

Listeriosis

Listeriosis is food poisoning caused by eating food contaminated with the bacteria (germ) known as *Listeria monocytogenes*. Listeriosis may affect any person but is more dangerous in pregnant women, newborn babies, the elderly, and people with impaired immune systems. Babies can be born with Listeriosis if their mothers eat contaminated food during pregnancy.

What causes Listeriosis?

The bacteria, *Listeria monocytogenes*, is found in soil, water and animal faeces. Vegetables can become contaminated from the soil or from manure used as fertilizer. Animals can carry the bacteria resulting in the contamination of meat and dairy products. Processed food, such as soft cheese and vienna sausages, can be contaminated during and after processing. Unpasteurized (raw) milk can be contaminated.

What is the symptoms of Listeriosis?

The symptoms of Listeriosis include fever, muscle aches, nausea and diarrhoea. If the infection spreads to the nervous system, symptoms such as headache, stiff neck, confusion, loss of balance, or convulsions can occur. Pregnant women may experience only a mild, flu-like illness; however, the baby may die unexpectedly before birth or experience a life-threatening infection within the first few days after birth. The signs and symptoms in a newborn baby may include little interest in feeding, irritability, fever and vomiting.

What are the risk factors for Listeriosis?

The major risk factor is eating food or drinking liquids contaminated with *Listeria* bacteria.

Who is at risk of contracting the disease?

1. Pregnant women and their babies: the infection is usually mild in pregnant women, however, may cause a miscarriage, stillbirth, premature birth or a potentially fatal infection for the baby after birth.
2. People who have weakened immune systems, included in this category are people who:

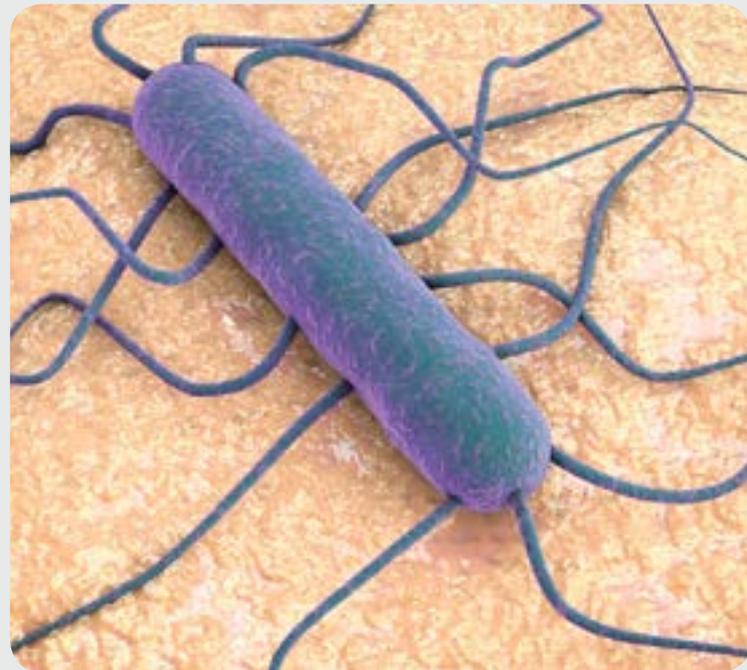


Figure 1: The bacterium, *Listeria monocytogenes*

- are older than 60-years
- have AIDS
- are undergoing chemotherapy
- have diabetes or kidney disease
- are taking high-doses of steroids or anti-rheumatoid arthritis drugs
- are taking medications to prevent the rejection of a transplanted organ

What are the complications of Listeriosis?

Most infections resolve on their own or can be treated with antibiotics. Listeriosis may, however, result in serious complications in certain cases.

The following potentially life-threatening complications may occur:

- Gastro-enteritis with life-threatening dehydration
- Septicaemia (infection in the blood)
- Meningitis and/or encephalitis (infection of the membranes surrounding your brain and spinal cord and / or infection of the brain)
- Brain abscesses (collection of pus in the brain)
- Seizures (convulsions/fits)
- Miscarriage
- Premature birth
- Newborn sepsis (potentially fatal)
- Stillbirth
- Death

- Consume perishable and ready-to-eat food as soon as possible.
- Always look out for expiry dates.

