



Food safety program fact sheet:

THE THREE HAZARDS TO FOOD

There are three types of hazards to food. They are

- **biological,**
- **chemical**
- **physical.**

Of the three, **biological hazards cause the most food borne illness outbreaks and are of the greatest concern to food service managers and Health Inspectors.**

Examples of biological hazards are: disease-causing bacteria, viruses, parasites, molds, yeasts, and naturally occurring toxins. Some rod-shaped bacteria change into a hard shelled form called a bacterial spore. Spores may survive cooking temperatures, freezing, and drying, and they may resist some sanitizing solutions to cause food borne illness. Some bacteria make poisons, also known as toxins, which cannot be destroyed by cooking. A virus is much smaller than the smallest bacterium and needs a living host to make more of itself. Parasites also need living hosts to reproduce or complete their life cycles. Examples of parasites are Anisakids, roundworms found in raw or undercooked fish and seafood, and *Trichinella spiralis*, the roundworm found in infested pork or game animals. Food borne viruses and parasites cause infections.

Chemical hazards are harmful substances such as pesticides, machine oils, cleansers and cleaning solutions, sanitizers, dissolved metals and an excessive amount of a food additive.

Physical hazards are objects which are not a part of food, never was meant to be food, but somehow got into the food. Examples are pieces of glass or metal, toothpicks, cigarette butts, pebbles, hair, staples, jewelry. Eating these can cause injury.

Sanitary means that a surface is free from harmful amounts of disease-causing germs or other contaminants. You cannot see, smell or taste harmful contaminants in food.

Establishing safe food handling practices increases profitability, reduces legal liability, and promotes goodwill to customers. An eating establishment - that has developed written standards to ensure safe food and that follows documented procedures to prevent food borne illness - can use the reasonable care defense in case it is sued for an alleged food poisoning outbreak.