

# SANI-GRAM

Patco   
FOOD SAFETY

## A Focus on Food Safety

### Listeria

As of January 10 of this year, the Food Safety and Inspection Service (FSIS) of the US Dept. of Agriculture (USDA) has issued two Public Health Alerts for food products due to possible contamination with *Listeria*. January 6th's recall was for assorted deli meat products produced by Peter DeFries Corporation, of New Mexico, and distributed to Dion's restaurant locations in three states. On January 7th, the alert was issued due to concerns that ready-to-eat chicken strips produced by House of Raeford, of North Carolina, may have been contaminated with *Listeria*. A recall was not requested because it is believed that all products have now been consumed.

An investigation of a multistate outbreak of *Listeria monocytogenes* conducted by the US Food and Drug Administration (FDA), US Centers for Disease Control and Prevention (CDC), and several states revealed that nine people from four states were infected with the outbreak strain; all nine were hospitalized and three died. As a result of this investigation, in May 2016, CRF Frozen Foods, whose frozen vegetables were implicated in this outbreak, recalled more than 350 consumer products sold under 42 separate brands, as well as at least 100 other products prepared by other companies that contained recalled ingredients from CRF Frozen Foods.

One of the deadliest foodborne outbreaks in US history occurred in 2011. A *Listeria* outbreak linked to cantaloupe from Jensen Brothers Farms in Colorado sickened 147 people in 28 states, resulting in the deaths of 33 people and another 10 who died later. One woman who was pregnant when she was sickened suffered a miscarriage. This was the first listeriosis outbreak associated with melons. A variety of *Listeria* strains were implicated. After the sentencing of the Jensen brothers on guilty pleas to six federal misdemeanors, Jensen Farms filed for bankruptcy.

So what is this microorganism called *Listeria*? It is a gram-positive, rod-shaped bacterium that can grow with or without oxygen conditions. Of the six species of *Listeria*, only *L. monocytogenes* causes disease in humans. They multiply best at 86-98.6 degrees F., but also multiply better than all other bacteria at refrigerator temperatures, something that allows temperature to be used as a means of differentiating *Listeria* from other contaminating bacteria.

*Listeria* typically spreads to people from contaminated food or water, but can also be transmitted from mother to fetus. Other than the mother-to-fetus route, it is not known to be transmitted from person-to-person. In a healthy person, an extremely large number of the bacteria must be ingested to cause illness. Even then, a healthy individual will suffer only a fever, diarrhea, and other related gastrointestinal symptoms. The amount of time from infection to onset of symptoms (incubation period) can range from 2 days to 70 days after eating contaminated food.

Adults can get listeriosis by eating contaminated food, but babies can be born with the disease if their mothers ate contaminated food during the pregnancy. Infections during pregnancy can cause premature delivery, miscarriage, stillbirth, or serious health problems for the newborn.

According to the CDC, people at increased risk for a serious illness resulting from *Listeria* infection include these groups:

- Pregnant women: about 20 times more likely than healthy adults to get listeriosis.
- Newborns
- People with weakened immune systems
- People with cancer, diabetes, or kidney disease
- People with AIDS: almost 300 times more likely than people with normal immune systems to get listeriosis
- The elderly

Outbreaks of *Listeria* infections in the 1990s were mostly linked to deli meats and hot dogs. Now they are often linked to dairy products and produce. Recent outbreaks have been traced to soft cheeses, celery, sprouts, cantaloupe, and ice cream.

**Soft cheeses** made with unpasteurized milk are 50-60 times more likely to cause infection than when made with pasteurized milk. The CDC recommends making sure the label says "made with pasteurized milk." But products made from pasteurized milk can still be contaminated if made in a facility with unsanitary conditions. Hispanic-style cheeses made from pasteurized milk, such as queso fresco, have caused *Listeria* infections, most likely because they were contaminated during cheese-making.

**Raw sprouts**- Sprouts need warm, humid conditions to sprout and grow. These conditions are ideal for the growth of bacteria, including *Listeria*, *Salmonella*, and *E. coli*. People at high risk should not eat raw or lightly cooked sprouts of any kind (alfalfa, clover, radish, and mung bean sprouts). Thorough cooking of the sprouts kills the bacteria. Rinsing sprouts will not remove bacteria.

**Cut melons** should be eaten right away or refrigerated at 41 degrees F. or lower and for no longer than 7 days. Cut melons left at room temperature for more than 4 hours should be thrown away.

**Hot dogs, pâtés, lunch meats, and cold cuts**- Don't let the juice from hot dog and lunch meat packages get on other foods, utensils, and food preparation surfaces. Wash hands after handling hot dogs, lunch meats, and deli meats. Safely store products in the refrigerator as follows:

- Hot dogs: Store opened packages no more than 1 week in the refrigerator and unopened packages no more than 2 weeks in the refrigerator.
- Lunch and deli meats: Store factory-sealed, unopened packages no longer than 2 weeks in the refrigerator. Store opened packages and meat sliced at a local deli no longer than 3-5 days in the refrigerator.

Recommended for those at high risk:

- Avoid eating hot dogs, lunch meats, cold cuts, other deli meats (such as bologna) or fermented or dry sausages unless they are heated to an internal temperature of 165 degrees F. or until steaming hot just before serving.
- Do not eat refrigerated pâté or meat spreads from a deli or meat counter or from the refrigerated section of a store. Foods that do not need refrigeration, such as canned or shelf-stable pâté and meat spreads, are safe to eat. Refrigerate these foods after opening.



**Smoked seafood**- A shelf-stable food is one that can be safely stored at room temperature or "on the shelf." Eating canned and shelf-stable tuna, salmon, and other fish products is not likely to increase the chance of getting a *Listeria* infection.

Not all canned foods are shelf-stable. Some canned foods are labeled "Keep Refrigerated," such as refrigerated smoked seafood, salmon, trout, whitefish, cod, tuna, and mackerel. Refrigerated smoked seafood items are often labeled "nova-style," "lox," "kippered," "smoked," or "jerky", and are usually found at seafood or deli counters of grocery stores and delicatessens. The CDC recommends that people at high risk do not eat refrigerated smoked seafood unless it is canned or shelf-stable, or it is in a cooked dish, such as casserole.

Every year, about 1,600 people get listeriosis in the United States. You should seek medical care and tell the doctor about eating possibly contaminated food if you have a fever and other symptoms of possible listeriosis, such as fatigue and muscle aches, within two months after eating the questionable food. This is especially important if you are pregnant, age 65 or older, or have a weakened immune system.

If you ate food possibly contaminated with *Listeria* and do not feel sick, most experts believe you do not need tests or treatment. Talk with your medical provider if you have questions about what to do after eating possibly contaminated food.

People who are at high risk for contracting a foodborne illness such as listeriosis should know which foods are risky and avoid them, avoid consuming unpasteurized milk and products made from it, heat hot dogs and deli meats before consuming, avoid cross-contamination, and use a thermometer to check your refrigerator (40 degrees F. or below) and freezer (0 degrees F. or below) temperatures.

Sources: [www.cdc.gov](http://www.cdc.gov); [www.about-listeria.com](http://www.about-listeria.com); [www.foodsafetynews.com](http://www.foodsafetynews.com); [www.fsis.usda.gov](http://www.fsis.usda.gov)

Ask the Expert: For any Food Safety or Sanitation questions or concerns, contact Linda Wilt via email - [LWilt@bhcinc.com](mailto:LWilt@bhcinc.com)