Definitions

It is important to understand the most common terms used within the food safety industry. We are not going to discuss these now, however you will find them detailed below in this download.

Please download this document and keep a copy as a quick reference guide.

Acute

The rapid onset of symptoms. Also used to describe the severity of the illness.

Aerobic

Certain bacteria are aerobic and need oxygen to survive.

Allergy (Allergenic Reaction)

An allergic reaction is the body's (over) reaction to a particular food/ingredient. An attack can occur within minutes of ingestion, and even the tiniest traces of an ingredient can be life threatening to a sufferer.

Ambient Temperature

Used to describe room temperature. A temperature that is in the Temperature Danger Zone and allows for rapid pathogenic bacterial multiplication.

Anaerobic

Bacteria that do not require oxygen to survive.

Anaphylactic Shock

A severe allergenic reaction to certain foods or food additives. It causes a fall in blood pressure leading to loss of consciousness and can be life threatening if not quickly treated. Urgent medical assistance is required and usually treated with an injection of adrenaline.

Aw (Water Activity)

The sign/symbol for water activity. It is the amount of moisture/water available for the bacteria. Pure water is 1.00aw, raw meat is 0.98aw. Bacteria cannot multiply at 0.80aw or below.

Bacillus

This is a large family of bacteria that cause food to spoil. Bacillus cereus can cause a foodborne illness. However, some Bacillus bacteria strains are helpful and part of our digestive system.

Bacteria

Are single-celled organisms that can live independently, or as parasites (i.e. dependent on other organisms for life). Many are necessary for life.

Bactericide

A chemical that destroys bacteria.

BIG 6

The six bacteria/viruses that are the most contagious and cause the most severe symptoms.

E coli, Hepatitis A, Nontyphoidal Salmonella, Norovirus, Shigella, Salmonella Typhi.

Binary Fission

The method by which bacteria multiply. It is the division into two cells, given the right conditions, every 10 to 20 minutes.

Blanching

The immersion of vegetables into boiling water or steam for a short period of time before freezing. A process to destroy enzymes and reduce spoilage that can occur in storage.

Botulism

This foodborne illness can result in death. Home-canned products are usually susceptible to containing botulism. Purchasing commercially produced canned products that have undergone a botulinum cook will reduce the risk of botulism.

Campylobacter jejuni

A common cause of foodborne illness in the US. Sources are raw and undercooked poultry, unpasteurized milk, and contaminated water.

Carrier

People can carry harmful pathogenic bacteria and foodborne illnesses without exhibiting symptoms as they may be within the incubation period when the disease needs to mature and attack. They can unknowingly pass the disease onto other people.

Clostridium perfringens

This type of pathogenic bacteria is a spore former that multiplies rapidly in the Temperature Danger Zone. Often found in the intestines of humans and animals.

Clostridium botulinum

This type of pathogenic bacteria is a spore former that can grow without oxygen and can produce a lethal toxin that attacks the human nervous system. Usually found in water and soil/dirt.

Contact Time

The recommended time a manufacturer states for a sanitizer to reduce pathogenic bacteria to a safe level. For example: spray and leave on a surface for 20 seconds before wiping off.

Contamination (Cross-Contamination)

This means the transferring of harmful physical, chemical or biological contamination onto food. Cross-contamination can be the transfer of pathogenic bacterial contamination from one place to another by mistake or by a deliberate act. E.g. by touching raw chicken breast, then a ready-to-eat dish, the hazard is now present on the previously safe dish.

Control Measure

An action or activity that can be used to reduce a food safety hazard to an acceptable level.

Control Point

A step in the process where it is essential to prevent, eliminate or reduce to an acceptable level a food safety hazard.

Convalescent Carrier

A person who continues to excrete organisms while recovering from a disease after symptoms have stopped.

Corrective Action

An action to be taken when the results of monitoring at a Control Point or Critical Control Point show a loss of control.

Critical Control Point

Similar to a Control Point, this is a step in the process where it is essential to prevent, eliminate or reduce to an acceptable level a food safety hazard. Usually the last step in the food preparation process before being served to the consumer. A typical CCP would be the cook/kill stage.

Detergent

A chemical which will help to remove grease, dirt, and food debris so that surfaces can be prepared for sanitization.

E. coli

Shiga, Escherichia coli, E. coli. Commonly found in the human intestine; most strains are harmless, but some can cause very serious food contamination and can even kill (E. coli 0157). E. coli 0157 can survive normal freezer temperatures and has recently been found to multiply at fridge temperatures (!).

Endotoxin

A poison/toxin produced inside bacteria and released upon its death and subsequent break-up of the cell.

