

**TABLE 19-1 Food-Borne Illnesses**

Disease and Organism That Causes It	Most Frequent Food Sources	Onset and General Symptoms	Prevention Methods*
<b>Food-Borne Infections</b>			
Campylobacteriosis (KAM-pee-lon-BAK-ter-es-Oh-sis) <i>Campylobacter jejuni</i> bacterium	Raw poultry, beef, lamb, unpasteurized milk (foods of animal origin eaten raw or undercooked or recontaminated after cooking).	Onset: 2 to 5 days. Diarrhea, nausea, vomiting, abdominal cramps, fever; sometimes bloody stools; lasts 7 to 10 days.	Cook foods thoroughly; use pasteurized milk; use sanitary food-handling methods.
Giardiasis (JYE-are-DYE-ah-sis) <i>Giardia lamblia</i> protozoan	Contaminated water; uncooked foods.	Onset: 5 to 25 days. Diarrhea (but occasionally constipation), abdominal pain, gas, abdominal distention, digestive disturbances, anorexia, nausea, and vomiting.	Use sanitary food-handling methods; avoid raw fruits and vegetables where protozoa are endemic; dispose of sewage properly.
Hepatitis (HEP-ah-TIE-tis) Hepatitis A virus	Undercooked or raw shellfish.	Onset: 15 to 50 days (28 to 30 days average). Inflammation of the liver with tiredness; nausea, vomiting, or indigestion; jaundice (yellowed skin and eyes from buildup of wastes); muscle pain.	Cook foods thoroughly.
Listeriosis (lis-TER-ee-OH-sis) <i>Listeria monocytogenes</i> bacterium	Raw meat and seafood, raw milk, and soft cheeses.	Onset: 7 to 30 days. Mimics flu; blood poisoning, complications in pregnancy, and meningitis (stiff neck, severe headache, and fever).	Use sanitary food-handling methods; cook foods thoroughly; use pasteurized milk.
Perfringens (per-FRINGE-enz) food poisoning <i>Clostridium perfringens</i> bacterium	Meats and meat products stored at between 120 and 130°F.	Onset: 8 to 12 hr (usually 12). Abdominal pain, diarrhea, nausea, and vomiting; symptoms last a day or less and are usually mild; can be serious in old or weak people.	Use sanitary food-handling methods; cook foods thoroughly; refrigerate foods promptly and properly.
Salmonellosis (sal-moh-neh-LOH-sis) <i>Salmonella</i> bacteria	Raw or undercooked eggs, meats, poultry, milk and other dairy products, shrimp, frog legs, yeast, coconut, pasta, and chocolate.	Onset: 6 to 48 hr. Nausea, fever, chills, vomiting, abdominal cramps, diarrhea, and headache; can be fatal.	Use sanitary food-handling methods; use pasteurized milk; cook foods thoroughly; refrigerate foods promptly and properly.
E. coli infection <i>Escherichia coli</i> <sup>a</sup> bacterium	Undercooked ground beef, unpasteurized milk and milk products, contaminated water, and person-to-person contact. (feces), (animals)	Onset: 12 to 72 hr. Severe bloody diarrhea, abdominal cramps, acute kidney failure; can be fatal.	Cook ground beef thoroughly; avoid raw milk and milk products; use sanitary food-handling methods; use treated, boiled, or bottled water.
Shigellosis (shi-gel-LOH-sis) <i>Shigella</i> bacteria	Person-to-person contact, raw foods, salads, dairy products, and contaminated water.	Onset: 1 to 7 days. Diarrhea, vomiting, cramps, fever; sometimes bloody stools.	Use sanitary food-handling methods; cook foods thoroughly; proper refrigeration.
Vibrio (VIB-ree-oh) bacteria <i>Vibrio vulnificus</i> <sup>c</sup> bacterium	Raw seafood and contaminated water.	Onset: 1 to 7 days. Diarrhea, abdominal cramps, fever, chills; can be fatal.	Use sanitary food-handling methods; cook foods thoroughly.
<b>Food Intoxications</b>			
Botulism (BOT-chew-lizm) Botulinum toxin [produced by <i>Clostridium botulinum</i> bacterium, which grows without oxygen, in low-acid foods, and at temperatures between 40° and 120°F; the botulinum (BOT-chew-line-um) toxin responsible for botulism is called botulin (BOT-chew-lin)]	Anaerobic environment of low acidity (canned corn, peppers, green beans, soups, beets, asparagus, mushrooms, ripe olives, spinach, tuna, chicken, chicken liver, liver pâté, luncheon meats, ham, sausage, stuffed eggplant, lobster, and smoked and salted fish).	Onset: 4 to 36 hr. Nervous system symptoms, including double vision, inability to swallow, speech difficulty, and progressive paralysis of the respiratory system; often fatal; leaves prolonged symptoms in survivors.	Use proper canning methods for low-acid foods; refrigerate homemade garlic and herb oils; avoid commercially prepared foods with leaky seals or with bent, bulging, or broken cans.
Staphylococcal (STAF-il-oh-KOK-al) food poisoning Staphylococcal toxin (produced by <i>Staphylococcus aureus</i> bacterium)	Toxin produced in meats, poultry, egg products, tuna, potato and macaroni salads, and cream-filled pastries.	Onset: ½ to 8 hr. Diarrhea, nausea, vomiting, abdominal cramps, and fatigue; mimics flu; lasts 24 to 48 hr; rarely fatal.	Use sanitary food-handling methods; cook food thoroughly; refrigerate foods promptly and properly; use proper home-canning methods.