



Safe Food Healthy Customers

**A Handbook for
Food Employees**

Environmental Public Health



**TULSA HEALTH
DEPARTMENT**

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Congratulations !

You are taking the first step in learning how to safely prepare and serve food.

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

Contamination hazards include:

- ◆ Biological agents (bacteria, viruses, parasites);
- ◆ Chemical agents (pesticides, cleaning supplies); or
- ◆ Physical agents (dirt, broken glass, hair)

Foodborne illness may range from mild flu-like symptoms to more serious complications, and can even lead to death. Symptoms are usually noticed within hours or up to several weeks after eating the food.

This book and your attendance in the ***Food Employee Training Class*** will give you information about how to protect yourself and others. You will learn about:

- ◆ Employee Responsibilities and Hygiene
- ◆ Food Temperatures and Food Protection
- ◆ Food Preparation and Processes
- ◆ Cleaning and Sanitizing

If you have any questions, please feel free to ask your instructor when you attend class or call our offices at (918) 595-4310.

Food Employee Classroom Rules

- No food or beverages are permitted within the classroom or testing area.
- Anyone who creates a disturbance will be asked to leave.
- No profanity or foul language will be tolerated.
- Turn off cell phones, pagers or any electronic device that may create a disturbance during class.
- The exam consists of 24 multiple-choice questions, a passing grade is 18 or more correct answers.
- Exams are available in the following languages:
English, Spanish, and Chinese.
- Cheating will not be tolerated.
- Talking is not allowed while taking the test. If you have questions, please raise your hand.
- During testing, please keep personal belongings on the floor or in the chair next to you.
- You may take this study booklet home with you.

Food Employee/Certified Food Manager Permits

- Must be provided to Tulsa Health Department representatives for review upon request.
- Permits are valid for 3 years. Once your card expires, arrangements should be made to obtain a new permit via class attendance or waiver test.
- To obtain your certified food manager card, bring your original ANSI certificate (Prometric, ServSafe® or National Registry of Food Safety Professionals) with your legal/valid photo identification to the Food Employee Training Center.

SAFE FOOD HEALTHY CUSTOMERS

A Handbook for Food Employees

Offered By



TULSA HEALTH
DEPARTMENT

Environmental Public Health Division
Serving Tulsa City-County

5051 S. 129th E. Ave.
Tulsa, Oklahoma 74134
918-595-4300

www.tulsa-health.org

The information provided in this handbook is intended to be used in conjunction with attendance in the ***Food Employee Training Class***. This does not represent all regulations provided for in the City of Tulsa Food Code (Oklahoma State Department of Health Food Code) and where the Food Code differs or expands on the information provided herein, the Food Code shall be followed.

Employee Hygiene & Responsibility

1

Wash Your Hands!!!

Correct and frequent handwashing is very important to prevent dangerous bacteria and viruses (germs) from being spread. Most agents that make people sick are transmitted to food by your hands.

Diseases such as Hepatitis A and Shigella are spread because people do not wash their hands after going to the restroom. This is called fecal-oral transmission.

Use the right method of hand washing . . .

Use only the hand sink — not the food, dish, or mop sink

Use soap and warm running water

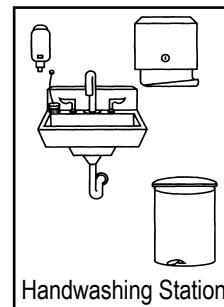
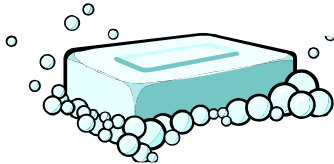
Rub hands briskly together for 20 seconds

Wash all surfaces, including

- ✓back of hands ✓between fingers
- ✓wrists ✓under fingernails

Use a fingernail brush, if available

- Rinse well
- Dry hands with a paper towel, *then*
- Turn off the water using a paper towel



When is the right time for hand washing?



- ! After going to the restroom
- ! After eating, drinking, or smoking
- ! After touching your hair, face, or other body parts
- ! After blowing your nose, coughing, or sneezing
- ! After taking a break

Also. . .

Before putting on gloves

Before handling utensils used to prepare food

After touching raw meats, fish, or poultry

After taking out the trash or handling garbage

After cleaning, sanitizing, or using chemicals

After engaging in other activities that contaminate hands.

