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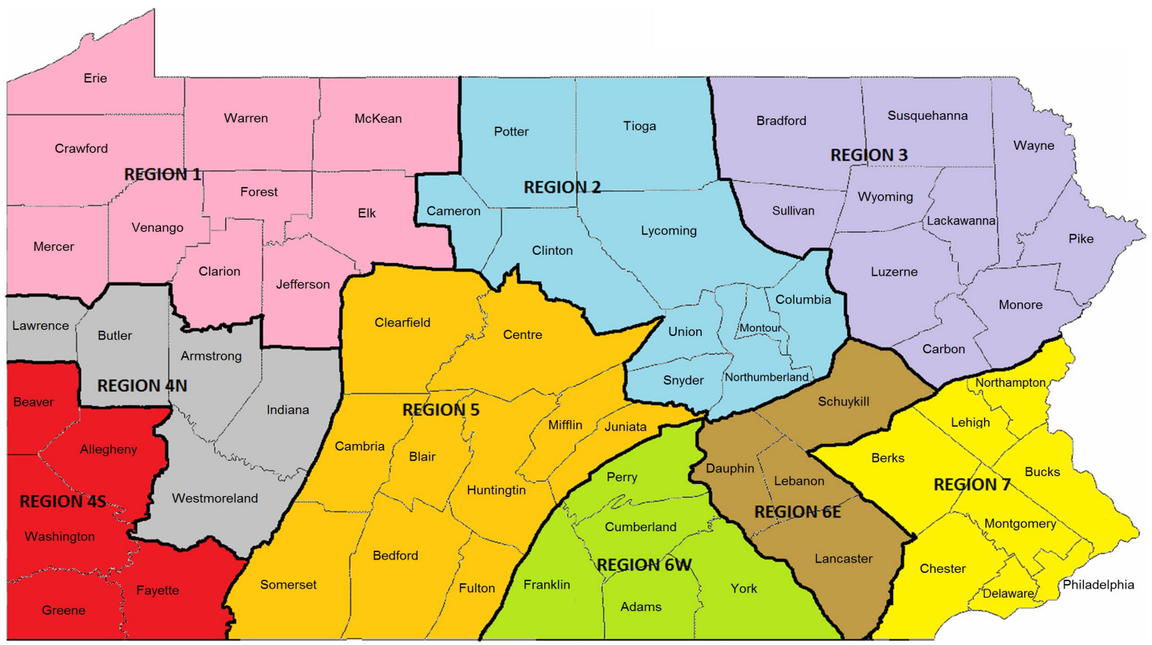
How to Obtain

This Valuable Training



Scheduled training sessions will be set up at different locations across the Commonwealth. Information on the training schedule may be obtained several ways: Through the Pennsylvania Department of Agriculture's Bureau of Food Safety Web site at www.agriculture.pa.gov/eatsafe, by contacting the Harrisburg central office at 717-787-4315, or by contacting a regional office in your area listed below. You can also check your local newspaper for advertisements of the training.

REGION 1 – 814-332-6890

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pennsylvania
DEPARTMENT OF AGRICULTURE

Food Safety

Is Everybody's Business

A Certification Course

For Non-Profit Organizations

Pennsylvania Department of Agriculture
Bureau of Food Safety and Laboratory Services

817937-BookCovers.qxp 10/18/19 Page 2

Food Safety is Everybody's Business

Chapter 1
Why Risk It? 1

Chapter 2
Is Foodborne illness preventable? 5

Chapter 3
Planning for a Safe Event 14

Chapter 4
Safe Purchasing, Storage, Preparation and Service for a Crowd 17

Chapter 5
Planning Successful Fundraising Events 29

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Pennsylvania Department of Agriculture
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Chapter 1

Why Risk It?

Non-profit food fundraisers are an excellent way to socialize with family and friends while earning money for organizational activities. Whether it's a chicken barbecue, church dinner, or a hot dog sale at the little league game, food fundraisers have several things in common:

- Preparation of food for the public
- Financial gain for the organization
- Community support
- Pride in the preparation of great tasting food

Why Do You Need To Know About Food Safety?

Whether you have volunteered at one food fundraising event or have been volunteering for years, there are several things you must keep in mind to have a safe and successful event:

Foodborne Illness Does Occur:

- Foodborne illness happens when a person becomes ill from eating food that contains a biological, chemical, or physical hazard. A foodborne outbreak occurs when two or more people experience the same illness after eating the same food.
- According to the Pennsylvania Department of Health, from 1990-2000, over 1700 people became ill from food purchased at Pennsylvania non-profit food fundraisers.
- Unfortunately, foodborne illness is under-reported. The Centers for Disease Control and Prevention estimates that foodborne diseases cause approximately 48 million illnesses, 128,000 hospitalizations, and 3,000 deaths in the United States each year.

Food fundraisers are not like cooking at home:

- There is a lot to think about when preparing for a food fundraiser. You will face different problems when preparing large quantities of food than when preparing food for you and your family at home. Some things to think about:
  - The menu: When planning a menu you must be aware of the following types of foods:
    - Time/Temperature Control for Safety (TCS) Foods are foods that allow disease-causing bacteria to grow. Usually TCS foods are moist, high in protein, and have a neutral or slightly acidic pH.

Examples of TCS foods include meats, poultry, dairy foods, fish, shellfish, eggs, tofu, sliced melons, sprouts and raw seeds, baked or boiled potatoes, soy-protein foods, and cooked rice or beans.

- Ready-to-Eat (RTE) Foods are foods that are served without any further cooking or washing. If RTE foods are purchased from a vendor and then resold at a food fundraiser, care must be taken to avoid cross-contamination. An example of a RTE food is washed lettuce to be used in a salad.

- Recipes for large groups,
- Sufficient equipment and space,
- Preventing cross-contamination. Cross-Contamination occurs when microorganisms that cause foodborne illness are transferred from one surface to another, possibly contaminating otherwise safe food.
- The service style appropriate for the occasion and location

Don't let your next food fundraiser become part of a foodborne illness statistic.

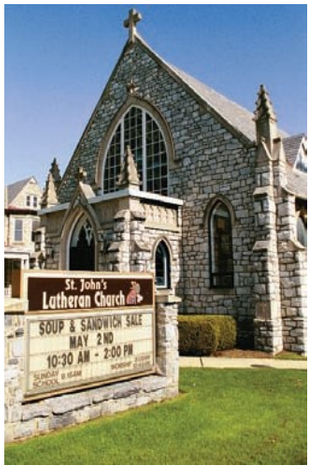
A lot has changed in the past 25 years:

- Many years ago, most food was grown, harvested processed, and sold all in the same area. Today, the food that you eat may be grown and processed thousands of miles from where you live. A lot can happen to food during production, processing, distribution, and preparation. Realize that foods, especially raw foods, may be contaminated before you purchase them (See figure 1.1). Proper handling assures that hazards are removed or destroyed.
- Today nearly fifty percent of the money we spend on food goes to buy food that other people prepare-such as "carry out" and restaurant meals. When preparing foods for others, extreme care must be taken to reduce the risk of foodborne illness for susceptible populations. Susceptible populations include people that are at a higher risk for illness and even death from foods contaminated with harmful micro-organisms. Susceptible populations include the very young, seniors over the age of 65, pregnant women, and those with chronic illness or weakened immune systems.

- Science has made many new discoveries in the past decades in the area of food safety. In the past, many cases of foodborne illness went undiagnosed. Today we know more about food-borne illness and the hazards, such as bacteria, that cause it. We have even discovered new diseases caused by contaminated food. The good news is that since we have identified new information about foodborne illness, we also have discovered easy ways to prevent illnesses related to food.

The costs to your organization are great:

- Costs of foodborne illness to your organization may be financial, medical, or legal. Before having another food fundraiser, consider the following:
  - Whose responsibility is it if someone gets sick?
  - How will your organization assume the financial responsibility if a person sues?
  - What other financial resources does your organization have, if profits from food fundraisers stop due to a foodborne outbreak?
  - How will your organization handle the loss of reputation that accompanies a foodborne outbreak?



Protection of your customer's health is your legal responsibility:

- When serving food to the public, it is your responsibility to assure the food you are serving is safe. Before running your next food fundraiser, contact your local health department or the Pennsylvania Department of Agriculture to determine if there are any licenses your organization needs and find out what materials are available on safely handling food. Your county's Penn State Cooperative Extension office is also a source of free or inexpensive food safety training and information for your organization's volunteer workers.
- If a foodborne illness occurs, is your organization prepared financially to deal with the consequences? Check out your organization's insurance policy to see if it covers lawsuits that may occur as a result of a foodborne outbreak.

Don't Risk the Success of Your Food Fundraiser

In the next few chapters, you will learn about the causes of foodborne illness and how to prevent them.

The goal of this course is to:

- Provide the reasons why food safety is important to your event
- Show practical ways to purchase, prepare, and serve foods safely
- Encourage you to share this information with others in your organization

You and your organization have so much to gain from a successful food fundraiser. Don't let food-borne illness ruin your organization's financial stability or good reputation. Follow the information in this guide to make your next food fundraiser enjoyable and safe.

Figure 1.1: The Food System

Have you ever wondered where the food you prepare and serve comes from? Food travels along the food system before it is ever eaten. The food system can be thought of in stages, with everyone having responsibilities for safe food handling:

- Production: This stage includes the growth and harvest of animals, fruits and vegetables, or grains.
- Processing: Processing includes a variety of activities after the food is harvested. These activities are usually performed at processing facilities and may include washing, sanitizing, cutting, grinding, and cooking. Processing can be minimal in the case of washing fruits and vegetables or very intense in the case of a frozen dinner.
- Distribution: Distribution may be at the local, regional, state, national, or international level. The food you eat may be grown and processed thousands of miles from where you live.
- Foodservice / Retail: Food is distributed to either a grocery store or some type of foodservice establishment. The food is handled and prepared at the foodservice establishment so that it is ready for consumers to eat. The food fundraisers provided by churches, civic organizations, and booster clubs fall into the category of foodservice.
- Consumer: At the end of the food system there is the consumer. The consumer may be a healthy adult or part of a highly susceptible population.

Chapter 2

Is foodborne illness preventable?

Absolutely YES! Let's take a look at what causes foodborne illness and how it can be prevented.

Foodborne illness occurs when a person becomes ill from eating a food that contains a biological, chemical, or physical hazard. Some examples of each hazard are listed in Table 2.1.

