

Mastitis in Ewes

Mastitis occurs when bacteria penetrate the teat canal and enter the udder. This may result in anything from a few clots in the milk, to a ewe that becomes very ill and dying within a matter of hours.

Most cases of mastitis occur either very soon after lambing or 3 – 6 weeks later when the ewes are producing the most milk. Any ewe that becomes ill after lambing should be checked for mastitis as should any ewe whose lambs appear hungry.

In the worst cases the blood supply to the affected half of the udder is damaged and it becomes gangrenous. These ewes will be extremely dull, reluctant to rise and off their food. The udder will be swollen and hard with red to purple discolouration of the skin. This discolouration may also be visible on the skin in front of the udder.

Although initially feeling hot the udder will quickly become cold and the outlook is hopeless. If these ewe does not die then the affected side of the udder will literally drop off, over the next few weeks. These ewes should be culled for welfare reasons as the wounds take months to heal and will attract flies.

In less severe cases ewes will be off colour with a poor appetite. They can appear to be lame on a hind leg as the pain of the mastitis makes them swing the adjacent leg wide. The affected half of the udder will be swollen and painful and feel hot compared to the other side. The milk may contain clots, blood or appear watery. The lambs may need topping up as the ewe will be reluctant for them to suck. Milk yield will be reduced and lamb growth rates can be affected.

In mild cases where the ewe has not been ill the problem may only come to light when firm lumps of scar tissue can be felt within the udder or teat either at weaning or more likely at a pre-tupping check. These ewes will not be able to cope with sucking multiple lambs and in most cases should be culled.

80% of all mastitis cases in ewes are caused by either *Staphylococcus aureus* or *Mannheimia*, (*Pasteurella*), *haemolytica*. *S. aureus* is a bacteria that is present all the time on the skin surface while *M. haemolytica* is carried in the mouths of most normal sheep. Lambs will pick it up from their mothers very early on and then transfer it from their mouths to the teat ends.

Environmental bacteria such as *E. coli* can also cause mastitis. *E. coli* is always present in the environment and if insufficient bedding is used or pens are overstocked, dirty or damp outbreaks of mastitis can occur. Be wary of transferring bacteria to the teat ends via dirty hands when you are checking that a newly lambled ewe has colostrum.

Anything that causes damage to the teat end, e.g. lambs' teeth or orf, can increase the chances of mastitis developing. Teat damage can be increased if the ewes' are short of milk and lambs are continually butting the udder and vigorously sucking the teats. It is important that the ewes' body condition score and nutrition are correct to ensure a good milk supply. Cold and windy conditions may increase problems with mastitis. Provide shelter and avoid excessive crutching.

Unusual causes of mastitis include infection with Maedi Visna virus or Leptospirosis. In both cases the ewes will have reduced milk yields or none at all.

If you have an outbreak of mastitis contact your vet to diagnose which bacteria is causing the problem by examining milk samples. Discuss with your vet the most appropriate antibiotics to use in routine cases. Where ewes are very sick the injection of tilmicosin, (Micotil), by your vet together with intravenous anti-inflammatory drugs can be a useful treatment.

HCC is grateful to SAC (Scottish Agricultural Collage) for preparing this article