Slide 1

The Food Code, 1-201.10 (B)(1) defines what is an accredited program and what is not. The definition as it appears in the Food Code is as follows:

(B) (1) **Accredited program.**
(a)**"Accredited program"** means a food protection manager certification program that has been evaluated and listed by an accrediting agency as conforming to national standards for organizations that certify individuals. (The Conference for Food Protection recognizes three examinations. All three are comparable. More information about CFP and the exams is below.)

(b)**"Accredited program"** refers to the certification process and is a designation based upon an independent evaluation of factors such as the sponsor's mission; organizational structure; staff resources; revenue sources; policies; public information regarding program scope, eligibility requirements, re-certification, discipline and grievance procedures; and test development and administration.

(c)**"Accredited program"** does not refer to training functions or educational programs. (One can use any training curriculum to prepare individuals to take one of the three CFP-recognized certification examinations.)

What is the Conference for Food Protection? The Conference for Food Protection (CFP) brings together representatives from the food industry, government, academia, and consumer organizations to identify and address emerging problems of food safety and to formulate recommendations. The Conference seeks to balance the interests of regulatory and industry people while providing an open forum for the consideration of ideas from any source. The Conference meets at least biennially to provide this forum. Though the Conference has no formal regulatory authority, it is a powerful organization that profoundly influences model laws and regulations among all government agencies and minimizes disparate interpretations and implementation. For example, the Conference presents recommendations to the FDA regarding the Food Code.

CFP-recognized examinations. CFP has recognized three examinations as a means to meet the requirement of passing a test through an accredited program. They are: (1) ServSafe® Food Protection Manager Certification Program prepared by the Educational Foundation of the National Restaurant Association; (2) Food Protection Manager Certification Program prepared by Experior™ Assessments, LLC; and (3) Food Protection Manager Certification Program prepared by the National Registry of Food Safety Professionals. For more information about any of one these, go to the American National Standards

Institute (ANSI) Web site. ANSI has worked with CFP to accredit these certification programs. The direct page within the ANSI Web site to this information is:
http://www.ansi.org/conformity_assessment/personnel_certification/person_sert_bodies.aspx?menuid=4

Content Requirement for Food Safety Certification Programs. Chapter 2 of the Food Code also clearly identifies the content that must be mastered in order for the manager (known as the person-in-charge in the Food Code) to be certified and so all examinations will test an individual on the following information:
(1) Describing the relationship between the prevention of foodborne disease and the personal hygiene of a food employee;
(2) Explaining the responsibility of the person in charge for preventing the transmission of foodborne disease by a food employee who has a disease or medical condition that may cause foodborne disease;
(3) Describing the symptoms associated with the diseases that are transmissible through food;
(4) Explaining the significance of the relationship between maintaining the time and temperature of potentially hazardous food and the prevention of foodborne illness;
(5) Explaining the hazards involved in the consumption of raw or undercooked meat, poultry, eggs, and fish;
(6) Stating the required food temperatures and times for safe cooking of potentially hazardous food including meat, poultry, eggs, and fish;
(7) Stating the required temperatures and times for the safe refrigerated storage, hot holding, cooling, and reheating of potentially hazardous food;
(8) Describing the relationship between the prevention of foodborne illness and the management and control of the following:
(a) Cross contamination,
(b) Hand contact with ready-to-eat foods,
(c) Handwashing, and
(d) Maintaining the food establishment in a clean condition and in good repair;
(9) Explaining the relationship between food safety and providing equipment that is:
(a) Sufficient in number and capacity, and
(b) Properly designed, constructed, located, installed, operated, maintained, and cleaned;
(10) Explaining correct procedures for cleaning and sanitizing utensils and food-contact surfaces of equipment;
(11) Identifying the source of water used and measures taken to ensure that it remains protected from contamination such as providing protection from backflow and precluding the creation of cross connections;
(12) Identifying poisonous or toxic materials in the food establishment and the procedures necessary to ensure that they are safely stored, dispensed, used, and disposed of according to law;
(13) Identifying critical control points in the operation from purchasing through sale or service that when not controlled may contribute to the transmission of foodborne illness and explaining steps taken to ensure that the points are controlled in accordance with the requirements of this Code;
(14) Explaining the details of how the person in charge and food employees comply with the HACCP plan if a plan is required by the law, this Code, or an agreement between the Regulatory authority and the establishment; and
(15) Explaining the responsibilities, rights, and authorities assigned by this Code to the:
(a) food employee,
(b) person in charge, and
(c) Regulatory authority.

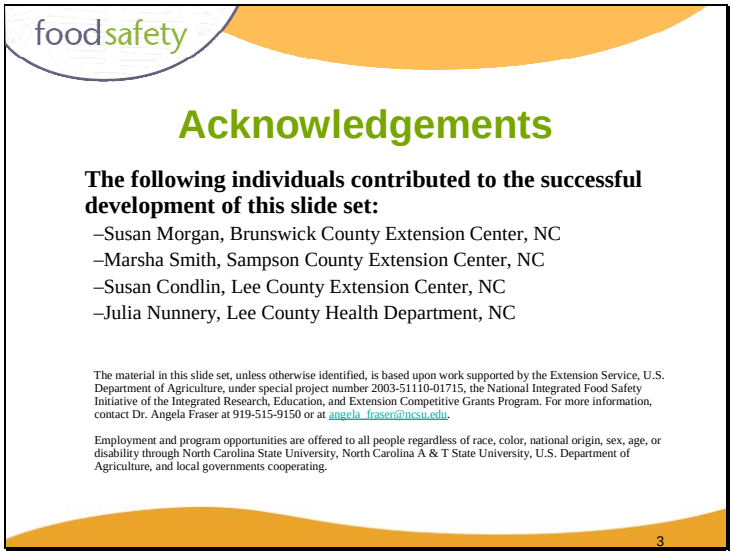
While any training curriculum can be used to prepare an individual for a certification examination, it is important to select one that addresses all 15 content areas. These slides adequately address all areas that will be covered on a CFP-recognized examination and so can be used with the ServSafe program or any other approved training program that will prepare individuals to take a CFP-recognized certification examination.

