Bought-in PI heifer caused BVD to devastate suckler herd

A bought-in heifer caused BVD devastation for Wexford suckler producer Paul Barden, resulting in the loss of over half of his calves in spring 2014.

Paul, who farms at Donooney, Adamstown, has been in suckling since 2003. He calved 50 cows in 2013. All calves were tissue-tagged and were negative for BVD. Paul was very conscious of disease prevention.

Cows were vaccinated against leptospirosis, salmonella and scour and he also had an IBR vaccination strategy in place. Because he had operated a closed herd, he did not feel the need to vaccinate against BVD.

Similar to every good farmer, Paul weighed up the biggest risks to his herd. In summer 2013, he bought in eight heifers. And that is when the BVD horror story began.

"I noticed one of the heifers was not thriving as well as the rest, but I had no reason to suspect there was anything seriously wrong with her," said Paul.

In September, 53 animals were scanned in-calf, including the bought-in heifer. Paul had little reason to be worried. But everything changed when the cows started to calve in 2014. Paul tells the gruesome story:

Suckler producer Paul Barden with Sharon Magnier, veterinary adviser with MSD Animal Health, on his farm at Donooney, Co Wexford. Of 53 cows scanned in-calf in September 2013, just 12 calves were alive in spring 2014 – all due to BVD caused by a bought-in PI heifer.

Nightmare

"It was an absolute nightmare. Forty cows calved – the rest had lost the calves since scanning, including the bought-in heifer which was now empty come calving time. Of the 40 calves born, we finished up with 12 animals that lived.

"Some were born dead or died immediately after birth. Over 20 lived, but got pneumonia and scour and anything else you could think of. With a lot of help from my vet Tomás O'Shea of Moyne Veterinary Clinic we tried to keep them alive, but they failed to respond to all treatments. They were in a shocking state.

"In the end, I agreed with Tomás that the only option was to put them down. Out of over 50 cows that went to the bull the previous spring, we finished up with 12 calves. The 29 that died or were put down were all PIs."

When the first signs of the impending disaster began to appear, Tomás blood-tested all breeding stock. The suspect bought-in heifer tested as a PI. She was immediately removed from the farm.

The cows that did not produce a calf were sold. All remaining breeding stock were given a primary and booster vaccination with Bovilis BVD in advance of last year's breeding season.

Annual BVD vaccination is now a rigid part of Paul's animal health programme.

He was forced to buy in 28 weanlings last autumn "in order to keep up numbers".

The number of cows due to calve this year has dropped to under 40, a mixture of Salers, Limousin and Hereford crosses.

His aim is to get back up to 50 cows and sell the progeny as forward stores or beef. It has been a very difficult year for Paul and a financial nightmare.

Vaccination absolutely necessary, urges vet

Veterinary practitioner Tomás O'Shea of Moyne Veterinary Clinic in Enniscorthy said Paul Barden's experience is a classic example of what can happen when a BVD-positive animal is introduced to a closed naive herd.

"This was the first time in many years that Paul bought in. So once the PI animal was introduced, the herd was ripe for infection," said Tomás.

He referred to a dairy farmer client who operated a strict biosecurity policy and was regularly monitoring for BVD.

Animals from a neighbouring herd broke into heifers he was grazing on an out-farm. The animals were removed in less than four hours but the damage was done.

"The result was poor fertility, abortions and a number of PI calves born.

"It highlights how rapidly a naive herd can be infected with this disease," he said.

Veterinary practitioner Tomás O'Shea on a visit to Paul Barden's farm. Because of the multiplicity of methods by which the BVD virus is transmitted, Tomás is adamant that annual vaccination is a necessity on every farm.

Tomás stressed the importance of removing PI calves immediately they are identified.

Risks

They can shed in excess of 1,000 times more virus than a transiently infected animal and are a lethal source of infection.

"I continually stress to farmers that even when a PI animal is removed, this does not mean that the herd is free of BVD. Equally, where no PIs are identified and where a closed policy is operated, there is still a constant risk of infection from neighbouring herds or on equipment and people.

"Because of the multitude of methods by which the BVD virus is transmitted, annual vaccination against BVD is an absolute necessity on every farm," he advised.

"I know of farmers who stopped vaccinating because they thought the risk of infection had disappeared. Many are now vaccinating again because of the recurrence of PIs or stories they have heard from neighbours about a fresh outbreak. There really is no alternative to vaccination until we rid the country of this serious disease," he stressed.

Advice on vaccination strategy

Vaccination, combined with identification and removal of PIs, good bio-security and ongoing monitoring are crucial in controlling BVD:

➲ Two injections of Bovilis BVD, given approximately four weeks apart, are needed in non-vaccinated cows and heifers. The second shot should be given four weeks before breeding.

➲ An annual booster shot of Bovilis BVD should be given four weeks before breeding.

➲ It is essential to use a vaccine that is licensed to provide foetal protection. Bovilis BVD is licensed to provide protection of the foetus during the risk period when administered at the correct time.

➲ Leptavoid H, a vaccine for controlling leptospirosis, can be given at the same time as Bovilis BVD.

Combined BVD and IBR vaccination

Animals can now be given a combined booster vaccination against BVD and IBR (Infectious Bovine Rhinotracheitis). This means that Bovilis BVD and Bovilis IBR Marker Live can be mixed together and given in a single 2ml intramuscular injection.

The combined vaccine should be used as a booster dose in cattle from 15 months old, helping to simplify vaccination against two of the most important and debilitating diseases.

Bovilis BVD and Bovilis IBR Marker Live should be used separately when administering the primary vaccine against BVD and IBR. Talk to your vet about best practice in administering the combined booster vaccine.