Table 2.1: Biological, Chemical, and Physical Hazards that Cause Foodborne Illness

Chemical Hazards	Physical Hazards	Biological Hazards
Detergents	Pests	Bacteria
Sanitizers	Glass	Viruses
Pesticides	Plastic	Parasites
Naturally occurring fish or plant toxins	Toothpick	Fungi
	Metal	

Chemical Hazards:

In order for a chemical hazard to cause foodborne illness, the chemical must first get into the food. To prevent the chemical contamination of food:

- Keep all chemicals in their original containers (cleaners, sanitizers, pesticides).
- Label all chemicals and store them as far away from food as possible.
- Do not spray or apply pesticides in the food storage or preparation areas. If pests are a problem, hire a certified pest control operator to take care of the issue.

- Some fish and plants contain naturally occurring poisons called toxins. Cooking does not destroy these toxins.
  - Do not use wild mushrooms. The mushrooms may contain toxins that could cause death if eaten.
  - Purchase fish and shellfish from approved vendors. Some species will produce toxins if they are held at improper temperatures. If the fish or shellfish looks spoiled or temperature abused in any way, do not accept it.

Physical Hazards:

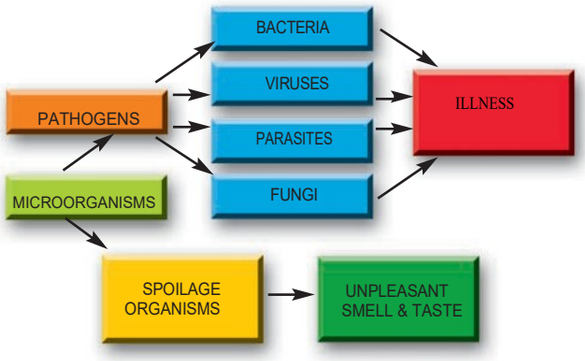
- Keep all food storage and preparation areas free of rodents and insects. Once pests have access to the kitchen, dead insects, rodent hair, and rodent feces may get into the food.
- Food handlers should limit the amount of jewelry worn so these items cannot get in the food.
- Keep can opener blades sharp to avoid causing metal shavings in food.

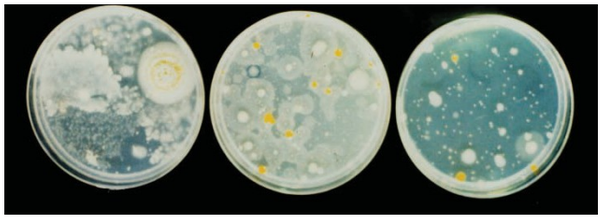
Biological Hazards:

Because 95% of foodborne illness is due to biological hazards, identifying and preventing biological hazards associated with food is key in preventing foodborne illness.

Microorganisms are biological hazards. Some microorganisms cause foodborne illness and are called pathogens. Other microorganisms may cause food spoilage and are called spoilage organisms. (See Figure 2.1)

Figure 2.1: Microorganisms in food that cause spoilage or illness





A person cannot see, smell, or taste pathogenic microorganisms, but can become very ill from them. Spoilage microorganisms on the other hand, make food taste or look unappetizing but will not make a person ill. It is possible that food may contain both spoilage and pathogenic microorganisms.

There are many different types of microorganisms and each act differently in food (see Table 2.2).

- Bacteria: Bacteria are found on raw food or they are added through the handling of food. If food is mishandled, any bacteria present will grow and multiply.
- Spores: Some bacteria produce bacterial spores. Spores may be thought of as bacteria that have a protective coating and do not grow in food but could produce toxins. Cooking does not destroy spores. In many cases the heat allows the bacterial spore to become a bacterial cell that will grow if the conditions are right.
- Toxins: Several foodborne bacteria produce bacterial toxins. Toxin production occurs when bacteria are allowed to grow to high numbers (usually between 1-10 million cells). Cooking does not destroy the majority of bacterial toxins.
- Viruses: Viruses need a living host to grow and therefore cannot grow in food. Viruses are destroyed by cooking.
- Parasites: Parasites are single-celled animals. Because parasites need a living host to grow, they cannot reproduce in food. Proper cooking or freezing destroys parasites.
- Fungi: Fungi include mold and yeasts and act as spoilage microorganisms in food.
  - Mold: Most people are familiar with mold in the form of moldy cheese or moldy bread. Molds grow under almost any condition. Molds may produce spores, but unlike bacterial spores, mold spores can be destroyed by heat. Mold cells have the ability to produce mold toxins. Mold may cause illness in certain people. It is possible to see a colony of mold but mold toxins are not visible.

    Because moldy food may have mold toxins present it is best to throw out spoiled or moldy food. An exception to this rule is if the mold is a natural part of the food such as in blue cheese, Gorgonzola, Brie, and Camembert.

- Yeast: Although yeasts spoil food, they also provide us with some favorite foods including bread and malted beverages. Like molds, yeast can grow in extreme conditions. Yeast especially likes to grow in jams, jellies and honey. Signs of yeast spoilage may include pink discoloration, sliminess, or an alcohol smell. Foods spoiled by yeast should be thrown out.

How many microorganisms does it take to make a person ill?

The number of organisms that causes illness is known as the infective dose. The infective dose depends on the health of the person and the organism. It may take 1-10 million bacterial cells to cause illness in a healthy adult, but only 10-100 bacterial cells to make a susceptible person sick. There are some foodborne pathogens that can cause illness in a healthy adult with an infective dose as low as 10 cells or units. In the case of parasites, it may take only one to cause illness. The important thing to remember is it is much more desirable to keep the pathogens out than to have to deal with them once they are in the food.

How long does it take before a person sees symptoms of foodborne illness?

A person does not always get sick immediately after eating contaminated food. The time it takes for a person to see symptoms of illness is known as the incubation period. Like infectivity, the incubation period depends on the health of the person as well as the type of organism ingested. Microorganisms cause illness in one of 3 ways:

- Infection: The microorganisms grow to a high level in the food ➞ the microorganisms are Ingested ➞ the microorganisms travels through the mouth and stomach ➞ the microorganisms infect the intestines, causing illness in 8-36 hours after consuming the food. Symptoms for Hepatitis A may take up to 50 days to develop! The main symptoms of foodborne infections are fever, diarrhea, bloating, and cramping. Other symptoms may include vomiting, headache, and dizziness. See Table 2.2 for examples of foodborne pathogens that cause foodborne infections.
- Intoxication: The microorganisms grow to a high level in the food ➞ the microorganism produces toxin in the food ➞ the toxin is ingested ➞ the toxin causes illness within 0.5 - 6 hours after consuming the food. The main symptoms of foodborne intoxications are vomiting, nausea, and abdominal cramping. Some diarrhea may occur. Chemical intoxications may occur from eating certain types of fish, wild mushrooms, or food contaminated with heavy metals. See Table 2.2 for examples of foodborne intoxications.
- Toxico-infection: The microorganisms grow to a high level in the food ➞ the microorganisms are ingested ➞ the microorganisms travel through the mouth and stomach ➞ the microorganisms infect the intestines ➞ the microorganisms produce a toxin in the intestines, causing illness at a similar rate as an infection. Symptoms develop at a similar rate as infections. See Table 2.2 for examples of toxico-infections.

How do microorganisms get into the food?

As food travels along the stages of the food system, there are 2 ways in which food may become contaminated:

1. Prior to entering the non-profit kitchen
2. Inside the non-profit kitchen

Because it is impossible to see, smell, or taste pathogens, all strategies to prevent foodborne illness should be based around the following concepts:

Strategies for Preventing Foodborne Illness:

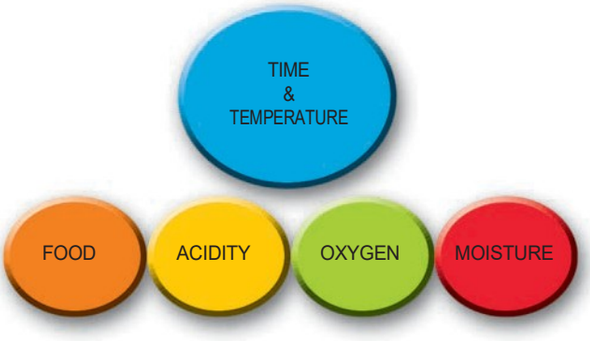
1. Make the assumption that all food entering the kitchen is contaminated and therefore must be handled properly throughout purchasing, storage, preparation, and service.
2. Even if there is no prior contamination (during production, processing, or distribution) foodborne illness could still occur (and does) because of infected food handlers using improper hygiene or through other means of cross-contamination.

Stopping Bacterial Growth

If food is contaminated before it ever enters a non-profit kitchen or is contaminated in the kitchen, is it possible to prevent foodborne illness?

ABSOLUTELY!

Figure 2.2: Factors that Affect Bacterial Growth



The first step to prevent foodborne illness is to prevent bacteria from growing in food. As the number of bacteria in the food increases, the risk of illness increases. Also as the number of bacteria increases, some bacteria may produce a toxin that can cause foodborne illness if eaten.

So how do you prevent the growth of bacteria? You must take away the things bacteria need to grow:

Food: Bacteria need food to grow. Foodborne pathogens find all of the nutrients they need for growth in many of the foods we enjoy. In fact, sometimes scientists use beef broth to grow bacteria in a lab! Just remember that the food you prepare and serve may be just as tasty to bacteria as it is to you.

Acidity: Acidity is the measure of the pH of a food. Bacteria need a pH of 4.6 or higher to grow. You can't know the exact pH of food just by tasting it, but here are a few examples:

Food	pH
Lemons	2.2 - 2.4
Tomatoes	4.2 - 4.9
Bread	5.3 - 5.8
Ham	5.9 - 6.1
Water	Neutral (7.0)
Egg white	7.0 - 9.0

Prevention Tips:

- Acidify foods if possible

Oxygen: Aerobic bacteria need oxygen to grow; anaerobic bacteria grow only in the absence of oxygen. Because cooking drives off oxygen, it may prevent aerobes from surviving and growing, but may create a perfect environment for anaerobes. Clostridium botulinum, the bacteria that causes botulism, is an anaerobe. Bacteria known as facultative aerobes can grow with or without oxygen.

Prevention Tips:

- Cook food thoroughly
- Hold hot foods at hot temperatures
- Chill leftovers quickly
- Handle vacuum packed meat and canned foods properly

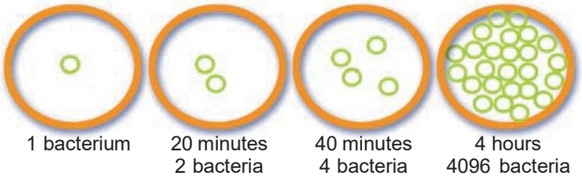
Moisture: The amount of water available to bacteria is known as water activity (a_w). Fluid milk and powdered milk are good examples of how water activity works. Bacteria will grow in milk, but cannot grow in powdered milk because it has such a low water activity.

