

**McDonald County Health Department**

**3446 S Business Hwy 71, Pineville, Mo.**

**417-223-4351**

 ![MC900057757[1]]()

Table of Contents

Introduction 3

Foodborne Illness 3

Learning Objectives 4

Person in Charge 5

Personal Hygiene 6-8

Cleaning and Sanitizing 9-10

Sanitizing Concentrations 11

Cross-Contamination and Food Storage 13

Food Storage Limits 15

Approved Foods 16

Toxic Chemicals and Pest Control 17

Water & Plumbing 18

Waste 19

Food Temperatures 20-23

Emergencies 24

Legal Authority 25

Introduction

**Why are Food Procedures important?**

**According to the Center for Disease Control, it is estimated that each year in the United States alone there are 76 million cases of foodborne illness resulting in 325,000 hospitalizations and 5,000 deaths.**

**To help prevent this, there are laws that govern food handling. This manual is designed to cover some of the practices that if done improperly could result in a customer becoming sick**.

**All managers/supervisors/person in charge are responsible for knowing this manual, the McDonald County Food Service Sanitation Ordinance, and the current Food Code.**

Foodborne Illness

Let's begin our discussion by talking about what is foodborne illness. There are three main types of illness:

**3. Biological**

This can then be further broken down into three more subcategories: **Viruses; Foodborne Intoxications**; and **Foodborne Infections**.

**Viruses** are pieces of DNA that can multiply within a living organism such as Hepatitis A. **Foodborne intoxications** involve a bacteria growing outside of a human and producing a toxin. The human then eats the toxin and becomes ill normally within a matter of hours. **Foodborne infections** involve a human eating the bacteria and then the bacteria produce a toxin within the person causing illness.

1. **Physical**

Physical foodborne illness occurs when a foreign object enters the food and the customer eats the object. An example would be a pushpin falling out of a corkboard and entering the food. The customer may bite down on the pin and break a tooth.

**2. Chemical**

Chemical foodborne illness occurs when a chemical enters the food and a customer ingests it. We need chemicals for cleaning and sanitizing our establishment, but we need to be careful to keep them separated from the food that we serve. An example of a chemical foodborne illness may be when an employee forgets to label a spray bottle containing a yellow liquid (degreaser). Another employee gets the spray bottle believing it is olive oil and begins to spray it on the pasta when it is done cooking. The customer now gets pasta saturated with degreaser which results in him becoming ill.

Learning Objectives

***Food workers are expected to know the following information***

The Person in Charge (PIC) will be knowledgeable of food sanitation rules and procedures within their establishment.

**Food Handler will be able to:**

1. Identify the correct techniques for handwashing.

2. Identify situations when food handlers must wash their hands.

3. Describe the five major mistakes that often cause foodborne illness.

4. Describe the activities performed by food handlers that prevent food borne illness from happening.

5. Identify potentially hazardous foods that support bacterial growth when held at temperatures in the danger zone.

6. Identify that food being cooled, cooked or reheated must move through the temperature danger zone as rapidly as possible.

7. Identify that cooking foods to the recommended temperatures will kill disease-causing germs.

8. Define and identify cross contamination as happening when microorganisms are transferred from one food or surface to another food.

9. Identify methods to prevent cross contamination such as washing, rinsing, and sanitizing utensils, work surfaces and equipment in-between uses.

10. Identify storage conditions that will minimize the potential for cross contamination.

**Food Handler will know:**

1. That the manager is responsible for training and ensuring that food handlers practice activities that prevent food borne illness

 2. That food borne illness is caused by organisms (germs), chemicals, or toxins.

Supervision

Someone at your restaurant must be in charge during all hours of operation. The person in charge (PIC) is responsible for knowing the food sanitation rules and procedures within your establishment. This person is responsible for providing staff with information needed to perform their job.

The PIC is usually an owner, manager or supervisor, but can be anyone who can demonstrate the knowledge listed above, and is given the authority to oversee other employees.

