

## 1



## Providing Safe Food

### In the News

#### Employees Sick from Own Food

In a recent incident, John White, a chef for the Johnson's Family Dining chain, led his staff in prepping, cooking, and transporting food to a banquet facility. The banquet facility was responsible for reheating and serving the food later that evening for the chain's holiday party. In the days after the party, 34 of the chain's employees got sick.

John was puzzled by the event, because he knew that his team had handled the food safely. Johnson's Family Dining has a strong commitment to food safety. It ensures that all its managers are certified in food protection.

At the party, John and his coworkers became what almost 132 million people are each day: customers at a foodservice operation. All customers expect to eat safe food, as did John. Unfortunately, the banquet facility that hosted the party did not have good practices in place for holding food. Much of the food that John's team delivered was time-temperature abused by the time the party started.

How could this happen? One reason might be because the banquet facility did not have a food safety program in place and their foodservice managers weren't certified in food protection. Studies have shown that operations with someone on staff who is certified in food safety have fewer foodborne-illness outbreaks, higher inspection scores, and safer, happier customers.

### You Can Prevent This

If the banquet facility in the story above had a manager certified in food protection, it might have avoided the foodborne-illness outbreak. Preventing foodborne illnesses is one of your most important tasks as a manager. This chapter will introduce you to the following basics for keeping food safe in your operation.

- Recognizing the importance of food safety
- Recognizing the risks associated with high-risk populations
- Avoiding potential hazards to food safety
- Understanding how food becomes unsafe
- Understanding important prevention measures for keeping food safe



## Foodborne Illnesses

Being a foodservice manager isn't easy. You have responsibilities to your operation, to your employees, and to your customers. The best way to meet those responsibilities is to keep the food you serve safe. To start, you must learn what foodborne illnesses are and who is most affected by them. You simply can't afford not to. The costs of a foodborne-illness outbreak can be devastating.

### Challenges to Food Safety

A foodborne illness is a disease transmitted to people by food. A foodborne-illness outbreak is when two or more people get the same illness after eating the same food. Each year, millions of people get sick from unsafe food.



Foodservice operations work hard to minimize foodborne illnesses. Careful temperature control, as shown in the photo at left, is one way to keep food safe. As a result of the industry's efforts, foodborne illnesses have declined in foodservice operations. However, operations still face many challenges to food safety.

**Time and money** Training costs time and money. A lack of financial support for a safe food environment adds to the challenge. Also, pressure to work quickly can make it hard to take the time to follow food safety practices.

**Language and culture** Your staff may speak a different language than you do, which can make it difficult to communicate. Cultural differences can also influence how employees view food safety.

**Literacy and education** Employees often have different levels of education, making it more challenging to teach them food safety.

**Pathogens** Illness-causing microorganisms are more frequently found on food that once was considered safe. For example, *Salmonella* spp. is now found on produce more than in the past.

**Unapproved suppliers** Food that is received from suppliers that are not practicing food safety can cause a foodborne-illness outbreak.

**High-risk customers** The number of customers at high risk for getting a foodborne illness is increasing. An example of this is the growing elderly population.

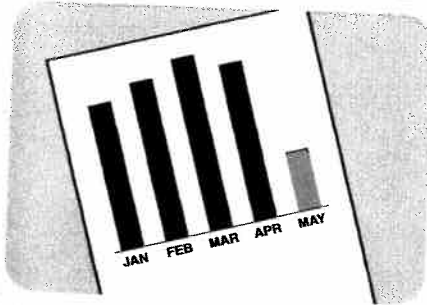
**Staff turnover** Training new staff leaves less time for food safety training.

The ServSafe program will provide you with the tools you need to overcome the challenges in managing a good food safety program.

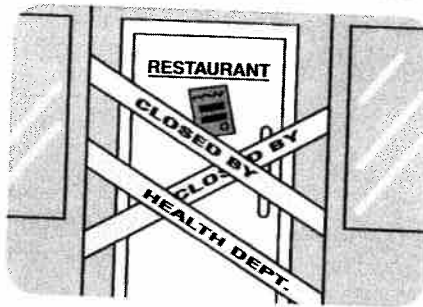
### The Cost of Foodborne Illnesses

Foodborne illnesses cost the United States billions of dollars each year. National Restaurant Association figures show that one foodborne-illness outbreak can cost an operation thousands of dollars and even result in closure.