Prevention Tips:

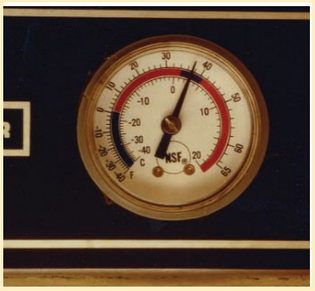
- Keep dry foods dry until they are ready to be used
- Keep equipment and utensils clean and dry
- Keep facilities dry and watch out for dripping pipes or leaky roofs
- Store foods in dry, non-humid areas

Time and Temperature: Bacteria need enough time and the right temperatures to grow. Bacteria grow well between the temperatures of 41 - 135°F. This is known as the temperature danger zone. Bacteria reproduce by doubling; meaning one cell becomes two cells. In some cases, bacteria double every 20 minutes. If left in the temperature danger zone, bacteria reach very high numbers in a short amount of time (See Figure 2.3).

Figure 2.3: Bacteria Growth



Although pathogens grow well in the temperature danger zone, the growth rate depends on both time and temperature. This means that at different temperatures, bacteria grow at different rates. At 95°F, it takes only hours for the number of bacteria to reach dangerous levels. At 50°F, dangerous population levels are reached in days. At 41°F it may take weeks to reach unsafe levels. The best way to prevent bacterial growth is to keep foods out of the temperature danger zone.



Prevention Tips: In a foodservice setting, the time-temperature relationship is the most critical factor for stopping bacterial growth. Although food, acidity, oxygen, and moisture are very important for the growth of bacteria, you have the most control over time and temperature. From the time the food comes under your organization's control until the food is served, follow these important guidelines to control the growth of bacteria:

Keep food out of the temperature danger zone:

- Food may spend no more than 4 hours in the temperature danger zone. The 4 hours includes the time it takes to purchase, properly store, prepare, and serve the food.

Store food at the proper temperatures:

- Refrigerate time / temperature control for safety foods as quickly as possible.
- Use thermometers to make sure refrigerators are working properly. If food is to be held at 41°F, set the refrigerator thermostat to 39°F.

Hold foods at the proper temperature:

- After preparation, hold food above 135°F or below 41°F.

Cool foods properly:

- Cool foods to below 70°F within 2 hours and to 41°F within an additional 4 hours

Purchase and use thermometers in your non-profit kitchen:

- The only way to tell if a food is in the temperature danger zone is to take the temperature of the food. Buy several thermometers and use them often to check that the food is at a safe temperature.

Strategies for Preventing Foodborne Illness: Preventing Cross-Contamination

As you have seen, microorganisms may be in the food you purchase or may be added in the kitchen. In order to protect the food that you will prepare and serve, follow these strategies to prevent cross-contamination:

Prevention Tips:

Prevent cross-contamination of microorganisms to food contact surfaces:

- Separate raw and cooked or ready-to-eat foods
- Keep all equipment and utensils properly cleaned and sanitized

Assure good personal hygiene:

- Wash hands before preparing food, after using the restroom, after eating or smoking, and before beginning each new task. In order to remove all microorganisms and dirt from hands, follow proper handwashing procedures:
  1. Rinse hands with warm water
  2. Apply soap and scrub for 20 seconds making sure to scrub all parts of the hands
  3. Rinse with warm water
  4. Use a single use towel (paper towels are excellent for drying hands)
- Store personal belongings such as coats, purses, and medicines away from food and food preparation areas
- Do not eat or smoke in food preparation areas

What Did You Learn?

Foodborne illness is preventable. In order to prevent foodborne illness, an understanding of what causes it is necessary.

- Biological, chemical, or physical hazards must be present in order for foodborne illness to occur.
- Microorganisms are biological hazards. Microorganisms may be pathogens or spoilage organisms.
- A person cannot see, smell or taste pathogens.
- Foodborne pathogens may be bacteria, viruses, parasites, or fungi.

The infective dose and the incubation period depend on the health of the person consuming the food as well as the type of microorganism ingested.

- The infective dose may be much lower for susceptible populations than for a healthy adult.
- There is a great misconception that as soon as a person eats contaminated food, he/she will get sick. This is not always the case.

Microorganisms cause illness in one of 3 ways:

- Infection: The microorganisms grow to a high level in the food ➞ the microorganisms are ingested ➞ the microorganisms travel through the mouth and stomach ➞ the microorganisms infect the intestines, causing illness in 8-36 hours after consuming the food.
- Intoxication: The microorganisms grow to a high level in the food ➞ the microorganisms produce toxin in the food ➞ the toxin is ingested ➞ the toxin causes illness within 0.5 - 6 hours after consuming the food.
- Toxico-infection: The microorganisms grow to a high level in the food ➞ the microorganisms are ingested ➞ the microorganisms travel through the mouth and stomach ➞ the microorganisms infect the intestines ➞ the microorganisms produce a toxin in the intestines, causing illness at a similar rate as an infection.

The food we consume travels through a complex food system. Foodborne pathogens may contaminate food during production, processing, distribution, or in a foodservice or retail establishment. Strategies to prevent foodborne illness should be based around the following concepts:

1. Make the assumption that all food entering the facility is contaminated and therefore, must be handled properly throughout purchasing, storage, preparation, and service.
2. Even if there was no prior contamination (during production, processing, or distribution) foodborne illness could still occur (and does) because of infected food handlers using improper hygiene or through other means of cross-contamination.

If food is contaminated before it ever enters a non-profit kitchen or may become contaminated within the non-profit kitchen, is prevention of foodborne illness possible? ABSOLUTELY! In order to prevent foodborne illness:

- Prevent Bacterial Growth:
  - Deny bacteria the food, acidity, oxygen, moisture, and time-temperature they need to grow.
  - In a foodservice setting, the time-temperature relationship is the most critical factor for stopping bacterial growth.
  - Use a thermometer to check food temperatures.
  - During purchasing, storage, preparation, holding, and service, minimize the time foods spend in the temperature danger zone.
- Prevent cross-contamination:
  - Prevent cross-contamination of microorganisms to food contact surfaces.
  - Assure good personal hygiene.

Table 2.2

Type of Microorganism	Does it Grow in Foods	Destroyed by Proper Cooking	Examples	Examples of Food Association	Preventative Strategies
Viruses	No	Yes	• Hepatitis A • Norovirus • Rotovirus	• Hepatitis A in shellfish • Norovirus in ready-to-eat foods • Rotovirus virus in ready-to-eat foods	• Cook foods to proper temperatures • Clean and sanitize equipment and utensils • Wash hands properly • Separate raw and cooked foods • Wash fruits and vegetables thoroughly • Purchase shellfish from approved vendors
Parasites	No	Yes	• Giardia duodenalis • Trichinella spirlis • Cryptosporidium parvum • Cyclospora cayetanesis	• Giardia in contaminated water • Trichinella in pork • Cryptosporidium in strawberries • Cyclospora in raspberries	• Cook foods to proper temperatures • Clean and sanitize equipment and utensils • Wash hands properly • Separate raw and cooked foods • Use only potable water
Mold	Yes (mold spore yes)	Yes (mold spore yes)	• Rhizopus stolonifer	• Bread spoilage	**For Mold & Yeasts:** • Cook foods thoroughly • Clean and sanitize equipment and utensils • Ensure proper storage and holding temperatures • Purchase high quality raw products • Prevent bruising of fruits
Mold Toxin	Yes	No	• Aspergillus flavus	• Aflatoxin in peanuts	
Yeast	Yes	Yes	• Candida	• Slimy spoilage in poultry	

Table 2.2 continued

Type of Microorganism	Does it Grow in Foods	Destroyed by Proper Cooking	Examples	Examples of Food Association	Preventative Strategies
Bacteria	Yes	Yes	• Salmonella • Campylobacter • Escherichia coli 0157:H7 • Clostridium perfringens • Clostridium botulinum • Shigella • Bacillus cereus • Vibrio • Staphylococcus aureus • Listeria monocytogenes • Yersinia	• Salmonella in eggs • Campylobacter in chicken • E. coli 0157:H7 in hamburger • C. perfringens in meats/gravies • C. botulinum in home-canned foods • Shigella on ready-to-eat foods • Bacillus cereus in rice • Vibrio in shellfish • S. aureus on food handled by ill workers • Listeria on ready-to-eat foods • Yersinia in pork	• Cool foods properly Cook foods to proper temperatures • Clean and sanitize equipment and utensils • Wash hands properly • Ensure proper storage and holding temperatures • Separate raw and cooked foods
Bacterial Spores	No	No	• C. botulinum spores • C. perfringens spores • B. cereus spores	• Outgrowth of C. botulinum spores in home-canned foods • Outgrowth of C. perfringens spores in meat gravy • Outgrowth of B. cereus spores in in cooked rice	• Cool foods properly • Clean and sanitize equipment and utensils • Wash hands properly • Ensure proper storage and holding temperatures
Bacterial Toxins	Yes (Under optimal conditions, toxin is produced in foods)	No	• S. aureus toxin • B. cereus toxin • C. botulium toxin	• S. aureus toxin in handled food such as cooked meat, pastries, deli foods • B. cereus toxin in cooked rice held room temperature for hours • C. botulinum toxin improperly home-canned foods	• Cool foods properly • Ensure proper storage and holding temperatures

Chapter 3

Planning for a Safe Event

There are many things to think about when planning a food fundraiser. A safe and successful food fundraiser has 3 elements: the food, the people, and the type of event. Proper planning will go a long way to reducing the risk of foodborne illness.

Time/Temperature Control for Safety (TCS) Food

Ready-to-eat foods: When working with RTE foods, cross-contamination is of major concern. For example, if a RTE food such as lettuce, is cut on an unwashed cutting board where raw chicken was just cut, microorganisms from the chicken may be transferred to the lettuce.

Home-canned foods: Canning foods at home can be a fun experience for the whole family. Although home-canned fruits, vegetable, jellies, and meats are a favorite any time of the year, they should not be sold or used at food fundraising events. Unfortunately, many people do not practice safe canning methods and therefore their home canned products are at a higher risk of causing foodborne illness. Refusing all home-canned foods at food fundraisers is the safest choice for your food fundraiser. The exception to this rule is if the home-canned items came from an approved inspected source.

