Illnesses/ Microorganisms	Source	Onset/Duration of Illness	Symptoms	Common Foods Involved	Prevention			
Infections								
Hemorrhagic Colitis (E. coli O157:H7)	Soil, sewage, untreated water, intestinal tracts of cattle, chickens, turkeys, pigs, rodents, some wild birds and wild game.	Onset: 3-9 days Duration: 2-9 days	Severe abdominal pain, watery diarrhea which becomes bloody, vomiting, dehydration, urinary infection and kidney failure, strokes, seizures, coma and death	Raw and undercooked meats, poultry, ground beef, raw milk and some raw milk cheeses, unpasteurized juices and cider, lettuce mixes	Cook animal foods thoroughly (especially ground meat), use pasteurized milk and milk products, prevent cross- contamination, deep cold foods cold.			
Listeriosis (Listeria monocytogenes)	Soil, silage, decaying plant matter, water, other environmental sources; intestinal tract of animals.	Onset: 1 day-3 weeks Duration: 2-7 days	Headache, fever, mild, flu- like in healthy individuals; in immunocompromised possible meningitis, blood poisoning, abortion, death	Raw milk, cheeses made from raw milk, raw vegetables, undercooked meat and poultry, hot dogs, cold cuts, cold smoked fish (grows @ 34°F-113°F)	Good sanitation; use only pasteurized milk and milk products, cook meat and poultry thoroughly, prevent cross-contamination, keep cold foods below 40°F.			
Yersiniosis (Yersinia enterocolotica)	Soil, untreated water, intestinal tracts of animals, especially pigs, raw milk	Onset: 1-7 days Duration: 2-3 days	Fever, abdominal pain, diarrhea, nausea, and vomiting; pseudo-appendicitis. Complications can include blood poisoning, arthritis, meningitis, liver disease	Meat, especially pork; milk and dairy products; seafood and fresh vegetables (grows @ 32°F-113°F)	Good sanitation; use only pasteurized dairy products; cook food thoroughly; keep foods below 40°F; observe useby dates in refrigerator storage			
Salmonellosis (Salmonella species)	Intestinal tracts of animals, especially poultry and pigs; birds and insects; also humans can be carriers	Onset: 12-48 hours Duration: 2-6 days	Nausea, vomiting, abdominal cramps, diarrhea, fever, and headache; may develop reactive arthritis	Raw and undercooked eggs, poultry and poultry products, fish, dairy products; cream desserts and pies, unpasteurized dicer, tomatoes, watermelon, cantaloupe, sprouts	Prevent cross- contamination; Cook animal foods thoroughly; prevent cross- contamination; practice good personal hygiene			
Shigellosis Bacillary dysentery (Shigella species)	Intestinal tract of humans, polluted water	Onset: 1-7 days Duration: Up to 14 days or longer, recovery can be slow.	Diarrhea with bloody stools; abdominal cramps, fever; asymptomatic carrier state in convalescence lasting days to months, secondary infection frequent	Foods that rec4eive much handling, including meat, vegetable and pasta salads, raw vegetables; seafood, milk, dairy products	Good sanitation and personal hygiene; minimize hand contact with food; prevent cross contamination			
Intoxications								
Staphyloccal intoxication (Staphylococcus aureus)	Hands, throats, nasal passages and sores of humans; raw milk, sewage	Onset: 1-6 hours Duration: 1-2 days	Heat resistant toxin causes nausea, vomiting, diarrhea, and abdominal cramps, no fever	Reheated foods, ham, and other meats; sandwich fillings; meat, vegetable and egg salads; cream-filled pastries, raw milk, imitation dairy foods	Practice good personal hygiene and sanitary habits; avoid touching food with unclean hands; heat, cook, and cool food properly; toxin is heat resistant			

Illnesses/ Microorganisms	Source	Onset/Duration of Illness	Symptoms	Common Foods Involved	Prevention				
Intoxications, cont.									
Botulism (Clostridium botulinum)	Soil, intestinal tract of animals and fish	Onset: 12-72 hours to 14 days Duration: days to months to years	Neurotoxin causes dizziness, blurred vision, difficulty speaking, swallowing, and breathing. Can be fatal without antitoxin.	Low acid canned food, especially home-canned products; smoked meat and fish; low-acid cooked foods held at room temperature in low-oxygen environment	Do not use home- canned food in commercial establishments; can food properly; boil home canned vegetables and meats 15-20 minutes before tasting; prepare and store food properly- especially modified atmosphere packaging				
	Viral Infections								
Infectious Hepatitis (Hepatitis A virus)	Intestinal tracts of human; infected workers; contaminated water; shellfish from contaminated water	Onset: 15-50 days Duration: weeks to months	Fever, nausea, vomiting, abdominal discomfort; appetite loss, fatigue, followed by jaundice, darkened urine, enlarged liver	Food not cooked after handling such as bakery products, luncheon meats, salads, sandwiches, fruits and vegetables; raw shellfish; water, raw milk	Good personal hygiene; minimize hand contact with food; cook all foods properly, especially seafood; separate infected persons from food preparation				
Norwalk viral illness (Norwalk virus)	Infected workers, contaminated water, shellfish from contaminated water	Onset: 24-48 hours Duration: 24-48 hours	Nausea, vomiting, diarrhea, abdominal pain, headache, low-grade fever	Water, raw vegetables, raw shellfish, eggs, ice	Good personal hygiene; monitor water supply; cook shellfish properly; prevent cross- contamination				
Parasitic Infections									
Giardia (Giardia lamblia)	Contaminated water or food, intestinal tracts of animals and humans	Onset: 7-10 days Duration: 2-6 weeks (if untreated recurs in several months)	Diarrhea, abdominal cramps, nausea, fatigue, bloating, flatulence and weight loss; watery stools	Food handled often during preparation; contaminated water	Good personal hygiene; sanitation; use potable water				
Cryptosporidium (Cryptosporidium parvum)	Contaminated water, intestinal tracts of animals, including deer	Onset: 2-10 days Duration: 2-4 days to 4 weeks	Intestinal form: watery diarrhea, may be asymptomatic.	Produce fertilized with manure; contaminated water; contaminated food handler	Good personal hygiene; Good Agricultural Practices; use potable water				
Cyclospora (Cyclospora cayatenansis)	Contaminated water, intestinal tracts of animals	Onset: 1 week Duration: a few days to a month or longer if untreated; with relapses	Watery diarrhea, explosive stools; loss of appetite, substantial loss of weight, bloating, flatulence, stomach cramps, nausea, vomiting, muscle aches, low-grade fever, and fatigue.	Contaminated water; fresh produce					

Sources:

<sup>•&</sup>quot;A Quick Reference to Bacterial, Viral and Parasitic Foodborne Illnesses," Cornell University

<sup>•</sup>Parasitic Disease Information Fact Sheets, Centers for Disease Control
•"Bad Bug Book," U.S. Food and Drug Administration