The Food Code is available at: http://www.cfsan.fda.gov/~dms/fc01-toc.html

Slide 2

The 244 slides were prepared, reviewed, and revised in 2006.

Slide 3



The above individuals reviewed the slide set for clarity in 2005.

Slide 4

This course is designed to prepare individuals to take an a food safety certification exam. It is designed for the person in charge of the foodservice operation. The person in charge is knowledgeable about foodborne disease prevention, Hazard Analysis and Critical Control Point (HACCP) principles, and Code requirements. They are prepared to recognize conditions in the operation that might contribute to foodborne illness or that might otherwise fail to comply with Code requirements. This individual should take appropriate preventive and corrective actions to prevent foodborne illness.

Status of "Universal Acceptance" of Food Protection Manager Certificates
Presently there are a wide variety of industry management training and certification programs being offered by regulatory agencies, academic institutions, food companies, industry groups and "third-party" organizations. Most certification programs share a common desire to have the food manager certificate they issue universally recognized and accepted by others - especially by the increasing number of regulatory authorities that require food manager certification.

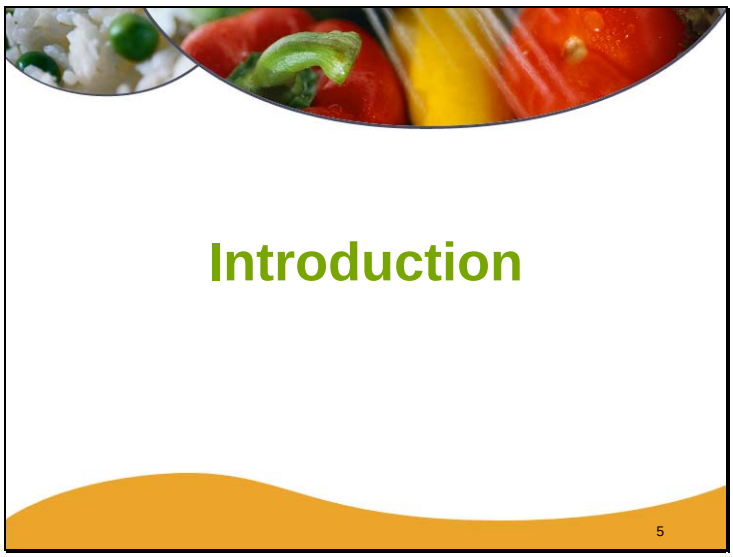
Certification programs vary significantly in focus and primary mission of sponsors, organizational structures, staff resources, revenue sources, testing mechanisms, policies toward applicants and employers of food managers, and policies pertaining to such things as public information, criteria for maintaining certification, and the need for recertification. Where courses are offered, they vary in scope, content, depth and duration, quality of instructional materials, qualifications of instructors, and instructional approach (classroom, on-the-job, PC-based, home study, etc.). Where testing is a program component, varying degrees of attention are given to test construction and test administration as they relate to nationally accepted standards (reliability, validity, job analysis, subject weighting, cut scores, test security, etc.).

The Conference for Food Protection has developed a process for the independent evaluation and recognition of food protection manager certification examinations that meet the standards for test development and test administration. Information regarding this CFP Food Protection Manager Certification Examination recognition process can be obtained by accessing the Conference for Food Protection web site at http://www.foodprotect.org.

Upon completion of this training program, the participant will be able to:
(1) Describe the relationship between the prevention of foodborne disease and the personal hygiene of a food employee;
(2) Explain the responsibility of the person in charge for preventing the transmission of foodborne disease

