

Information Sheet - Ovine Pulmonary Adenocarcinoma (OPA)

Also known as '*Wheelbarrow disease*' or '*Jaagsiekte*', because if you pick up the hind legs of the sheep in the air, fluid is often observed running from the nose and mouth.

It is an infectious and fatal lung disease of sheep, caused by a virus known as *Jaagsiekte Sheep Retrovirus* (JSRV), which infects cells in the lung making them form tumours. The tumour cells then produce more of the virus which can infect new areas of the lung or other sheep.

The disease signs associated with OPA are loss of condition, difficulty breathing and in around half of cases, production of clear or frothy fluid from the affected lungs, appearing as discharge dripping or pouring from the nose. The sheep may survive for many weeks after the signs of disease appear or may die suddenly. In affected flocks OPA may be the cause of death of 1% to 20% of the flock in one year. It is important to note that the early stages of OPA are not apparent as the tumours are too small to cause any breathing problems even though they are able to produce viruses which can infect other sheep.

Tests to enable detection of infection in sheep before they develop clinical signs of OPA are a focus of ongoing research but currently there is no prevention or cure available.

We are trying to obtain data to share with the, Moredun Research to try and advance the knowledge of this disease.

Ultrasound scanning can identify early OPA in sheep before any signs of disease begin to show and while the animal is still of some cull value. An ultrasound cannot give a definitive negative result for individual animals. Post-mortem examinations are a good way to get an understanding of a flock's health status. So if you can obtain the lungs and have them autopsied it would be helpful to understand how wide spread this disease is.



We advised to regularly inspect adult sheep and cull infected animals. Sheep with OPA are not always your thin ewes. OPA poses no risk to human health and sheep can be sold for meat. One key message is to maintain a high standard of bio-security. If you suspect OPA in your flock speak to your vet.