**Person in Charge should ensure the following:**

The operation is not being conducted in a private home or in a room used as living or sleeping quarters;

* + - * Customers and other unnecessary persons to the foodservice operation are not in the food preparation, food storage or ware washing areas;

Employees are routinely washing their hands; ![MC900250740[1]]()

* + - * All deliveries are monitored and evaluated

![MC900351636[1]]()

;

Daily oversight of employees’ routine monitoring of the cooking temperatures, using appropriate temperature measuring devices and are properly handling raw animal product and ready to eat foods;

* + - * All employees are properly trained in food safety as it relates to their assigned duties.

**Food personal hygiene practices are an essential part of providing safe food to customers.**

 **Handwashing facilities must be accessible and properly working at all times.**

**A Handwashing facility may not be used for purposes other than handwashing.**

 **Among these hygiene practices, the most important is hand washing.**

**You must be aware of what your hands are touching at all times. You should recognize when your hands become contaminated and wash them to keep from passing the contamination on to the food you are preparing and serving**

**Hand-Washing Procedure**

 **![MC900371340[1]]()**

* First, moisten hands with hot water and apply hand soap.
* Second, vigorously rub hands together scrubbing between your fingers, under your fingernails, your forearms, and the back of your hands.
* Continue scrubbing for at least 20 seconds. It is the hand soap combined with the scrubbing action that removes the dirt and germs from your hands
* Third: completely rinse your hands under running water and dry them with a disposable paper towel.

**You must wash your hands:**

* When you first arrive at work;
* Prior to handling food, utensils, and single service articles;
* Before putting on gloves to handle ready-to-eat foods and between glove
changes.
* Before and after handling or touching any raw foods such as raw meats,
chicken, and eggs.
* After using the bathroom;
* After touching any part of your body or uniform;
* After handling dirty equipment, dishes or utensils;
* After taking a break;

After any other activity that may contaminate your hands such as washing dishes, sweeping the floor, taking out the trash, eating or drinking, coughing, or sneezing.

You must wash your hands in an approved, designated hand sink. Sinks used to wash dishes or prepare food are not approved for hand washing. The hand wash sink must always be accessible and have an adequate supply of hot water, hand soap, and paper towels.

* If you work with food, you must always be clean and in good health; you should bathe daily and wear clean clothes.
* You must never go to work if you are sick, especially if you have symptoms of diarrhea, vomiting, fever, or if you have any discharge from your nose or eyes. You should notify your supervisor when you are sick and certain illnesses will require you to stay home until your doctor has cleared you.
* You must have fingernails that are cut and maintained and should not have painted or fake fingernails.
* All jewelry must be removed prior to handling food with the exception of a simple wedding band. While working with open food you must have an effective hair restraint, such as a hat or hair net.
* Finally, you must never eat or smoke in food preparation or food storage areas.

**Direct bare hand contact with ready-to-eat foods is prohibited.**

Ready-to-eat foods are those that will not be subjected to further cooking or heating to destroy bacteria; these may include, sandwiches, cut fruit, bread, tortillas, salads, or any cooked food. In order to handle ready-to-eat foods, you can use utensils, tongs, scoops, or wax paper. In situations where it becomes necessary to touch the food with your hands, you must always wear disposable, non-latex gloves.

Even though you may use gloves to handle food with your hands, you must always wash your hands prior to putting on the gloves and change the gloves when they become contaminated, as in all of the situations previously mentioned.

**You must wash your hands each time you change your gloves or contaminate the gloves.**

1. **What are the steps of hand washing?**

 **A. Apply soap to your hands, rub your hands together for 20 seconds, rinse your hands, dry you hands with a disposable paper towel, and turn off the faucet with the same paper towel used to dry your hands.**

 **B. Apply soap to your hands, rub your hands together for 1 minute, rinse your hands, and dry you hands with a clean cloth.**

 **C. Rinse your hands under hot water for 20 seconds, dry your hands with a disposable paper towel, and turn off the faucet with the same paper towel.**

 **D. Immerse your hands in a solution of water and chlorine for at least 30 seconds and dry your hands with a disposable paper towel.**

**2. When must you wash your hands?**

**A. At least every 30 minutes.**

**B. When your supervisor tells you.**

**C. When customers can see your hands.**

**D. Each time your hands become contaminated.**

**3. Where must you wash your hands?**

1. **In any sink that is free and accessible.**
2. **Only in an authorized and designated hand wash sink.**
3. **In the authorized hand sink or in the dish wash sink if the hand sink is not working or available.**
4. **In the sanitizer bucket.**

