

FOODBORNE ILLNESS: "What Consumers Need to Know?"

WHAT IS FOODBORNE ILLNESS?

Foodborne illness often shows itself as flu-like symptoms such as nausea, vomiting, diarrhea, or fever, so many people may not recognize the illness is caused by bacteria or other pathogens on food.

Thousands of types of bacteria are naturally present in our environment. Not all bacteria cause disease in humans. For example, some bacteria are used beneficially in making cheese and yogurt.

Bacteria that cause disease are called "pathogens." When certain pathogens enter the food supply, they can cause foodborne illness. Only a few types cause millions of cases of food-borne illness each year. Most cases of foodborne illness can be prevented. Proper cooking or processing of food destroys bacteria.

Age and physical condition place some people at higher risk than others, no matter what type of bacteria is implicated. Infants, children, pregnant women, the elderly, and people with compromised immune systems are at greater risk from any pathogen. Some people may become ill after ingesting only a few harmful bacteria; others may remain symptom free after ingesting thousands.

HOW BACTERIA GET IN FOOD

Bacteria may be present on products when you purchase them. Raw meat, poultry, seafood, and eggs can all be purchased with live pathogens in them. Foods, including safely cooked, ready-to-eat foods,



can become cross-contaminated with bacteria transferred from raw products, meat juices or other contaminated products, utensils, or from poor personal hygiene of people who handle them.

THE "DANGER ZONE"

Bacteria multiply rapidly between 40° and 140° F. To keep food out of this "danger zone," **keep cold food cold and hot food hot.**

- 1. Store food in the refrigerator (40° F or below) or freezer (0° F or below).
- 2. Use the **Raw Food Product** cooking guide to safely cook all types of meat.
- 3. Maintain hot cooked foods at 1 40° F or higher.
- 4. Reheat cooked foods to 165° F.

FOODBORNE ILLNESS GUIDELINES

- Preserve the evidence. If a portion of the suspected food is available, wrap it securely, mark "DANGER" and refrigerate. Save all the packaging materials, such as cans or cartons. Write down the food type, the date, and time consumed, and when the onset of symptoms occurred. Save any identical unopened products.
- Seek treatment as necessary. If victim is in an "at risk" group, seek medical care immediately.
 Likewise, if symptoms persist or are severe (such as: bloody diarrhea, excessive nausea, vomiting, or high temperature).
- 3. <u>Call the local health department</u> if the suspected food was served at a large gathering, from a restaurant or other food service facility, or if it is a commercial product.
- 4. <u>Call the USDA Meat and Poultry Hotline</u> (Number below) if the suspected food is a USDA-inspected product and you have all the packaging.

For More Information:

USDA Meat/Poultry Hotline: 1-800-535-4555 Washington, DC: 202-720-3333

FSIS Web site: http://www.fsis.usda.gov

FSIS Fast Fax: 1-800-8281

FDA Consumer Food Info Line: 1-800-FDA-4010

FDA Web site: http://www.fda.gov

BACTERIA THAT CAUSE FOODBORNE ILLNESSES

Campylobacter jejuni

Found: intestinal tracts of animals and birds, raw milk, untreated water, and sewage sludge.

Transmission: contaminated water, raw milk, and raw or undercooked meat, poultry, or shellfish.

Symptoms: fever, headache, muscle pain followed by diarrhea (sometimes bloody), abdominal pain, and nausea that appear 2 to 5 days after eating; may last 7 to 10 days.

Clostridium Botulism

Found: widely distributed in nature; soil, water, on plants, and intestinal tracts of animals and fish. Grows in little or no oxygen.

<u>Transmission:</u> bacteria produce a toxin that causes illness. Improperly canned foods, garlic & onions in oil, vacuum-packaged or tightly wrapped foods.

Symptoms: Toxin affects the nervous system. Symptoms usually appear 18 to 36 hours, but can sometimes appear as few as 4 hours or as many as 8 days after eating; double vision, droopy eyelids, trouble speaking and swallowing, and difficulty breathing. Fatal in 3 to 10 days if not treated.

Clostridium Perfringens

Found: soil, dust, sewage, intestinal tracts of animals and humans. Grows in little or no oxygen.

<u>Transmission:</u> called "cafeteria disease," many outbreaks result from food left for long periods in steam tables or at room temperature. Bacteria destroyed by cooking, but some toxin-producing spores may survive.

Symptoms: diarrhea and gas pains may appear 8 to 24 hours after eating; usually last about 1 day, but less severe symptoms may persist for 1 to 2 weeks.

E. coli 0157:H7 (several strains)

<u>Found:</u> intestinal tracts of some mammals, raw milk, unchlorinated water.

<u>Transmission:</u> contaminated water, raw milk, undercooked ground beef, unpasteurized apple juice or cider, and person-to person.

Symptoms: diarrhea or bloody diarrhea, abdominal cramps, and nausea; can begin 2 to 5 days after food is eaten, lasts about 8 days. The very young, & elderly have developed acute kidney failure.

Listeria Monocytogenes

Found: intestinal tracts of humans and animals, milk, soil, leafy vegetables, and processed foods; can grow slowly at refrigerator temperatures.

<u>Transmission:</u> soft cheese, raw milk, ice cream, raw leafy vegetables, meat,

poultry, and seafood.

Symptoms: fever, chills, headache, backache, sometimes abdominal pain and diarrhea; 12 hours to 3 weeks; may later develop into a more serious illness in at-risk patients (meningitis, spontaneous abortion or still births); sometimes just fatigue.

Salmonella (over 2300 types)

Found: intestinal tract and feces of animals, particularly poultry; also found in raw shell eggs.

<u>Transmission:</u> raw or undercooked eggs, poultry, and meat; raw milk and dairy products; seafood and food handlers.

Symptoms: stomach pain, diarrhea, nausea, chills, fever, and headache usually appears 8 to 72 hours after eating; may last 1 to 2 days.

Shigella (over 30 types)

Found: human intestinal tract.

<u>Transmission:</u> person-to-person by fecal-oral route; fecal contamination of food and water. Most outbreaks result from food, especially salads, prepared and handled by workers using poor personal hygiene.

Symptoms: disease referred to as dysentery. Diarrhea containing blood and mucus, fever, abdominal cramps, chills, and vomiting; 12 to 50 hours from ingestion of bacteria; can last a few days to 2 weeks.

Staphylococcus Aureus

Found: on humans (skin, infected cuts, pimples, noses, and throats).

<u>Transmission:</u> people to food through improper food handling. Multiplies rapidly at room temperature to produce a toxin that causes illness.

Symptoms: severe nausea, abdominal cramps, vomiting, and diarrhea occur 1 to 6 hours after eating; recovery within 2 to 3 days—longer if severe dehydration occurs.