#### Costs of a Foodborne Illness to an Operation



Loss of customers and sales



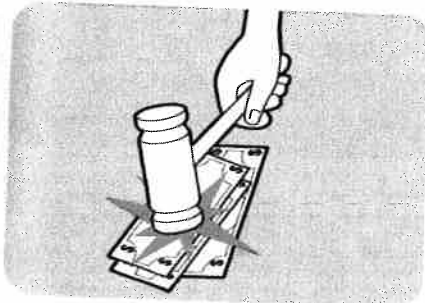
Loss of reputation



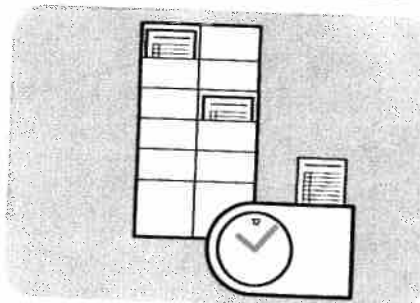
Negative media exposure



Lowered staff morale



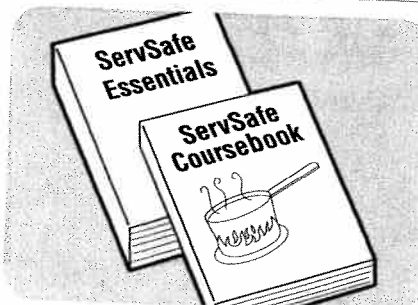
Lawsuits and legal fees



Staff missing work



Increased insurance premiums



Staff retraining

Most important are the human costs. Victims of foodborne illnesses may experience lost work, medical costs, long-term disability, and even death.

### Populations at High Risk for Foodborne Illnesses

Certain groups of people have a higher risk of getting a foodborne illness.



**Elderly people**

People's immune systems weaken with age. The immune system is the body's defense against illness.



**Infants and preschool-age children**

Very young children have not built up strong immune systems.



**Pregnant women**

Women's immune systems are compromised during pregnancy.



**Other populations**

- People with cancer or on chemotherapy
- People with HIV/AIDS
- Transplant recipients

#### **Apply Your Knowledge**

Who's at Risk?

Place a ✓ next to the people in high-risk populations.

\_\_\_\_\_ 68-year-old man

\_\_\_\_\_ 45-year-old man

\_\_\_\_\_ 25-year-old man on chemotherapy

\_\_\_\_\_ 16-year-old girl

\_\_\_\_\_ 23-year-old pregnant woman

\_\_\_\_\_ 38-year-old transplant recipient

\_\_\_\_\_ 41-year-old man on blood-pressure medication

\_\_\_\_\_ 3-year-old girl

For answers, please turn to page 1.10.



### Preventing Foodborne Illnesses

To prevent foodborne illnesses, you must recognize the hazards that can make food unsafe. These hazards can come from pathogens, chemicals, or objects. They might also come from certain unsafe practices in your operation. Most of these hazards can be controlled by focusing on personal hygiene, time and temperature control, and cross-contamination.

### Potential Hazards to Food Safety

Unsafe food is usually the result of contamination, which is the presence of harmful substances in the food. Some food safety hazards are caused by humans or by the environment. Others can occur naturally.

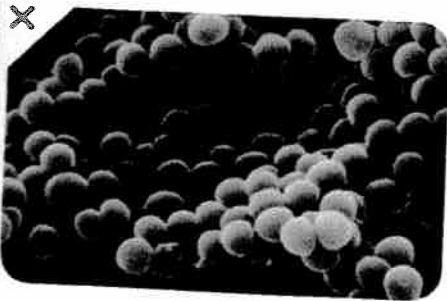
Potential hazards to food safety are divided into three categories.

**Biological** Pathogens are the greatest threat to food safety. They include certain viruses, parasites, fungi, and bacteria, like the photo of *Staphylococcus aureus* shown at left. Some plants, mushrooms, and seafood that carry harmful toxins (poisons) are also included in this group.

**Chemical** Foodservice chemicals can contaminate food if they are used incorrectly. The photo at left shows one example of how chemicals may contaminate food. This group also includes cleaners, sanitizers, polishes, machine lubricants, and toxic metals that leach from cookware into food.

**Physical** Foreign objects like hair, dirt, bandages, metal staples, or broken glass can get into food. The photo at left shows this type of physical hazard. Naturally occurring objects, like fish bones in fillets, are also physical hazards.

Each of the hazards listed above is a danger to food safety. But the greatest threat to an operation's food safety program is biological hazards. Pathogens are responsible for most foodborne-illness outbreaks.



C.T.  
No Law  
where gloves  
need to be worn.

## How Food Becomes Unsafe

The Centers for Disease Control and Prevention (CDC) has identified the five most common risk factors that cause foodborne illness.

- ① Purchasing food from unsafe sources
- ② Failing to cook food adequately
- ③ Holding food at incorrect temperatures
- ④ Using contaminated equipment
- ⑤ Practicing poor personal hygiene

Except for purchasing food from unsafe sources, each cause listed above is related to three main factors. These are time-temperature abuse, cross-contamination, and poor personal hygiene.

**Time-temperature abuse** Food has been time-temperature abused when it has stayed too long at temperatures that are good for the growth of pathogens. A foodborne illness can result if food is time-temperature abused, which can happen in many ways.

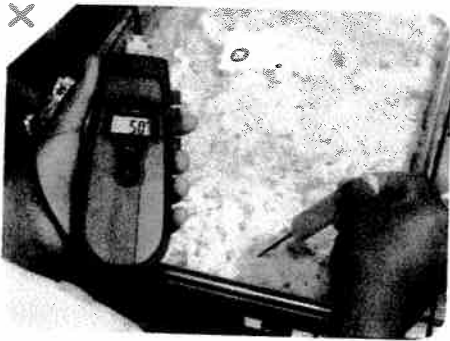
- Food is not held or stored at the right temperature, as shown in the photo at left.
- Food is not cooked or reheated enough to kill pathogens.
- Food is not cooled the right way.

