

Listeriosis

DISEASE IN ANIMALS

The most important species for man and animals is *L. monocytogenes*, which can be found worldwide in humans, animals, vegetation, water and soil. Most cases are acquired by ingestion of contaminated silage or feed. Transmission can also occur by inhalation or direct contact. Venereal transmission may also be possible. Infection has been diagnosed in a wide variety of mammals and birds, but sheep are the most susceptible, followed by goats and cattle. Sporadic outbreaks have occurred in rabbit and guinea pig breeding colonies. Listeriosis is uncommon in pigs and only a few cases have occurred in dogs.

Reporting: Animal disease reporting of Listeriosis to the Ohio Department of Agriculture or USDA APHIS Veterinary Services is not required. Voluntary reporting to the [local health department](#) (LHD) of lab confirmed animal cases associated with transmission to humans is encouraged.

Clinical signs: Listeriosis is often associated with encephalitis, abortions, or septicemia. Encephalitis is the most common clinical presentation in ruminants. Typical signs include uncoordination, leaning against stationary objects, circling in one direction and paralysis of facial and throat muscles. Genital infections can result in late trimester abortions. Swine and fowl typically develop septicemia.

Diagnostics: Culture: blood, CSF, aborted placenta/fetus, other normally sterile tissues (i.e. brain in encephalitis cases) IFA, Elisa, PCR: identify bacteria from milk, meat, aborted animals

Case classification:

- Suspected: a clinical case with signs consistent with listeriosis.
- Probable: a clinically suspect case with laboratory evidence from a screening or unvalidated test.
- Confirmed: a case that meets confirmatory testing criteria determined by a state or federal diagnostic laboratory (e.g. isolation of the organism from appropriate samples).

DISEASE IN HUMANS

Reporting: Report by the end of the business day any suspected human illness or positive laboratory result to the LHD where the patient resides. If unknown, report to the LHD of the health provider or laboratory.

Human illness: The milder form of the disease is referred to as febrile listerial gastroenteritis. Symptoms occur after a short incubation period from ingestion of high doses of *L. monocytogenes* by healthy individuals. Symptoms include diarrhea, fever, headache, and myalgia. Invasive listeriosis, where the agent penetrates the brain or placenta, affects immune-compromised individuals, the elderly, pregnant women, and the very young. The incubation period ranges from three to 70 days. Symptoms vary, and include pneumonia, septicemia, endocarditis, abscesses, skin lesions, conjunctivitis as well as gastroenteritis. Listeriosis is particularly harmful to pregnant women, resulting in miscarriage or damage to the fetus.

Personal protection: Follow recommendations for safe food handling and preparation. Skin should be protected when contacting potentially infective materials, especially those associated with abortions.

FOR MORE INFORMATION

Disease in Animals

[Ohio Animal Disease Diagnostic Laboratory](#)

[OIE Manual of Diagnostic Tests](#)

[Iowa State University Center for Food Security and Public Health Animal Disease Factsheets](#)

Disease in Humans

[ODH Infection Control Manual](#)

[CDC Listeriosis](#)