

# Maedi Visna

## (MV)

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Advisory  
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**Maedi Visna was first described by Dr Bjorn Sigurdsson in Icelandic sheep flocks during 1954. On translation, the term “Maedi Visna” depicts two clinical signs of MV in sheep, with “Maedi” meaning “dyspnoea” (difficulty breathing) and “Visna” meaning “wasting”.**

MV is a highly infectious viral disease which was introduced into UK sheep flocks through the importation of sheep. The spread of MV throughout UK flocks is on the rise, with figures estimating that the proportion of infected flocks has recently doubled – rising from 1.4% to 2.8%. However, it should be noted that these figures are much higher in some areas of the UK, and that within flocks the prevalence (proportion of infected individuals) can be very high (up to 85%).

Maedi Visna is caused by a retrovirus and can have devastating effects on flocks, with reduced fertility (conception rates around 9% lower than uninfected ewes have been reported), productivity and increased mortality rates all contributing to a significant financial impact.



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Many animals affected with MV may appear asymptomatic. A 6-7% reduction in milk yield, resulting in a 0.94kg reduction in the weaning weight of lambs born to infected ewes over four years old has been shown. In monetary value, this equates to a loss of approximately £4.07/lamb – assuming a disease prevalence of 20% is observed within a flock (Ogden et al., 2019). In flocks where animals display clinical signs, the disease may present in several forms. Most commonly, infected animals exhibit wasting alongside progressive dyspnoea. Less frequently, infected animals may show neurological signs such as muscle tremors and/or incoordination. Occasionally infected animals may exhibit a dry cough, severe arthritis or chronic mastitis. Poor milk yields can lead to high mortality in neonatal lambs and poor lamb growth rates. Generally, clinical signs are extremely hard to identify in flocks with a low prevalence of infection. Once clinical signs are evident infection is often widespread and culling of large numbers of animals may be required.

**Typically, animals' contract MV by the airborne route via droplets from the respiratory tract of infected animals. Coinfection of animals with both OPA and MV will increase the concentration of the virus within an animal's respiratory tract, which can significantly increase the risk of transmission between sheep. MV can also be spread through the consumption of infected colostrum/milk and through the semen of infected animals. Lambs born to MV positive ewes should not be retained as replacements.**

Maedi Visna is ultimately a fatal condition from which infected animals cannot recover. Infected animals may live with MV for a number of years and are highly infectious whilst appearing asymptomatic.

At present there is no vaccine available for Maedi Visna within the UK. Flocks can be blood tested to identify any infected animals present. Animals testing positive for MV should be isolated from the flock immediately and culled. It is also recommended that any purchased sheep are sourced from "MV accredited" flocks, which are known to be free of the virus.

SRUC Veterinary Services runs an MV accreditation scheme which is open to all UK sheep flocks. To achieve accreditation flocks must initially pass two clear qualifying tests carried out at an interval of six to twelve months. Once accredited, the flock must undergo routine blood tests every two to three years. A monitoring scheme has recently been launched. More information on SRUC's Premium Sheep and Goat Health Schemes (PSGHS) can be found at [https://www.sruc.ac.uk/info/120113/premium\\_sheep\\_and\\_goat\\_health\\_schemes](https://www.sruc.ac.uk/info/120113/premium_sheep_and_goat_health_schemes).