**4. What should you do if the gloves you are using to handle food become contaminated?**

**A. Remove the gloves, store them in a clean place, wash your hands, and put the gloves back on.**

**B. Remove the gloves, throw the gloves away, and put on new gloves.**

**C. Remove the gloves, throw the gloves away, wash your hands, and put on new gloves.**

**D. Remove the gloves, handle the food with your bare hands but only if they are clean, and put the gloves back on when you have time.**

**5. Where or when can you smoke and eat in the establishment?**

**A. You can smoke and eat in any area of the establishment but only when the food is covered and stored.**

**B. You can never smoke or eat in the kitchen or in areas where food is prepared or stored.**

**C. You can eat in the kitchen but not smoke.**

**D. You can eat in the kitchen but only during a break or lunch.**

**6. Are you allowed to work if you have a contagious illness?**

**A. Yes.**

**B. It depends on the type of contagious illness you have.**

**C. Never.**

**D. If no one can tell you are sick.**

**(1) A; (2) D; (3) B; (4) C; (5) B; (6) C**

Cleaning and Sanitizing

Ensuring that the kitchen is scrupulously clean is vital to food safety. You should recognize that even surfaces that appear clean might still have harmful germs that you cannot see. Only by cleaning and sanitizing equipment, dishes, and surfaces that come into direct contact with food, can we eliminate and destroy these invisible germs. Food contact surfaces must be light colored, durable, smooth, corrosion-resistant, resistant against pitting, chipping, scratching, and non-absorbent.

There is a difference between washing and sanitizing. Washing removes visible soil and contamination and sanitizing kills and reduces the number of harmful bacteria that you cannot see. You are required to both wash and sanitize every surface that comes into contact with food to assure that they are completely free of any contamination.

Wiping cloths for cleaning and sanitizing must be available in every work area for equipment such as meat slicers, counters, food preparation tables, cutting boards, and utensils. Sponges cannot be used to clean or sanitize food contact surfaces or equipment. Always wash, rinse, and sanitizer these surfaces before and after they have come into contact with food. Also, because bacteria grow and multiply in moist environments, moist wiping cloths must be stored in a bucket of water and sanitizer when they are not in use. This sanitizing solution must be changed frequently; food debris uses up the sanitizer quickly.

It is important that the disinfectant be at the proper concentration to ensure that the germs are destroyed and that the solution is not dangerous. The only sure way to measure the concentration is with a paper test strip. The white paper test strips will change to medium blue if the chlorine is at the correct concentration-between 50 and 100 parts per million. If you use other types of disinfectants, such as quaternary ammonia or iodine, the appropriate test strips for these products must be used according the manufacturer's instructions.

The same principles of washing and rinsing apply when washing dishes by hand in a three-compartment sink.

Before starting you must clean each sink compartment and drain board. Then pre-scrape the dishes to remove the excess food.

**Now you can begin the three step process:**

1. In the first compartment, thoroughly wash the dishes with detergent and hot water.

2. In the second, rinse the dishes in clean hot water to remove the soap. (Mixing detergent with sanitizer can prevent the disinfectant from eliminating the germs)

3. The dishes must be sanitized in a solution of sanitizer and room temperature water. You must ensure that the sanitizer is at the adequate concentration by using the appropriate chemical test strips. The dishes should remain completely immersed in the solution for at least 30 seconds.

A test kit or other device that accurately measures the concentration (ppm) of the sanitizing solution must be available.

After cleaning and sanitizing it is necessary to let the dishes air dry on the dry board or rack. Once dry you should store them in a clean place where they protected from contamination.