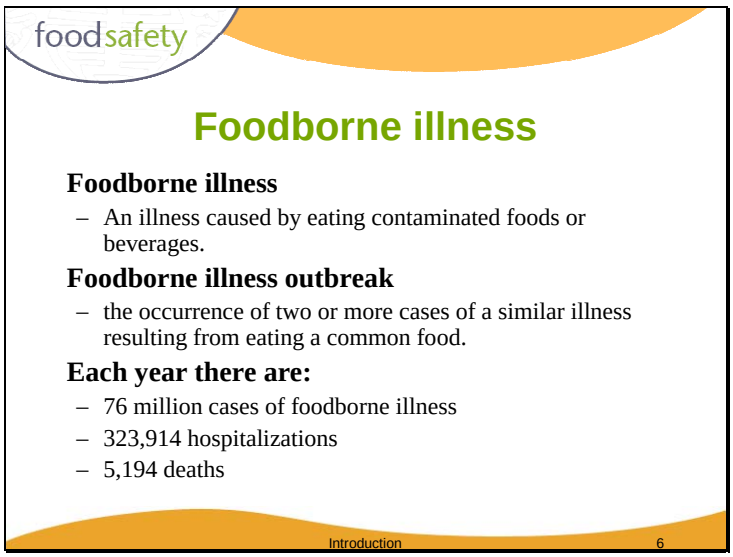
by a food employee who has a disease or medical condition that may cause foodborne disease;
(3) Describe the symptoms associated with the diseases that are transmissible through food;
(4) Explain the significance of the relationship between maintaining the time and temperature of potentially hazardous food and the prevention of foodborne illness;
(5) Explain the hazards involved in the consumption of raw or undercooked meat, poultry, eggs, and fish;
(6) State the required food temperatures and times for safe cooking of potentially hazardous food including meat, poultry, eggs, and fish;
(7) State the required temperatures and times for the safe refrigerated storage, hot holding, cooling, and reheating of potentially hazardous food;
(8) Describe the relationship between the prevention of foodborne illness and the management and control of the following:
    (a) Cross-contamination,
    (b) Hand contact with ready-to-eat foods,
    (c) Handwashing, and
    (d) Maintaining the food establishment in a clean condition and in good repair;
(9) Explain the relationship between food safety and providing equipment that is:
    (a) Sufficient in number and capacity, and
    (b) Properly designed, constructed, located, installed, operated, maintained, and cleaned;
(10) Explain correct procedures for cleaning and sanitizing utensils and food-contact surfaces of equipment;
(11) Identify the source of water used and measures taken to ensure that it remains protected from contamination such as providing protection from backflow and precluding the creation of cross connections;
(12) Identify poisonous or toxic materials in the food establishment and the procedures necessary to ensure that they are safely stored, dispensed, used, and disposed of according to law;
(13) Identify critical control points in the operation from purchasing through sale or service that when not controlled may contribute to the transmission of foodborne illness and explaining steps taken to ensure that the points are controlled in accordance with the requirements of the Food Code;
(14) Explain the details of how the person in charge and food employees comply with the HACCP plan if a plan is required by the law, the Food Code, or an agreement between the Regulatory authority and the establishment; and
(15) Explain the responsibilities, rights, and authorities assigned by the Food Code to the:
    (a) food employee,
    (b) person in charge, and
    (c) Regulatory authority.

Slide 5



This content of this section is based on information that appears in the following sections of the U.S. Food Code – the Joint Introduction to the 2001 Food Code and the Preface.

Slide 6

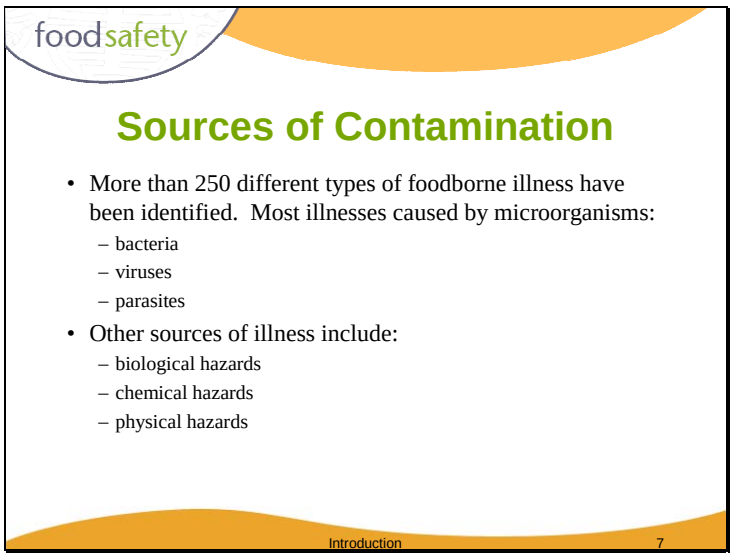


More than 200 known diseases are transmitted through food. The causes of foodborne illness include viruses, bacteria, parasites, toxins, metals, and prions (infectious proteins that have a unique way or replicating and are believed to be the cause of Bovine Spongiform Encephalopathy). The symptoms of foodborne illness range from mild gastroenteritis to more severe and even life-threatening complications, such as neurological, hepatic, and renal syndromes. It is estimated that 76 million cases of foodborne disease occur each year in the United States. Most cases are mild and cause symptoms for only a day or two. Some cases are more serious, and CDC estimates that there are 325,000 hospitalizations and 5,000 deaths related to foodborne diseases each year. The most severe cases tend to occur in the very old, the very young, those who have an illness already that reduces their immune system function, and in healthy people exposed to a very high dose of an organism.

Related links:
Food-Related Illness and Death in the United States
Surveillance for Foodborne Disease Outbreaks
Preliminary FoodNet Data on the Incidence of Foodborne Illnesses

Source:
Mead, P.S., L. Slutsker, V. Dietz, L.F. McCaig, J.S. Bresee, C. Shapiro, P.M. Griffin, and R.V. Tauxe. 1999. Food-related illness and death in the U.S. Emerging Infectious Diseases 5:607-625. Complete publication available on-line at www.cdc.gov/ncidod/eid/vol5no5/mead.htm

Slide 7



Government estimates vary widely as to the prevalence and growth of foodborne illnesses. Because many people afflicted with foodborne illnesses assume they have the flu and do not visit a physician, cases tend to be underreported. The Centers for Disease Control and Prevention (CDC), the federal agency that collects and disseminates information on foodborne illnesses, notes that reports of outbreaks represent "only a small fraction of the total number that occur."