Other hazardous TCS foods that should not be used at food fundraisers are:

- Home processed wild game
- Unpasteurized cider
- Raw milk or raw milk products
- Home-prepared foods. The exceptions to this rule are homemade non-potentially hazardous / non-TCS Food, such as baked goods and jam or jelly, or from an approved source.

The People Who are your Volunteers? The volunteers who work at food fundraisers are an essential part of making the event safe and successful. All volunteers must understand the importance of food safety and purchase, store, prepare, and serve the food safely. Before your next food fundraiser ask:

- Are the volunteers who will be preparing and serving the food at the fundraiser aware of food safety concerns related to cooking large volumes of food?
- Have they worked at a food fundraiser before?
- Will they follow the food safety guidelines for the event even though they may not practice the same food safety guidelines at home?

It may be necessary to hold a short training session for the volunteers before the actual event. Call your local health office, Pennsylvania Department of Agriculture office, or Cooperative Extension office for a free training session for you and your volunteers.

The success of a food fundraiser depends upon community support:

- What types of people will you be serving?
- Will there be susceptible populations present in large numbers?

Knowing the people you will be serving will allow you to take precautions to reduce the risk of foodborne illness.

Type of event: What type of food fundraiser will you have? There are 3 things to consider when determining the type of event:

- Length of Event
- Type of Service
- Facilities and Equipment

Length of Event: The length of the event will determine the equipment and food safety practices necessary to reduce the risk of foodborne illness. Food may stay in the temperature danger zone a total of four hours. If your event is longer than four hours, do you have the equipment necessary to keep foods out of the temperature danger zone?

See Exhibit 3.1 for specific examples.

Type of Service: Common service-styles used at food fundraisers include:

- Cafeteria Style
- Buffet
- Potluck
- Trailer/Booth/Barn
- Family Style
- Waiter/Waitress
- Carryout

Certain food safety precautions must be taken depending on the style used. Steps to prevent cross-contamination and control time / temperature should be determined before deciding on a service style. See Exhibit 3.1 for specific examples.

Facilities and Equipment: The length of the event and the type of service will help determine the facilities and equipment you will need. It may be necessary to look at the facilities and equipment available to determine the types of events your organization can conduct safely. See Exhibit 3.1 for specific examples.

The success of your food fundraiser depends on the planning that occurs before the event begins. Don't wait until the day of your food fundraiser to think about the risks involved with the food, people, or type of event. Make your next food fundraiser a success by planning for a safe event from the very beginning.

Exhibit 3.1. Questions To Ask Before Planning a Chicken Barbecue

An organization decides to hold a two-day chicken barbecue lasting from noon until 8:00 p.m. each day. Below are questions that should be asked before planning the event:

Length of Event:

- Is refrigeration available?
- Will food be cooked in small or large batches?
- Are cold and hot holding equipment available?
- Are handwashing facilities accessible?
- Is drinkable water available?

Type of Service:

- If customers service themselves, are service utensils available?
- If volunteers serve the food, will they wear gloves?
- Are handwashing facilities available and accessible for volunteers to wash hands between tasks?
- Will food be cooked in small or large batches?
- What type of hot and cold holding equipment is available?
- If food is being held for more than four hours, will someone check food temperatures?
- If carryout is available, will labels with handling instructions be provided?

Facilities and Equipment:

- Do you have all of the equipment necessary to safely prepare the food or are you using temporary facilities that are inadequate?
- Do you have the equipment and materials necessary for proper cleaning and sanitizing of equipment and utensils?
- Is it possible to rent equipment such as refrigerated trucks, hot boxes, etc.?
- Is there enough space to separate raw chicken from cooked chicken?
- Are thermometers available to take food temperatures?
- If hot holding equipment is not available, are there alternatives to holding food such as cooking in small batches and serving immediately?

Chapter 4

Safe Purchasing, Storage, Preparation and Service for a Crowd

Planning is the first step to conducting a safe and successful event. Steps during the purchasing, storage, preparation, and service, or the flow of food, must be considered in order to keep the food safe.

Purchasing

Safe food handling must begin with purchasing, the first stage of the flow of food. While purchasing and transporting food from the store, follow these safe procedures:

- In order to minimize the time spent in the temperature danger zone, shop for Time-Temperature Control for Safety (TCS) foods such as meat, poultry, seafood, and dairy products last.
- To prevent cross-contamination, place meat, poultry, and seafood in plastic bags to separate from ready-to-eat foods such as fruits and vegetables.
- Keep foods cold during transportation. Avoid stops along the way, drive directly to the kitchen where the foods can be refrigerated.

- During hot weather, place TCS foods in a cooler in your car if the trip to the kitchen will be longer than 30 minutes.
- Refrigerate the food immediately once upon arrival at the kitchen.

If food is purchased from a vendor and delivered directly to the kitchen:

- Inspect food packaging for damage and pest infestation.
- Use a thermometer to make certain frozen food is at 0°F or below and refrigerated food is at 41°F or below, before accepting the food from the vendor.

See Figure 4.1 for an overview on food thermometers.

- Special considerations:

1. As a precaution, never accept any home-canned or home-preserved food. Life threatening foodborne illness can occur from food that has been preserved incorrectly.
2. If members of your organization donate food to the event, only accept non-TCS, commercially pre-packed or canned foods. Food that has been prepared in a home kitchen should not be accepted with the exception of homemade baked goods that are not TCS foods, such as fruit pies, cakes and cookies, candy, and bread.

Storage

Once food has been safely purchased, follow these tips to keep it safe during storage:

General Storage Practices:

- Label and date foods. Practice First In, First Out (FIFO) to use older stock first.
- Do not store chemicals, garbage, or other non-food items in food storage areas.

- To prevent cross-contamination, always store raw TCS foods below ready-to-eat or prepared foods.

- Cover or package foods. All foods must be stored in food-grade containers.

Dry Storage:

- To prevent any bacterial or fungal growth, dry products such as flour, sugar, etc. must remain dry during storage. Consider storing these items in airtight food storage containers if the product is not used quickly.
- Keep dry foods away from overhead pipes that may drip.
- Do not store food directly on the floor. Keep items 6 inches off the floor and away from the wall.

Refrigerated storage:

- To keep foods at 41°F or lower, set the refrigerator temperature at 39°F or below.
- If your refrigerator does not have a temperature display, purchase a refrigerator thermometer to determine the refrigerator temperature.
- Do not overload the refrigerator. Overloading the refrigerator will prevent air from circulating and keeping the food cold. Do not cover shelves with foil or trays that will block the flow of air.

Freezer storage:

- To keep foods frozen, set the freezer temperature at 0°F or lower. Frozen food should remain in a frozen state until thawing or use.

Acceptable storage containers:

- Only food-grade containers may be used for food storage.
- Examples of unacceptable food storage containers:
  - Unlined garbage cans
  - Metal cans used to store cooked soups, vegetables, etc.
  - Raw food containers or boxes used to stored prepared foods
  - Chemical containers or boxes used to store and transport food
  - Egg cartons used to package candy eggs
  - Trash bags used to package and store food items
  - Plastic milk containers for beverages
  - Unlined wicker baskets used to display or store baked goods

Preparation

During preparation, there are many ways in which food may become contaminated or temperature abused. Food safety strategies for all stages of preparation, including cutting / slicing, thawing, and cooking, are necessary to ensure that the risk of contamination and temperature abuse is reduced.

Slicing and Cutting:

- Clean and sanitize cutting boards, meat slicers, and utensils between tasks or every 4 hours if doing the same task. Consider using different boards for raw foods and RTE foods.
- Be aware of special considerations for melons:
  - Before cutting, wash the outer surface of the melon thoroughly with cool tap water to remove surface dirt (see Figure 4.2 for information on water safety). A melon can be scrubbed with a hard bristled brush to remove soil.
  - Wash all food-contact equipment and utensils that contact cut melons (cutting boards, knives, etc.) thoroughly with hot soapy water, rinse, sanitize, and air-dry.
  - Use a barrier such as gloves, deli paper, or an appropriate utensil to touch cut melons. Do not touch cut melons with bare hands.

  - Maintain the temperature of cut melons at 41°F or below. Cut melons should be displayed in a refrigerated case, not just displayed on top of ice.
  - Date mark cut melons that are held more than 24 hours to indicate that they must be consumed or discarded within 7 days.
  - Mark the time when cut melons are displayed without refrigeration. Cut melons may be displayed for a maximum of 4 hours without temperature control, and, if not eaten, must be thrown away at the end of 4 hours.

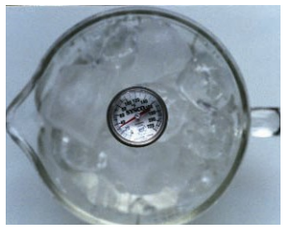
- Minimize the time food spends in the temperature danger zone: When cutting large batches of TCS food, such as chicken, take only one box of chicken out of the refrigerator at a time and then place back in the refrigerator before bringing out another box.
- Minimize cross-contamination: When preparing large volumes of food, assign one person to focus on the cutting or slicing for the duration instead of doing multiple tasks at one time.

Thawing:

- Safe thawing may be accomplished in one of 4 ways:
  1. Thaw food in the refrigerator at 41°F or less.
  2. Submerge the product in running potable water at a temperature of 70°F or below.
  3. Thaw in a microwave oven, only if the food will be cooked immediately afterward.
  4. Thaw food as a part of the cooking process. This is only acceptable for thin foods like hamburgers, but is not suitable for large foods such as roasts.
- Never refreeze foods that have begun thawing.

Cooking:

Whether you are grilling, frying, baking, sautéing, or roasting food, follow these guidelines to assure safe cooking:



- The only way to assure that microorganisms have been killed during cooking is to use a calibrated food grade thermometer to take the internal temperature of the food.
- In order to reduce time spent in the temperature danger zone, consider cooking food in small batches.
- Follow the guidelines in Table 4.1 for minimum safe internal cooking temperatures.
- Do not use a marinade which was used to marinate raw meat and poultry to baste foods or as a serving sauce. Instead, reserve fresh marinade for basting or serving.
- Do not partially cook food and set aside for final cooking later.

