Mycoplasma Ovipneumoniae in Domestic Sheep and Goats

Significance to and Role of Alberta Producers

What is Mycoplasma ovipneumoniae?

Mycoplasma ovipneumoniae (also commonly referred to as M. ovi) is a bacterium that invades the airways and lungs of domestic sheep and goats (small-ruminants) and disrupts their ability to filter out other pathogenic bacteria and/or viruses known to infect the respiratory system. While M. ovi by itself is not known to be a significant cause of disease and/or losses in domestic sheep/goat herds, infection with this bacterium, in combination with other respiratory pathogens, can lead to a gradual increase in clinical respiratory disease sign (such as pneumonia) and corresponding production losses within these herds.



Clinical Signs

Many domestic herds may have M. ovi present while having no visible signs of disease. When present, clinical signs can include any of the following: chronic nasal discharge, coughing, weight loss (or poor gains), and/or loss of fiber quality. These signs can be easily confused with those of many other diseases of sheep and goats. For this reason, it is important to work with a veterinarian to investigate any losses and/or signs of disease you may have within your herd.

Transmission of M. ovi

The bacteria are commonly found in the nasal cavity and sinuses of domestic sheep/goats that may or may not show signs of illness. They are transmitted by close contact and aerosol/droplet transfer between infected and non-infected individuals.

Public Health

Mycoplasma ovipneumoniae infection in domestic sheep and goats is NOT a reportable or notifiable disease in Alberta, and does not cause disease in humans. As such, there is no risk to public health from contact with M. ovi-infected sheep/goats or from consuming products (milk, meat, etc.) from these animals.



Protecting Alberta's Bighorn Sheep Population from M. ovi

While *Mycoplasma ovipneumoniae* is generally not known to be the primary cause of significant clinical disease or death in domestic herds, it **has been found to cause significant die offs when it enters wild sheep populations.** For this reason, Alberta Environment and Parks (AEP) and Alberta Agriculture, Forestry and Rural Economic Development (AFRED) are collaborating with the sheep industry and domestic sheep/goat producers located in areas of western Alberta that are adjacent to known bighorn sheep ranges to mitigate the risk of transmission of this pathogen. The intent is to protect Alberta's bighorn sheep population by minimizing contact (and the potential spread of M. ovi) between domestic sheep/goat herds and wild bighorns through education and incentive programs.



What to Do if You Suspect M. ovi in Your Domestic Sheep/Goats

Contact your local mixed animal veterinary clinic or small ruminant veterinarian for a consultation to discuss your herd health and determine if diagnostic testing for M ovi is recommended. Remember that there are other diseases besides M.ovi that can cause respiratory signs and/or weight loss in domestic sheep and goats. Based on your herd's history, clinical signs, and relevant laboratory test results, your veterinarian will recommend the most appropriate way to treat your herd.

To Find a Veterinarian

If you are searching for a veterinarian near you that works with sheep/goats, please go to <u>https://www.abvma.ca</u>. Click "Search for Veterinary Care", then in the search field, enter "Sheep, Goat, Small Ruminant" and click "Search". You can also narrow the search to specific towns/cities nearest you.

Is Your Herd Located Within the Disease Surveillance Zone?

If your farm is located within the Disease Surveillance Zone, please have your veterinarian contact our office at the number below to discuss available programs, such as funding for M. ovi testing and fencing options, to prevent the spread of this bacterium to bighorn sheep.

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To qualify for M ovi-related programs you will require a Premises Identification (PID) Number (available at <u>https://www.alberta.ca/register-with-the-animal-premises-</u> <u>identification-program.aspx</u>) and a (new or existing) working relationship with a small ruminant or mixed animal veterinarian.

To Learn More About M. ovi and How You Can Help Protect Your Herd and Wild Sheep

See <u>https://open.alberta.ca/publications/epizootic-bacterial-pneumonia-bighorn-sheep-alberta</u> and <u>https://www.alberta.ca/pneumonia-and-bighorn-sheep.aspx#jumplinks-2</u>





