

# Table of Contents

## **3      Introduction**

Definitions • 4  
Foodborne Illness • 5  
Personal Health and Work Habits • 7

## **9      Safe Food Practices**

In Receiving • 9  
In Preparation • 10  
In Service • 11  
In Transport • 11  
Safety of Foods • 12  
Dishwashing and Sanitizing • 12

## **14     Pest Control**

## **15     Good Housekeeping**

## **15     Safe and Sanitary Facilities, Equipment, and Utensils**

## **16     Safety Practices**

## **17     Food Service Responsibilities**

## **20     The Fundamental Five of Safe Food Service**



DIVISION OF  
Environmental Health

Environmental Health Services

food hygiene

water services

onsite sewage

biomedical waste

facilities

clean communities

*Improving your  
quality of life...*

# Preventing Food Contamination

A Guide for Many of Florida's Food Service Industries



# Sanitation is a way of life.

It is the quality of living that is  
expressed in the clean home,  
the clean farm, the clean business  
and industry, the clean neighbor-  
hood, the clean community.

Being a way of life, it must come  
from within the people;  
it is nourished by knowledge  
and grows as an obligation  
and an ideal in human relations.

The National Sanitation Foundation

# Introduction

## **Food and beverage establishments serve millions of meals**

to Florida residents and guests every day. The preparing and serving of these foods are done by thousands of people. The goal of this Food Service Training Pamphlet is to have food protected from contamination, personnel free of disease, and food service establishments clean and sanitary - to prevent food illness.

**Food service management is obligated to protect the health** of customers and personnel. Educating and training of personnel in the principles of sanitation and good personal hygiene are essential. Therefore, a continual, carefully planned training program should be conducted by food service management so that every worker in the establishment will understand what he or she must do to prevent the spread of infections and illnesses.

## **Good personal hygiene, safe preparation and proper storage**

of all foods, clean sanitary buildings and equipment, and providing proper service to each customer are the responsibility of everyone working in a food service establishment.

**These are the first steps toward having satisfied customers.**



# Definitions

**1. Employee** Any person working in or for a food service establishment who engages in food preparation or service, who transports food or food containers, or who comes in contact with any food utensils or equipment.

**2. Equipment** All stoves, ranges, hoods, meatblocks, tables, counters, refrigerators, freezers, sinks, dishwashing machines, steamtables and similar items, other than utensils, used in the operation of a food service establishments.

**3. Foodborne Illness** A general term often used to describe any disease or illness caused by eating contaminated food or drink.

**4. Food Contact Surfaces** Surfaces of equipment and utensils with which food normally comes in contact, and those surfaces from which food may drain, drip or splash back onto surfaces normally in contact with food.

**5. Fixed Food Establishment** A food service establishment which operates at a specific location and is connected to electrical, water, and sewage disposal systems.

**6. Food Preparation** The manipulation of foods intended for human consumption by such means as washing, slicing, peeling, chipping, shucking, scooping and/or portioning, and activities involving temperature change.

**7. Food Service Establishment** Any facility, where food is prepared and intended for individual portion service, and includes the site at which individual portions are provided.

**8. Kitchenware** All multi-use utensils, other than tableware (such as pots, pans).

**9. Limited Food Service Establishment** Any establishment with a food operation, so limited by the type and quantity of foods prepared and the equipment utilized, that it poses a lesser degree of risk to the public's health, and, for the purpose of fees, requires less time to monitor.

**10. Pathogen** Any disease producing agent, microorganism or germ.

**11. Perishable Foods** Any food of such type or in such condition as may spoil; provided, that foods which are in hermetically sealed containers processed by heat or other means to prevent spoilage and properly packaged, dehydrated, dry or powdered foods so low in moisture content as to retard development of microorganism are not considered readily perishable.

**12. Potentially Hazardous Food** Any perishable food which is capable of supporting rapid and progressive growth of infectious or toxicogenic microorganisms. Also included are perishable foods capable of supporting the slower growth of clostridium botulinum.

**13. Safe Temperatures** As applies to potentially hazardous foods; means temperatures of 41°F or below, or 140°F or above.