Table 4.1. Minimum Internal Cooking Temperatures

FOOD	TEMPERATURE (°F)
Eggs-immediate service	145 for 15 seconds
Egg dishes	155 for 17 seconds
Beef, pork, lamb or fish	145 for 15 seconds
Beef or pork roasts	130 for 112 min. for rare to 155 for 22 sec. for medium well
Ground or injected veal, beef, lamb, pork	155 for 17 seconds
Poultry, any kind	165 instantaneous
Ground poultry, any kind	165 instantaneous
Stuffed meats/fish/poultry/pasta OR Stuffing containing meats, fish, poultry	165 instantaneous
Ratites	165 instantaneous

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Holding

Improper holding practices may give bacteria the time and temperature necessary to multiply to disease-causing numbers. Proper food safety procedures must be followed in order to reduce the risk of foodborne illness.

- Keep hot foods hot and cold foods cold.
  - The minimum holding temperature for hot food is 135°F or higher.
  - The maximum holding temperature for cold food is 41°F or lower.
- Use prepared food as quickly as possible.
- Consider cooling cooked foods and then reheating when needed.
- Monitor the temperature of the food using a calibrated food thermometer at least every 2 hours.
- Use holding equipment such as crock pots, steam tables, and hot holding carts only for holding food and not for cooking or reheating food.
- Cover foods to maintain a safe temperature.
- Regularly stir foods to ensure even heating.

Cooling

The Centers for Disease Control and Prevention has found improper cooling to be one of the most common reasons for foodborne illness outbreaks. Cooking does not destroy bacterial spores. If spores are present, time and temperature are the only barriers to preventing bacterial growth and toxin production during cooling. Consider the following strategies to properly cool food:

- Cooked Time-Temperature Control for Safety (TCS) food must be cooled:
  1. Within 2 hours, from 135°F to 70°F; and
  2. Within 4 additional hours, from 70°F to 41°F or less OR
  3. To 41°F or lower within 4 hours
- Use one of the following methods to cool foods:
  1. Divide the food into shallow pans;

2. Separate the food into smaller or thinner portions;
3. Stir the food in a container placed in an ice water bath;

4. Stir the food with ice-filled plastic wands

- Never place large quantities of hot food in the refrigerator or freezer. Refrigerators and freezers are designed to hold already chilled or frozen food at refrigeration or frozen temperatures and are not meant to cool large volumes of hot food.

Reheating

- Reheat foods that will be held hot until service to 165°F within 2 hours.
- Use a calibrated food thermometer to check the final temperature.
- Only reheat foods once.

Service

Food may be served in a variety of ways. Specific food safety risks are associated with each service style. Keep in mind the following guidelines when serving food:

- Hands must be washed before serving food.
- Gloves may be worn when handling foods.
  - Hands must be washed prior to putting on the gloves.
  - Change gloves if they become contaminated or at 4 hour intervals
- To avoid potential cross-contamination situations, assign specific serving duties to each volunteer.
- When handling utensils, plates, cups, and serving dishes, avoid touching surfaces that will come in contact with food.
- For specific food safety risks and safe practices for each service style see Figure 4.3.

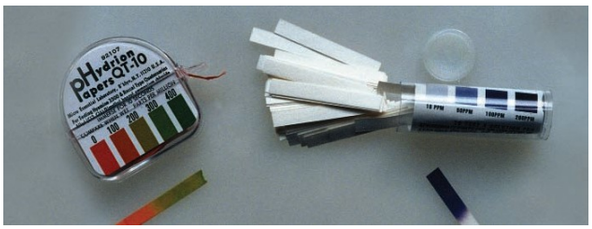
Cleaning and Sanitizing

Cleaning and sanitizing of equipment and utensils is necessary for the removal of dirt, food, and foodborne pathogens. When a surface is clean, it is free of visible soil. When a surface is sanitary, it is free from harmful levels of foodborne pathogens. A surface cannot be sanitized until it is first cleaned. A sanitizer will not work if it comes into contact with dirt, food, or soap residue. Specific steps must be taken to assure that the cleaning and sanitizing steps are done properly. Consider the following guidelines for proper cleaning and sanitizing procedures:

<u>Cleaning and Sanitizing with a 3-compartment sink</u>

- Step 1: Scrape, Rinse, or Soak utensils before washing.

- Step 2: Wash equipment in a warm detergent solution (110°F) to remove all food and soil residue.
- Step 3: Rinse in warm, clean water to remove all traces of detergent.
- Step 4: Sanitize by applying heat (30 seconds in clean 171° F hot water) or chemical to the cleaned equipment.
  - Applying Heat in Step 4: When using heat, an auxiliary heat source (such as a heating coil) for maintaining 171°F temperature must be installed in the sink. Use T-Strips or a Maximum Registering Thermometer to verify surface temperature of dishes reaches 160°F.



  - Applying Chemical in Step 4: See directions located on the product label for mixing the sanitizing solutions with water for proper concentration. Use a test strip to be sure the concentration is correct. Chemical sanitizers include:
    - Chlorine (100ppm or ~ 1tsp/gal of water)
    - Iodine (12.5 - 25 ppm)
    - Quaternary ammonium (200ppm)
- Step 5: Air Dry all equipment and utensils.

- Follow these steps if a 3-compartment sink is not available:
  - Follow steps 1-3.
  - Empty the first compartment, making sure to rinse thoroughly with clean water to remove any food and detergent.
  - Mix the sanitizing solution in the first compartment and place the clean, rinsed equipment in the sanitizing solution of the first compartment.
  - Air dry.

- 10 Dishwashing Tips:
  1. Pre-rinse all dishes, utensils, and equipment to remove the majority of food and dirt.
  2. Wash, Rinse, and Sanitize - always follow this 3-step process in order.
  3. Be very careful with sanitizing solutions. Use sanitizing strips to ensure the proper, safe concentration.
  4. Refill sinks with clean water and detergent often.
  5. Use hot water (at least 110°F) for cleaning and rinsing.
  6. Cleaning and sanitizing must be done in separate compartments. Do not add bleach to the wash water.
  7. Only appropriate types and levels of sanitizers may be used to sanitize equipment. Contact your inspector if you are unsure of the type or concentration of sanitizer to use.
  8. Do not use scented or oxygenated bleach.
  9. Let dishes air dry completely-do not use a towel to dry dishes.
  10. Do not allow handwashing at dishwashing sinks.

<u>Cleaning and sanitizing with a commercial dish washing machine:</u>

- If using a commercial dishwashing machine, it is important to follow the manufacturer's instructions to ensure proper cleaning using either hot water or chemical sanitizing.

Cleaning and sanitizing when sinks or dishwashing machines are not available:

- Sinks or dishwashing machines may not always be available. If traditional cleaning and sanitizing equipment is not accessible, use this alternative method:

  Step 1: Use a new, clean food grade bucket, filled with clean warm water and detergent to clean equipment.

  Step 2: Use a second new, clean food grade bucket, filled with warm water to rinse off the detergent residue.

  Step 3: Use one of 2 ways to properly sanitize:

  - Bucket Method:

    - Use a new, clean bucket. Fill with water and sanitizer at the appropriate temperature and concentration.
    - Place equipment in bucket to sanitize.
  - Spray Bottle Method:
    - Fill a spray bottle with a sanitizing solution at the proper concentration and temperature.
    - Spray surface of equipment thoroughly.

  Step 4: Air dry on a clean surface.

  Wiping Cloths:

- Wet wiping cloths:

  - Wet wiping cloths, when not in use, should be stored in a chemical sanitizing solution at a strength mixed according to the manufacturer's directions.
- Dry wiping cloths:
  - Dry wiping cloths should be new and clean.
  - Dry wiping cloths should be used for wiping food spills from tableware and carry out containers.
- Use separate wiping cloths for food contact and non-food contact surfaces.

Storage of Cleaning Materials:

- In order to avoid cross-contaminating food with chemicals, store all cleaning or sanitizing materials away from any food storage or preparation areas.
- Keep all chemicals in original or clearly marked containers.

Equipment and Facility Considerations

The proper equipment and facility set-up may make the difference between a successful fundraiser and a situation where people become ill due to foodborne illness. In order to have a safe and successful event, consider the following equipment and facility requirements:

- Inspect all food storage and preparation equipment several days before the event to make sure things are working properly.
- Basic facility requirements for permanent and temporary establishments:

- Means for hand washing

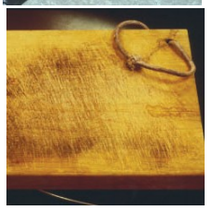
- Means for cleaning and sanitizing

- Means for providing hot water

- Means for providing potable water

- Means for proper wastewater disposal

- Throw out old or inappropriate equipment:



- Rusted equipment or utensils
- Cutting boards or other equipment or utensils with deep groves
- Hot or cold holding equipment which does not maintain the proper temperatures
- Storage equipment that is not food grade

- All equipment should have the NSF seal of approval or be of comparable design and standard.
- See Figure 4.4 for alternative equipment ideas for those on a limited budget.
- Pest control: Pests, such as rodents and insects, carry microorganisms that can cause disease. Pests are attracted to the food and warmth of a kitchen. It is easier to prevent pests from entering a kitchen than to remove them once they have come into the kitchen. Use the following strategies to keep pests from entering the kitchen:

- Cover holes in screens or walls to prevent pests from entering the kitchen.
- Keep all trash outside and away from the building in a secure trash container.
- Clean all spills as quickly as possible.

If pests do enter the kitchen, contact a pest control operator for proper pest removal. DO NOT attempt to apply pesticides. Allow a licensed pest control officer to determine the proper procedure for pest removal.

Trash Tips

- All trash should be placed in clean, leak-proof containers.
- Use trash bags in all containers.
- Use lids on all trash containers.
- Empty trash when container is full and at least daily.
- Clean and sanitize containers weekly.
- Use trash containers only for the collection and removal of trash. Do not use to store food or prepare food or beverages.
- Arrange for trash to be picked up as soon as possible after the event.
- Provide enough trash containers to hold the amount of trash expected.

Figure 4.1. Thermometer Review

TYPES OF THERMOMETERS

Digital (thermocouple)

- Reach and display the final temperature the fastest - within 2 to 5 seconds.
- Can accurately read the temperature of thin foods such as hamburger patties, pork chops, and chicken breasts.
- Not designed to remain in the food while it's cooking but should be used near the end of the estimated cooking time to check for final cooking temperature.
- Thermocouples can be calibrated for accuracy.

Digital (thermistor)

- Can measure temperature in thin foods, as well as thick foods.
- Place the tip in the center of the thickest part of the food.
- Not designed to remain in the food while it's cooking.
- Not all thermistors can be calibrated. Check the manufacturer's instructions.

