



LISTERIOSIS

Also Known As: *Listeria monocytogenes*
Pathogen Type: Bacteria
Transmission: Foodborne is the most common route
Reservoir: Mainly forage, soil, water and mud
Source: Centers for Disease Control - www.cdc.gov

KEY POINTS:

- Listeriosis is a serious infection caused by eating food contaminated with the bacterium *Listeria monocytogenes* has recently been recognized as an important public health problem in the U.S.;
- The disease affects primarily pregnant women, newborns, and adults with weakened immune systems;
- It can be avoided by following proper food handling, hygiene, and cooking techniques.

What is Listeriosis?

It is a serious infection caused by eating food contaminated with the bacterium *Listeria monocytogenes*, and has recently been recognized as an important public health problem in the United States. The disease affects primarily pregnant women, newborns, and adults with weakened immune systems. It can be avoided by following proper food handling, hygiene, and cooking techniques.

How does *Listeria* get into food?

Listeria monocytogenes is found in soil and water. Vegetables can become contaminated from the soil or from manure used as fertilizer. Animals can carry the bacterium without appearing ill and can contaminate foods of animal origin such as meats and dairy products. The bacterium has been found in a variety of raw foods, such as uncooked meats and vegetables, as well as in processed foods that become contaminated after processing, such as soft cheeses and cold cuts at the deli counter. Un-pasteurized (raw) milk or foods made from un-pasteurized milk may contain the bacterium.

Listeria is killed by pasteurization and cooking; however, in certain ready-to-eat foods such as hot dogs and deli meats, contamination may occur after cooking but before packaging.

How do you get it?

You get Listeriosis by eating food contaminated with *Listeria*. Babies can be born with listeriosis if their mothers eat contaminated food during pregnancy. Although healthy persons may consume contaminated foods without becoming ill, those at increased risk for infection can probably get Listeriosis after eating food contaminated with even a few bacteria. Persons at risk can prevent *Listeria* infection by avoiding certain high-risk foods and by handling food properly.

What are the symptoms of Listeriosis?

A person with this disease has fever, muscle aches, and sometimes gastrointestinal symptoms such as nausea or diarrhea. If infection spreads to the nervous system, symptoms such as headache, stiff neck, confusion, loss of balance, or convulsions can occur.

Infected pregnant women may experience only a mild, flu-like illness; however, infections during pregnancy can lead to miscarriage or stillbirth, premature delivery, or infection of the newborn.

Who is at risk?

In the United States, an estimated 2,500 persons become seriously ill with Listeriosis each year. Of these, 500 die. At increased risk are:

- Pregnant women – they are about 20 times more likely than other healthy adults to get Listeriosis. About one-third of these cases happen during pregnancy;
- Newborn – Newborns rather than the pregnant women themselves suffer the serious effects of infection in pregnancy;
- Persons with weakened immune systems;
- Persons with cancer, diabetes, or kidney disease;
- Persons with AIDS – They are almost 300 times more likely to get Listeriosis than people with normal immune systems;
- Persons who take glucocorticosteroid medications;
- The elderly;

Healthy adults and children occasionally get infected with Listeria, but they rarely become seriously ill.

How can you reduce your risk for Listeriosis?

General recommendations are to:

- Thoroughly cook raw food from animal sources, such as beef, pork, or poultry;
- Wash raw vegetables thoroughly before eating;
- Keep uncooked meats separate from vegetables and from cooked foods and ready-to-eat foods;
- Avoid un-pasteurized (raw) milk or foods made from un-pasteurized milk;
- Wash hands, knives, and cutting boards after handling uncooked foods;
- Consume perishable and ready-to-eat foods as soon as possible.

Recommendations for persons at high risk, such as pregnant women and persons with weakened immune systems, in addition to the recommendations listed above are:

- Do not eat hot dogs, luncheon meats, or deli meats, unless they are reheated until steaming hot;
- Avoid getting fluid from hot dog packages on other foods, utensils, and food preparation surfaces, and wash hands after handling hot dogs, luncheon meats, and deli meats;
- Do not eat soft cheeses such as Feta, Brie, and Camembert, blue-veined cheeses, or Mexican-style cheeses such as Queso Blanco, Queso Fresco, and Panela, unless they have labels that clearly state they are made from pasteurized milk;
- Do not eat refrigerated pâtés or meat spreads. Canned or shelf-stable pâtés and meat spreads may be eaten;
- Do not eat refrigerated smoked seafood, unless it is contained in a cooked dish, such as casserole. Refrigerated smoked seafood, such as salmon, trout, whitefish, cod, tuna or mackerel, is most often labeled as “nova-style,” “lox,” “kippered,” “smoked,” or “jerky.” The fish is found in the refrigerator section or sold at deli counters of grocery stores and delicatessens. Canned or shelf-stable smoked seafood may be eaten.

What should you do if you've eaten food recalled because of *Listeria* contamination?

The risk of an individual person developing *Listeria* infection after consumption of a contaminated product is very small. If you have eaten a contaminated product and do not have any symptoms, it is not recommended that you have any tests or treatment, even if you are in a high-risk group. However, if you are in a high-risk group, have eaten the contaminated product, and within two months become ill with fever or signs of serious illness, you should contact your physician and inform him or her about this exposure.

How is it diagnosed?

There is no routine screening test for susceptibility to Listeriosis during pregnancy, as there is for Rubella and some other congenital infections. If you have symptoms such as fever or stiff neck, consult your doctor. A blood or spinal fluid test (to cultivate the bacteria) will show if you have Listeriosis. During pregnancy, a blood test is the most reliable way to find out if your symptoms are due to Listeriosis.

What is the treatment?

When infection occurs during pregnancy, antibiotics given promptly to the pregnant woman can often prevent infection of the fetus or newborn. Babies with Listeriosis receive the same antibiotics as adults, although a combination of antibiotics is often used until physicians are certain of the diagnosis. Even with prompt treatment, some infections result in death. This is particularly likely in the elderly and in persons with other serious medical problems.