

Food-Borne Illnesses

Name of illness	What causes it	Symptoms	Characteristics of illness	Preventative measures
Salmonellosis Examples of foods involved: poultry, red meats, eggs, dried foods, and dairy products.	Salmonellae. This bacteria is wide-spread in nature and lives and grows in the intestinal tracts of human beings and animals.	Sever headache, followed by vomiting, diarrhea, abdominal cramps, and fever. Infants, elderly, and persons with low resistance are most susceptible. Severe infections cause high fever and may even cause death.	Transmitted by eating contaminated food, or by contact with infected persons or carriers of the infection. Also transmitted by insects, rodents, and pets. Onset: Usually within 12 to 36 hours. Duration: 2 to 7 days.	Salmonellae in food are destroyed by heating the food to 140°F and holding for 10 minutes or to higher temperatures for less time; for instance, 155°F for a few seconds. Refrigeration at 40°F inhibits the increase of Salmonellae, but they remain alive in foods in the refrigerator or freezer, and even in dried foods.
Perfringens Examples of foods involved: stews, soups, or gravies made from poultry or red meat.	<i>Clostridium Perfringens</i> . Spore-forming bacteria that grow in the absence of oxygen. Temperatures reached in thorough cooking of most foods are sufficient to destroy vegetative cells, but heat-resistant spores can survive.	Nausea without vomiting, diarrhea, acute inflammation of stomach and intestines.	Transmitted by eating food contaminated with abnormally large numbers of the bacteria. Onset: Usually within 8 to 20 hours. Duration: May persist for 24 hours.	To prevent growth of surviving bacteria in cooked meats, gravies, and meat casseroles that are to be eaten later, cool foods rapidly and refrigerate promptly at 40°F or below, or hold them about 140°F.
Staphylococcal poisoning (frequently called staph) Examples of foods involved: custards, egg salad, potato salad, chicken salad, macaroni salad, ham, salami, and cheese.	<i>Staphylococcus aureus</i> . Bacteria fairly resistant to heat. Bacteria growing in food produce a toxin that is extremely resistant to heat.	Vomiting, diarrhea, prostration, abdominal cramps. Generally mild and often attributed to other causes.	Transmitted by food handlers who carry the bacteria and by eating food containing the toxin.	Growth of bacteria that produces toxin is inhibited by keeping hot foods above 140°F and cold foods at or below 40°F. Toxin is destroyed by boiling for several hours, or heating the food in a pressure cooker at 240°F for 30 minutes.
Botulism Examples of foods involved: canned low-acid foods, and smoked fish	<i>Clostridium botulinum</i> . Spore-forming organisms that grow and produce toxin in the absence of oxygen, such as in a sealed container.	Double vision, inability to swallow, speech difficulty, progressive respiratory paralysis. Fatality rate is high, about 65% in the United States.	Transmitted by eating food containing the toxin. Onset: Usually within 12 to 36 hours or longer. Duration: 3 to 6 days.	Bacterial spores in food are destroyed by high temperatures obtained only in the pressure canner.* More than 6 hours is needed to kill the spores at boiling temperature (212°F). The toxin is destroyed by boiling for 10 to 20 minutes; time required depends on kind of food.