Always wash your hands...
before starting work,
after taking a break, or
when entering the kitchen.

Nothing takes the place of hand washing!

Sanitizing lotions or hand dips may be used **after** correctly washing your hands, but may **never** be used in place of hand washing.

Gloves may be used for limiting bare hand contact with food, or other duties, but may **never** be used in place of hand washing.

Don't Work Sick!!!

If you are sick, germs can spread to anything you touch — food, dishes, counters, utensils, pots, pans, and other people. As a food worker, you are required to report if you have any of the following symptoms, infectious diseases, or illnesses.

Do Not Work If You Have . . .

- ✗ Diarrhea
- ✗ Vomiting
- ✗ Jaundice
- ✗ Sore throat with a fever
- ✗ A lesion containing pus such as a boil or infected wound.
- ✗ "Big 5" infectious diseases or illnesses easily transmitted to food by sick employees:
 - *Norovirus
 - *Hepatitis A virus
 - *Shigella Species
 - *Enterohemorrhagic or Shiga toxin producing E. coli.
 - *Salmonella species



(Tell your supervisor and call the Health Department right way at (918) 595-4300.)

Duties May be Changed . . .

If you must go to work, or become ill while at work, report to your supervisor immediately.

If you are experiencing persistent sneezing, coughing, or a runny nose that causes discharges from your eyes, nose or mouth or if you have an infected cut, burn, boil or sore on your hand, do not work with food or touch clean dishes or equipment.

If you have an infected wound that is open and draining, it must be properly covered with a water-proof barrier. Your work duties may be changed so that you don't have to handle food until the illness or infection is gone.

Some alternate work assignments include:

- ◆ Taking out the trash
- ◆ Mopping and sweeping floors
- ◆ Cleaning the restrooms and lobby
- ◆ Taking dirty dishes back to the kitchen



NOTE: Food employees that work in facilities that serve a Highly Susceptible Population **may not** work if they have diarrhea, vomiting, or jaundice. Sick food employees **MUST NOT COME TO WORK** until all symptoms are gone.



Eating, Drinking, Smoking

In food preparation areas, food employees **may not**



Eat,



Drink,



Smoke, or use other tobacco

These activities can contaminate food when the employee touches their mouth or other body parts and then touch food.

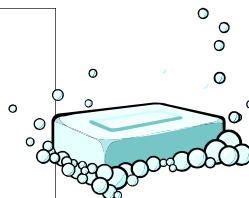
Employees must go to areas like break rooms, lobbies, or outside the restaurant for these activities.



Exception: Employees may drink from a **closed** container **with a handle** while in the food preparation areas. This container must be stored in a way that it cannot spill onto (contaminate) food or food contact surfaces. Drinking straws are not allowed because of the increased likelihood of hand-to-mouth contamination.

Remember!

Always wash your hands
before returning to work!



Good Hygiene

Food workers are the greatest source of food contamination. Harmful bacteria and viruses are found on your whole body, including your hair and clothes. Bathe daily and go to work clean.



Wear clean clothes (uniforms) every day. While at work, **do not wipe** your hands on your clothing or apron, and change your apron when it becomes dirty.

Hair Restraints

**HAIR NETS
REQUIRED
BEYOND THIS
POINT**

Hair (male or female) that is long enough to touch the top of the collar must be controlled any time you are in the kitchen, working with food, handling clean utensils, or washing dishes.

Some approved methods of restraining hair include hats, hair coverings or nets, buns or braided hair.

Facial hair that is long enough to touch the collar must also be restrained (hairnet or beard net).



**Hair Restraints are
required in food service
establishments that handle
open food.**

Jewelry

Jewelry may not be worn on arms or hands when preparing food.

Exception: Only plain wedding bands may be worn. Medical identification alerts must be pins or necklaces (not bracelets) to prevent contact with food during food preparation or service.



Fingernails

Fingernails must be trimmed, filed, and maintained so that the edges and surfaces are clean and not rough. Food employees may not wear fingernail polish or artificial nails while preparing food.

Personal Items

Personal items like coats, jackets and purses should be stored in an approved area away from where food is being prepared, or where food, dishes, equipment, or linens are stored.

Medicine should also be stored away from any food, clean equipment, or food preparation areas. Severe illness, or even death, could occur if a customer eats food that is unintentionally contaminated with medicine.



