

Definition:

Foodborne disease is caused by consuming contaminated foods or beverages. Many different disease-causing microbes, or pathogens, can contaminate foods, so there are many different foodborne infections. In addition, poisonous chemicals, or other harmful substances can cause foodborne diseases if they are present in food. The people at high risk for foodborne illness include:

- Young children
- Pregnant women
- Elderly people
- People with weakened immune systems
- People taking medications

Causes:

More than 250 different foodborne diseases have been described. Most of these diseases are infections, caused by a variety of bacteria, viruses, and parasites that can be foodborne. The microbe or toxin enters the body through the gastrointestinal tract, and often causes the first symptoms there. Common causes:

- Noroviruses (Norwalk-like viruses)
- Campylobacter
- E. coli
- Botulism
- Hepatitis A
- Shigellosis (dysentery)
- Bacillus cereus
- Listeria
- Staphylococcus aureus
- Salmonella

Sources:

Shellfish, raw vegetables, eggs, water, ice, undercooked shellfish, meats or eggs, milk, cheese, produce, poultry, unpasteurized milk and fruit juices, raw fish, creamed pies, mashed potatoes, canned foods, garlic in oil, smoked foods, starchy foods, contaminated ready-to-eat foods like potato, tuna, and macaroni salad. Dysentery can also be spread by flies.

Symptoms:

The microbe or toxin enters the body through the gastrointestinal tract, and often causes the first symptoms there which include, but are not limited to the following, and may appear within hours or weeks of infection:

- Nausea
- Vomiting
- Diarrhea
- Fever (sometimes)

Wise Words from Environmental Health:

Lack of proper hand washing is one of the most common ways that organisms can be spread during food prep at retail facilities. Wash hands prior to food handling or dispensing food or utensils; when switching between working with raw and ready to eat foods; after touching bare body parts; after using the restroom; after handling any animal; after coughing, sneezing, using a handkerchief or tissue, or after use of tobacco, and after eating/drinking; after handling soiled equipment or utensils; and after any other activity that could contaminate hands. *Wash hands often!*

PREVENTION TIPS

COOK meat, poultry and eggs thoroughly. Using a thermometer to measure the internal temperature of meat is a good way to be sure that it is cooked sufficiently to kill bacteria. For example, ground beef should be cooked to an internal temperature of 160° F. Eggs should be cooked until the yolk is firm.

SEPARATE: Don't cross-contaminate one food with another. Avoid cross-contaminating foods by washing hands, utensils, and cutting boards after they have been in contact with raw meat or poultry and before they touch another food. Put cooked meat on a clean platter, rather back on one that held the raw meat.

CHILL: Refrigerate leftovers promptly. Bacteria can grow quickly at room temperature, so refrigerate leftover foods if they are not going to be eaten within 4 hours. Large volumes of food will cool more quickly if they are divided into several shallow containers for refrigeration.

CLEAN: Wash produce. Rinse fresh fruits and vegetables in running tap water to remove visible dirt and grime. Remove and discard the outermost leaves of a head of lettuce or cabbage. Because bacteria can grow well on the cut surface of fruit or vegetable, be careful not to contaminate these foods while slicing them up on the cutting board, and avoid leaving cut produce at room temperature for many hours. Don't be a source of foodborne illness yourself. Wash your hands with soap and water before preparing food. Avoid preparing food for others if you yourself have a diarrheal illness or open sores. Changing a baby's diaper while preparing food is a bad idea that can easily spread illness.

REPORT: Report suspected foodborne illnesses to your local [health department](#). The local Public Health Department is an important part of the food safety system. Often calls from concerned citizens are how outbreaks are first detected. If a Public Health official contacts you to find out more about an illness you had, your help is important. In Public Health investigations, it can be as important to talk to healthy people as to ill people. Your cooperation may be needed even if you are not ill. A person's last meal before an illness isn't necessarily connected to an illness - contamination may have occurred several meals before onset of symptoms.

To report suspected cases of foodborne illness and/or ask questions:

- Public Health: (530) 225-5591; www.shastapublichealth.net
- Environmental Health: (530) 225-5787; www.co.shasta.ca.us (click on Resource Management)

For more information:

Centers for Disease Control and Prevention (CDC): www.cdc.gov/ncidod/dbmd/diseaseinfo/foodborneinfections