**14. Sanitize** The effective treatment of clean equipment and utensils by an approved process, which provides enough accumulative heat or concentration of chemicals for enough time so that 99.999% of disease microorganisms are eliminated.

**15. Single-Service Articles** Any cups, containers, closures, plates, straws, place mats, napkins, doilies, spoons, stirrers, paddles, knives, forks, wrapping materials, and all similar articles, which are constructed wholly or in part from paper or paper material, foil, wood, plastic, synthetic or other readily destructible materials, for one time and one person use and then discarded.

**16. Tableware** Multi-use eating and drinking items, including flatware, knives, forks, spoons, glasses, cups, etc.

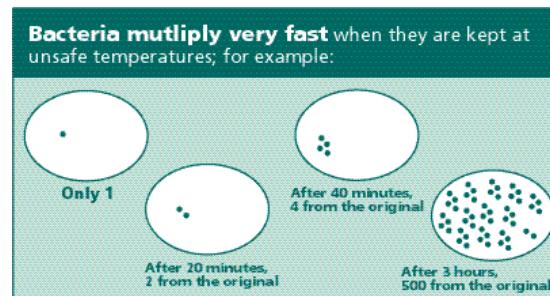
**17. Utensil** Implements such as pots, pans, ladles or food containers used in the preparation, storage, transportation or serving of food.

# Foodborne Illness

**Prevention of foodborne illness** (often referred to as food poisoning) is a major concern in the food service establishment. Foodborne illness is a general term often used to describe any disease or illness caused by eating contaminated foods or drinks.

Almost all reported cases of foodborne illness are caused by bacteria or by the poisons produced by bacteria. This poison is commonly formed in food before it is eaten and cannot be detected by taste, odor, or color. While there are other microorganisms (germs) that can cause foodborne illnesses, this pamphlet concentrates on bacteria.

Bacteria multiply very fast when they are kept at an unsafe temperature.



## Germs that cause disease are spread by:

- Improper handling, preparing, and storing of food.
- Improper washing of hands and fingernails.
- Poor personal hygiene habits of food employees.
- People who may seem well but carry bacteria which can make other people sick.
- Improperly cleaned and sanitized eating and cooking utensils and equipment.
- Contamination of food, utensils, and equipment from flies, roaches and other insects.
- Use of foods from unapproved sources.

## There are three main types of foodborne illness:

- Food infection
- Food intoxication
- Chemical foodborne illness

## Food Infection

This type of foodborne illness occurs when germs are present in foods and are allowed to multiply until there is enough of them to cause sickness (see Diagram One).

**Salmonella** is caused by a microorganism, which after ingestion, grows in the intestine. The main sources of the foodborne salmonellas are humans and other warm-blooded animals. The organism reaches food by contamination from food handlers; or in the case of foods such as eggs and other poultry products, may already be present in the animal. Salmo-

nella infection in food is more common in the summer than in the winter because environmental conditions are more favorable for growth.

### Foods Involved:

- **Poultry\*, eggs products** made with uncooked eggs such as custards, cream cakes, meringues, pies and eggnog; **uncooked or improperly cooked meats and meat products** (such as meat pies, sausage, cured meats).
- **Previously cooked foods** that have been warmed and held without refrigeration or canned goods held for a while after opening.
- **Milk and milk products** left out of the refrigerator for a long period of time. Also milk that is well past due date.

\* Cooking poultry to 165°F for at least 15 seconds, will eliminate the presence of the salmonella.

## Food Intoxication

This type of foodborne illness occurs when microorganisms that are present in food produce a toxin (poison) and it is the toxin the causes the illness rather than the actual microorganisms. Some toxins are not killed by cooking temperatures and cannot be detected because the flavor, appearance, or odor of food does not change. The only prevention for food intoxication (poisoning) is to keep germs out of food and to keep food stored at the proper temperature.

**Staphylococcus** is the most common type of food intoxication. It produces an enterotoxin (toxin in the intestine). If the toxin is ingested, within a few hours, severe reactions will occur including nausea, vomiting, and diarrhea. It may be found on the skin, in the nose, and on the throat of normal people. These germs cause common boils and may be the reason for infected pimples or cuts.