People who have a high risk of contracting the infection should avoid:

- Eating soft cheeses made with unpasteurized milk such as feta, blue cheese or Mexican-style cheeses. Cheeses that are safe to eat include hard cheeses, semi-soft cheeses such as mozzarella, pasteurized processed cheeses such as slices and spreads, cream cheese, and cottage cheese.
- Eating vienna sausages and cold meats, unless they are reheated until steaming hot.
- Eating refrigerated pates or meat spreads.
- Eating refrigerated smoked seafood.

How can you prevent Listeriosis



Figure 2: Handwashing Steps

Listeriosis can be prevented through safe food handling practices.

- Wash your hands with soap and water before preparing food, eating and after going to the toilet.
- Wash raw vegetables and fruits before eating.
- Do not drink raw (unpasteurized) milk or eat products made from unpasteurized milk.
- Keep uncooked meats, poultry and seafood separate from vegetables, fruits, cooked food, and ready-to-eat food.
- Wash knives, kitchen surfaces, and cutting boards with water and soap before and after handling uncooked food.
- Thoroughly cook raw food from animal sources, such as meat, poultry, or seafood.

Diagnosis

Your doctor will ask you questions about your symptoms, food you have recently eaten, and your work and home environments. A blood test, spinal fluid or amniotic fluid test may be done to confirm the diagnosis.

Treatment

Most people with Listeria infection spontaneously clear the infection in about seven days. Gastro-enteritis due to listeria usually does not require treatment. However, gastro-enteritis due to listeria in high risk persons such as pregnant women, persons with cancer on chemotherapy, and

the elderly may be treated with anti-

biotics (ampicillin or cotrimoxazole in standard doses for 3-7 days) to clear the infection. During pregnancy, prompt antibiotic treatment may help keep the infection from affecting the baby. Newborn babies who have a Listeria infection, will also be offered antibiotics. In general, the length of antibiotic treatment increases with the severity of the infection and the complications at hand.

What is covered under PMB level of care?

Diagnosis and management of uncomplicated Listeriosis is not included in the Prescribed minimum benefits (PMBs). Listeria infection may, however, result in various complications as listed above. Most of the complications are included in the PMBs and should be treated as specified for the specific condition.

Complications of Listeriosis are included in the PMBs under Diagnosis and Treatment Pair (DTP) code 940S. This DTP refers to Metastatic infections; septicaemia. The treatment component specified for this DTP, according to the PMB Regulations, is Medical management.

Neonatal (disseminated) Listeriosis is a PMB condition under DTP code 901N. This DTP refers to Congenital systemic infections affecting the newborn baby. The treatment component specified for this DTP, according to the PMB Regulations, is Medical management, ventilation.

It is important to note that while the treatment for Listeriosis is not covered by the PMBs, complications resulting from Listeriosis should be funded according to the PMB Regulations.

References

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6. Figure 1: The bacterium, Listeria monocytogenes. Available from: <https://guardian.ng/news/south-africa-listeriosis-outbreak-toll-hits-180/>
7. Figure 2: Handwashing Steps. Available from: <http://www.health.state.mn.us/handhygiene/wash/fsgermbuster.html>



WHAT ARE PRESCRIBED MINIMUM BENEFITS?

Prescribed Minimum Benefits (PMBs) are defined by law. They are the minimum level of diagnosis, treatment, and care that your medical scheme must cover. The scheme must pay for your PMB condition/s from its risk pool, and in full. There are medical interventions available over and above those prescribed for PMB conditions, but your scheme may choose not to pay for them. A designated service provider (DSP) is your scheme's healthcare provider (e.g. doctor, pharmacist, hospital) for the treatment or care for a PMB condition. If you choose to use a non-DSP voluntarily, you may have to pay a portion of the bill as a co-payment. Co-payment will not apply where a member has involuntarily used a non-DSP owing to an emergency medical condition, significant distance from a DSP, or non availability of a DSP. PMBs include 270 serious health conditions, any emergency conditions; and 25 chronic diseases. Information on these conditions can be found on the Council for Medical Schemes (CMS) [website](#).

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