitizer Effectiveness

Follow manufacturer's recommendations for the correct temperature

- The sanitizer must make contact with the object for a specific amount of time
- · Minimum times differ for each sanitizer

## Water hardness and pH;

- Find out what your water hardness and pH is from your municipality.
- Work with your supplier to identify the correct amount of sanitizer to use







## In Conclusion

## Safe food handling means:

- Understanding the biological, chemical and physical hazards.
- Controlling temperatures, times, pests, and sanitation from start to finish in your establishment.
- Controlling personal hygiene by teaching and supervising staff.
- Being an authority and an example in your organization.

			••••	 
		•		
- 0	 			 