Staphylococcal food poisoning can be prevented by careful sanitation methods such as washing your hands and cleaning your work area. Foods refrigerated at 41°F and below will prevent staphylococcus germs from multiplying and producing toxins.

### Foods Involved:

- **Ham salad, chicken salad, tuna salad**, sandwiches, meat products, dairy products.
- **Improperly prepared or stored custard and cream** filled baked goods and puddings, creamy salad dressing left out in heat for long periods of time.
- Foods that have been **thawed repeatedly**.
- Foods that have been **improperly thawed or improperly reheated**.

The best way to control staphylococcus microorganisms is to ensure proper employee hygiene and to minimize exposure to unsafe temperatures.

**Botulism** is the most severe type of food intoxication. It is caused by the consumption of food containing toxin (poisons) produced by the microorganism, Clostridium botulinum. This germ can also grow without air and produces spores. These spores are inactive forms of the microorganism that can withstand extreme temperatures and become active under favorable conditions (such as unsafe temperatures). Foods containing these spores are very dangerous when ingested.

### Foods Involved:

- Home canned goods , significantly damaged canned goods (nonacid foods such as string beans, corn, beets, that are canned or preserved at temperatures not high enough to kill the botulism microorganism).
- Sautéed onions, garlic in oil, baked potatoes.
- Acidified foods.
- Smoked fish and meat.

## Chemical Foodborne Illness

This type of foodborne illness occurs when foods are contaminated by chemicals such as pesticides (used in insect and rodent control), certain cleaning compounds, and sometimes by the use of improper containers (pots, pans, bowls, etc.) for cooking or storing food. Drugs and pesticides are used in agriculture chemicals used to control infestation of fruit and vegetables. Some pesticides include insecticides, fungicides, herbicides, and some germicides. These chemicals when ingested in large amounts can cause serious foodborne illness. All poisonous chemicals and cleaning compounds should be carefully labeled and stored in an area separate from foods. To prevent the possible leaching or dissolving of harmful metals into certain foods, galvanized containers should never be used with acidic foods or beverages such as lemonade and tomatoes. To prevent the possibility of chemical foodborne illness from pesticides, all fresh fruits and vegetables should be washed thoroughly. Even chemicals that are quite harmless when present in small amounts, have caused severe illness or death when eaten in large quantities.

### Preventing Foodborne Illness

- Pay attention while preparing food to prevent accidental contaminants.
- Remember: WHEN IN DOUBT, THROW IT OUT!
- Plan for a minimum of leftovers.
- Throw away food that is cloudy, mushy, or has an off odor.
- Throw away food from a leaking can. DO NOT taste. This could be a possible source of botulism.
- Throw away food that changes appearance, color, and/or shape over a period of time.

## Personal Health and Work Habits

**Good personal hygiene practices are a must and cannot be overemphasized for food service workers.** When good hygiene principles are practiced, it keeps the workers healthy and helps prevent the spread of disease to food. There are fewer germs, bacteria, and/or viruses present when food service personnel are clean. The following rules should be observed:

1. **Cleanliness** The outer clothing of all employees must be clean.

Employees must maintain a high degree of personal cleanliness during all periods of duty. Hair nets, head bands, caps or other effective hair restraints must be worn by all persons engaged in the preparation and service of food to keep hair from food and food-contact surfaces.

**2. Clothing** Shoes and clothing must be comfortable in order to avoid fatigue, poor posture and to prevent accidents. Garments should not be loosely or tightly worn.

**3. Handwashing** Employees must wash their hands and exposed portions of their arms at the following times:

- After touching bare human body parts other than clean hands and clean exposed portions of the arm.
- After using the rest room.
- After caring for or handling support animals.
- After coughing, sneezing, using a handkerchief or disposable tissue, using tobacco, eating or drinking.
- Immediately before engaging in food preparation including working with exposed food, clean equipment and utensils and unwrapped single-service/single-use articles.
- During food preparation, as often as necessary to remove soil and contamination and prevent cross contamination when changing tasks.
- When switching between working with raw foods and working with ready to eat foods (foods that do not require further cooking before service).
- After engaging in any activities that contaminate the hands.

