

# Mulesing of sheep

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## What is mulesing?

Mulesing is a surgical procedure during which the skin around the breech and tail area of Merino sheep is removed. It is usually carried out on young sheep before they reach six months of age. A local anaesthetic is not used as this requires a veterinarian to administer the anaesthetic and would make the operation prohibitively expensive. The loose skin is removed with a very sharp pair of shears. Many farmers apply a topical painkiller immediately after the surgery which reduces the pain from the wounds. Mulesing is performed in the cooler months of the year to avoid the wound attracting female Australian Sheep Blowflies to the area to lay their eggs.

Once the wound has healed the skin become tight around the tail area and very little wool grows there. This permanently reduces the likelihood of urine and faeces staining the area and making it attractive to the female Australian Sheep Blowfly.



Freshly mulesed lambs



An adult sheep that has been mulesed

## Why do we mules sheep?

The Australian Sheep Blowfly is the major external parasite of sheep in Australia. The female flies lay their eggs in damp wool on the body of sheep. The most commonly affected areas are around the tail (often referred to as the breech) and along the backline of the sheep because these areas trap moisture from faeces and urine (breech area) and rain (backline), making them attractive to the female blowflies. The eggs quickly hatch into larvae (more commonly called maggots) which feed on the skin and flesh of the sheep. This is known as flystrike. The affected area becomes very stained

and smelly, attracting other species of blowflies to lay their eggs and cause secondary flystrike. Once fully grown the maggots fall from the sheep and burrow into the ground. Here they become a pupa and grow into an adult blowfly which emerges from the soil and starts the cycle again. In warm, humid weather the blowfly life cycle can take as little as three weeks and massive numbers of flies can build up very quickly.



A sheep struck on the body area



A sheep struck on the breech area

If flystrike is left untreated the sheep will usually die a slow and painful death. Treatment involves shearing wool away from the affected area, killing the maggots with an insecticide and treating the wound with antibiotic powder. The treatment of fly-struck sheep, together with the losses caused to production, costs the Australian sheep industry many millions of dollars each year.

The mulesing operation, which has been routinely performed on Merino sheep since the 1930s, permanently reduces the likelihood of breech strike as it reduces the amount of faecal and urine staining of the wool in the breech region, thus lessening the chances of the sheep becoming fly-struck. Merino sheep have loose, wrinkly skin and are much more susceptible to flystrike than other breeds of sheep.

### **What is the problem with mulesing?**

There is no doubt that mulesing causes pain and distress to sheep. Some research suggests that this lasts for approximately three days after the operation is performed. Farmers acknowledge this but they argue that flystrike is also a painful and distressing condition for sheep and that mulesing is an effective way of reducing breech strike in Merino sheep. They argue that mulesing causes short term pain for long term gain.

Many animal welfare groups, however, are totally opposed to mulesing on the grounds of animal cruelty and want to see the practice banned in Australia. In the early 1990s an American-based organisation known as People for the Ethical Treatment of Animals (PETA) began lobbying buyers and consumers of Australian wool to boycott the product on the grounds that they were supporting cruelty to animals. Such was the impact of this lobbying and the subsequent threat to Australia's wool exports (over 95% of wool produced in Australia is exported) that the Australian wool industry

agreed to cease mulesing sheep by 2010 and to investigate alternatives to mulesing as a means of preventing flystrike. However, this was not achieved but research (detailed below) continues. Approximately 30-35% of Australian bales of wool now come from non-mulesed sheep and this percentage continues to rise as farmers move into alternative management practices.

### **Long-term solution**

#### **Breeding plainer bodied Merino sheep.**

Breeding Merinos with fewer wrinkles and/or with bare areas around their breech and tail region offers the only long-term solution. However, this will take a long time as the genetics are not simple and there are approximately 50 million wrinkly Merinos currently in Australia (May 2013).

### **Alternatives to Mulesing**

#### **1. Alternative management practices**

A lot of work is being done to work out the best timing for sheering and crutching, and the use of chemical fly repellents to replace the need to mules. Although increased use of crutching and chemicals is costly, many farmers are adopting these practices to be able to produce un-mulesed wool.

#### **2. The use of skin clips around the breech region**

Special clips are applied to loose folds of skin around the breech and tail. They constrict the flow of blood to the area. The skin and the clips fall off after a few weeks. This leaves a bare area around the tail, giving a similar result to that obtained by traditional mulesing.



Clips applied to loose skin around the tail

This method was commercialised in May, 2009 but has not proved a popular alternative to mulesing.

### 3. Skin injections

Scientists are also investigating chemicals that can be injected into the skin around the breech and tail area which are capable of stopping wool growth and tightening the skin so that the area is less attractive to blowflies. This method is currently under field trials and the product is awaiting registration.

In conclusion, many farmers still believe that mulesing is the best and most effective flystrike preventative procedure and will continue to use it. Animal welfare agencies believe that mulesing is cruel and that there are alternatives available (even though they may cost more to use). Worldwide the demand for unmulesed wool continues to increase and places pressure on the Australian sheep industry to stop mulesing.

#### **Related links:**

<http://www.wool.com/en/on-farm-research-and-development/sheep-health-welfare-and-productivity/sheep-health/breech-flystrike/AWIs-approach>

<http://www.wool.com/default.htm>

[http://kb.rspca.org.au/What-is-mulesing-and-what-are-the-alternatives\\_113.html](http://kb.rspca.org.au/What-is-mulesing-and-what-are-the-alternatives_113.html)

<http://www.rspca.org.au/campaigns/mulesing>

<http://www.abc.net.au/site-archive/rural/news/content/201304/s3731948.htm>

<http://www.theaustralian.com.au/news/health-science/sheep-farmers-flocking-back-to-mulesing/story-e6frg8y6-1226557807686>