#

# Sanitizing Concentrations

|  |  |  |
| --- | --- | --- |
| **Sanitizing** **Agent** | **Temperature** | **Concentration****(ppm)** |
|  | pH 10 or less | pH 8 or less |  |
| **Chlorine** | 120ºF | 120ºF | 25 |
|  | 100ºF | 75ºF | 50 |
|  | 550ºF | 550ºF | 100 |

|  |  |  |  |
| --- | --- | --- | --- |
| **Sanitizing Agent** | **Temperature** | **pH** | **Concentration** |
| **Iodine** | 75ºF | 5.0 | 12.5-25 |
| **Quaternary****Ammonium** | 75ºF | N/A | 100-200 |

**1. What are the steps for washing dishes by hand?**

**A. Scrape off the excess food, wash with soap and hot water, rinse with hot water, sanitize, and air dry**

**B. Scrape off the excess food, rinse with hot water, wash with soap and hot water, sanitize and air dry**

**C. Scrape off the excess food, wash with soap and hot water, sanitize, and air dry.**

**D. Scrape off the excess food, wash with soap and hot water, rinse with hot water, and air dry, and sanitize;**

**2. The chlorine in the solution used to sanitize food contact surfaces must be at what concentration?**

**A. You must use a capful of chlorine for every gallon of water.**

**B. The concentration of chlorine is not important.**

**C. The concentration must be between 50 and 100 parts per million, which can be measured with a paper test strip.**

**D. The concentration must be at 200 parts per million, which can be measured with a chlorine paper strip.**

**3. What is the difference between washing and sanitizing?**

**A. There is no difference.**

**B. Washing makes things look clean and sanitizing make them smell good.**

**C. Washing removes contamination and sanitizing whitens.**

**D. Washing removes contamination and sanitizing destroys microorganisms.**

**4. What are some of the critical food contact surfaces that must always be washed and sanitized?**

**A. Bathrooms, floors, and walls in the kitchen.**

**B. Break room, the surface of the griddle, and dining room tables.**

**C. Cutting boards, knives, utensils, and equipment.**

**D. Floor of the service area, the outside of equipment and display cases, and counters.**

**(1) A; (2) C; (3) D; (4) C**

Cross Contamination and Food Storage

Cross-contamination occurs when harmful germs from raw foods or contaminated surfaces are passed onto the food.

**This transfer of germs may occur in any of the following situations:**

**When hands that have touched raw food touch**

 **foods that are ready to eat.**

**When raw or contaminated food touch foods that**

 **are ready to eat.**

**When a ready to eat food comes into contact with surfaces that were not properly washed and sanitized after having been in contact with a raw food. Food contact surfaces include cutting boards, knives, utensils, and
food preparation tables.**

**When dirty wiping cloths or wiping cloths contaminated with raw foods are used on surfaces that come into contact with ready to eat foods.**

You can prevent cross-contamination by washing and sanitizing every utensil, cutting board, food preparation table, and work area before and after coming in contact with food. Use the cleaning methods previously mentioned and adequately wash your hands, especially after handling raw foods.

In addition, always store raw meats, eggs, poultry, and fish in containers on the lowest shelves of the refrigerator. This will prevent the raw products from leaking or falling onto foods that are ready to eat.

Finally, all foods must be stored at least six inches above the floor at all times.

Food cannot be stored under water or sewer lines.

**1. How must raw animal foods be stored in the refrigerator?**

**A. On the floor of the walk-in cooler away from other foods**

**B. In containers stored on the lowest shelves of the refrigerator.**

**C. Raw shell eggs can be stored with cooked food and the other raw products on the lowest shelves.**

**D. All food products that are going to be cooked or reheated and raw foods can be stored together in the walk-in cooler.**

**2. What must you use to sanitize equipment, tables, and other work surfaces that come into direct contact with the food?**

**A. It is not necessary to sanitize things that cannot be completely submerged in the dish sink compartments.**

**B. You must use a wiping cloth that has been soaked in a solution of water and an approved sanitizer.**

**C. You must use a wiping cloth that has been soaked in a solution of water, soap, and chlorine.**

**D. You must use a wiping cloth with chlorine but only at the end of the workday when all of the food is put away.**

1(B)2(C)

Food Storage limits

Foods should always be used in the same order in which they were received.

All arriving food products should be marked with a date so you know which inventory to use first.

In addition, any ready-to-eat potentially hazardous food (see definition below) must be marked with a discard date at the time of opening or preparation.

The discard date must be 7 days after the food was prepared or opened, if the food has been refrigerated at 41° F or less. (4 days if refrigerated at 45° F). Do not reuse food containers once emptied.