There are four types of foodborne illness agents:
Bacteria - Some bacteria, of course, are beneficial and are even used in food processing; others combat disease. There are literally thousands of different strains of bacteria that can cause foodborne disease; fewer than 50 to 100 are responsible for most of the illnesses.
Viruses - Viruses are too small to be seen with any ordinary microscope, and they grow or reproduce only in living cells. They are often found in untreated water. In addition, viruses from human feces on inadequately washed hands can be a source of foodborne disease.
Parasites - Food and water can carry such parasites as tapeworms, roundworms and certain species of protozoa.
Food toxins - Toxins, such as scrombotoxin and ciguatoxin, are formed by microorganisms in food when stored in the temperature danger zone.

Foodborne illness occurs when a foodborne illness agent causes either an infection or intoxication. An infection results from eating significant quantities of contaminants that have grown in the food itself or in the small intestines once the food is eaten (toxin-mediated infection).

It is important to emphasize that because there are literally thousands of different strains of bacteria that can cause foodborne disease, it is difficult to generalize their characteristics and effects. For instance, most bacteria are destroyed by thorough cooking, yet some can survive boiling. Most microorganisms prefer warm environments, but some such as *Listeria* will survive and even grow at refrigerator temperatures. Most microorganisms do not survive in food with relatively high salt concentrations, but some will.

Slide 8

The cost of foodborne illness to the U.S. economy, based on direct medical expenses, lost wages, and productivity, and industry loss of tainted food products, is estimated at between $10 billion and $83 billion annually.

Slide 9

Pregnant women, the elderly, and those with weakened immune systems are at higher risk for severe infections, such as listeriosis, and so should be particularly careful not to eat undercooked animal products. They should also avoid eating soft, French- style cheeses, pates, uncooked hot dogs, and sliced deli meats, which have been sources of *Listeria* infections. Persons at high risk should also not eat alfalfa sprouts and unpasteurized juices.
A bottle-fed infant is at higher risk for severe infections by *Salmonella* or other bacteria that can grow in a bottle of warm formula if it is left at room temperature for many hours.
Persons with liver disease are susceptible to infections by a rare but dangerous microbe called *Vibrio vulnificus*, found in oysters. This population group should not eat raw oysters.

Variables of the Host. Different variables will affect whether or not an individual will contract a foodborne illness. These variables are -- age, general health, pregnancy, medications (over-the-counter or prescription), metabolic disorders, alcoholism, cirrhosis, hemochromatosis, malignancy, amount of food consumed, gastric acidity variation: antacids, natural variation, achlorhydria, genetic disturbances, nutritional status, immune competence, surgical history, and occupation.

SOURCE: Centers for Disease Control and Prevention. Available on-line at: www.cdc.gov/ncidod/dbmd/diseaseinfo/foodborneinfections_g.htm#morelikely

Slide 10

We live in a world that has a wide diversity of microorganisms, and there are many opportunities for food to become contaminated as it is produced and prepared. Many foodborne microorganisms are present in healthy animals (usually in their intestines) raised for food. Meat and poultry carcasses can become contaminated during slaughter by contact with small amounts of intestinal contents. Similarly, fresh fruits and vegetables can become contaminated if they are washed or irrigated with water that is contaminated with animal manure or human sewage. Some types of *Salmonella* can infect a hen's ovary so that the internal contents of a normal-looking egg can be contaminated with *Salmonella* even before the shell in formed. Oysters and other filter-feeding shellfish can concentrate *Vibrio* bacteria that are naturally present in seawater, or other microbes that are present in human sewage dumped into the sea.

Later in food processing, other foodborne microorganisms can be introduced from the environment of the food processing line. They may also be introduced by infected humans who handle the food, or by cross-contamination between raw and cooked or ready-to-eat products. The unwashed hands of food handlers who are infected can introduce *Shigella* bacteria, hepatitis A virus, and Norovirus. In the kitchen, microbes can be transferred from one food to another food by using the same knife, cutting board, or other utensil to prepare both without washing and sanitizing the surface or utensil in between uses. A food that is fully cooked can become recontaminated if it comes into contact with other raw foods or the drippings from raw foods that contain foodborne pathogens.

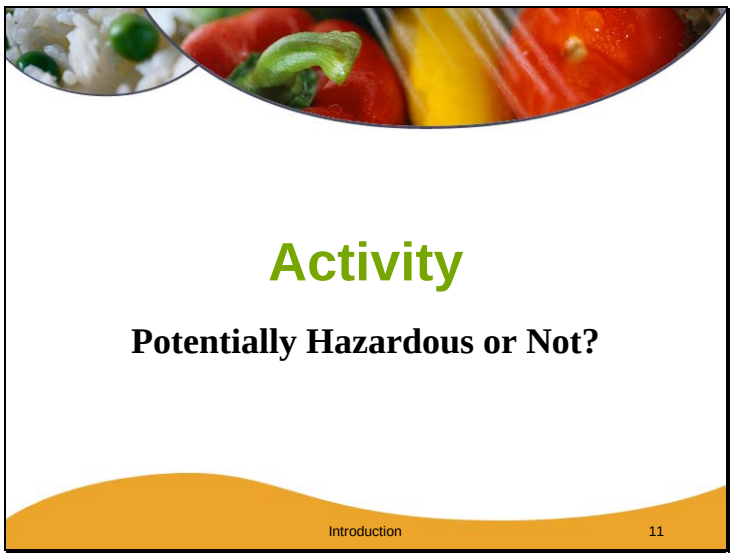
The way that food is handled after it is contaminated can also make a difference in whether or not an outbreak occurs. Many bacteria need to multiply to a larger number before enough are present in food to cause foodborne illness. Given warm moist conditions and an ample supply of nutrients, one bacterium that reproduces by dividing itself every half hour can produce 16 billion bacteria in 12 hours. As a result, lightly contaminated food left out overnight can be highly contaminated by the next day. On the other hand, if the food were refrigerated promptly, the bacteria would not multiply very slowly, if at all. In general, refrigeration or freezing prevents virtually all bacteria from growing. This general rule has a few exceptions. Two foodborne bacteria, *Listeria monocytogenes* and *Yersinia enterocolitica* can grow at refrigerator temperatures and so many potentially hazardous foods should not be refrigerated for more than seven days. High salt, high sugar or high acid levels keep bacteria from growing, which is why salted meats, jam, and pickled vegetables are traditional preserved foods.