**Cross-contamination** Pathogens can be transferred from one surface or food to another. Cross-contamination can cause a foodborne illness in many ways.

- Contaminated ingredients are added to food that receives no further cooking.
- Ready-to-eat food touches contaminated surfaces.
- Contaminated food touches or drips fluids onto cooked or ready-to-eat food, as shown in the photo at left.
- A foodhandler touches contaminated food and then touches ready-to-eat food.
- Contaminated cleaning towels touch food-contact surfaces.

**Poor personal hygiene** Foodhandlers can cause a foodborne illness if they do any of the following actions.

- Fail to wash their hands the right way after using the restroom or after any time their hands get dirty
- Come to work while sick
- Cough or sneeze on food, as shown in the photo at left
- Touch or scratch wounds, and then touch food



### Important Prevention Measures

Now that you know how food can become unsafe, you can use this knowledge to keep food safe. Focus on these measures.

- Controlling time and temperature
- Preventing cross-contamination
- Practicing personal hygiene
- Purchasing from approved, reputable suppliers



Set up standard operating procedures that focus on these areas. The ServSafe program will show you how to design these procedures in later chapters.

As a manager, your job is more than just understanding food safety practices. You also have to train the employees in your operation, as shown in the photo at left. Most important, you must then monitor them to make sure they follow the procedures.

#### Apply Your Knowledge

What's the Problem?

Six dangerous actions are listed below. Under each example, write an **X** next to the option that best describes how the food became unsafe.

- ① A package of raw chicken breasts is left out at room temperature.  
       \_\_\_\_\_ Time-temperature abuse      \_\_\_\_\_ Poor personal hygiene      \_\_\_\_\_ Cross-contamination
- ② A foodhandler sneezes on a salad.  
       \_\_\_\_\_ Time-temperature abuse      \_\_\_\_\_ Poor personal hygiene      \_\_\_\_\_ Cross-contamination
- ③ A foodhandler cooks a rare hamburger.  
       \_\_\_\_\_ Time-temperature abuse      \_\_\_\_\_ Poor personal hygiene      \_\_\_\_\_ Cross-contamination
- ④ A foodhandler scratches a cut, and then continues to make a sandwich.  
       \_\_\_\_\_ Time-temperature abuse      \_\_\_\_\_ Poor personal hygiene      \_\_\_\_\_ Cross-contamination
- ⑤ A foodhandler leaves the restroom without washing her hands.  
       \_\_\_\_\_ Time-temperature abuse      \_\_\_\_\_ Poor personal hygiene      \_\_\_\_\_ Cross-contamination
- ⑥ A foodhandler cuts up raw chicken. He then uses the same knife to chop carrots for a salad.  
       \_\_\_\_\_ Time-temperature abuse      \_\_\_\_\_ Poor personal hygiene      \_\_\_\_\_ Cross-contamination

For answers, please turn to page 1.10.



### Chapter Summary

As a foodservice manager, you have responsibilities to your operation, to your employees, and to your customers. The best way to meet those responsibilities is to keep the food you serve safe.

A foodborne illness is a disease transmitted to people by food. Some groups are at a higher risk of getting sick from unsafe food. They include infants and preschool-age children; pregnant women; the elderly; people with cancer or on chemotherapy; people with HIV/AIDS, and transplant recipients.

Hazards to food safety can be biological, chemical, or physical. Foodhandlers who do not follow the right procedures can also make food unsafe. Important prevention measures for keeping food safe are: controlling time and temperature; preventing cross-contamination; practicing personal hygiene; and purchasing from approved, reputable suppliers.

### Chapter Review Case Study

Now take what you have learned in this chapter and apply it to the following case study.

Jerry was not happy. It was Wednesday, and every Wednesday the softball team came in. The post-game visits usually involved a lot of joking and a lot of burger orders. But tonight, the team had called to cancel. The game had been called off due to rain. Unfortunately, Jerry had just started a dozen burgers on the grill. On top of that, he had a stomachache. The evening was not going well.

Jerry finished cooking the hamburger patties until they were well done, and then he put them in a pan on the counter. "Maybe someone will order a burger later," he thought. Since there were no customers yet, he made a quick run to the restroom. When he finished, he wiped his hands on his apron and headed back to the kitchen.

Twenty minutes later, Jerry got his first customers of the evening, an elderly man and his four-year-old granddaughter. Jerry was happy when they ordered a burger to share. "Cook it medium," the man said. It looked like the premade burgers would stay on the counter for a while.

Jerry went back to the kitchen and put a fresh patty on the grill. Then he wiped off the cutting board he had used earlier for prepping raw chicken. He sliced the tomatoes and onion. When the burger just passed medium-rare, he plated it up.

When Jerry delivered the food, the little girl asked for a glass of water. Jerry grabbed a glass and used it to scoop up some ice. But the glass broke. Jerry carefully picked the broken glass out of the ice machine. Then he got the girl a fresh glass for the ice water.

1. What did Jerry do wrong?

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2. What could Jerry have done differently?

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For answers, please turn to page 1.10.