**4. Fingernails** Food employees must keep their fingernails trimmed, filed and maintained so the edge and surfaces are cleanable and not rough. Many germs get caught underneath long nails and can get into food while it is being prepared; once there, it will multiply, causing the food to become contaminated.

**5. People in Kitchens** Only authorized individuals, necessary for the operation of the food service establishment, or as part of an organized educational event, are allowed to be in the food preparation or utensil washing areas. Infants, children and the general public must not be permitted in food preparation areas.

**6. Cleaning Procedure** Food employees must clean their hands and exposed portions of their arms with soap and running water by vigorously rubbing together the surfaces of their lathered hands and arms for at least 20 seconds and thoroughly rinsing with clean water. Employees must pay particular attention to the areas underneath the fingernails and between the fingers.

**7. Where to Wash** Food employees must clean their hands in a hand-washing lavatory that is equipped with hot and cold running water. Employees must not clean their hands in a sink used for food preparation, or in a service sink or a curbed cleaning facility used for the disposal of mop water and similar liquid waste.

**In addition to being personally clean and well groomed, the food service worker should follow these rules for safe food handling practices:**

- Keep hands and fingers away from hair, face, nose, and mouth. Germs may be easily picked up and transmitted to food by the hands and fingers.
- Use spoons, forks and other utensils when handling foods. This reduces hand contact and contamination of the foods being prepared.
- Outer clothing must be worn over regular clothing when moving from a raw food operation to a ready-to-eat food operation. Outer coverings should be changed, as they become increasingly soiled.

- Utensils, clean or dirty should be handled by their base or handle. This protects both the customer and the server from germs.
- All equipment and utensils must always remain in good condition to prevent germs from collecting in broken areas.

Employees must not smoke or use tobacco in any form while working in the preparation or service of food or while handling food service utensils or equipment. Smoking is not be permitted in food storage and preparation areas or in areas where utensils are cleaned or stored. Cigarette lighting is also prohibited in all areas.

Disease can be passed from person to person. **As a food service employee, your health habits affect you and your work and the health of those around you. For the best results in your job – REMEMBER:**

No person is allowed to work in any area of a food service establishment in any capacity while affected with any disease in a communicable form or while a carrier of such disease or while afflicted with boils, infected wounds, sores or an acute respiratory infection, in which there is a probability of such person contaminating food or food-contact surfaces with pathogenic organisms, or transmitting disease to other individuals.

Before reporting for work, approval from a physician may be required if you have been exposed to a severe communicable disease [Salmonella, Staphylococcus, Hepatitis, Diarrhea infections etc.]. All communicable diseases should be reported to the local health department.

**Only healthy people should handle food.** Food can be contaminated by a sick person, a carrier of disease (a person who may be sick or well but can still spread the disease), or a diseased animal.

# Safe Food Practices

**Food service employees who demonstrate good health habits and practice food safety provides more efficient and sanitary food service.**

Foodborne illnesses can also be spread if employees are not properly trained on how to receive and store food. It is very important that food employees are very knowledgeable in all food handling areas.

## In receiving and storage

Food received or used in food service establishments must be from sources approved or considered satisfactory by the health department and must be clean, wholesome, free from spoilage, adulteration and misbranding, and safe for human consumption. The food must have been prepared, processed, handled, packaged and stored in a sanitary manner so as to be protected from contamination and spoilage.

Storerooms should be well ventilated and free of dampness. Also storerooms should be free of pests and bugs.

Bulk products, such as sugar and flour, may be emptied into tightly covered, properly labeled approved containers to prevent outside contamination.

Food may not be stored in locker rooms, rest rooms, dressing rooms, garbage rooms, mechanical rooms, under sewer lines that are not shielded to intercept potential drips, under leaking water lines (including leaking automatic fire sprinkler heads) under lines on which water has condensed, under open stairwell or under other sources of contamination.

Food products must be stored on shelves or platforms 6 inches from the floor to ensure adequate cleaning of the storeroom floor.

Keep cleaning products, poisons and/or harmful products in storage away from food storage areas to prevent contamination.