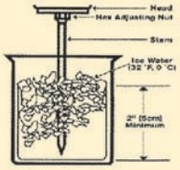
Bi-metallic·

- Measures the temperature of a food in about 15 to 20 seconds.
- Not designed to remain in the food while it is cooking in the oven.
- For accurate temperature measurement, the probe of the bimetallic-coil thermometer must be inserted the full length of the sensing area (usually 2 to 3 inches). If measuring the temperature of a thin food, such as a hamburger patty or boneless chicken breast, the probe should be inserted through the side of the food so that the entire sensing area is positioned through the center of the food. Some models can be calibrated. Check the manufacturer's instructions.

THERMOMETER CALIBRATION

There are two ways to check the accuracy of a food thermometer. One method uses ice water, the other uses boiling water. Many food thermometers have a calibration nut under the dial that can be adjusted. Check the package for instructions.

To use the ice water method, fill a large glass with finely crushed ice. Add clean tap water to the top of the ice and stir well. Immerse the food thermometer stem a minimum of 2 inches into the mixture, touching neither the sides nor the bottom of the glass. Wait a minimum of 30 seconds before adjusting. Without removing the stem from the ice, hold the adjusting nut under the head of the thermometer with a suitable tool and turn the head so the pointer reads 32°F.



For the boiling point method, insert the stem into boiling water. Without removing the stem from the water, hold the adjusting nut under the head of the food thermometer with a suitable tool and turn the head so the thermometer reads 212°F.

Remember that water boils at a lower temperature in a high altitude area. Check with the local Cooperative Extension Service for the exact temperature of boiling water in your area.

THERMOMETER USE & CARE

- As with any cooking utensil, food thermometers should be washed with hot soapy water. Most thermometers should not be immersed in water. Wash carefully by hand.
- Most available food thermometers will give an accurate reading within 2 to 4°F. However, the reading will only be correct, if the thermometer is placed in the proper location in the food.
- Insert the probe into the thickest part of the food to get an accurate internal temperature reading

- Sanitize the probe before each use.

Figure 4.2. Water Safety

Water: Water is used in a variety of ways in the kitchen. Whether preparing, cooking, or cleaning, consider the following safety precautions when using water:

Source:

- The water must be potable or drinkable and come from approved sources
  - Approved sources may be public water or a well or spring that has been tested.
  - Water from wells or springs must be tested by an approved laboratory.
- Potable water must be used for the following purposes:·
  - Handwashing
  - Water as an ingredient
  - Cleaning and sanitizing any equipment, containers, or utensils that come into contact with food

Transport:

- Transport water in approved, clean containers.
- Only use food-grade hoses and water holding equipment.

Backflow:

- Don't leave hoses attached to faucets when not in use.

Waste Water:

- Dispose of waste water in a mop sink.
- If a mop sink is not available, dispose by flushing down the toilet.
- Never dump waste water in a sink where food preparation occurs.

Availability:

- Hot and cold water must be available for dishwashing and handwashing.
- In the case of a temporary facility, if water cannot be piped into the stand, and instead a supply is kept at the stand, the water must be stored in a clean, covered container that has a dispensing spout. Using a large coffee urn to heat water is one option. The container must be a 5-gallon minimum capacity.
- Collapsible 5-gallon containers, such as used for camping, are acceptable
- The hot water can only be poured or dispensed via a spigot
- At fairs, festivals, etc., if water is supplied via a hose, the hose must be a designated food grade hose
- There must be an adequate supply of water for intended usage
- Consider using disposable dishes if water supply is a problem
- The menu may have to be adjusted according to water availability

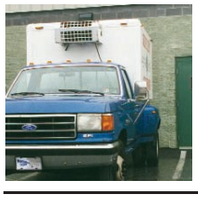
Ice:

- Ice is considered food and must be made from a safe water source.
- Store all ice used in the preparation of drinks, beverages or other purposes where ice will be consumed in clean, easily cleanable, nonporous containers with closed lids. An ice chest may be used.
- Styrofoam coolers may only be used if the inside of the container and lid are lined with plastic.
- Never completely submerge any food including cans of beverages in ice.
- Minimize the handling of ice. Never use hands to serve ice. Use an ice scoop.

Figure 4.3. Service Styles: Risks and Safe Practices

Service Style	Food Safety Risks	Safe Practices
Cafeteria Style - food prepared in large quantities and immediately served to guests in line	• Improper holding temperatures	• Use thermometers to monitor
	• Server contamination	• Good personal hygiene
Buffet or Family Style - guests serve themselves from large containers on serving or individual tables	• Customer contamination	• Clean plates for every visit • Sneeze shields • Serving utensils for each food • Label food
	• Improper holding temperatures	• Frequent use of thermometers
	• Adding old contaminated food to fresh	• Finish old food before adding fresh
Potluck (Buffet without hot/cold holding units) - food brought to dinner, prepared in individual home kitchens	• Contamination by customers or preparers	• Reconsider preparation in individuals' homes
	• Improper holding temperatures	• No more than 2 hours cumulative at room temperature
	• Contaminated leftovers going home	• Two hours cumulative or dispose of leftovers
Temporary - food prepared and served from a temporary site such as a fair, booth or festival	• Inadequate electrical supply to operate equipment to maintain proper temperature	• Frequent use of thermometers to monitor holding temperatures
	• Insect contamination	• Use a solution of bleach water to help keep surfaces free of foods that attract insects
	• Questionable/improper environment for food preparation or service	• Reconsider event location
Waiter/Waitress - food brought to table by a server or waitress	• Contamination by server or waiter	• Good personal hygiene • Avoid contact with food surfaces
Home Delivered Meals / Carryout / Catering - food is prepared at a kitchen and then delivered or served a another location	• Improper holding temperatures	• Use appropriate hot and cold holding delivery containers to maintain proper temperatures • Using a thermometer, check temperatures
	• Cross-contamination from carryout or delivery containers	• Provide handling instructions to the consumer • Regularly clean and sanitize all delivery containers

Figure 4.4. Alternative Equipment ideas.

	Refrigeration and Cold Holding: • Use coolers with drainage plug • Coolers that plug into a car power outlet	Handwashing: If a handwashing sink is not available, fill a container that has a dispensing spigot with potable warm water. Wet hands with water, apply soap, scrub for 20 seconds and rinse. Dry with a paper towel.
	• Dry ice	Where To Purchase Used Equipment: • Restaurants • Hospitals • Universities • Auctions • Talk with your inspector about what you should replace first • If you have money to spend, consider purchasing a new piece of equipment or replace outdated utensils.
	• Rent refrigerated trucks	
	Hot Holding:· • Propane cooking stoves • Sternos with inexpensive aluminum pans and racks (at party rental stores) • Slow cookers	

Chapter 5

Planning Successful Fundraising Events

Bake sales are a great fundraising activity. If your organization plans to conduct a bake sale, be aware that there are food safety issues associated specifically with this type of fundraiser.

Conducting a successful and safe BAKE SALE

Bake sales are a great fundraising activity. If your organization plans to conduct a bake sale, be aware that there are food safety issues associated specifically with this type of fundraiser:

- Acceptable items for sale: Traditionally, bake goods intended for a bake sale are prepared in home kitchens and then transported to the bake sale site. To reduce the risk of foodborne illness, items should be prepared at a central kitchen rather than in individual homes. Whether the baked goods are prepared in a central kitchen or in home kitchens, consider the following strategies to increase the safety of the event:
  - Acceptable food items for a bake sale include:
    - Fruit pies
    - Candy
    - Cookies and Cakes
    - Bread and Muffins
  - Unacceptable food items for a bake sale include high risk food, and any Time-Temperature Control for Safety (TCS) foods, such as:
    - Custards and custard pies
    - Real cream pies
    - Jar or canned bread
    - Home-canned goods
    - Flavored oils
    - Homemade ice cream
    - Pumpkin pie
    - Cream-filled cupcakes or doughnuts
    - Cheesecake
    - Cream cheese frostings and fillings
- Allergens: Approximately 1% of the population has a food allergy. People with food allergies may be allergic to milk and dairy products, egg and egg products, fish, shellfish, wheat, soy and soy products, peanuts, and other nuts. If a person with a food allergy eats a food they are allergic to, they may suffer symptoms ranging from shortness of breath to death. In order to alert customers to potential problems, develop a

written ingredient list for all bake goods. Have the list available at the bake sale.

- Service Style: In order to prevent cross-contamination, all items should be wrapped and only handled by the volunteers.
- Sanitation: In order to reduce the risk of contamination, consider these sanitation strategies:
  - In order to reduce the risk of contamination, regularly clean and sanitize food contact surfaces.
  - Provide a trash container for the disposal of spoons, toothpicks, napkins, etc.

Use the Bake Sale Checklists (Tables 5.1 and 5.2) and the "Guidelines for Keeping Our Bake Sale Safe" sheet (Figure 5.1) to ensure that your organization reduces the food safety risks associated with bake sales.

Figure 5.1

Guidelines for Keeping Our Bake Sale Safe

Thank you for agreeing to donate bake goods to our bake sale. Please be aware that there are food safety issues associated specifically with bake sales. In order to increase the success of our bake sale, please follow these recommendations when preparing, packaging, and transporting baked goods:

1. Please donate only acceptable food items for the bake sale:
   - Acceptable food items for a bake sale include:
     - Fruit pies
     - Candy
     - Cakes and cookies
     - Bread and Muffins
   - Unacceptable food items for a bake sale include high risk foods and any foods requiring Temperature Control, such as:
     - Custards and custard pies
     - Real cream pies
     - Jar or canned bread
     - Home-canned goods
     - Cream-filled cupcakes or doughnuts
     - Frostings and fillings made with cream cheese
     - Flavored oils
     - Homemade ice cream
     - Pumpkin pie
     - Cheesecake
2. To accommodate those with food allergies, please provide a list of ingredients for each item donated.
3. To reduce the risk of contamination, please individually wrap all items.
4. Please label your donations with your name address and phone number.
5. Food should be tightly wrapped or sealed during transport. Food should not be transported with family pets.