.**For how long can a ready-to-eat potentially hazardous food be stored in the refrigerator once it has been opened or prepared?**

**A. For seven days if the food has been maintained below 41° the entire time.**

**B. For seven days but only if the food tastes, smells or looks bad.**

**C. For 14 days if the food has been held below 32° F the entire time.**

**D. If you follow the rule to use foods in the same order they were received, the food can be stored for an indefinite amount of time.**

# (A)

# Approved Food

**Any foods served in your establishment must come from an approved source. Homemade food cannot be used or offered for human consumption in a food establishment. All packaged food must carry a label or seal on the packaging that indicates the name of the processor or distributor, the name of the food, and the ingredients.**

**All foods arriving at your workplace must be free of spoilage. Canned foods must have an intact seal and be discarded if swollen. Potentially hazardous foods should be rejected if they arrive at an unsafe temperature. Packaged foods should be rejected or discarded if they arrive damaged.**

**1. Which of the following foods would be approved for use in your establishment?**

**A. Any homemade food.**

**B. Potentially hazardous foods that arrive at your establishment at room temperature.**

**C. Any food that is from an approved source, properly labeled, and in proper condition.**

**D. Any meat product that is packaged and labeled but does not have a valid mark of inspection.**

(C)

Toxic Chemicals and Pest Control

**All chemicals, lotions, detergents, medicines, sanitizers, and cleaners must be stored away from food, utensils, and food preparation areas. Any chemical product that is not in its original container must be clearly labeled as to its contents.**

For example, when you transfer a chemical from its original container to a spray bottle, the spray bottle must now be labeled with the name of the chemical.

**Pesticides and pesticide equipment cannot be present or stored in a food establishment.**

**Applying any pesticide is strictly prohibited unless it is done by a professional, licensed pest control applicator.**

**Pesticides should only be used as a last resort, after every available preventive measure has been taken.**

 **The best way to control cockroaches, mice, flies and other pests is to keep the establishment and garbage areas clean, and to eliminate hiding places.**

**1. What is the best way to get rid of roaches?**

**A. Use a powder pesticide instead of a spray.**

**B. Leave the lights on all time, even when the business is closed.**

**C. Seal areas where the roaches can hide and keep the establishment clean.**

**D. Smash them with your foot or a heavy object.**

**2. Where must you store chemicals such as cleaner and sanitizers?**

**A. At least 6 inches above the floor.**

**B. With equipment and clean utensils.**

**C. Away from any food or clean equipment and utensils.**

**D. On the shelf above food and utensils.**

1(c) 2(c)

Water & Plumbing

**Drinking Water** Must be obtained from an approved source. Public water is sampled by city municipality. Private water will be sampled by the Health Department at each inspection.

**Plumbing System** Must be in good repair. There should be no leaky pipes or faucets. Turning the water off at the shut-off valve does not save money.

**Air Gap/Backflow** An air gap must be installed between the water supply inlet and the flood level rim of the plumbing fixture, equipment, or non-food equipment. If there is not an air gap, a backflow or back-siphonage prevention device must be installed. A backflow prevention device must be located so that it can be easily cleaned and maintained. Common locations of air gaps and/or backflow devices include, but not limited to: ware washing sinks, preparation sinks, ice machines and soda machines.

**.**

**Mop Sink** At least one service sink or one curbed cleaning facility equipped with a floor drain must be provided and conveniently located for the cleaning of mops or similar wet floor cleaning tools and for the disposal of mop water and similar liquid waste. Just remember, not everything can go down the drain. Read the labels on how to dispose of the product.

**Grease Traps** Filters or other grease extracting equipment shall be designed to be readily removable for cleaning and replacement if not designed to be cleaned in place. Do not place heavy equipment over the lid so that it can be easily accessed for cleaning and inspection. Check with your local health department to see if there are any local requirements for documenting and recording of grease trap cleanings.

Waste

**Outdoor Storage** An outdoor storage surface for refuse, recyclables and returnable’s shall be constructed of nonabsorbent material such as concrete or asphalt and shall be smooth, durable and sloped to drain. The enclosure must also be constructed of durable and cleanable materials. Storage areas must be kept clean and free of any unnecessary debris.

**Receptacles** Receptacles and waste handling units for refuse, recyclables and returnable’s and for use with materials containing food residue must be durable, cleanable, insect-resistant, rodent-resistant, leak proof, and nonabsorbent. There must be tight-fitting lids, doors or covers on the receptacles. The lids, doors or covers must be closed at all times. Drains in receptacles and waste handling units for refuse, recyclables and returnable’s must have drain plugs in place.

