

Handout 1: Common Germs That Can Cause Foodborne Illness

Many different germs can cause people to become sick from contaminated food. Knowing where they come from and how to prevent them helps keep families safe. **Remember:** Most foodborne illnesses can be prevented with Clean, Separate, Cook, Chill practices.

Common Foodborne Germs				
Germ	Where It's Found	Foods Often Involved	Typical Symptoms*	Key Prevention Tips
Salmonella	The intestinal tracts of animals and humans can be contaminated with pathogens from raw meat, poultry, eggs, and unpasteurized milk.	Undercooked poultry, eggs, meat, unpasteurized milk and dairy, and contaminated produce.	Diarrhea, stomach cramps, fever, nausea; usually 8–72 hours after eating; lasts 1–2 days or longer.	Cook poultry and eggs thoroughly. Avoid raw dough and batters. Do not drink unpasteurized milk or juice. Also, prevent cross-contamination.
Clostridium perfringens ("cafeteria germ")	Lives in soil and in the intestines of people and animals; grows when large amounts of food are kept warm for a long time.	Large pans of meat, stews, gravies, and casseroles are held at room temp or warmers that aren't hot enough.	Diarrhea and gas pains 8–24 hours after eating; usually lasts about 1 day.	Keep hot foods hot (140°F or above); cool leftovers quickly in shallow containers and refrigerate them within 2 hours.
Staphylococcus aureus (Staph)	On skin, in noses, cuts, and sores of healthy people.	Foods handled a lot after cooking (ham, deli meats, salads, sandwiches, cream-filled pastries).	Sudden nausea, vomiting, stomach cramps, diarrhea 1–6 hours after eating.	Wash hands, cover cuts, don't prepare food when sick; keep foods out of the temperature "danger zone."
E. coli O157:H7 and other STEC	The intestinal tracts of some animals can be contaminated by undercooked ground beef, raw milk, contaminated produce, or water.	Undercooked ground beef, raw milk, unpasteurized juices, raw sprouts, contaminated fresh produce.	Severe diarrhea (often bloody), stomach cramps, sometimes fever; illness can lead to kidney failure in young children and older adults.	Cook ground beef to 160°F. Avoid unpasteurized milk/juice. Wash produce thoroughly and prevent cross-contamination.
Clostridium botulinum (botulism)	Widely found in soil and water; grows in places with little or no oxygen and produces a dangerous toxin.	Improperly home-canned foods, garlic-in-oil mixtures, vacuum-packed or tightly wrapped foods not handled properly.	Double vision, drooping eyelids, trouble speaking or swallowing, difficulty breathing; can be fatal if not treated.	Follow tested home-canning recipes, never taste food from a jar with signs of spoilage, when in doubt, throw it out.
Shigella	Found in the intestines of infected people; spread easily when hands are not washed after using the bathroom.	Salads, sandwiches, and other ready-to-eat foods handled by someone with poor handwashing; contaminated water.	Diarrhea (may have blood or mucus), fever, stomach cramps; symptoms usually begin 1–2 days after exposure.	Careful handwashing after using the bathroom or changing diapers; exclude ill workers from food preparation.
Listeria monocytogenes	In soil, water, and some animals; can grow slowly even in the refrigerator.	Ready-to-eat meats (hot dogs, deli meats), soft cheeses made with unpasteurized milk, some refrigerated smoked seafood.	Fever, chills, headache, upset stomach; can lead to serious illness in pregnant women, newborns, older adults, and people with weakened immune systems.	Keep refrigerator at 40 °F or below, reheat hot dogs and deli meats until steaming hot, avoid unpasteurized milk and cheeses made with it.

*Symptoms and timing can vary by person. Anyone with severe symptoms (bloody diarrhea, high fever, dehydration, or symptoms that last more than a few days) should seek medical care.