Exotoxin

A poison/toxin produced by bacteria that is released while the bacteria is still alive.

Facultative Anaerobes

Bacteria that can survive with or without air/oxygen.

Food Handler

Any person who comes into contact or handles food. This includes bar staff and servers.

Food Premises/Operation

A building where food is manufactured, prepared, cooked, or sold.

Food Safety Management System (FSMS)

A documented set of procedures and records demonstrating that safe food production is taking place. and is based on HACCP principles. As a Manager it's highly likely you will be involved in the documenting and running of an FSMS system.

Freezer Burn

The damage caused to frozen foods by dehydration and oxidation due to air reaching the food, usually if it has been poorly packaged.

Fungus/Fungi

A single celled micro-organism including mushrooms, toadstools, molds and yeasts.

Gastro-enteritis

The inflammation of the intestines and stomach from bacterial or viral infection normally causing stomach pains, nausea, vomiting and diarrhea.

HACCP

Hazard Analysis Critical Control Point is an approach that seeks to identify hazards to food safety and put in places procedures and checks to dramatically reduce the likelihood of food contamination occurring. HACCP is the set of principles on which Food Safety Management Systems are based. HARPC/HACCP plans are mandatory in certain DOH jurisdictions.

Hazard

A biological, chemical or physical threat to food that could cause harm. In food safety we talk about risk and severity associated with a hazard. Risk is the likelihood of the hazard hurting someone; severity is size or magnitude of the situation if it does.

Hazard Analysis

The process of evaluating information about a potential hazard to decide what are the risks to food safety and what processes should be put in place to reduce the risk to an acceptable level.

Heat Sterilization

A high heat treatment process that destroys all living micro-organisms.

Hepatitis A

Hepatitis affects the liver. Symptoms can appear between 15-50 days after infection. Foods that are ready to eat are the most susceptible to Hepatitis. Shellfish can also contain the virus, (due to contaminated water) which is the reason all food establishments are required to maintain their shellfish tags for 90 days.

High-Risk Food (Potentially Hazardous Foods – PHF)

Foods which are usually high in protein and water content (often ready-to-eat meals). In most cases high-risk foods must be refrigerated. A high-risk food is anything that is ready-to-eat and will not undergo a cooking stage (kill stage) before consumption. Examples are cooked meats, dairy, salads, sandwiches, or pies. Raw chicken is highly risky in terms of bacteria but is technically not a high-risk food because it will always need cooking before consumption.

Incubatory Carrier

A person who excretes organisms during the incubation period but displays no obvious signs or symptoms.

Incubation Period

The time between infection and the first signs or symptoms of a disease.

Infective Dose

The number of micro-organisms needed to cause a foodborne illness.

Listeriosis

An illness caused by eating food contaminated with the bacteria Listeria monocytogenes. Mostly affects people with reduced immune systems (the young, the old, recuperating from an illness, and pregnant women), and can kill.

Mesophiles

The vast majority of pathogenic bacteria are mesophiles and will multiply at temperatures between 50°F and 131°F, with 95°F being the optimal multiplication temperature.

Microbe

The term microbe refers to molds, enzymes and bacteria. This term is most commonly used to describe harmful bacteria that cause disease, but in many cases microbes can have positive effects such as helping to flavor products, fermentation and assisting in digestion.

Monitor

To conduct a planned sequence of measurements or observations to determine if a Control Point or a Critical Control Point is being achieved.

Mold

Types of microscopic fungus that can appear as discolored growth patches on food. A typical example would be the visible sign of green mold on bread or rancid milk.

Mycotoxin

A toxin produced by some fungi.

Neurotoxin

A toxin that attacks the central nervous system.

Norovirus

A virus commonly linked with ready to eat foods. It causes acute gastroenteritis with aggressive vomiting as a common characteristic. Symptoms usually only last 1-3 days. This virus spreads very quickly from person to person and can be more serious in the very young and elderly. A serious threat in confined areas such as hospitals, cruise ships and large hotels(!).

Onset Period

The time between eating contaminated food and the first signs or symptoms of an illness.

Organoleptic

A quick inspection of a food product by smell, sight, taste, or touch. Usually used to spot visual spoilage problems such as green mold on bread or rancid milk.

Osmosis

The process by which water moves in and out of cells. Used as a preservation method to extend product life by using sugar or salt to draw out or reduce the water/moisture content of a food product. A cookie would be an example of this.

Outbreak

The term used when two or more cases of a foodborne illness are reported in a food business or operation.

Oxidation

A chemical reaction involving oxygen that changes the taste or texture of food.

Pathogens (Biological Hazards)

This is the term given to any microorganism (we can't see them without a microscope) that are a danger to food safety. This includes pathogenic bacteria, viruses, parasites and fungi (which include molds and yeast).