**Compactors** On-site compactors must be installed so that accumulation of debris and insects and rodents are not attracted or harboring in and around the location.

**Removal** Refuse, recyclables and returnable’s must be removed from the premises at a frequency that will minimize the development of odors and other conditions that attract or harbor insects and rodents.

 Food Temperatures

Cooking the food to the proper temperature is the best way to destroy harmful germs that may be present in foods. Most types of germs are killed through cooking. The cooking temperatures may vary depending on the type of food.

It is extremely important that you use a metal stem thermometer to check the temperature of the food you are cooking. To correctly measure the temperature you must insert the thermometer into the thickest part of the food that is cooking. The thermometers must be washed and sanitized before coming into contact with the food and between uses, to prevent contamination.

**TEMPERATURE**

*(Degrees F)*

165 155 155

**TYPE OF FOOD**

**POULTRY GROUND**

**BEEF**

**EGGS** *(THAT ARE* NOT 155

*FOR IMMEDIATE*

*SERVICE)*

**NON-GROUND MEATS** 155

**SEAFOOD** 145

**EGGS**

*(THAT ARE FOR* 145
*IMMEDIATE SERVICE)*

**EXAMPLE**

Chicken, turkey, chicken patties hamburgers, meat loaf, sausage

Custard, scrambled eggs on a buffet line

Steak, roasts, pork chops, corned beef fish filet, shrimp, mussels

Eggs over easy, scrambled eggs to order

Any food cooked in a microwave oven must be cooked to 165° F, stirred at least once during cooking, and then left to stand covered for a minimum of two minutes prior to serving.

Once the food has been cooked to the appropriate temperature, the food must be kept free from contamination. In the same manner, all ready to eat foods should be protected from contamination because they will be consumed without further cooking.

**The Temperature Danger Zone**

Potentially hazardous food (or food that can support the growth harmful bacteria) must be maintained above 130° F or less than 41° F at all times. This means that food that is held cold in a refrigerator should be below 41° F and cooked food that is being held hot must be held above 130°. Harmful bacteria grow and multiply very quickly between 41° and 130°. The range of temperatures between 41° and 130° is called the temperature danger zone. Whenever possible, you must avoid having foods in the temperature danger zone. Likewise, all potentially hazardous foods should spend as little time as possible in the temperature danger zone during preparation, reheating, and cooling.

***Reheating***

Food must be reheated to a temperature of at least 165° F. Reheating must be rapid. Cold foods placed into a steam table will not reheat quickly enough. Instead use a microwave, stovetop, or oven to heat the food before placing it in the steam table. A food should only be reheated once.

***Cooling***

Cooling is usually the riskiest step in food preparation. If the food is not cooled properly the food can remain in the temperature danger zone too long. It can be very difficult to cool food quickly and most refrigeration units are not designed or capable of this. Therefore, you should avoid cooling whenever possible. You should prepare foods daily by cooking and holding hot only the food that will be served during that day.

Nevertheless, the cooling of some foods is unavoidable and you must know the proper way to cool foods quickly. Cooling foods rapidly can be achieved using one or more of the following methods, based on the type of food that is to be cooled:

* Separate the food into smaller portions or thinner portions and place them
in shallow containers;
* Stir the food while the container is submerged in a water and ice bath;
* Use metal containers to allow easier heat transfer
* Add ice as an ingredient;
* Use equipment designed for quick cooling of foods;
* Leave the food partially covered or uncovered. (If it is protected from
contamination)

***Thawing***

Foods must never be left to thaw at room temperature. At room temperature the outer part of the food will thaw quickly and may remain in the temperature danger zone for too long while the center of the food continues thawing. The safest way to thaw food is inside a refrigerator. Inside the refrigerator the temperature of the food will always remain below 41° F, out of the temperature danger zone. When you thaw raw products, place them in a container and store the container on the lowest shelf in the refrigerator to prevent contamination of the other foods. You may also thaw foods under cold running water or in a microwave if it is part of the cooking process.



