

ABORTION SHEET VIRUSES

●● Sheep and goats



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Source : www.idele.fr

IN SMALL RUMINANTS, ABORTIONS OF VIRAL ORIGIN ARE NOT THE MOST COMMON, BUT THEY CAN SOMETIMES BE ASSOCIATED WITH SIGNIFICANT OUTBREAKS. AMONG THE VIRUSES CAUSING ABORTIONS, CACHE VALLEY VIRUS AND BORDER DISEASE VIRUS ARE PRESENT IN CANADA.

INTRODUCTION ●●

Unlike cattle farms in Canada where two viruses are common cause of abortion (IBR and BVD viruses), abortions of viral origin are infrequent in small ruminants. However, they must be considered as a possible cause of abortion since their presence in Canada has been confirmed by serological studies. The two viral infections that are described in this sheet are **CACHE VALLEY VIRUS (front)** and **BORDER DISEASE VIRUS (back)**.

CACHE VALLEY VIRUS...

Cache Valley virus (CVV) can be transmitted to humans and small ruminants through the bite of infected mosquitoes. It is therefore a vector-borne zoonotic disease. The circulation of CVV in Canada has been demonstrated by the presence of antibodies in several sheep flocks and by clinical cases of congenital malformations and abortions in sheep and goats. The risk of abortion and congenital malformations is especially high when ewes and does in early gestation are grazing when mosquito populations are high. ▲▲

TO PREVENT CVV INFECTION, IT IS RECOMMENDED TO REDUCE POSSIBLE CONTACT BETWEEN MOSQUITOES AND EWES IN EARLY PREGNANCY :

- AVOID DRY PONDS AND OTHER STAGNANT WATER SOURCES;
 - GRAZE WELL DRAINED PASTURES;
 - AVOID GRAZING DURING THE FIRST THIRD OF GESTATION (DURING MOSQUITO SEASON);
 - APPLY ANY OTHER MEANS OF MOSQUITO CONTROL WHILE RESPECTING THE ENVIRONMENT.
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CLINICAL SIGNS ●●

The main congenital malformations observed following a CVV infection are arthrogryposis (bilateral stiffness of the joints), scoliosis, torticollis, abnormalities of the head, and underdeveloped muscle mass. Sometimes only abortions without congenital malformations are observed. In humans, CVV infection is associated with meningitis and encephalitis.

DIAGNOSTIC ●●

Samples (aborted fetus / stillbirth, placenta, female serum) should be submitted to provincial laboratory for necropsy so the cause of abortion or congenital malformation can be determined.

TREATMENT ●●

There is no treatment or vaccination to control the Cache Valley virus. However, it is important to find the cause of abortions / malformations to adjust, if necessary, the management of females in gestation at pasture.

Congenital malformations caused by CVV.



Source : MAPAQ

SOME FACTS ABOUT CACHE VALLEY VIRUS :

- ◆ Humans become infected strictly by mosquito bite, and not by contact with infected sheep or goats;
- ◆ Global warming could contribute to spreading this disease in Canada in the future.