Danger Zone

Bacteria and viruses can be killed by cooking the food. Bacterial growth can be controlled by keeping the food hot or cold. This is called temperature control.

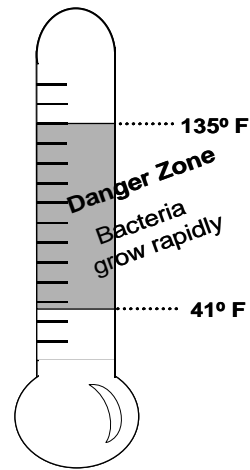
What Bacteria Need to Grow . . .

Time

Temperature

Protein-rich food

Moisture



Bacteria do not grow fast when the temperature of the food is colder than 41°F or hotter than 135°F. The temperature range between 41°F and 135°F is known as the **Danger Zone**.

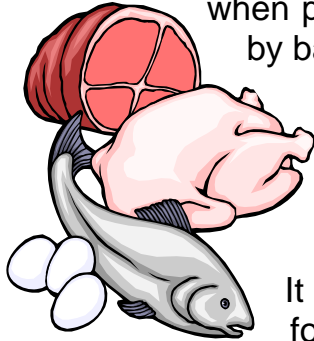
When perishable foods are left in the **Danger Zone**, bacteria grow very fast and can produce poisons (toxins) that can make people sick.



Checking food temperatures routinely is very important. If food is left in the Danger Zone for **four** hours or more, **throw it away!**

Time/Temperature Control for Safety Foods (TCS)

Protecting food is important to prevent foodborne illness (food poisoning). Illness can be caused when people eat food that is contaminated by bacteria.



Bacteria grows easily on certain kinds of food, called:

Time/Temperature Control for Safety Foods.

It is very important to keep these foods hot or cold to kill or limit the bacteria that can grow.

TCS examples include:

Raw seed sprouts (alfalfa, bean)

Raw or cooked meat, poultry, or seafood

Milk products

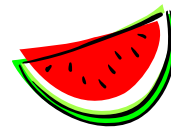
Raw or cooked eggs

Cooked vegetables, rice, beans, or pasta

Cut, low-acid fruits and melons

Cut leafy greens (iceberg, romaine, leaf, butter, baby escarole, endive, spring mix, spinach, cabbage, kale, arugula and chard).

Any food that has any of the above ingredients



Non-Time/Temperature Control for Safety Foods (Non-TCS)

Harmful bacteria do not grow easily on some kinds of food so they do not need to be kept hot or cold. When these foods *are* refrigerated, it is only to make the food taste better or last longer.

These kinds of food are called:

Non-Time/Temperature Control for Safety Foods.



Non-TCS examples include:

Breads, bagels, crackers (low moisture content prevents growth of bacteria).

Mayonnaise — commercially-made only (high acid content prevents growth of bacteria).

Pickles (high acid content prevents growth of bacteria).

Ice (the cold temperature prevents the growth of bacteria).

Fresh, ***uncut*** fruits and vegetables.

All foods, whether TCS or non-TCS, must be protected from coughs, sneezes, pests, chemicals, and other contaminants.



Thermometers

Temperature control is very important to food safety. A thermometer **must** be used to make sure the food is cooked or held at the correct temperature.

Digital thermometers

Fast-read digital thermometers should be used to measure the temperature of thin-mass foods like hamburger patties or chicken breasts.

Note: Bi-metallic (dial-type) stem thermometers can only be used to monitor the temperature of mass quantities of food like chili or thick foods like roasts.



How To Use The Food Thermometer...

Calibrate the thermometer (ask your supervisor for help).

Wash, rinse, and sanitize before and after each use.

Don't let thermometer sensor touch the sides or bottom of container.

Insert thermometer into the thickest part of the food, avoiding bone.

Wait 15 seconds to record the temperature.

Foods that are in the **Danger Zone** should be reported to your supervisor.

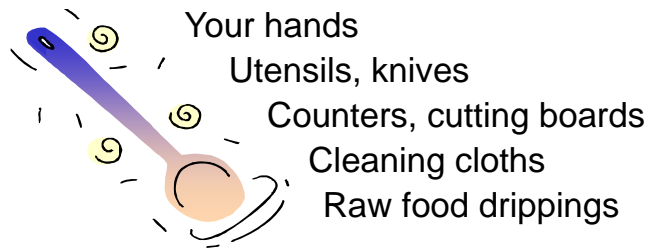


Thermometers should also be used to check the temperature of refrigerators, freezers, and dishwashing machines. Check with your supervisor for the correct type.