## In Refrigeration

Food should be cooled to an internal temperature of 41°F, in a period of no more than 4 hours.

### Cooling for large quantities of foods must be accomplished in one of the following ways:

1. Place food in shallow pans.
2. Separate food into smaller containers.
3. Use rapid cooling equipment.
4. Stir food in a container placed in an ice water bath.
5. Use containers that facilitate heat transfer.
6. Add ice as an ingredient. OR
7. Any other effective methods that is approved by the Department of Health.

Arrange containers apart from one another in a refrigerator to ensure proper cooling. This allows air to circulate around containers.

Cover all food while in storage. Covering keeps food from drying out And minimizes the possibility of contamination.

Do not re-freeze products once they are thawed.

## In food preparation

When working with food:

- Handle food as little as possible.
- Throw away plastic gloves after one use.
- Keep fingers away from mouth, hair, face, skin and other parts of the body.
- Use the handwashing sink in the food preparation area for washing hands, not the food preparation sink.
- Wash fresh produce under running water before it is served either raw or cooked.
- Thaw frozen foods in the refrigerator, under cold running water, or as part of the cooking process.
- Prepare precooked frozen foods exactly as the directions state.
- Have foods ready at serving time but not any longer than necessary before serving time.
- Do not leave cooked foods at room temperature.
- In storage, place prepared food in covered containers or have it wrapped or packaged to insure protection from contamination.

## In the work area

To keep area clean:

- Avoid placing cartons or boxes on surfaces used for food preparation.
- Wipe food contact surfaces with clean cloths which are used only for that purpose.
- Keep kitchens free of clutter.
- Keep worktables clear and clean while in use.
- Wash and put away equipment that is not being used.
- Clean and sanitize food preparation surfaces between different types of raw food products (beef, pork, poultry, etc.) and between the preparation of raw products and ready to eat products.

## With utensils

When using utensils:

- Wash and sanitize flatware or other utensils that fall to the floor.
- Do not taste foods with any utensil used either to mix or stir foods.
- DO NOT use fingers to sample food. Always use a clean spoon.

## Use foods on a first in, first out basis

Refrigerated, ready-to-eat, potentially hazardous food prepared and held for more than 24 hours in a facility must be marked with the date of preparation. It must be discarded if not sold or served within ten calendar days.

Storage containers must have openings large enough to allow easy cleaning between uses.

## In service

Do not contaminate the food during the serving process:

- Use clean tongs, scoops, forks, spoons, spatulas, or other suitable utensils to handle food.
- Pick up and hold all tableware by the handles.
- Store tableware away from dust.
- Provide straws either individually wrapped or from an approved dispenser.
- Serve butter or margarine in individual servings.
- Ice should be from an approved source.
- Ice machines should be in a covered, visible and protected location.
- Ice should be transferred to serving containers using approved scoops. Never use hands, cups, or glasses to scoop ice. Keep scoops protected when not in use.
- Do not store food items on ice used for drinks.
- Use a spoon or other suitable utensil to remove any serving or mixing spoon that falls into the food.
- Make sure food to be served on a take-out basis is covered until served.
- Uneaten food and single-service utensils should be thrown away in approved waste containers.
- When handling plates and trays, do not touch eating surfaces with fingers.

## In transport

During all periods of transportation, potentially hazardous food must be kept at safe temperatures. (milk, eggs, poultry, fish). Bacteria grow faster in these foods when they are not kept at a safe temperature.

Make sure that foods being transported are protected from dust, pests and insects at all time.

Temperature and time is very important in all aspects of food service (storing, preparing, serving, etc.). Keep hot foods hot and cold foods cold.

# Safety of Foods

## Dishwashing and sanitizing

**The rule is Scrape, Wash, Rinse, and Sanitize.** Special attention should be given while cleaning forks and spoons. Germs and bacteria can be transferred from infected persons to eating utensils and survive poor dish-washing and sanitizing procedures. NOTE: Some dishes must be pre-rinsed to loosen dried-on food particles.

