



Scabby mouth

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Scabby mouth is a pox-like viral disease of sheep and goats. The disease is characterized by scabs and pustules on the face (Figure 1) including the muzzle, lips, inside the mouth and around the eyes, on the feet and occasionally around the tail.

Scabby mouth is also known as contagious pustular dermatitis, contagious ecthyma, orf or sore mouth. The disease is present throughout the sheep raising areas of the world and is the most common viral disease of sheep in Australia.

Scabby mouth is often not a problem on Australian farms, and infection and recovery may occur without the producer being aware. Occasionally, problems may occur if there is secondary infection or fly strike or if disease is present at shearing or sale. The virus can infect humans, so shearers and others may refuse to handle infected sheep.

Scabby mouth has become a significant disease since 1989 because it has been involved in disruptions to the live sheep trade to the Middle East.

Transmission

Scabs shed from infected sheep can harbour the virus for many years and act as a source of infection. The virus also remains viable for many years on pasture and in yards.

A break in the skin allows the virus to enter the sheep and establish infection. Therefore, outbreaks are often associated with abrasions caused by rough dry feed, such as stubble, thistles, grass seeds or burrs. Infection may also occur if there is prolonged wetting of the feet.

Clinical signs

The clinical signs of scabby mouth are generally seen about three days after being infected. The disease is most common in weaners over summer but sheep of all ages may be affected.

The initial stages of the disease are seldom observed. The first sign is redness and a slight swelling of the skin. Watery blisters then form which develop into pustules and quickly rupture to form thick brown scabs.

The scabs are shed three to four weeks later leaving a layer of raw pink skin which heals quickly.

Face / mouth lesions

Scabs usually first appear in the corners of the mouth and may spread to cover the lips and the adjoining skin of the muzzle. Large wart-like scabs may develop in severe cases.

The haired areas of the face, the bridge of the nose, the ears and around the eyes can also become affected.

In severe cases the lesions can extend into the nostrils and into the mouth involving the gums, the tongue, the dental pad and inside the cheeks. These sores can cause infected animals to stop eating.



Figure 1. Mild signs of scabby mouth.

Leg lesions

Occasionally the legs may be affected, usually just above the hoof or between the toes, which can cause lameness (Figure 2). Sometimes these lesions can extend up to the knee or hock.



Figure 2. Severe scabby mouth affecting the lower leg.

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Lambs

Lesions on the lips, muzzle and inside the mouth in suckling lambs can infect the udder and teats of the dams, which may progress to a severe mastitis. The ewe may refuse to let the lamb suckle, resulting in starvation and possibly death of the lamb.

Rams

Occasionally rams develop sores on the scrotum which cause the skin to thicken.

Humans

In humans, swollen red nodules with a greyish centre leading to scabs may develop on the skin a few days after infection. These should lift and the skin heal in about two weeks. Medical advice should be sought if necessary.



Figure 3. A severe case of scabby mouth in a lamb.

Diagnosis

Most outbreaks can be diagnosed by the clinical signs listed above. The virus can be identified from the scabs to confirm the diagnosis.

Immunity

Recovered animals develop immunity which is often long-term provided that there is regular exposure to the virus. Vaccinated sheep are susceptible to re-infection but the disease is mild and short-lived in animals with previous immunity.

The vaccine

The vaccine contains a live virus that produces mild disease. It is applied by scratching the bare skin with a special applicator. The vaccine manufacturer's recommendations should be followed carefully, as correct vaccination technique is most important for the development of protective immunity.

Precautions

Humans can be infected with the scabby mouth virus. After vaccinating sheep, wash the hands in disinfectant solution, prepared according to label directions. Disinfectants should not be used to clean the vaccination needles – the opposite of what is recommended for other routine vaccinations.

Treatment

No specific treatment is available and generally it is best to let the disease run its course of about three weeks. Treatment is aimed at providing palatable feed and preventing blowfly strike.

- Insecticides can help to prevent blowfly strike of the lesions.
- In severe cases, soft palatable feed should be fed to avoid excessive loss of condition.
- Where harsh dry feed is a problem (eg thistles), it may help to move sheep to a new paddock with softer feed.

Other conditions

Scabby mouth may be confused with other diseases including two important diseases exotic to Australia. They are:

- Sheep pox
- Foot and mouth disease

A veterinarian should investigate mouth lesions in animals where the cause is not known.

Biosecurity

Livestock, machinery, fodder and people can introduce animal and plant diseases, weed seeds and pests. Develop a biosecurity plan for your farm to reduce the risk of introducing these problems.

For sheep purchases, ask the vendor for an Animal Health Statement which covers OJD, footrot, lice, brucellosis, drenching and vaccination history.