

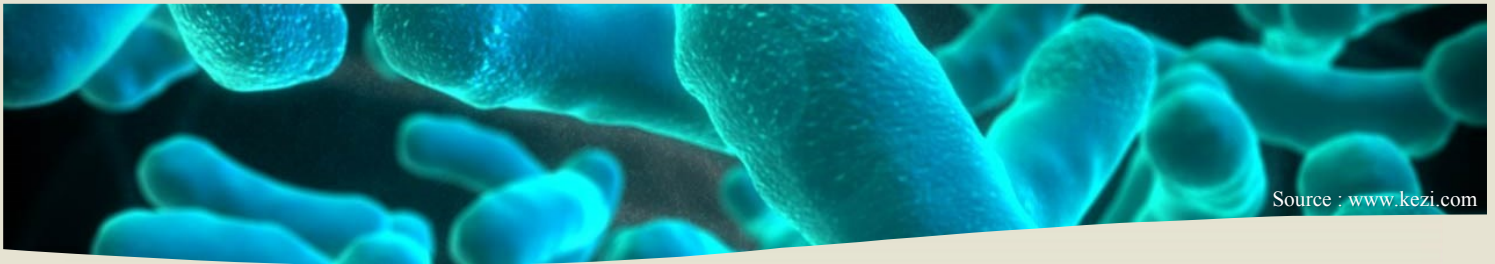
# ABORTION SHEET

# LISTERIOSIS



www.cepmq.com

•• Sheep and goats



Source : www.kezi.com

**LISTERIOSIS IS A BACTERIAL DISEASE COMMONLY FOUND IN SMALL RUMINANTS. THEY BECOME INFECTED MAINLY BY INGESTING CONTAMINATED FOOD.**

## AGENT INVOLVED ••

Listeriosis is caused by the bacterium *Listeria monocytogenes*, which is found everywhere in the environment. This bacterium is present in the digestive tract of many species : mammals, birds and insects.

## TRANSMISSION ••

In sheep and goats, transmission occurs mainly through **ingestion of contaminated silage** (poor quality or poorly preserved, allowing the growth of bacteria). The animal can also become infected **by contact with a contaminated surface such as soil** (eg mowing the forage too close to the ground).

THE INCUBATION PERIOD BETWEEN INGESTION OF THE BACTERIA AND EARLY ABORTIONS CAN BE 7 TO 30 DAYS. THEREFORE, AFTER A CLINICAL CASE OF LISTERIOSIS, VIGILANCE IS REQUIRED FOR SEVERAL DAYS SINCE MANY SUBJECTS WERE ABLE TO CONSUME THE SAME CONTAMINATED FOOD.



## CLINICAL SIGNS ••

In small ruminants, the most common clinical signs have a neurological involvement : **fever, facial paralysis, circling, inability to stand and death**. This disease is more often fatal in sheep than in goats. In addition to the nervous condition, **listeriosis can cause abortions, septicemia and mastitis**.



Source : www.merckvetmanual.com

Abortions usually occur after an episode of fever. If the infection occurs in late pregnancy, the disease will result in the birth of stillborn or weak lambs and kids. Affected females may have uterine infections as a result of their abortion.

## BEWARE OF SILAGE (POOR QUALITY) !

Particular attention should be given to silage-based diets since they favour multiplication and spread of the bacteria.