Cross Contamination

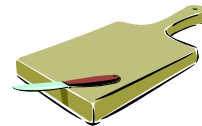
Cross contamination is transferring bacteria or other harmful substances to food that has already been cooked or is ready to be served to the customer. (Example: Handling raw hamburger meat and then putting lettuce and tomatoes on the hamburger bun without washing your hands first.)

Any of the following things can transfer bacteria or other contaminants to ready-to-eat-food:



How To Prevent Cross Contamination . . .

- ◆ Store raw meat below ready-to-eat or cooked food.
- ◆ Separate different raw animal foods from each other.
- ◆ Wash your hands between tasks and before touching clean utensils or equipment.
- ◆ Keep cutting boards and utensils in good repair for easier cleaning.
- ◆ Wash, rinse and sanitize utensils and all work surfaces after each task, especially after raw meat has touched the utensil or work surface.
- ◆ Store food in packages, covered containers, or wrappings.



Don't Touch Ready-To-Eat Food



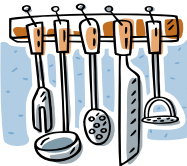
Unless documentation is in place, food that has been prepared and is ready to be served to the customer should *not* be touched with bare hands. Minimizing bare-hand contact with ready-to-eat food will help prevent bacteria from being introduced into food. Handle these foods with utensils (scoops, tongs, ladles), deli tissues, or single-use gloves.

If gloves are used to avoid bare-hand contact with food, they must be single-use, disposable gloves.

Employees must ***always***:

- ◆ Wash their hands before putting on gloves and when changing into a new pair of gloves.
- ◆ Change gloves as soon as they become soiled or torn.
- ◆ Change gloves before beginning a different task.

Utensils should be stored in ways that will keep them from becoming contaminated. This includes storing them in a clean, dry area or leaving them in the food with the handle up.



Never wash or rinse gloves!
Take them off, throw away, and wash your hands before putting on a new pair.

Food Defense Awareness

Food workers are the first line of defense for securing the food establishment and food products they serve. Food defense awareness can decrease the risk of intentional food contamination at your facility from biological, chemical, or physical agents.



Food workers should use the FIRST system:

- F- Follow company food defense plan
- I- Inspect your work area
- R- Recognize anything out of the ordinary
- S- Secure all ingredients, supplies and finished products.
- T- Tell Management if you notice anything unusual or suspicious.



Food Receiving & Storage 3

Sources

All food served to customers must come from approved sources (suppliers, wholesalers, or distributors).

Meat, poultry, and eggs must be inspected by the Oklahoma State Department of Agriculture or by the United States Department of Agriculture.



Milk must be pasteurized before it can be served to customers.

Shellfish must have certification tags telling where it came from and when it was harvested.

Food prepared for the public must be made in a kitchen that has been licensed by *The Health Department*. Food sold to the public may not be prepared or stored in someone's home.

Inspect all food on delivery to make certain that it is safe, undamaged, and within the correct temperature ranges. Do not accept food that is in the **Danger Zone**, has an unpleasant odor, is moldy, or canned goods that are damaged or swollen.



General Guidelines For Storage

- ◆ Label and date all food with product name and the date and time the food was placed in storage.
- ◆ Food items should be stored at least 6" off the floor.
- ◆ Clean up all spills and remove trash and dirty packages.
- ◆ Rotate stock to use the oldest foods first (FIFO).
- ◆ *Never* store chemicals or cleaning supplies with food.
- ◆ *Never* re-use old cleaning or chemical containers to store food.

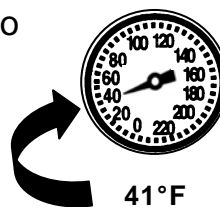
Dry Storage

- ◆ Cover dry foods.
- ◆ Keep all packages closed and dry.
- ◆ Storage areas should be clean and pest free.



