

# ServSafe© Food Safety Manager Exam Study Guide

## Chapter 1: Providing Safe Food

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The information contained in this study guide is intended to contain enough information for a food service manager/operator to pass the ServSafe® Nationally Accredited Food Safety Exam. It is based on the instructor's notes and talking points, which are based on the ServSafe® Essentials 5<sup>th</sup> Edition reference book. Under no circumstance is what is written herein and following intended to be a legal, regulatory, operating or reference of any form or kind, or to provide a definitive guide to food safety and service. The information contained herein does not outline the entire FDA Food Code and food service operators should seek proper legal advice and services, which is not found within these notes. We have been careful to provide accurate information, but are not responsible or liable for any damage or loss incurred resulting from any inaccuracies or omissions in this document. If you and/or your operation establish any policies, or follow any procedures based on the notes contained herein, you do so at your own risk.

## Chapter 1: Providing Safe Food

### Preventing Foodborne Illnesses

- Foodborne illness: a disease carried or transmitted to people by food
- Foodborne illness outbreak: incident where 2 or more people get the same illness after eating at the same place.
- A foodborne illness outbreak is confirmed when laboratory analysis shows that a specific food is the source of the illness.
- Preventing foodborne illnesses is one of the manager's and/or owners primary responsibility.

### Challenges to Food Safety

- Time and money: Pressure to work quickly. Training costs.
- Language and culture: Different cultures have different views on food safety. Different native languages can make communication difficult with staff.
- Literacy and education: Staff often have different levels of education and ability to read and write.
- Pathogens: Pathogens are illness causing organisms. Pathogens are now often found on food that once was considered safe. Pathogens include certain viruses, bacteria, parasites, and fungi that can cause illness.
- Unapproved suppliers: Food received from unregulated and unknown suppliers is often found to be unsafe.
- Immune System: in health related terms: a complex network of interacting cells that protect the body from pathogens and other foreign substances, destroys infected and malignant cells, and removes cellular debris.
- High risk customers: Also known as High Risk Populations. These are people with a compromised immune system or an immune system not yet fully developed. Examples of High Risk Customers/Populations include: the elderly, infants, preschool age children, pregnant women, people who are seriously ill, people who are taking certain immune lowering medications, and transplant recipients.
- Staff turnover: Constantly training new staff to the establishments operating procedures leaves less time to train and monitor for food safety.

### Costs Associated with Foodborne Illnesses

- Foodborne illnesses cost the United States billions of dollars each year.
- The National restaurant Association estimates that one foodborne illness outbreak can cost an establishment hundreds of thousands of dollars and permanent closure of the establishment.
- Loss of customers and sales
- Negative media exposure
- Lawsuits and high legal fees
- Increased insurance premiums
- Loss of reputation
- Lowered staff morale

- Staff unemployment and absenteeism
- Costs associated with staff re-training
- Human costs: victims of foodborne illnesses can experience lack and loss of work, medical and psychological costs, long term and permanent disabilities and even death.

#### Preventing Foodborne Illnesses

- To prevent foodborne illnesses, the manager/owner must recognize the hazards and situations that make food unsafe.
- Hazards that make food unsafe include: pathogens, chemicals, and objects.
- Additional hazards include unsafe practices and procedures practiced in the establishment.
- Most of the hazards can be controlled by focusing on: personal hygiene, time and temperature control of food, and cross contamination.

#### Potential Hazards to Food Safety

- Contamination: the presence of harmful substances in food.
- Unsafe food is usually the result of some kind of contamination.
- Food safety hazards can occur naturally, be caused by humans, or by the occurrences in the environment of the establishment.
- Potential hazards to food safety are divided into three (3) categories: 1. Biological 2. Chemical and 3. Physical.
- Each of the three categories is a risk to food safety.
- The greatest risk to food safety are Biological Hazards. Pathogens, which come under the Biological category, are responsible for most foodborne illnesses.
- Category 1 – Biological Hazards: Pathogens. Pathogens are the greatest threat to food safety and they include certain viruses, parasites, fungi, and bacteria. Some plants, mushrooms and seafood that carry harmful toxins (poisons) are also included in this category.
- Category 2 – Chemical Hazards: Any type of chemical that if used incorrectly, can contaminate food. These include the wrong use and application of food service and regular cleaning chemicals such as degreasers, sanitizers, soaps, polishes, and machine lubricants. Toxic chemicals that leach from the cookware to food is also included in this category.
- Category 3 – Physical Hazards: Objects from the occurring environment in an establishment are considered Physical Hazards. Foreign objects such as hair, broken light bulbs, broken glass, pieces from falling ceiling tiles, dust and dirt, bandages, staples, and slivers from an opened can that can contaminate food are all examples of Physical Hazards. Naturally occurring objects such as fish bones, and pits from certain fruits are also considered Physical Hazards.

#### How Food Becomes Unsafe

- The Centers for Disease Control and Prevention (CDC) has identified the five (5) most common risk factors or ways that cause foodborne illness: 1. Purchasing food from unapproved and unknown suppliers. 2. Failing to cook adequately 3.

Holding food at incorrect temperatures. 4. Using contaminated equipment. 5. Practicing poor personal hygiene.

- Except for food from unapproved and unknown suppliers, each of the causes listed by the CDC is related to three (3) main factors: 1. Time-temperature abuse. 2. Cross-contamination and 3. Poor Personal Hygiene.
- Time-temperature Abuse: Food has been time-temperature abused when it has stayed too long at temperatures that are conducive for the growth of pathogens.
- A foodborne illness can happen if food is time-temperature abused - in which it can happen in the following ways: 1. Food is not held or stored at the right temperature. 2. Food is not cooked or reheated enough to kill pathogens. 3. Food is cooled improperly.
- Cross-contamination: Cross contamination occurs when pathogens are transferred from one surface or one food, to another.
- A foodborne illness can happen if food suffers cross-contamination - in which it can happen in the following ways: 1. Contaminated ingredients are added to food that receives no further cooking. 2. Ready to eat food touches a contaminated surface. 3. Contaminated food drips fluids or touches cooked or ready to eat foods. 4. A foodhandler touches contaminated food and then touches ready to eat food. 5. Contaminated towels touch food contact surfaces.
- Poor Personal Hygiene: Transferring of pathogens from the foodhandler to the food due to the foodhandler's poor personal hygiene can make food unsafe.
- A foodborne illness can happen due to poor personal hygiene - in which it can happen in the following ways: 1. The food handler does not wash his hands the right way after using the bathroom or after anytime that his hands get dirty. 2. A foodhandler comes to work when she is sick. 3. When a foodhandler coughs or sneezes on food. 4. If a food handler touches or scratches a wound or a cut, then he touches the food.

#### Important Prevention Measures

- By knowing how food becomes unsafe, the manager/owner can use the knowledge to keep food safe.
- Setting standard operating procedures that focus on the following measures will help keep food safe: 1. Controlling time and temperature 2. Preventing cross-contamination 3. Practicing good personal hygiene 4. Purchasing from known, approved and reputable suppliers.
- As a manager/owner of an establishment, your job is more than to know and establish food safety practices. You also have to train staff and monitor to make sure that they follow good food safety procedures.

#### Chapter 1 Key Terms

- Pathogens: Pathogens are illness causing organisms. Pathogens are now often found on food that once was considered safe. Pathogens include certain viruses, bacteria, parasites, and fungi that can cause illness.
- Time-Temperature Abuse: Food has been time temperature abused when it stays too long at temperatures that are good for pathogens to grow.

- Foodborne illness: Disease transmitted to people by food.