Table 5.1

PRE-EVENT CHECKLIST: Bake Sale	Task Completed	Date Completed	Signature	Notes
LICENSE Check to see if a food license is required to conduct a bake sale				
INGREDIENT LIST Collect ingredient lists prior to the beginning of the bake sale				
VOLUNTEERS Volunteer bakers received the "Guidelines for Keeping Our Bake Sale Safe" Sheet				
INSURANCE In the event of an outbreak, the organization has the appropriate insurance				

Table 5.2

DAY-OF-THE-EVENT: Bake Sale	Task Completed	Signature	Notes
ACCEPTABLE FOOD ITEMS Display only non-TCS foods for sale			
INGREDIENT LIST Display ingredient list for each group of baked goods			
CROSS-CONTAMINATION All baked items are wrapped and only volunteers may handle baked goods			

817937-FoodSafetyBook.qxp 10/18/2019 Page 32

Conducting a Successful and Safe DINNER

Many organizations sponsor meals such as turkey, ham, chicken, or roast beef dinners as their primary fundraising activity. If your organization plans to conduct a fundraising dinner, be aware that there are food safety issues associated specifically with this type of fundraiser. In Maryland in 1997, the mishandling of hams, served at a large church supper caused 746 people to become ill with two deaths. To keep your fundraising dinner safe and successful, be aware of the risks associated with preparing and serving fundraising dinners:

- Time-temperature abuse:
  - Minimize the time food spends in the temperature danger zone throughout the entire flow of food, specifically, purchasing, storage, preparation, thawing, cooking, holding, cooling, service, and reheating.
  - Check to make sure that your organization has the proper equipment available to keep hot foods hot and cold foods cold. Check to make sure all equipment is working properly.
  - Use calibrated, food-grade thermometers to monitor food temperatures and to assure that food spends minimal time in the temperature danger zone.
- Cross-contamination:
  - Minimize cross-contamination by using different preparation areas for raw and ready-to-eat foods
  - When preparing large volumes of food, assign one person to focus on the cutting or slicing for the duration, instead of doing multiple tasks at one time.
  - Clean and sanitize utensils, equipment, and preparation areas between tasks
- Personal Hygiene: Poor personal hygiene is a leading cause of foodborne illness. Train volunteers on proper handwashing techniques and monitor handwashing frequency to ensure that volunteers are following appropriate handwashing procedures.

Use the Dinner Fundraising Planning Form (Figure 5.2) and the Dinner Fundraising checklists (Tables 5.3 and 5.4) to organize a safe and successful event.

Figure 5.2

Dinner Fundraising Planning Form

Name of Event _____

Date(s) of Event _____

Names of Event Coordinators

Name	Address	Phone

Expected Number of Patrons _____

Expected peak times and number of patrons _____

Date, time, and location of volunteer training for event _____

Names of volunteers

1. _____ 6. _____
2. _____ 7. _____
3. _____ 8. _____
4. _____ 9. _____
5. _____ 10. _____

Service Style: _____

Type and number of refrigerated storage equipment needed: _____

_____

Type and number of thermometers needed: _____

Type and number of hot and cold holding units needed: _____

Manual or dishwashing machine: _____

Type of sanitizer and ppm: _____

Table 5.

PRE-EVENT CHECKLIST: Meat/Poultry/Fish Dinner	Task Completed	Signature	Notes
LICENSE Check to see if a food license is required to conduct a dinner			
PURCHASING Transport Time-Temperature for Safety (TCS) food in a cold storage container. Separate TCS and ready-to-eat (RTE) foods during transport			
STORAGE Adequate freezer or refrigerator space for TCS Foods			
THAWING Time: Adequate time to thaw meat Temperature: Adequate refrigerator space to properly thaw meat			
CROSS-CONTAMINATION Separate areas are available for preparation and storage of TCS and RTE foods			
THERMOMETERS Appropriate style and number of thermometers are available Thermometers are calibrated			
HOT and COLD HOLDING EQUIPMENT Appropriate hot and/or cold holding equipment is available Hot holding equipment maintains food at or above 135°F Cold holding equipment maintains food at or below 41°F			
VOLUNTEERS Volunteers have received the necessary food safety training			
HANDWASHING Soap, warm water, and paper towels are available for handwashing			
CLEANING and SANITIZING Detergent and sanitizer are available for cleaning and sanitizing equipment			
WASTE DISPOSAL Appropriate clean, sanitized trash containers available			
INSURANCE In the event of an outbreak, the organization has the appropriate insurance			

Table 5.

DAY-OF-EVENT-CHECKLIST: Meat/Poultry/Fish Dinner	Person Responsible for Completing the Task	Notes
HANDWASHING Hands are washed before the start of food preparation, any time cross-contamination may occur, and between tasks	All volunteers	
CROSS-CONTAMINATION Ready-to-eat foods such as fruits and vegetable are prepared in a separate area from TCS foods Utensils and equipment are cleaned and sanitized between tasks		
COOKING All cooked items are cooked to the proper internal temperature		
HOT and COLD HOLDING Calibrated thermometers are used to check that food is held at the proper temperatures		
SERVICE Cross-contamination is minimized during service If takeout is available, proper handling instructions are included		
COOLING If cooling is necessary, it is done using one of the 4 safe methods		
VOLUNTEERS Volunteers follow proper food safety procedures		
CLEANING and SANITIZING Proper techniques and compounds are used to clean and sanitize equipment, utensils, and preparation areas		
WASTE DISPOSAL All waste is disposed of in clean, sanitized trash containers		

FoodSafetyNonProfitBook 10/18/2019 Page 36

Conducting a Safe and Successful Barbecue

Barbecues are a great fundraising activity. If your organization plans to conduct a fundraising barbecue, be aware that there are food safety issues associated specifically with this type of fundraiser. To keep your fundraising barbecue safe and successful, be aware of the preparation and service risks:

- Time-temperature abuse: Minimize the time food spends in the temperature danger zone throughout the entire flow of food:
  - During transport from the store or to the event site, keep Time-Temperature for Control for Safety (TCS) food, such as meat or poultry cold and transport quickly
  - Thaw meat and poultry properly
  - Marinate meat and poultry in the refrigerator
  - Cook meat and poultry to the proper temperatures
  - Precook meats only immediately before grilling
  - Keep TCS food above 135°F during hot holding
  - Keep TCS food below 41°F during cold holding
- Check to make sure that your organization has the proper equipment available to keep hot foods hot and cold foods cold. Check to make sure all equipment is working properly.

- Use calibrated, food-grade thermometers to monitor food temperatures to assure that food spends minimal time in the temperature danger zone.
- Cross-contamination:
- Minimize cross-contamination by using different preparation areas for raw and RTE foods.
- Prepare RTE foods such as fruits and vegetables in separate areas from TCS foods.
- Clean and sanitize utensils and equipment between tasks.
- Use only food-grade containers to carry, transport, or hold foods.
- When preparing large volumes of food, assign one person to focus on the cutting or slicing for the duration instead of doing multiple tasks at one time.
- Boil used marinade before adding to cooked foods.
- Personal Hygiene: Poor personal hygiene is a leading cause of foodborne illness. Train volunteers on proper handwashing techniques and monitor handwashing frequency to ensure that volunteers are following appropriate handwashing procedures.

Use the Barbecue Pre- and Day-of-the-Event check-list (Table 5.5 and 5.6) to organize a safe and successful event.

Table 5.

PRE-EVENT CHECKLIST: Barbecue	Task Completed	Date Completed	Signature	Notes
LICENSE Check to see if a food license is required to conduct a barbecue				
PURCHASING Transport Time-Temperature for Safety (TCS) foods in a cold storage container. Separate TCS and ready-to-eat (RTE) foods during transport				
STORAGE Adequate freezer or refrigerator space for TCS food				
THAWING Time: Adequate time to thaw meat Temperature: Adequate refrigerator space to properly thaw meat				
CROSS-CONTAMINATION Separate areas are available for preparation of TCS and RTE foods Appropriate types and numbers of food grade containers are available				
THERMOMETERS Appropriate style and number of thermometers are available Thermometers are calibrated				
HOT and COLD HOLDING EQUIPMENT Appropriate hot and/or cold holding equipment is available Hot holding equipment maintains food at or above 135°F Cold holding equipment maintains food at or below 40°F				
VOLUNTEERS Volunteers have received the necessary food safety training				
CLEANING and SANITIZING Detergent and sanitizer are available for cleaning and sanitizing				
HANDWASHING Soap, warm potable water, and paper towels are available in preparation and service areas for handwashing				
WASTE DISPOSAL Appropriate clean, sanitized trash containers				
INSURANCE In the event of an outbreak, the organization has the appropriate insurance				

817937-FoodSafetyBook.qxp 10/18/2019 Page 38

Table 5.

DAY OF THE EVENT: Barbecue	Person Responsible for Completing the Task	Notes
HANDWASHING Hands are washed before the start of food preparation, any time cross-contamination may occur, and between tasks	All volunteers	
CROSS-CONTAMINATION Ready-to-eat foods such as fruits and vegetable are prepared in a separate area from TCS food Utensils and equipment are cleaned and sanitized between tasks Only food grade containers are used to carry, transport, or hold foods		
COOKING All cooked items are cooked to the proper internal temperature Calibrated thermometers are used to check that TCS food is cooked to proper internal temperature If precooking, meats are cooked immediately after precooking		
HOT and COLD HOLDING Calibrated thermometers are used to check that food is held at the proper temperatures		
SERVICE Cross-contamination is minimized during service If takeout is available, proper handling instructions are included		
COOLING If cooling is necessary, it is done using one of the 4 safe methods		
VOLUNTEERS Volunteers follow proper food safety procedures		
CLEANING and SANITIZING Proper techniques and chemicals are used to clean and sanitize equipment, utensils, and preparation areas		
WASTE DISPOSAL All waste is disposed of in clean, sanitized trash containers		

817937-FoodSafetyBook.qxp 10/18/2019 Page 39

Conducting successful and safe HOME MEAL DELIVERIES

If your organization delivers meals to the elderly or ill, be aware that there are food safety issues associated with the transport and service of ready to eat foods:

- Time and temperature:
  - If the meals are prepared at a central kitchen and delivered to your organization, they should be received at 41°F or lower if received cold; or 135°F or higher if received hot.
  - Keep meals at the proper temperatures during transport: 41°F or lower for cold transport, 135°F or higher for hot transport.
  - Keep foods out of the temperature danger zone. From the time the meals are received, they should spend no more than 2 hours between 41°F and 135°F.

- Cross-contamination:
  - Clean and sanitize all containers used to carry, transport, or hold foods.
  - Use only food grade containers to carry, transport, or hold foods.
  - Do not transport food with family pets.
- Personal Hygiene:
  - Wash hands before transporting food.

Use the Home Delivered Meals checklist (Table 5.7) to organize the safe and successful delivery of meals.