Cold Storage

- ◆ Store cooked and ready-to-eat foods above raw foods to avoid contamination.
- ◆ Always cover foods for protection.
- ◆ Space pans of food in refrigerated units far enough apart to allow proper air circulation. Avoid overloading refrigeration units.
- ◆ Refrigerated units must be able to maintain foods at 41°F.
- ◆ Check food temperatures (see page 19 for cooling requirements).
- ◆ Use a refrigeration thermometer to help ensure proper cold holding temperatures..



41°F

Thawing

There are four safe ways to thaw foods:

1. **In the refrigerator.** This is the safest way, but it may take a few hours to a few days. Allow a day or more for large items such as turkeys and roasts.

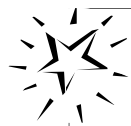
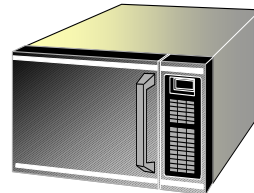


2. **Under cold, running water.** Use a clean, sanitary sink, and remove the food as soon as it is thawed. **Do not** thaw food in warm water, hot water, or standing water.



3. **During the cooking process.** This works well with items like French fries, onion rings, or hamburger patties. It does not work well with large mass food items.

4. **In a microwave oven.** Food must be cooked or served right away. This does not work well for large mass food items.



Never thaw at room temperature!
Setting food on the counter or sink to thaw at room temperature is ***unsafe*** because it allows bacteria to grow rapidly.

Cooking

Cooked foods must be cooked to minimum internal temperatures to kill dangerous bacteria. The internal temperatures of these foods must be held for 15 seconds.

It is impossible to determine the temperature of cooked food by looking at it or touching it. A clean, sanitary thermometer **must** be used to check food temperatures.

Listed below are the correct internal temperatures to ensure that the food is cooked safely:

165°F Poultry (chicken, turkey, duck, pheasant)
Stuffing containing meat
Anything stuffed with meat
Raw meat cooked in microwave

155°F Ground beef (hamburger)

145°F Seafood
Pork
Most other TCS Foods



135°F Fruits & vegetables (if cooked for hot holding)

130°F Rare roast beef

By Customer Request . . .

If raw or undercooked animal foods are offered to your customers, information must be provided that explains the increased risk of illness from eating that food. Ask your supervisor about required consumer food advisories.

Hot Holding

Food that has been cooked and will not be served immediately, must be maintained at **135°F**. Steam tables, soup warmers, and other heating units must be turned on and heated up before the food is placed into them.

- ◆ Place smaller amounts of food in heating units and refill the containers often.
- ◆ Cover pans to keep the food hot.
- ◆ Regularly stir food to distribute heat.
- ◆ Never mix raw food into cooked hot held food.



Cold Holding

For cold holding, food must remain **41°F** or below. Store the food in a refrigerated unit or serving unit. **Do not** let the food stand at room temperature because bacteria will grow.

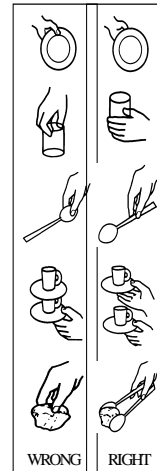
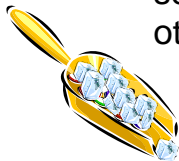
- ◆ Cover food that is placed in a refrigerator to prevent contamination.
- ◆ Put ready-to-eat cold foods in pans or on plates. Do not place food directly on ice.
- ◆ Food containers placed on ice should be pre-chilled, and the ice should come up to the level of the food inside the container.

Check foods often with a thermometer to make sure hot foods stay above 135°F and cold foods stay below 41°F.

Service

Employees can protect the food by practicing good hygiene and food service procedures.

- ◆ Follow hygiene and hand washing procedures outlined in Chapter 1.
- ◆ **Never** touch the food-contact areas of glasses, cups, plates, or tableware.
- ◆ **Never** stack cups or bowls while serving to prevent contamination.
- ◆ Use ice scoops or ice tongs. Do not scoop ice with a service glass or any other glass. The glass could break, and running your fingers through the ice contaminates it.



Re-Service

The only items that may be taken from one customer's table and then be served to another customer are unopened, sealed packages of food. This includes items like wrapped crackers and packets of honey, jelly, sugar, sweeteners, creamer, ketchup, or mustard. Condiment bottles such as ketchup and steak sauce may also be taken from table to table.

If a customer leaves food on a plate, it **must be thrown away**. Unused food, such as chips, rolls and bread, may **not** be served to another customer.