Microorganisms are killed by heat. If food is heated to an internal temperature above 172°F for even a few seconds, it is sufficient to kill parasites, viruses or bacteria, except for the *Bacillus* and *Clostridium* bacteria, which produce a heat-resistant form called a spore. These spores are killed only at temperatures

above boiling. This is why canned foods must be cooked to a high temperature under pressure as part of the canning process.

The toxins produced by bacteria vary in their sensitivity to heat. The toxin produced by *Staphylococcus aureus*, which can cause vomiting, is not inactivated even if it is boiled. Fortunately, the toxin that causes botulism is completely inactivated by boiling the food for ten minutes or longer.

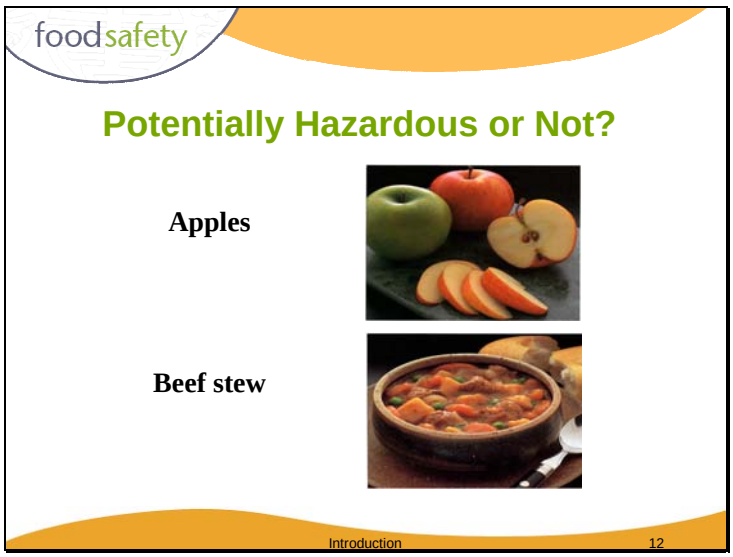
Slide 11



ACTIVITY INSTRUCTIONS: Show the following seven slides and have the training participants determine if the food item is potentially hazardous or not. Have them explain their reasoning using the definition of a potentially hazardous food -- typically neutral or slightly acidic (low acid), moist, and contains protein. Remind participants that foodservice workers must use time-temperature control for safety (TCS) when handling potentially hazardous foods. The bottom line is that potentially hazardous foods must be kept hot or cold to minimize the growth of bacteria.

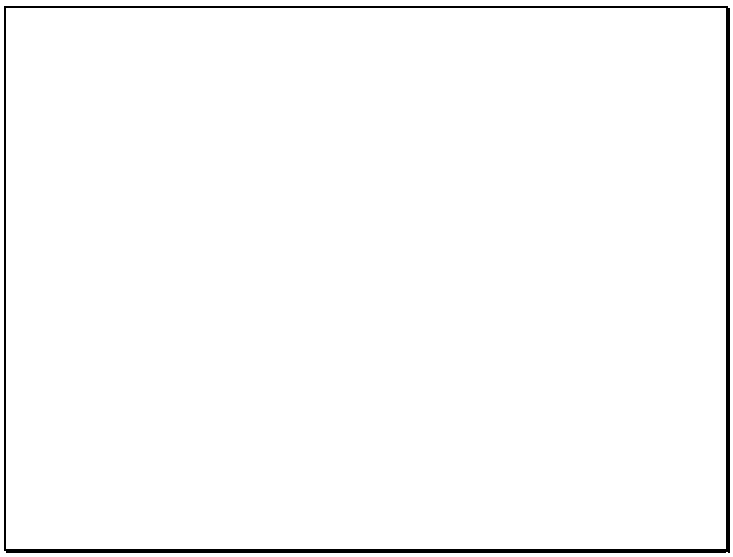
Potentially hazardous foods can support the growth of pathogenic bacteria. Foods that are not potentially hazardous cannot. To prevent the growth of pathogenic bacteria, potentially hazardous foods must be kept hot (135 degrees F or hotter) or cold (41 degrees F or colder). Potentially hazardous foods can be in the temperature danger zone (41 degrees F to 135 degrees F) for no more than four hours. If a potentially hazardous food is in the temperature danger for more than four hours, it must be thrown out. The only exception to this is for cold foods. Cold foods can be in the temperature danger for up to six hours if: originally held at 41^{o}F or colder; labeled with the date and both the time it left temperature control and the time it is to be discarded; and not exceed 70^{o}F during the six hours.