**Thermometers**

Any refrigeration equipment you use must be equipped with a thermometer. Use a metal stem thermometer to check foods you are cooking, holding hot or cold, or cooling. Thermometers must be cleaned and sanitized prior to being inserted into the food and between uses to prevent contamination of the food.

1. Hot, cooked potentially hazardous food must be maintained above what temperature?

A. Above 130° F at all times.

B. Between 41° F and 130° F at all times.

C. Above 41° F at all times.

D. At any temperature if the food is already completely cooked.

2. Cold potentially ha2ardous food must be maintained at what temperature?

A. Below 41° F at all times.

B. Between 41° F and 130° F at all times.

C. Above 41°F at all times.

D. At any temperature if the food is packaged and from an approved processor.

3. Why must potentially hazardous food be kept out of the temperature danger zone?

A. To prevent altering the smell and color of the food.

B. To prevent the bacteria from growing and multiplying.

C. To prevent frozen foods from thawing.

D. Because customers like to eat foods that are either very hot or very cold.

4. Raw chicken must be cooked to what temperature?

A. Greater than 130° F.

B. Greater than 145" F.

C. Greater than 155° F.

D. Greater than 165° F

5. What is the proper procedure for cooling food?

A. Leave the food at room temperature for 2 hours and then store it in the walk-in cooler.

B. Always cool the food in the same container in which it was cooked.

C. The methods you use to cool the food are not important so long as the food is reheated to above 165° F.

D. The food should be cooled in uncovered, shallow containers inside the walk-in cooler.

6. What is the correct procedure for reheating food?

A. You should quickly reheat the food to a minimum temperature of 165° F before placing it in the steam
table.

B. First the food must reach room temperature and then it can be reheated to 165° F within 2 hours.

C. If the food is going to be held hot in a steam table, it can be reheated to any temperature.

D. Reheating procedures are not important as long as the food is handled properly before hand.

7. What is the correct procedure for thawing food?

A. At room temperature.

B. In a hot water bath.

C. Inside a refrigerator or under cold running water.

D. At room temperature if the food is in its original packaging.

(1) A; (2) A; (3) B; (4) D; (5) D; (6) A; (7) C

**Emergencies**

You should know how to respond to emergency situations. If a sewer or waste system backs up in the drains, or if the water supply is cut off or damaged, you should notify the manager and close the business right away. You should also close the business if there is an extended power or hot water outage.

If a piece of equipment that you rely on to keep foods hot or cold fails, you must think and act quickly. If possible, shift food into an alternate refrigerator or warming unit. If you are unsure how long a refrigerator or freezer has been malfunctioning, take the temperature of foods inside the unit using a metal stem thermometer. If the food is above 45 degrees, discard it. If frozen food has thawed, do not refreeze it, and discard it if the temperature exceeds 45 degrees.

If you are unsure how to respond to an emergency, you should call the health department for advice. The operator or person in charge must immediately take necessary action and notify the health department if an imminent health hazard may exist because of an emergency such as fire, flood, extended power outage, sewage back-up, misuse of toxic materials or poisons, onset of foodborne illness outbreak, or any condition or circumstance which may endanger public health.

**Legal Authority**

All retail food establishments in McDonald County must operate in compliance with current Missouri Food Code and McDonald County Food Service Sanitation Ordinance

The Health Department may forbid the sale or use of any food or drink, which is, or is suspected of being, unwholesome, adulterated or contaminated.

**Inspections** The health department can inspect every retail food establishment as often as it deems necessary. The person operating a retail food establishment shall permit access by representatives of the health department.

**Records** Upon request, the health department must be permitted to examine the health and sanitary records of a retail food establishment to obtain information pertaining to food and supplies, purchases, received or used and persons employed.

**Sampling** The health department may take and examine samples of food, drink and other substances as often as it deems necessary for the detection of unwholesomeness, adulteration or contamination.

**Emergency**

**Occurrences** The operator or person in charge must immediately take necessary action and notify the health department if an imminent health hazard may exist because of an emergency such as a fire, flood, extended interruption of electrical or water service, sewage backup, misuse of poisonous or toxic materials, onset of an apparent foodborne illness outbreak, gross unsanitary occurrence or condition or other circumstance that may endanger public health.

**Closure for**

**Infection** The health department may close a retail food establishment if it is

 suspect to be a source of foodborne infection.