- The food-contact surfaces of equipment and utensils must be clean to sight and touch.
- The food-contact surfaces of kitchenware must be kept free of encrusted grease deposits and other soil accumulations.
- Nonfood-contact surfaces of equipment must be kept free of an accumulation of dust, dirt, food residue, and other debris.

## Washing

### Hand method

- Wash in water 100°F - 120°F.
- Use adequate amounts of detergent in water.
- Make-up fresh water as needed.
- Pre-rinse if necessary.

### Machine method

- Dishes and utensils should be placed in racks, trays, and baskets so surfaces touched by food have a direct spray of wash and rinse water.
- For best results follow all directions on the machine carefully.
- Ensure that the machine receives routine maintenance and that all warning systems, timers, and automatic dispensers are operating properly.
- Add liquid or powder detergent when necessary.
- Unless otherwise specified wash water should be 140°F - 160°F.
- Never overload machine to ensure proper cleaning.
- Pre-rinse if necessary.

## Rinsing and sanitizing

### Hand method

- Place utensils in clean hot water.
- To sanitize utensils, leave them in water that is at 170°F for 30 seconds or in an approved chemical sanitizer for 1 minute or more (follow manufacturers instructions).



- A chemical sanitizer solution should be used in the correct amounts listed on the instruction label on the container.
- Utensils and equipment must be rinsed so that abrasives and cleaning chemicals are removed.

### Machine method

- All utensil and equipment placed in machines must be exposed to all dishwashing cycles.
- Automatic detergent dispensers, wetting agent dispensers, and liquid sanitizer injection, if any, must be properly installed and maintained.
- All dishwashing machines should be thoroughly cleaned at least once a day or more when machine is used often.

### Single tank, stationary rack, dual temperature machine:

Wash temperature	140°F
Final rinse temperature	180°F

### Single tank, stationary rack, single temperature machine:

Wash temperature	165°F
Final rinse temperature	165°F

### Single tank, conveyor machine:

Wash temperature	140°F
Final rinse temperature	180°F

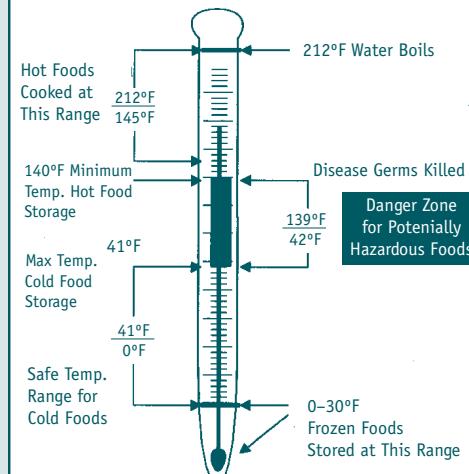
### Multi-tank, conveyor machine:

Wash temperature	140°F
Pumped rinse temperature	160°F
Final rinse temperature	180°F

### Single tank, pot, pan, and utensil washer, either stationary or moving rack:

Wash temperature	140°F
Final rinse temperature	180°F

## Safety of Foods



# Pest Control

All garbage and trash are breeding places for diseases, germs, and insects and serve as food for rodents. To avoid this:

- Keep garbage and trash in easily washed containers that are tight fitting and prevent flies from entering.
- Use plastic liners for garbage cans to aid in cleaning the containers. If plastic liners are not used, newspaper can be used but is not as effective.
- Wash garbage cans daily with hot, soapy water.
- Use insect sprays and rodent bait in and near the garbage and waste area. Only sprays approved by the health authority should be used.
- Routinely inspect incoming shipments of food, supplies, and premises for bugs to control the spread of pests.
- Eliminate harboring conditions where pest might nest. Using trapping devices or other means of pests control to minimize spread.
- Leave work and dining areas clean from debris that pests may feed upon.

A food service establishment must be free of all pests, particularly flies, roaches, ants, mice, and rats. Rodents and insects walk and feed on all kinds of filth, pick up germs on their feet and bodies, and then deposit these germs on any food or utensil they touch.