Psychrophiles

Bacteria that will multiply at temperatures between 23°F and 68°F with 50°F being their optimal multiplication temperature.

Psychrotrophs

Bacteria that will multiply at temperatures between 32°F and 95°F with 77°F being their optimal multiplication temperature. Will grow at refrigerator temperatures and as a result are a danger to control. Examples include Listeria.

Process Flow Chart

A step-by-step flow process diagram that details the sequence of steps used in the production of a certain food item. Usually starts at supplier and flows through to service.

Salmonella (Nontyphoidal) NTS

A common foodborne illness found in many farm animals. Salmonella can survive for weeks outside the body. It is not destroyed by freezing but is killed by temperatures above 165°F.

Salmonella Typhi

Carried by humans who have typhoid fever. It only takes a small number of bacteria to make a person ill and can take many weeks to cure.

Sanitizer

A chemical used for sanitization. Can also be a non-chemical source such as boiling water or steam.

Sanitization

The process of reducing pathogenic bacteria to a safe level using either a chemical sanitizer or hot water/steam.

Scombroid Poisoning

This is an intoxication caused by histamine poisoning. Certain finned fish such as tuna, bluefish, mackerel, bonito and mahi-mahi, if not refrigerated immediately after being caught begin to decompose, producing histamine. This histamine, which is odorless, tasteless and is not destroyed in the cooking process, causes scombroid poisoning.

Shigellosis

This bacterial illness is sometimes called bacillary dysentery. Main sources are contaminated food, water and carriers. This infection can occur when food workers who are carriers of the bacteria fail to wash their hands after using the toilet. Flies are also responsible as they can transmit the bacteria from feces to food. Shigellosis can be found in raw produce, green salads, and foods such as tuna, turkey, macaroni and potato salad.

Spoilage

The decomposition of food by bacteria, molds, enzymes and even chemicals. It is the process by which food deteriorates from the moment it is harvested or killed.

Spore Former

Some bacteria have the ability to produce spores. They develop the spore to protect the bacteria cells in adverse conditions such as cooking, chilling, or chemical attack. The multiplication of bacteria recommences as soon as it re-enters the Temperature Danger Zone.

Staphylococcus Aureus

One of the most common foodborne intoxications. A group of bacteria commonly found on the skin, hair, nose, throat and within infected cuts. It can cause a multitude of diseases from direct infection to production of toxins that harm us via food contamination.

Temperature Danger Zone

Most pathogenic bacteria multiply rapidly between 41°F and 135°F. This temperature range is known as the Temperature Danger Zone. Your objective is to keep food out of this temperature range as much as possible.

Thermophiles

Bacteria that will multiply at temperatures between 104°F and 176°F, with 122°F being their optimal multiplication temperature. Examples include bacteria that cause spoilage in canned foods.

Time Temperate Control for Safety (TCS) Foods

Commonly known as TCS Foods. Most of these foods are high in moisture (water), and some will be served as ready to eat foods such as milk, dairy products, sliced melon, cut leafy greens and tomatoes. Other TCS Foods are also high in moisture and protein, for example raw meat, poultry, shellfish and fish.

TCS Foods include: Milk & Dairy Products, Eggs, Meats (beef, lamb, pork, poultry, fish, shellfish & crustaceans), Baked Potatoes, Heat Treated Plant Food (cooked rice, beans, vegetables, tofu & soy protein, meat alternatives), Sprouts & Sprout Seeds, Sliced Melon/Cut Tomatoes/Cut Leafy Greens, Untreated Garlic & Oil Mixtures.

Toxin

A potentially fatal poison produced by certain plants, animals and bacteria that can attack various parts of the body including the nervous system and major organs. Many pathogenic bacteria produce toxins as you cook the food (released as you kill them), and others as a natural by-product of life.

Traceability

The ability to trace or identify batches of raw materials, food in the production process, or finished food products. This is particularly important in the event of a foodborne illness outbreak, so they can be identified and isolated.

Trichinosis

This parasite can be found in uncooked/undercooked pork products. When improperly cooked pork is consumed, humans may become host to the trichinae worm which causes trichinosis.

Validation

Using an external company or individual to check and approve that your Food Safety Management System and HACCP Plan is operating correctly.

Verification

The procedures, methods and testing (monitoring), used to determine that your Food Safety Management System is operating correctly.

Verocytotoxin

A very powerful and dangerous poison/toxin produced by bacteria such as E coli 0157.

Virus

An infective agent that typically consists of a nucleic acid molecule in a protein coat which can only multiply in the living cells of the host (such as humans).