

observations did not, however, establish a broad awareness about this pathogen in the community of infectious disease specialists, microbiologists or food microbiologists.

What is listeriosis?

Listeriosis is food poisoning caused by eating foods contaminated with the *Listeria monocytogenes* (*L. monocytogenes*) bacterium. In pregnant women, the infection can result in miscarriage, premature delivery, serious infection of the newborn, or even stillbirth.

Listeriosis affects mainly pregnant women, newborns, the elderly, and adults with impaired immune systems. Healthy adults and children sometimes are infected with *L. monocytogenes*, but they rarely become seriously ill. Babies can be born with listeriosis if their mothers eat contaminated food during pregnancy.

What causes listeriosis?

L. monocytogenes is found in soil and water.

- Vegetables can become contaminated from the soil or from manure used as fertilizer.
- Animals can carry the bacteria and can contaminate meats and dairy products.
- Processed foods, such as soft cheeses and cold cuts, can be contaminated after processing.
- Unpasteurized (raw) milk or foods made from unpasteurized milk can be contaminated.

What are the symptoms?

The symptoms of listeriosis include fever, muscle aches, and sometimes nausea or diarrhea. If infection spreads to the nervous system, symptoms such as headache, stiff neck, confusion, loss of balance, or convulsions can occur. But infected pregnant women may experience only a mild, flu-like illness.

How is listeriosis diagnosed?

Listeriosis is diagnosed based on a medical history and physical exam. Your doctor will ask you questions about your symptoms, foods you have recently eaten, and your work and home environments. A blood test or spinal fluid test may be done to confirm the diagnosis.

How is it treated?

An otherwise healthy person who is not pregnant typically does not need treatment. Symptoms will usually go away within a few weeks.

If you are pregnant and get listeriosis, antibiotics can often prevent infection of the fetus or newborn. Babies who have listeriosis receive the same antibiotics as adults, although a combination of antibiotics is often used until your doctor is certain the cause is listeriosis.

How can you prevent listeriosis?

You can prevent listeriosis by practicing safe food handling.

- Shop safely. Bag raw meat, poultry, or fish separately from other food items. Drive home immediately after finishing your shopping so that you can store all foods properly.
- Prepare foods safely. Wash your hands before and after handling food. Also wash them after using the bathroom or changing diapers. Wash fresh fruits and vegetables by rinsing them well with running water. If possible, use two cutting boards—one for fresh produce and the other for raw meat, poultry, and seafood. You can also wash your knives and cutting boards in the dishwasher to disinfect them.
- Store foods safely. Cook, refrigerate, or freeze meat, poultry, eggs, fish, and ready-to-eat foods within 2 hours. Make sure your refrigerator is set at 40°F (4°C) or colder. But listeria can grow in the refrigerator, so clean up any spills in your refrigerator, especially juices from hot dogs, raw meat, or poultry.
- Cook foods safely. Use a clean meat thermometer to determine whether foods are cooked to a safe temperature. Reheat leftovers to at least 165°F (74°C). Do not eat undercooked hamburger, and be aware of the risk of food poisoning from raw fish (including sushi), clams, and oysters.
- Serve foods safely. Keep cooked hot foods hot [140°F (60°C) or above] and cold foods cold [40°F (4°C) or below].
- Follow labels on food packaging. Food packaging labels provide information about when to use the food and how to store it. Reading food labels and following safety instructions will reduce your chance of becoming ill with food poisoning.

- When in doubt, throw it out. If you are not sure whether any food is safe, don't eat it. Reheating food that is contaminated will not make it safe. Don't taste suspicious food. It may smell and look fine but still may not be safe to eat.
- Do not eat hot dogs, luncheon meats, or deli meats, unless they are reheated until steaming hot.
- Do not eat soft cheeses unless the label states they are made from pasteurized milk. Common cheeses typically made with unpasteurized milk-such as feta, Brie, Camembert, blue-veined cheeses, and Mexican-style cheeses such as "queso blanco fresco"-can cause listeriosis. You can have hard cheeses and semisoft cheeses such as mozzarella along with pasteurized processed cheese slices and spreads, cream cheese, and cottage cheese.
- Do not eat refrigerated pâté or meat spreads. But you can eat these foods if they are canned.
- Do not eat refrigerated smoked seafood unless it is an ingredient in a cooked dish such as a casserole. Examples of refrigerated smoked seafood include salmon, trout, whitefish, cod, tuna, and mackerel. You may eat canned fish such as salmon and tuna or shelf-stable smoked seafood.
- Do not drink raw (unpasteurized) milk or eat foods that contain unpasteurized milk.
- Avoid eating salads made in a store, such as ham, chicken, egg, tuna, or seafood salads.