## Methods of controlling pests

1. Seal cracks and keep screens closed.
2. Keep foods covered and clean up spilled foods immediately.
3. Dispose of trash and garbage promptly.
4. Close all openings around wiring, drain pipes, vents, and flues to make them rat and insect proof.
5. Carefully follow instructions on labels when using poisons and chemicals. Purchase and use only those approved by the health authority for use in food establishments.
6. Food products, such as flour, sugar, pancake mix, etc., can be removed from their original containers and placed in approved sealed tight containers that are properly labeled and more impermeable to pest (rodent proof).

For protection against possible chemical poisoning, insecticide dispensers should not be within 12 feet of exposed food, food preparation, or serving areas or food contact surfaces. This includes all food equipment, utensils, tables, counters, and similar articles and space used in the preparation of food and drink. Good housekeeping is a must in controlling pests. NO AMOUNT of pesticides can replace good DAILY Housekeeping practices.



# Good Housekeeping

**Good housekeeping means keeping the entire establishment clean and sanitary at all times.** Making it a more pleasant place for the customer to visit as well as a better place in which to work. Good housekeeping helps break the chain of infection from the source of the disease to the customer and to the employee. It also helps prevent accidents and makes a safer place in which to work. Good housekeeping is a primary responsibility of the management. However, the cooperation and assistance of all employees is needed for a safe and sanitary operation.

One of the keys to good housekeeping is proper arrangement and installation of equipment within the food facility. This makes for easier and faster cleaning and sanitizing. Additionally, posting and following daily cleaning schedules can increase cleaning efficiency and promote good housekeeping practices.

Cleaning should be done during periods when the least amount of food is exposed, such as after closing. This does not apply to cleaning that is necessary due to a spill or other necessary cleaning.

## Safe and Sanitary Facilities, Equipment and Utensils

### Facilities

To keep facilities safe and sanitary:

- Keep floors repaired and clean them daily.
- Keep walls, ceiling, windows, screens, doors, and light fixtures clean and in good repair.
- Keep screens on windows, doors, and outer openings closed and in good repair.
- Keep exhaust fans, filters, and hoods in good working order and clean of dust and grease.
- Construct and install all counters, shelves, tables, refrigerators, sinks, and other equipment or utensils so they can be easily clean.
- Clean rest rooms and fixtures daily.
- Prepare and store food in clean, dry places. Avoid storing food underneath sweating or leaking pipes.
- As part of the pest control practices and to maintain safety, loading zones and garbage areas should be kept clean and free of trash.

### Equipment and utensils

Some general rules for safe, sanitary equipment and utensils are:

- Purchase equipment that has been approved by an accredited third party.
- Follow manufacturer's instruction for equipment installation, use, care, and cleaning.
- Keep counters, shelves, hoods, and sinks clean and free from dust, dirt, insects, and other contaminating material.
- Be sure the wiring system for electrical equipment is grounded.

- Clean can openers daily. Replace nicked or dull cutting blades.
- Clean dish machine daily. Remove, wash, and rinse tubes, making sure that openings are not clogged. De-lime machine as needed.
- Follow manufacturer's instructions for microwave oven installation, use, care, and cleaning.
- Keep air temperature in all parts of the refrigerator at 41°F or below.
- Install drain lines with air gap before going into sewers.
- Follow the manufacturer's instructions for cleaning and sanitizing soft ice cream or milk shake machines.
- Food being transported should be protected to ensure it is maintained at safe temperatures and protected from contamination.
- In walk-in refrigerators, food should be kept a least 6 inches off of the floor.
- Deep fat fryers, ovens, stove, ranges, mixers, peelers, and similar equipment should be cleaned daily.
- Potentially hazardous foods need to be keep at safe temperatures at all times (41°F or below, or 140°F or above).

## Safety Practices

All emergency telephone numbers, such as police, fire department, ambulance, health department, and food poison control center, should be handy and easily accessible at all times.

### To prevent burns

- Use caution in removing lids from steaming, pots, pans, and kettles.
- Use dry, flameproof potholders.
- Handles of pans should be turned inward on range so that they cannot be easily bumped off.
- Keep papers, plastic aprons, and other flammable materials away from heat and hot areas.
- Use pots and pans with sturdy handles.
- Use caution in removing pans, cookies sheets, and casserole dishes from oven, also use an oven mitt.