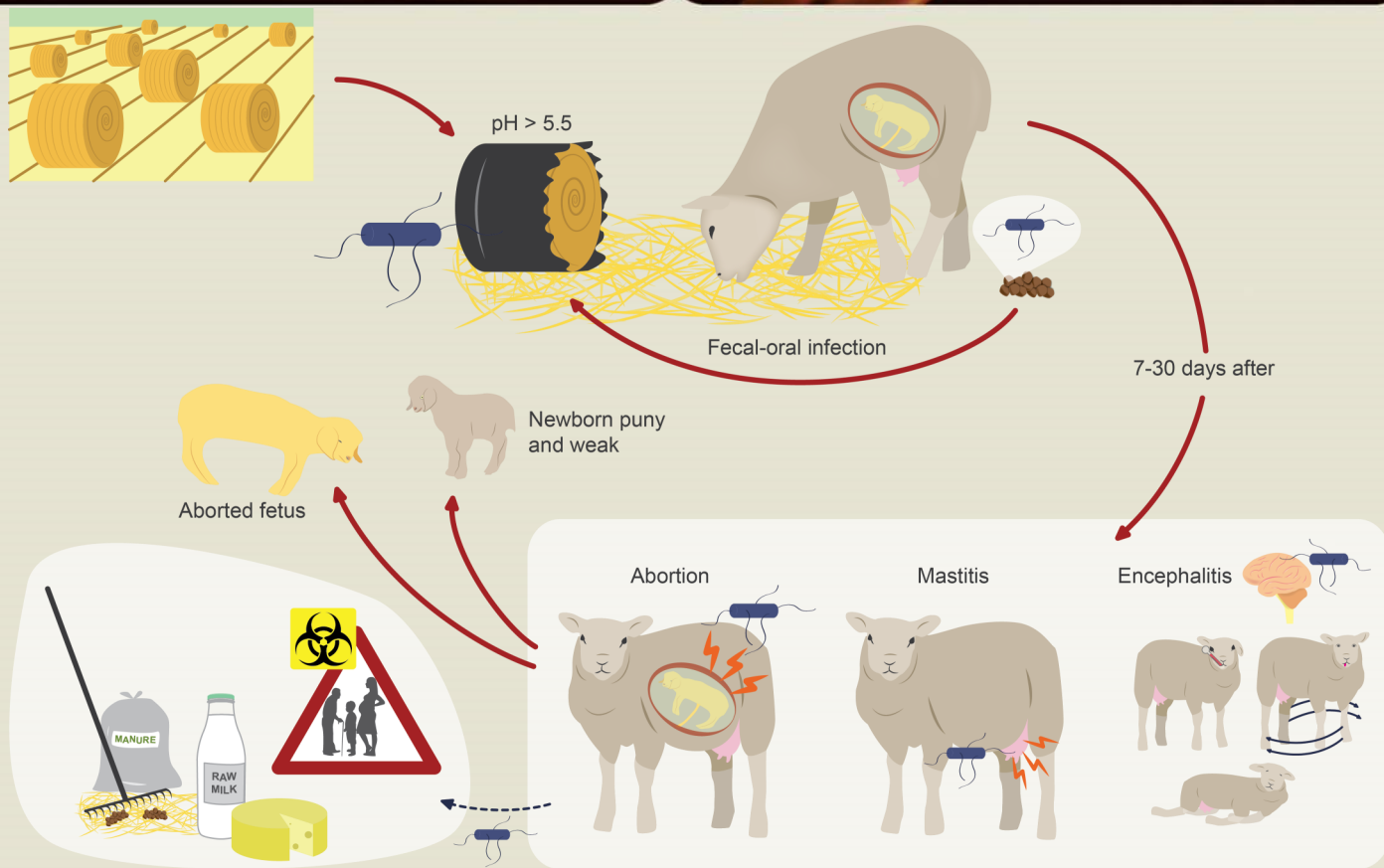


## SOME FACTS ABOUT LISTERIOSIS AND SILAGE :

Two areas of risk: silage contamination by *Listeria* and multiplication of the bacteria in silage when contaminated.

- ◆ The cutting height of the fodder is important in order to avoid the presence of soil particles in the silage that can contaminate it;
- ◆ A pH above 5.5 in silage promotes growth of the bacteria;
- ◆ Silage left in the feeder or used as bedding promote the growth of the bacteria.

# Diagram of the contamination by the bacterium *Listeria monocytogenes*



## DIAGNOSTIC ●●

Submitting specimens (aborted fetus and placentas) to the laboratory is essential because it is the only way to obtain a definitive diagnosis from which one can implement appropriate preventive and treatment measures.

## PREVENTION ●●

Preventing this bacterial infection relies on **proper harvesting and preservation practices**, and respecting strict **hygiene measures at feeding**.

## TREATMENT ●●

Tetracyclines are inexpensive and effective antibiotics to stop abortions caused by *Listeria monocytogenes*. They can be administered in several forms: in water, in food and by injection. It is important to choose the most appropriate form for each farm and each episode of illness.

## WARNING ZOOZOSIS !

**LISTERIOSIS IS ZOOZOTIC AND TRANSMISSIBLE TO HUMANS.**

**Humans get infected in different ways :**

- ◆ Consuming contaminated food (raw milk, raw milk cheese, poorly washed vegetables, or undercooked meat, fish, and seafood);
- ◆ By contact with contaminated substrates (silage, soil, sewers, decomposing material, etc.);
- ◆ By contact with infected domestic animals (sheep, goats, cattle) or wild animals (hares and rodents);
- ◆ And from person to person.

**In general, humans develop flu-like symptoms.** In pregnant women, newborns or anyone with weakened immune system, the infection can cause abortion, meningitis/encephalitis or sepsis.



**Cultivons l'avenir 2**  
Une initiative fédérale-provinciale-territoriale

**Growing Forward 2**  
A federal-provincial-territorial initiative

**Canada**

**Québec**

## TREATMENT TIP :

It is important to know that tetracyclines do not like hard water. In this case, citric acid must be added in order to acidify the water. This prevents the tetracyclines from crystalizing and making the drug non-functional.

Translation: Saskatchewan Sheep Development Board thanks to funding from Growing Forward 2, a Canada and Government of Saskatchewan initiative. I Thank you to Ms. Corlena Patterson of the Canadian Sheep Federation for the review.