Slide 12



Potentially hazardous foods must meet all three characteristics – protein, low acid, and sufficient moisture -- in order to be classified as potentially hazardous.
Apples –- no, because it is not cut. Storing whole or cut apples in the refrigerator is recommended to increase the shelf-life not to keep it safe to eat.
Beef stew – yes, because low acid, protein, and high water activity.

Slide 13

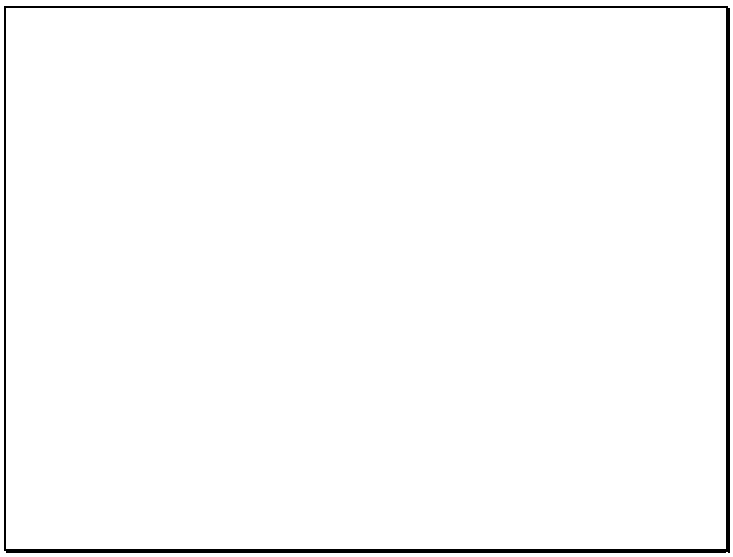


Potentially hazardous foods must meet all three characteristics – protein, low acid, and sufficient moisture -- in order to be potentially hazardous.
Bologna – yes, because low acid, protein, and high water activity
Cake – no, because low water activity

Slide 14

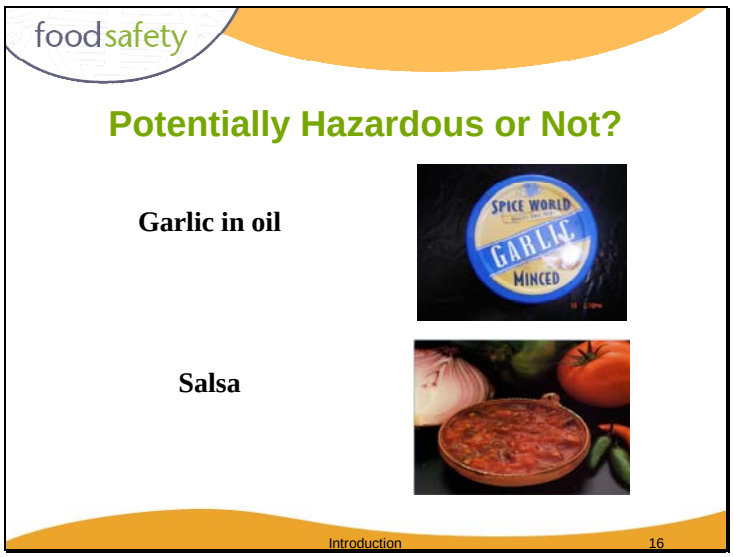
Potentially hazardous foods must meet all three characteristics – protein, low acid, sufficient moisture -- in order to be classified as potentially hazardous.
Macaroni and cheese – yes, because low acid, protein, and high water activity
Baked potato – yes, because low acid, protein, and high water activity.

Slide 15



Potentially hazardous foods must meet all three characteristics – protein, low acid, and sufficient moisture -- in order to be potentially hazardous.
Bacon – no, not if cooked to a crisp state. If undercooked, the bacon is potentially hazard because low acid, protein, and high water activity
Crackers – no, because low water activity

Slide 16



Potentially hazardous foods must meet all three characteristics – protein, low acid, and sufficient moisture -- in order to be classified as potentially hazardous.

Garlic in oil – yes, if it is not acidified because it would be low acid, protein, and high water activity. Unopened jars of commercially prepared garlic in oil are not potentially hazardous because they have been properly acidified. Once opened, it is recommended to keep them refrigerated.

Salsa – no, because high acid. However, if the salsa is freshly prepared without acid (lemon juice or vinegar), it is potentially hazardous and so must be kept in the refrigerator.

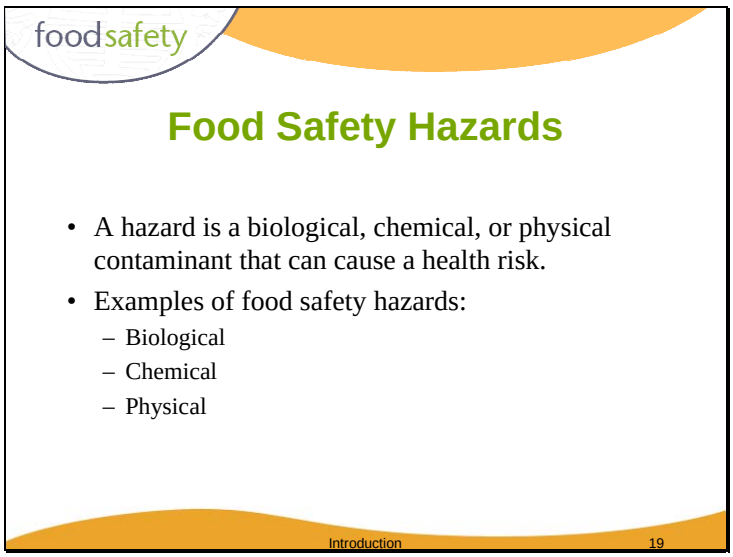
Slide 17

Potentially hazardous foods must meet all three characteristics – protein, low acid, and sufficient moisture -- in order to be classified as potentially hazardous.
Tofu – yes, because low acid, protein, and high water activity
Sliced watermelon – yes, because low acid, protein, and high water activity. Melons (watermelon, cantaloupe, honeydew, muskmelon) and figs are the only fruits that are classified as low acid. Therefore, these fruits are classified as potentially hazardous. When they are whole, they can be stored at room temperature. When cut, they must be kept cold (41F or colder).