### To prevent falls

- Use a step ladder or low stool when climbing; never use a chair, box, or counter top.
- Repair all flooring defects immediately.
- All work areas should have adequate amounts of light.
- Keep floors clean of all spills.
- Keep floors dry or make caution warnings visible for wet areas at all times.

### To protect against cuts

- Keep sharp knives and other sharp utensils in a knife holder or appropriate place.
- Cut away from the body; never cut towards the body.
- Throw away broken glass and other broken objects immediately.
- Wash all sharp tools separately from other utensils.

- Never place sharp objects in the bottom of sink while washing other dishes.

### To avoid fire hazards

- Keep fire extinguishers in convenient locations and serviced; instruct personnel on their location and use before a fire.
- Do not use excessive water around electrical outlets.
- Keep cigarettes away from clothing and other fire hazard materials.

### To avoid other accidents or hazards

- Insure that all poisons are clearly marked and stored away from food.
- Heavy cans and other heavy objects should be kept on wheels for transporting from place to place.
- Throw out broken or defective utensils.
- Make sure tables and chairs are durable and sturdy.

# Food Service Responsibilities

A safe and sanitary food service establishment should involve all employees including management and food service workers to insure that safe food is provided to customers. It is very important that everyone does the job required of them to have adequate food facilities.

### Manager/supervisor

- Should be certified in Food Service and ensure that a clean and sanitary establishment is maintained.
- Major responsibility is to customers and personnel in his or her establishment.
- Must delegate authority as necessary.
- Inform health department if a food service employee has any disease in a communicable form or have become a carrier of a communicable disease.
- Make training programs possible and require participation from all employees.

### Food service worker

- Immediately call to the attention of the manager and/or supervisor all sanitation and safety hazards.
- Request from proper authorities the facilities, materials, and supplies.
- Cooperate with others responsible for a safe and sanitary food establishment.
- Inform management and health department if you have any disease in a communicable form or have become a carrier of a communicable disease.

### Health authority

- Has a responsibility to the public to insure that food service establishments provided clean and safe food.
- Inspect establishments regularly.
- Furnish copy of inspection reports to manager and explain violations.

- Suggest solutions for improvements and discuss the problem with management.
- Assist management in food service training programs.
- Give information and cooperation to any food service establishments requesting assistance.
- Relate to employees about safety and health practices.
- Relate to customers that you have their best interest in mind.

## In Closing

**Food service managers and supervisors, through their local health departments, have many resources to help in the prevention of foodborne illnesses.** At the state level, there are medical epidemiologists-physicians who are especially trained in the science of disease occurrence and prevention and who are readily available for consultation or assistance to the local health director and food employees. The central laboratory and several regional laboratories receive and test food and utensil specimens collected by the local food safety specialist to ensure safety. At any time they are ready to provide any assistance in the investigation and/or study of food sanitation.

**By working together, we can insure that the customer who eats in Florida's food service establishments is served clean, wholesome and contaminant-free food!**



# The Fundamental Five of Safe Food Service

These are the five fundamentals for safe, sanitary food service. Although good sanitation includes other details, if any one of these basic five points is missing, the prevention of food contamination is significantly jeopardized.

- 1. Clean hands** Dirty hands spread germs. Hands and fingernails should be washed thoroughly with soap and water before work, after using toilet and every time they are soiled or become contaminated.
- 2. Clean service** Handling utensils the wrong way may spread disease. Single service items should be handled carefully to keep them sanitary. Other utensils should be washed clean, sanitized as recommended by the health authority, then carefully stored and handled.
- 3. Clean food** Food may be infected by coughs, sneezes, handling dirty equipment, vermin, animals, and wastes. It should be protected during storage, preparation, and service.
- 4. Right temperature** Cold temperatures slow or stop the growth of germs; heat kills them. Cold foods should be kept cold; hot foods should be kept hot. Prepared food should never be left standing at room temperature except during necessary periods of preparation and service.
- 5. Healthy personnel** Food service personnel must be healthy to prevent colds and other diseases from being passed to others. Germs from infected cuts, pimples, or boils can contaminate food.

**Please post this important reminder**