Cooling

Always use a thermometer to check food temperatures during the cooling and reheating process!

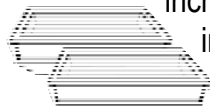
Food must be cooled quickly! Do not let food set out at room temperature, or stay in the *Danger Zone* where bacteria grows quickly.

Cooked TCS food must be cooled from:

135°F to 70°F within 2 hours; and

135°F to 41°F or less within a total of 6 hours.

- ◆ Food prepared from ambient ingredients must be cooled within four hours.
- ◆ Separate food into smaller or thinner pieces.
- ◆ Place food in shallow metal pans with food not more than 4 inches deep. Very thick foods should be no more than 2 inches deep.
- ◆ Ice may be added to the food as an ingredient.

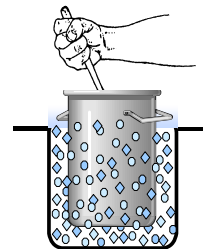


- ◆ Leave enough space around refrigerated pans so air can circulate. Do not stack pans on top of one another.
- ◆ Place food into containers that speed up heat transfer.
- ◆ Leave the pan uncovered in refrigerator until it has reached 41°F (protect food to prevent contamination).

Ice Water Bath...

An ice water bath can also be used for cooling and works very well for liquid foods:

- ◆ Place food into a metal cooling container then place into a sink or a larger pan filled with ice and water.
- ◆ The ice should be up to the level of the food in the cooling container then add cold water to the top of the ice.
- ◆ Stir food frequently and monitor cool down with a thermometer until the food reaches the proper temperature.



Date Marking

TCS Foods that are prepared and stored for 24 hours or more need to be date marked to indicate the discard or use by date.

Food that is held at 41°F or below must be used or discarded within 7 days.

Ready-to-eat manufactured TCS foods need to be clearly marked with the day the original container is opened (this will count as day 1).



- The date marked in your establishment cannot exceed the manufacturer's use by date if that use-by date is based on food safety.
- If a finished food product is made of several different prepared TCS foods, the finished product must use the earliest prepared date.

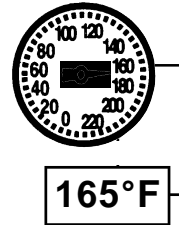
NOTE: This date marking policy does not apply to individual meal portions served or packaged upon customer's request (To Go Orders)

MONDAY	
LUNES	
Item	Chicken Soup
Date	9/12/11 Time <input type="checkbox"/> AM <input type="checkbox"/> PM
Use By	9/19/11 Time <input type="checkbox"/> AM <input type="checkbox"/> PM
Temp.	_____
Emp.	_____
Mgr.	_____

Reheating

Sometimes food will be reheated after it has been cooled. Foods must be reheated very quickly to keep the food safe.

- ◆ Reheat food to **165°F** within 2 hours.
- ◆ Use stove burners, microwave ovens, convection ovens, or double boilers.
- ◆ Never use steam tables or crock pots for reheating because they heat too slowly.
- ◆ Reheat food in small batches and stir often.
- ◆ Put reheated food in hot holding equipment or serve it immediately to the customer.



Leftovers



Leftovers are food items that **were not** served to a customer but will be cooled, stored and served at a later time. Steps should be taken to protect this food:

- ◆ Serve leftover foods as soon as possible.
- ◆ Always serve leftovers before serving freshly prepared foods.
- ◆ Never mix freshly made foods with leftovers.

Any food that has been served and not consumed by a customer is NOT leftover. If the customer does not eat the food, it must be **thrown away**.



Clean & Sanitary

5

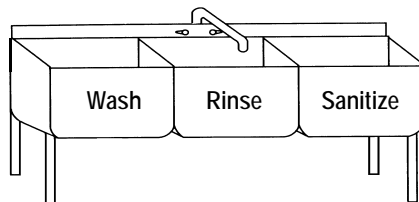
Clean and sanitary do not mean the same thing. Clean means free of visible soil (dirt, soap, food). Sanitary means free of harmful contamination (bacteria, viruses). All food contact surfaces of equipment and dishes must be cleaned and then sanitized with either heat or chemicals.

