

## INTRODUCTION TO FOOD SAFETY

Foodborne illness is nearly 100% preventable if food is handled safely from the time it is received until the time it is served. Restaurant managers can be proactive in preventing foodborne illness by having a food safety plan and training workers their workers to follow the plan.

### What is Foodborne illness?

Foodborne illness is caused by eating contaminated food. Each year in the U.S. about 76 million people get foodborne illness and over 5,000 die as a result. This means that this year alone about 1 in every 4 Americans will get foodborne illness.

Economists estimate that foodborne costs the U.S. between \$10 billion and \$83 billion each year. A foodborne illness outbreak can cost a restaurant about \$75,000. Specific costs include lost business, lawsuits, and medical costs. Most reported cases of foodborne illness are still tracked back to restaurants and so not handling food safely can be expensive.

### Who Can Get Foodborne Illness?

Anybody can get foodborne illness. However, some people are more susceptible than others. People who are more likely to get foodborne illness are:

- infants and preschool age children;
- pregnant women;
- older adults;
- people who are chronically ill; and
- individuals taking medications.

If these individuals should get sick from eating contaminated food in your restaurant, they could develop very serious complications. Each year over 300,000 people are hospitalized because of complications from foodborne illness.

### What Causes Foodborne Illness in a Restaurant?

Foodborne illness occurs when food becomes contaminated. Contaminated food contains hazards that are either naturally present or that were introduced when a worker does not handle food safely. There are three types of hazards --biological, chemical, and physical.

- *Biological hazards* -- bacteria, viruses, parasites, fungi, poisonous plants, poisonous mushrooms, and fish that carry harmful poisons.
- *Chemical hazards* – pesticides, food additives, preservatives, cleaning supplies, and toxic metals
- *Physical hazards* – items that accidentally get into food, such as hair, dirt, metal staples, and broken glass, as well as naturally occurring objects, such as bones.

### Potentially Hazardous Foods

Bacteria, viruses, and parasites cause most foodborne illness in the U.S. Any food can become unsafe but some foods are more likely to become contaminated. These foods are called

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potentially hazardous. A potentially hazardous food is neutral or slightly acidic (low acid), moist, *and* contains protein. In order for a food to be potentially hazardous, it must meet all three conditions. Examples of potentially hazardous foods include: meat, fish, poultry, cooked vegetables, cooked rice, dairy products, and eggs.

Potentially hazardous food can support the rapid growth of bacteria. Therefore, keeping potentially hazardous food hot or cold needs to be part of your restaurant's food safety plan.

### **Risk Factors**

When developing your food safety plan, you will need to address the risk factors that are most commonly associated with foodborne illness. The Centers for Disease Control and Prevention (CDC) have identified five risk factors that cause most foodborne illness. These are:

- *Food from unapproved and unsafe source* – not buying food from regulated food suppliers
- *Improper holding time and temperature* -- keeping food between 41°F (5°C) and 135°F (57°C) for more than four hours
- *Poor personal hygiene* -- workers not washing their hands properly; coughing or sneezing on food; touching or scratching sores, cuts, or boils; and coming to work sick
- *Improper cooking* – not cooking food to recommended internal temperatures
- *Cross-contamination* -- transferring microorganisms from one surface or food to another surface or food

### **Who's Responsible for Food Safety in a Restaurant?**

The foodservice manager is responsible. The manager must:

- Keep food safe in the restaurant at all times.
- Demonstrate his/her knowledge about food safety by complying with local foodservice regulations; becoming a certified food protection manager; *or* correctly answering an inspector's questions.
- Develop standard operating procedures (SOPs) that address time and temperature controls of food; good personal hygiene; prevention of cross-contamination; and approved food sources.
- Monitor the food handling practices of all workers in the operation.

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