Table 5.7

HOME DELIVERED MEALS: Checklist	Task Completed	Date Completed	Signature	Notes
RECEIVING Meals are received either at 41°F or below or 135°F or above				
TRANSPORT Meals are transported at 41°F or below or 135°F or above				
CROSS-CONTAMINATION Meals are transported in clean, sanitized containers				
HANDWASHING Volunteers wash hands properly before handling meals				
VOLUNTEERS Volunteers have received the necessary food safety training				
INSURANCE In the event of an outbreak, the organization has the appropriate insurance				

817937-FoodSafetyBook.qxp 10/18/2019 Page 41

Conducting a successful and safe SUB or SANDWICH Sale

Sub or sandwich sales are a great fundraising activity. If your organization plans to conduct a sub or sandwich sale, be aware that there are food safety issues associated specifically with this type of fundraiser:

- Time and temperature: To reduce the risk of foodborne illness, all subs and sandwiches should be prepared at a central kitchen rather than in individual homes.
  - During transport from the store or to the event site, keep Time-Temperature Control for Safety (TCS) food, such as meat or poultry cold and transport quickly.
  - Keep TCS food cold during storage.
  - When assembling sandwiches, if total assembly time exceeds 2 hours, in order to reduce temperature abuse, take out meat and cheese from storage in batches.
  - Once assembled, keep sandwiches cold. As batches of sandwiches are assembled, place immediately into cold storage.
  - Keep sandwiches cold during transport.

- Cross-contamination:
  - Minimize cross-contamination by assigning one person to focus on the cutting/slicing, or assembly for the duration instead of doing multiple tasks at one time.
  - Assemble sandwiches on cleaned and sanitized surfaces.
  - Use only food grade containers to carry, transport, or hold foods.
  - Use only commercially prepared foods and condiments. Do not use home-prepared foods.
- Personal Hygiene: Poor personal hygiene is a leading cause of foodborne illness.
  - Train volunteers on proper handwashing techniques and monitor handwashing frequency to ensure that volunteers are following appropriate handwashing procedures.
  - Gloves may be worn but must not be used as a substitute for handwashing.

Use the Sub and Sandwich Sale Pre- and Day-of- the-Event checklist (Table 5.8 and 5.9) to organize a safe and successful event.

Table 5.

PRE-EVENT CHECKLIST: Sub and Sandwich Sale	Task Completed	Date Completed	Signature	Notes
LICENSE Check to see if a food license is required to conduct a sub sale				
PURCHASING Transport Time-Temperature Control for Safety (TCS) food in a cold storage container. Separate TCS and other RTE foods during transport.				
STORAGE Adequate refrigerator space for potentially hazardous foods				
CROSS-CONTAMINATION A central kitchen is available for sandwich assembly Appropriate types and numbers of food grade containers are available				
COLD HOLDING EQUIPMENT Appropriate cold holding equipment is available to store and/or transport subs				
VOLUNTEERS Volunteers have received the necessary food safety training				
CLEANING and SANITIZING Detergent and sanitizer are available for cleaning and sanitizing equipment and preparation areas				
HANDWASHING Soap, warm potable water, and paper towels are available for handwashing				
INSURANCE In the event of an outbreak, the organization has the appropriate insurance				

817937-FoodSafetyBook.qxp 10/18/2019 Page 43

Table 5.

DAY OF THE EVENT: Sub and Sandwich Sale	Person Responsible for Completing the Task	Notes
HANDWASHING Hands are washed before the start of food preparation, any time cross-contamination may occur, and between tasks	All volunteers	
CROSS-CONTAMINATION Utensils, equipment and preparation areas are cleaned and sanitized. Only food grade containers are used to carry, transport, or hold foods Tasks such as slicing, assembling, packing are assigned to volunteers		
COLD HOLDING If sandwiches are not immediately transported, they are stored at 41°F or below		
HOT and COLD HOLDING Calibrated thermometers are used to check that food is held at the proper temperatures		
TRANSPORT Sandwiches are transported at 41°F or lower Sandwiches are not transported with family pets		
VOLUNTEERS Volunteers follow proper food safety procedures		
CLEANING and SANITIZING Proper techniques and chemicals are used to clean and sanitize equipment, utensils, and preparation areas		

817937-FoodSafetyBook.qxp 10/18/2019 Page 44

Conducting a Safe and Successful Food Fundraiser Using Temporary Facilities

Many times, food fundraisers such as bake sales, barbecues, and food stands, are conducted using temporary facilities. In Pennsylvania, groups conducting food fundraisers using temporary facilities may need a temporary license. The Pennsylvania Department of Agriculture defines a temporary license as:

> "A license issued or reissued to a proprietor of an establishment utilizing permanent facilities for fourteen (14) days or less per year, or a license issued to a proprietor for the operation of an establishment for fourteen (14) days or less per year in connection with a single event or celebration."

Examples of establishments that require a temporary license;

- An organization that has 12 dinner fundraisers per year (1 per month)
- A vendor that attends a fair would receive a temporary license good only at that fair.

Contact the Pennsylvania Department of Agriculture or your Local Health Department to determine if a temporary license is needed for your organization's food fundraiser.

Food fundraisers using temporary facilities must meet the same food safety requirements as permanent stands/establishments. If your organization plans to conduct a food fundraiser using temporary facilities, be aware that there are food safety issues associated specifically with this type of fundraiser as well as unique ways to meet food safety requirements. To keep your food fundraiser safe and successful, be aware of the risks associated with using temporary facilities:

- Water
  - Temporary facilities must have hot and cold running water that is piped to the stand for cooking, cleaning, and handwashing.
  - If piped water is not available, an acceptable, alternative source is water stored in clean, covered containers that have a dispensing spout.
  - The container must be a 5-gallon minimum capacity
  - Collapsible 5-gallon containers, such as used for camping, are acceptable.
  - A hot pot or coffee urn may be used to heat water for use in washing dishes or other tasks. The hot water must be dispensed via a spigot.
  - If the stand does not have a built in waste water system, collect all wash and cleaning water in a 5- gallon or larger container.

- Ice
  - Ice is considered food and must be made from a safe water source.
  - Store all ice used in the preparation of drinks, beverages or other purposes where ice will be consumed in clean, easily cleanable, non-porous containers with closed lids. An ice chest may be used.
  - Styrofoam coolers may only be used if the inside of the container and lid are lined with food-grade plastic.
  - Never completely submerge any food including cans of beverages in ice.
  - Minimize the handling of ice. Never use hands to serve ice. Use an ice scoop.

- Time-temperature abuse:
  - Minimize the time food spends in the temperature danger zone throughout the entire flow of food:
    - Keep Time-Temperature Control for Safety (TCS) food, such as meat or poultry, cold and transport quickly to the event site
    - Thaw foods properly
    - Cook foods to the proper temperatures
    - Keep TCS food above 135°F during hot holding

- Keep TCS food below 41°F during cold holding
- Check to make sure that your organization has the proper equipment available to keep hot foods hot and cold foods cold. Check to make sure all equipment is working properly.
- Use calibrated, food-grade thermometers to monitor food temperatures to assure that food spends minimal time in the temperature danger zone.

- Cross-contamination:
  - Minimize cross-contamination by using different preparation areas for raw and RTE foods.
  - Prepare RTE foods such as fruits and vegetables in separate areas from TCS foods.
  - Clean and sanitize utensils and equipment between tasks.
  - Use only food-grade containers to carry, transport, or hold foods.
  - When preparing large volumes of food, assign one person to focus on the cutting or slicing for the duration instead of doing multiple tasks at one time.

- Personal Hygiene: Poor personal hygiene is a leading cause of foodborne illness. Train volunteers on proper handwashing techniques and monitor handwashing frequency to ensure that volunteers are following appropriate handwashing procedures. If sinks are not available, use the following handwashing strategy:
  - Wet hands by dispensing warm water from the spigot of a container
  - Apply soap and scrub hands for 20 seconds
  - Rinse hands by dispensing warm water from the spigot of the container
  - Dry hands with a paper towel
  - Make sure to collect waste water in a bucket or container and place paper towels in a trash can

Use the Temporary Facilities Pre- and Day-of-the- Event checklist (Table 5.10 and 5.11) to organize a safe and successful event.

Table 5.

PRE-EVENT CHECKLIST: Temporary Facilities	Task Completed	Date Completed	Signature	Notes
LICENSE Check to see if a temporary food license is required				
WATER Hot and cold potable water is available at the site (piped to the stand or brought in 5-gallon containers with spigots)				
CROSS-CONTAMINATION Separate areas are available for preparation of Time-Temperature for Safety (TCS) and RTE foods Appropriate types and numbers of food grade containers are available				
THERMOMETERS Appropriate styles and numbers of thermometers are available Thermometers are calibrated				
HOT and COLD HOLDING EQUIPMENT Appropriate hot and/or cold holding equipment is available Hot holding equipment maintains food at or above 135°F Cold holding equipment maintains food at or below 40°F				
VOLUNTEERS Volunteers have received the necessary food safety training				
CLEANING and SANITIZING Detergent and sanitizer are available for cleaning and sanitizing equipment				
HANDWASHING Soap, warm potable water, and paper towels are available for handwashing				
WASTE DISPOSAL Appropriate clean, sanitized trash containers				
INSURANCE In the event of an outbreak, the organization has the appropriate insurance				

817937-FoodSafetyBook.qxp 10/18/2019 Page 47

Table 5.

DAY OF THE EVENT: Temporary Facilities	Person Responsible for Completing the Task	Notes
HANDWASHING Hands are washed before the start of food preparation, any time cross-contamination may occur, and between tasks	All volunteers	
CROSS-CONTAMINATION Ready-to-eat foods such as fruits and vegetables are prepared in a separate area from raw foods Utensils and equipment are cleaned and sanitized between tasks Only food grade containers are used to carry, transport, or hold foods		
COOKING All cooked items are cooked to the proper internal temperature Calibrated thermometers are used to check Time-Temperature Control for Safety (TCS) food is cooked to the proper internal temperature		
HOT and COLD HOLDING Calibrated thermometers are used to check that TCS food is held at the proper temperatures		
SERVICE Cross-contamination is minimized during service If takeout is available, proper handling instructions are included		
COOLING If cooling is necessary, it is done using one of the 4 safe methods		
VOLUNTEERS Volunteers follow proper food safety procedures		
CLEANING and SANITIZING Proper techniques and chemicals are used to clean and sanitize equipment, utensils, and preparation areas		
WASTE DISPOSAL All waste is disposed of in clean, sanitized trash containers Waste water is collected and disposed of properly		

817937-FoodSafetyBook.qxp 10/18/2019 Page 48