You can see clean.
You *cannot* see sanitized



Manual Dishwashing

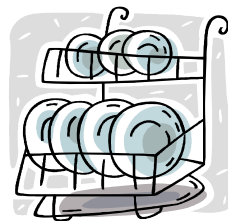
When equipment and dishes (utensils, tableware, pans) are washed by hand, they must be washed in a three-sink sequence.



Before washing items by hand, clean and sanitize all sinks and work surfaces the equipment will touch.

Washing equipment & dishes by hand . . .

1. Scrape leftover food and debris into the garbage.
2. **Wash** the items in the *first sink* with hot, soapy water.
3. **Rinse** items in the *second sink* with clean, hot water.
4. **Sanitize** items in the *third sink* with cold water and a chemical sanitizing solution. Use a test strip to make sure the chemical concentration is correct.
5. Air dry all items before storing them.
Do not use a towel to dry dishes.



Machine Dishwashing

There are two types of commercial dishwashing machines:

Hot water sanitizing machines

Chemical sanitizing machines



Washing dishes in a machine . . .

1. Check the machine to make sure it is clean and in good operating condition.
2. Scrape leftover food and debris into the garbage. Pre-soak dishes that have dried food left on them.
3. Load the equipment and dishes into the machine, making sure not to overload the machine.
4. Air dry equipment and dishes before storing them. Never use a towel to dry dishes.
5. To make sure that the items are properly sanitized, always use a thermometer to check the water temperature or a chemical test strip to check the concentration of the solution.

Chemical Solutions

Chemicals must be mixed correctly and soap should never be added to solutions used for sanitizing.



To check that the concentration is correct, use the test strip approved for the chemical. Three common chemicals used for sanitizing with correct concentrations are:

Chlorine (bleach)25 ppm to 100 ppm
Iodine.....12.5 ppm to 25 ppm
Quaternary AmmoniaSee container label

General Cleaning



Cleaning never stops. A daily schedule should be used to make certain that all areas are cleaned including walls, ceilings, and floors. Food contact surfaces, equipment, and customer tables should be cleaned as they are used. Proper cleaning is the first step towards a sanitary and pest free establishment.

Wiping Cloths . . .

- ◆ Use wiping cloths to clean food contact surfaces, tables, cutting boards and equipment.
- ◆ Store wiping cloths in a clean, sanitizing solution. Never add soap to the solution.
- ◆ Use a different wiping cloth for cleaning up after raw meats. Do not use the same cloth to wipe tables and other counters.



Chemicals. . .

- ◆ *Never* store chemicals, soaps, or pesticides with or above food, utensils or equipment.
- ◆ Label everything clearly. It is best to keep chemicals in the bottles or boxes that they were delivered in.



- ◆ Not all pesticides are rated for use in a food establishment.
- ◆ Read and follow chemical directions for proper use.

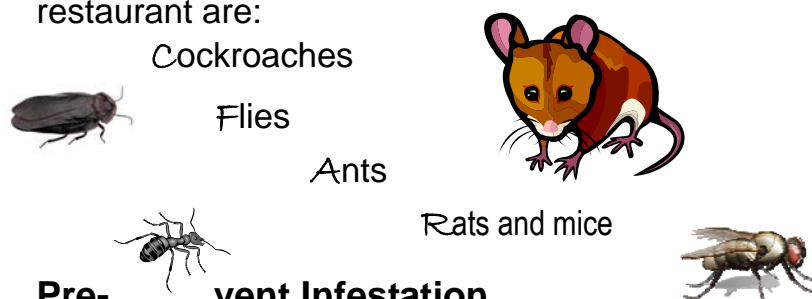
Pest Control

The best defense against pests in the establishment is a regular cleaning and sanitizing schedule.



Common Pests . . .

All pests are a serious health hazard because they leave disease-causing germs on food and food contact surfaces. A few common pests found in a restaurant are:



Pre-vent Infestation . . .

- ◆ Thoroughly clean and sanitize the establishment regularly, and immediately clean up spills.
- ◆ Seal all cracks in floors, walls, and ceilings.
- ◆ Fill or cover all holes around pipes.
- ◆ Keep doors and windows tightly closed. *Do not* prop open the back doors or drive-through windows.
- ◆ Keep garbage in sealed plastic bags inside tightly covered containers. Clean containers frequently.
- ◆ Outside dumpsters should have closed lids, and the ground around the dumpsters should be kept clean.

If pests become a problem, a licensed pest control company should be used.