Slide 18

Potentially hazardous foods must meet all three characteristics – protein, low acid, and sufficient moisture -- in order to be classified as potentially hazardous.
Grilled tuna salad sandwich – yes, because low acid, protein, and high water activity
Steamed rice – yes, because low acid, protein, and high water activity

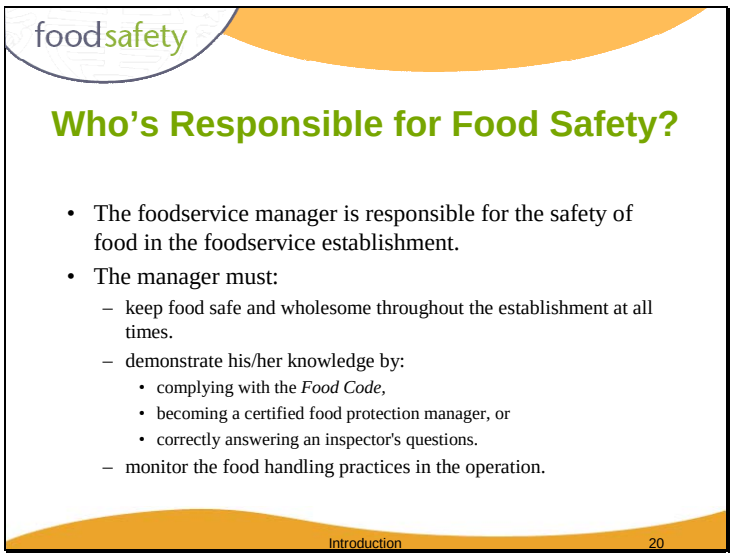
Slide 19



Biological hazards – microorganisms (bacteria, viruses, parasites)
Chemical hazards – toxins from bacteria, fish, plants; cleaning agents; sanitizers; pesticides; and heavy metals
Physical hazards – bone, fingernails, wood, metal

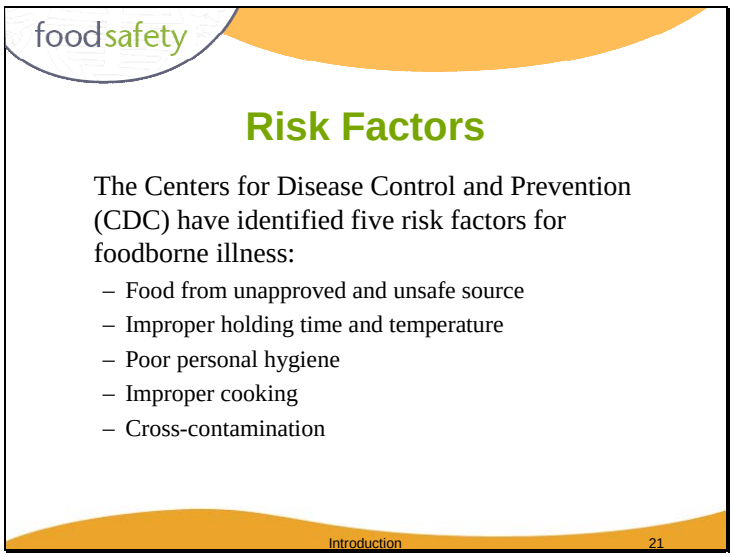
Biological and chemical hazards can cause illness. Physical hazards can cause injury.

Slide 20



According to the Food Code, the person in charge must make sure that:
(A) Food storage and preparation is not conducted in a private home or in a room used as living or sleeping quarters.
(B) Persons unnecessary to the food establishment operation are not allowed in the food preparation, food storage, or warewashing areas, except that brief visits and tours may be authorized by the person in charge if steps are taken to ensure that exposed food; clean equipment, utensils, and linens; and unwrapped single-service and single-use articles are protected from contamination;
(C) Employees and other persons, such as delivery and maintenance persons and pesticide applicators who enter the food preparation, food storage, and warewashing areas comply with the requirements of the Food Code;
(D) Employees are effectively cleaning their hands;
(E) Employees are inspected foods as they are received to determine that they are from approved sources, delivered at the required temperatures, protected from contamination, unadulterated, and accurately presented;
(F) Employees are properly cooking potentially hazardous food, being particularly careful in cooking those foods known to cause severe foodborne illness and death, such as eggs and comminuted meats.
(G) Employees are using proper methods to rapidly cool potentially hazardous foods that are not held hot or cold;
(H) Consumers who order raw or partially cooked ready-to-eat foods of animal origin are informed that the food is not cooked sufficiently to ensure its safety;
(I) Employees are properly sanitizing cleaned multiuse equipment and utensils before they are reused, through routine monitoring of solution temperature and exposure time for hot water sanitizing, and chemical concentration, pH, temperature, and exposure time for chemical sanitizing;
(J) Consumers are notified that clean tableware is to be used when they return to self-service areas, such as salad bars and buffets;
(K) Employees are preventing cross-contamination of ready-to-eat food with bare hands by properly using suitable utensils such as deli tissue, spatulas, tongs, single-use gloves, or dispensing equipment; and
(L) Employees are properly trained in food safety as it relates to their assigned duties.

