



## GETTING TO GRIPS WITH THE FINANCIAL IMPACT OF ORF

Tackling orf disease can be tough. **Jeremy Hunt** takes a look at how it can be controlled

**O**rf in sheep is a highly contagious and extremely virulent viral disease – characteristics that compound the problem of achieving effective control, especially when its occurrence in large flocks may go totally unnoticed or may appear as a “storm” of unexpected infection with serious implications.

In flocks that have an on-going problem with orf, vets recommend routine vaccination of newborn lambs. But while research has shown that a surprisingly high percentage of flocks sustain a low-level of undetected infection, what makes the disease a truly tough challenge for many sheep producers is that just because orf may appear to have been brought under control by a previous vaccination programme, abandoning vaccination will mean sheep are still vulnerable to the infection that lingers on the farm.

While orf virus cannot over-winter outside, its resilience enables it to survive for many years in buildings. It can live in bedding and on pasture as well as on the skin.

And it's the resilience of the disease that presents sheep producers with their biggest problem when trying to control it. Once a flock has had orf infection the disease will continue to erupt from time to



Sheep flocks with a history of orf are being urged to vaccinate new season lambs, even if the disease hasn't been seen for a while.

time – even if there are long periods when it isn't seen. Its unpredictability means it can suddenly appear and even closed flocks that have a long history of being orf-free can suddenly find themselves with a serious bout of infection.

### Orf control

\* The raised rash and pustulated scabs that are characteristic of orf are highly infectious and anyone dealing with infected sheep must adhere to a strict hygiene routine to avoid contracting the disease themselves and spreading it to others via hand towels or contact.

Mid-Wales vet Ian Jones of Hafren Vets at Newtown says that while the first sign of orf in young lambs should trigger immediate vaccination of the rest of the lamb crop, sheep producers who have not had an outbreak of orf in their flock should definitely not undertake vaccination as a precaution.

“If you see it you must vaccinate immediately; if you have never seen it, leave well alone,” says Mr Jones.

Flocks that have never had orf, but bought in breeding sheep last

autumn, should lamb those females separately and run them as an independent group, advises Mr Jones.

### Vaccination

\* “That should be standard management practice anyway, but it will hopefully avoid the main flock picking up orf infection. But the biggest area of confusion over whether or not to vaccinate concerns flocks that may have had orf some years ago, but then missed a year of vaccination, have still not seen the disease for a year or two and assume they are free of it.

“It's very dangerous if you stop vaccinating once you have started. A lot of flocks weren't vaccinated during the foot and mouth outbreak, didn't see any signs of the disease for a year or two and thought they'd got away with it.

“But it often creeps back very slowly with just a few cases to start with and then, if the flock is still unprotected, there can be a serious outbreak that hits up to 25% or more of the lamb crop. Once you've had orf the infection is always there. Even if you miss a couple of years of vaccination you are playing a risky game assuming you are clear of it. Orf can come back with a vengeance,” says Mr Jones.

One of the fundamental mistakes made by sheep producers faced with an orf outbreak is to jab the infected lambs.

“Those lambs will be run down as a result of the virus and by vaccinating you are giving them more virus. If a flock is run in separate droves it's advisable to leave all the lambs in the drove with the infection without vaccination, but jab the rest.

“Lambs that recover from an orf infection don't do as well when they are suffering from the disease and that can not only mean a delayed selling date but also less income simply because they lose their “bloom” and it shows. With lamb values at their current levels,



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Ian Jones

it makes orf vaccination look a relatively low-cost level of protection if there has been orf on the farm previously,” says Mr Jones.

### Effects of orf in growing lambs

\* Fiona Lovatt, a vet with Castle Vets, an XLVets practice at Barnard Castle, has undertaken a detailed study of the effects of orf in growing lambs. Covering eight flocks over the last two years, the research identified lambs with orf and matched them with an uninfected lamb from the same flock. The trial collected data from more than a hundred lambs and involved regular weighings to determine the impact of orf on growth.

The results showed that orf infected lambs weighed 10% less than those clear of the virus. The age range of lambs when orf was first noticed was from two weeks to five

weeks. Although it may be assumed by some that lambs with mouth sores caused by orf are predisposed to eat less – and hence gain less weight – the trial included lambs that were infected but did not have mouth ulcers which may have deterred intakes.

“This study has proved very conclusively that orf does have an impact on growth. The weight discrepancy steadily increased over the six weeks we monitored the lambs and was highly significant after three and five weeks compared with weighings taken at the beginning of the outbreak,” says Ms Lovatt.

“A lot of farmers accept orf, but at the first signs of the disease the infected lambs should be isolated and consideration given to vaccinating the rest of the flock. The orf virus is incredibly clever. It is a master at disrupting the sheep's immune response,” she adds.

As well as the loss of income

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from lower growth rates of lambs infected with orf, Ms Lovatt also considered the even bigger losses incurred by ewes that have to be culled as a consequence of infection.

“We found that if a lamb has orf there's an 82% chance its mother will also have orf lesions on her teats – with inevitable consequences. And of such ewes in the study, 14% became mastitic – another major financial impact of orf.”

### Costs

\* At about 50p a dose, orf vaccine isn't expensive compared with the lost sheep income that can result from an outbreak. However, vets believe it's the effort involved in “scratching” – and gathering in upland flocks – that means some flockmasters take a risk if they see a few infected lambs and hope there will be limited spread.

If orf does break out, a vaccination programme is essential. The vaccine should never be administered to ewes less than seven to eight weeks before lambing and any vaccinated ewes should be kept away from the lambing area until the scabs – which contain large amounts of the virus – are shed.

With the exception of pregnant ewes, sheep can be vaccinated at any time and in particular if a problem with orf is encountered or if

susceptible animals are to be mixed with infected animals. Under no circumstances should the vaccine be used on farms that do not have a problem with orf.

While vaccination will provide protection from orf infection – and will certainly reduce the worst clinical effects of the disease – it doesn't provide long-term immunity. Sheep that have been vaccinated do not usually show such severe symptoms if a future outbreak occurs for which they have not been protected.

### Online



**VIDEO:** Take a look at our ‘how to’ video on orf control at [www.fwi.co.uk/howtovideos](http://www.fwi.co.uk/howtovideos) for an insight into best practice scratching technique. Also read more articles from the Flock Focus series online at [www.fwi.co.uk/flockfocus](http://www.fwi.co.uk/flockfocus)

### SPONSOR'S MESSAGE

\* You may not have seen orf in your flock last season, however the virus can survive in lambing sheds and buildings for many years, and on the skin of carrier animals – acting as a source of future infection.

In flocks with a history of orf, taking action to prevent it taking hold on your farm through vaccination with Scabivax Forte will help improve the welfare and productivity of your sheep. With new data showing that orf-affected lambs can weigh 10% less, it makes sense to protect your flock, and people handling your stock, from this zoonotic disease. If you have a history of orf on the farm, talk to your vet about vaccinating with Scabivax Forte.

\* For further information, always talk to your prescribing professional

**Scabivax Forte**  
Controls ORF - protects productivity