Glossary

Biological agents — bacteria, parasites, viruses, and fungi that can grow and survive in certain types of food and on surfaces of equipment and dishes. Bacteria can be killed by proper cleaning and sanitizing.

Calibrate — process to determine if a thermometer is set at the correct mark to give accurate temperature readings, and then to make the necessary adjustments if it is not accurate.

Clean — to be free of visible soil, dirt, food or soap.

Concentration — the amount of chemical present in a volume of water.

Contaminate (contamination) — to introduce bacteria, chemicals, or other harmful substances into food or onto food contact surfaces.

Cross contamination — to transfer or re-introduce bacteria, chemicals, or other harmful substances into food or onto food contact surfaces after a food has been cooked or is ready to be served to the customer.

Danger Zone — temperature range in which biological agents can survive, reproduce, and grow; temperatures between 41°F and 135°F.

Dishes — within this handbook, dishes shall mean items used to store, serve, prepare, transport or dispense foods. This includes items such as utensils, tableware, plates, bowls, glasses, pots, pans, and all food contact parts of equipment.

Dish washing — the process of cleaning and sanitizing dishes and the food contact surfaces of equipment by hand or by machine, using heat or chemicals.

Equipment — items used in the operation of a food service establishment such as slicers, mixers, stoves, can openers, tables, counters, and refrigerators.

FIFO (First In First Out) — method of rotating food items to ensure that the oldest stock items are the first items used.

Fecal-oral transmission — transmission of disease when fecal matter contaminates food or water sources; most common transmission in a food establishment happens when employees use the restroom and do not adequately wash their hands. Then they touch food (or dishes), which is then consumed (or used) by customers.

Food contact surfaces — equipment surfaces and dishes that come into contact with food; includes surfaces onto which food may drip, drain, or splash.

Food Defense— protection of food products from intentional contamination by biological, chemical or physical agents.

Food Safety—protection of food products from unintentional contamination by physical, chemical or biological agents.

Foodborne illness (food poisoning) — illness which results when people eat food contaminated with bacteria, viruses, chemicals, physical agents, or other harmful substances.

Non-Time/Temperature Control for Safety Foods — foods in which bacteria does not grow easily.

Ready-to-eat — foods that are in a form that is ready to serve to customers due to washing, cooking, or other preparation.

Sanitize — to reduce the amount of bacteria and viruses on an item to safe levels; to kill bacteria and viruses by using heat or chemicals.

Time/Temperature Control for Safety Foods — foods that support the rapid and progressive growth of bacteria; require temperature control to be safe for consumption.

New Training Location

Eastgate Metroplex

Eastgate Metroplex, Suite 550
Former Eastland Mall
East 21st Street & 145th East Avenue
North Entrance

Notes



Eastgate Metroplex Training Center

14002 E. 21st Street, Suite 550 •Tulsa, Oklahoma

Food Employee Training Schedule

Classes are taught in **ENGLISH** on:

Monday	12:00 pm	3:00 pm	6:00 pm
Wednesday	9:00 am	2:00 pm	
Thursday	9:00 am	12:00 pm	4:00 pm

Classes are taught in **SPANISH** on:

Monday & Friday..... 9:00 am

Schedule is subject to change.

Check current schedule at www.tulsa-health.org.

Class size is limited to the first 80 people present.
Arrive **30 minutes before** the time listed above.
Late arrivals cannot be admitted after class has begun. **The fee for class must be paid in cash only.**
A driver's license is **not** required to attend the class.

Other Training Centers

Call or view schedule for these centers
at www.tulsa-health.org

Bixby (South Tulsa)

8120 E. 126th St.....(918) 369-3155

Sand Springs

306 E. Broadway.....(918) 591-6100

Broken Arrow

James Goodwin Health Center

5051 S. 129th E. Ave.....(918) 595-4427

Collinsville

12th and Center.....(918) 596-8650

This handbook is available
on our website at
www.tulsa-health.org



Also on the website:

- ◆ Class schedules
- ◆ Food safety posters
- ◆ Newsletters
- ◆ Food Code
- ◆ Self-inspection forms
- ◆ Citizen compliant form
- ◆ Restaurant inspections



**TULSA HEALTH
DEPARTMENT**

Tulsa City-County Health Department
Environmental Public Health
(918) 595-4300
www.tulsa-health.org