Slide 21



In 1998, the U.S. Food and Drug Administration's (FDA) National Retail Food Team initiated a study to measure the occurrence of food preparation practices and employee behaviors most commonly reported to the Centers for Disease Control and Prevention (CDC) as contributing factors in foodborne illness outbreaks. Specifically, this study called for conducting data collection inspections of various types of foodservice and retail food establishments at five-year intervals to observe and document the occurrence of the following contributing factors:
Food from Unsafe Sources
Improper Holding/Time and Temperature
Inadequate Cooking
Poor Personal Hygiene
Contaminated Equipment/Prevention of Contamination

For the purposes of this long-term study, FDA designated these contributing factors as "foodborne illness risk factors." The first report in the study was issued in August 2000 and presented data collected in 1998. This 2004 report is the second report in the series and presents data collected in 2003. A third data collection is scheduled for 2008.

The 2000 report called attention to the need for greater active managerial control of foodborne illness risk factors. It suggested that more innovative and effective strategies to improve food safety practices in retail and foodservice establishments were needed. The report highlighted operational areas most in need of improvement including employee handwashing, cold holding of potentially hazardous foods, date marking of ready-to-eat foods, and cleaning and sanitizing of food contact surfaces.

In 2003, FDA Regional Retail Food Specialists collected data during site-visits of over 900 establishments representing nine distinct facility types. Direct observations, supplemented with information gained from discussions with management and food workers, were used to document the establishments' compliance status for forty-two individual data items based on provisions in the 1997 FDA Food Code. In each establishment, the compliance status for each data item was recorded in terms of IN Compliance, Out of Compliance, Not Observed (meaning the behavior or practice was not observed during the visit), or Not Applicable (meaning the behavior or practice did not apply to the establishment).

For each of the nine facility types, the percentage of observations recorded as Out of Compliance is presented for each risk factor and for the individual data items related to those risk factors most in need of priority attention. The Percent Out of Compliance value for each risk factor was calculated by dividing the

total number of Out of Compliance observations of data items in the risk factor by the total number of observations (IN compliance and Out of Compliance) of data items in the risk factor. The Percent Out of Compliance for an individual data item is the proportion of establishments where that data item was Out of Compliance when the practice or procedure could be observed.

The data presented in this report indicate that the same risk factors and data items identified as problem areas in the 2000 report remain in need of priority attention. This indicates that industry and regulatory efforts to promote active managerial control of these risk factors must be strengthened. In all facility types, the Out of Compliance percentages remained high for data items related to the following risk factors:
Improper Holding/Time and Temperature
Poor Personal Hygiene
Contaminated Equipment/Prevention of Contamination

For the improper holding/time and temperature risk factor, the high Percent Out of Compliance values were most commonly associated with improper cold holding of potentially hazardous food (PHF) and inadequate date marking of refrigerated ready-to-eat PHF.

Within the poor personal hygiene risk factor, the proper, adequate handwashing data item had the highest Percent Out of Compliance value for every facility type. Percent Out of Compliance values for proper, adequate handwashing ranged from approximately 34% for hospital foodservice to approximately 73% for full service restaurants.

Of the data items related to the contaminated equipment/protection from contamination risk factor, improper cleaning and sanitizing of food contact surfaces before use was the item most commonly observed to be Out of Compliance in each facility type. Percent Out of Compliance values for this data item ranged from 25% in elementary schools to 58% in deli departments.

This report also includes a comparison between the data collected from food establishments that had a Certified Food Protection Manager (CFPM) from a program recognized by the Conference for Food Protection and those that did not. The data suggests that the presence of a certified manager has a positive effect on the control of certain risk factors, especially in fast food restaurants, full service restaurants, meat and poultry departments, and produce departments. Poor personal hygiene appears to be the risk factor for which the presence of a certified manager had the most positive effect.

The 2003 data collection effort included several supplemental data items that were not included in the 1998 data collection. While the forty-two primary data items in the study remained the same from 1998 to 2003, the supplemental data items addressed changes made to the FDA Food Code since 1998. These items related to the cooking temperature for pork, minimum hot holding temperatures, employee health, juice, eggs, and highly susceptible populations. Data gathered for the supplemental data items suggest that reducing the minimum hot holding temperature for potentially hazardous foods from 140°F (60°C) to 135°F (57°C) and reducing the minimum cooking temperature for pork from 155°F (68°C) to 145°F (63°C) had minimal effect on the industry's control of these risk factors.

Results from the 2003 data collection indicate that the recommendations made to foodservice and retail food operators and regulators in the 2000 Report need to be reemphasized. Foodservice and retail food operators must ensure that their management systems are designed to achieve active managerial control over the risk factors. Likewise, regulators must ensure that their inspection, education, and enforcement efforts are geared toward the control of the risk factors commonly found to be Out of Compliance.

SOURCE: FDA Report on the Occurrence of Foodborne Illness Risk Factors in Selected Institutional Foodservice, Restaurant, and Retail Food Store Facility Types. 2004.
Available at: http://www.cfsan.fda.gov/~dms/retrsk2.html