Identify and remove persistently infected animals to limit BVD spread

There is little scope for complacency when it comes to BVD control and producers should always be on the lookout for persistently infected (PI) animals – even in vaccinated herds.

Experts agree the best time to identify these animals is as calves, before they spread the virus to their herdmates and cause lasting damage.

An estimated 80 per cent of the losses from BVD are attributed to PI animals and the effects they cause, so control of these animals is essential.

Simon Fryar, from Meadow Quality, says he would support a definitive BVD testing system, which would minimise the risk of his company 'buying' BVD-infected calves.

"This would be a great breakthrough," he says. "We buy 700 calves from dairy herds throughout Britain each week, then pool them in collection centres before taking them on to rearing farms.

"If we buy in PI calves, then apart from there being a high risk of the calf dying, they have the potential to infect other calves from day one."

PI calves are unlikely to – but can – reach adulthood, and infected calves often suffer setbacks.

> **"For most herds, a policy of using tag and test in all youngstock and getting rid of PI's is a good idea**
> BILL MAY

Tag and test

"The closest we've come to removing PI calves is through Nordic Star's 'Tag and Test', where calves are tagged soon after birth and the ear tissue sample is tested for the BVD antigen through their lab.

Tagging and testing calves for BVD early on can help identify persistently infected animals and lower the risk of the virus spreading.

"Results should be back on the farm within five days and a positive result will flag up a potential PI animal."

Meadow Quality currently specifies the tag and test service is used on calves destined for suckler herds.

"BVD is easily measured in the beef herd and the cost of tag and test is quickly justified," says Mr Fryar. "Losses seem far more disguised in the dairy sector and, because of this, there's less incentive to test, but we're looking at designing a bonus payment for herds that carry out this procedure and have official results."

Bill May, a vet at Lambert, Leonard and May, also stresses the importance of pinpointing PI calves as soon as possible – whether they are to be sold or will be reared on the farm.

"The earlier PI calves are identified and removed from the herd the better," he says.

"Getting rid of PI animals in a dairy herd and combining it with vaccination and good biosecurity are the fundamentals of a control plan."

Mr May says this is a 'big ask' among dairy producers in view of increasing inputs and falling milk prices.

"As a practice we have a good penetration of BVD vaccinated herds. Done properly, these herds will become immune to the disease and ensure no more PI animals are born, as long as there are no PI adults of breeding age in the herd.

Loophole

"A PI animal will remain 'PI', regardless of any vaccinations, and any calves born to a PI will themselves be PI calves – this is a potential loophole which needs to be considered."

Mr May says very few herds are truly 'closed' herds and bought-in stock may not have the same level of protection as the herd, so could be naive – susceptible to infection – or could be PI animals.

"For most herds, a policy of using tag and test in all youngstock and getting rid of PIs is a good idea – but it does rely on results being back on farm quickly before any culprits can spread the virus.

"Like any disease, infection among the whole group of calves will not be immediate, but the longer they remain unidentified, the greater the risk of more animals becoming infected. The ultimate solution here would be a sensitive cow-side test, but I think that is some way off."

Effects of BVD

- **PI animals:** Progeny of either PI cows or an unvaccinated susceptible cow which becomes infected in the first 110 days of pregnancy.
  The dam fights off the disease and should recover, but the calf remains infected for life, shedding huge amounts of virus
- **BVD:** The virus can cause fertility problems, calf deformities and it suppresses the immune system, leaving the animal more vulnerable to infections and disease