

Guidance on dealing with BVD Persistently Infected (PI) Animals

What is a BVD PI animal?

An animal is considered to be Persistently Infected (PI) if its initial BVD test result is positive or inconclusive, or if the result of a retest gives a further positive or inconclusive BVD result.

Are there any obvious visible signs that a calf is PI?

PI calves may appear healthy, particularly at birth, but represent a significant risk of infection to other animals in your own and neighbouring herds. Over time many will become poor doers and gradually deteriorate. The majority of PI cattle do not survive to reach slaughter weight, and will die before reaching 2 years of age, either from a condition called Mucosal Disease (which is unique to PI animals) or a range of other illnesses, particularly scours and pneumonias.

What should I do if I have a PI animal?

The AHWNI database will have issued a letter to you identifying the positive calf and its registered dam and advising on the next steps. **You are advised to isolate these animals immediately and to cull PIs as soon as possible.**

There is an option to re-test the positive calf to confirm it is PI. This test can be done on a blood sample collected by your vet at least 3 weeks after the first sample. The dam of the calf is also under suspicion if she has not had a direct negative result in the past, so unless the calf attains a negative result, you will be required to test the dam also.



Since the start of the compulsory programme, almost 90% of all calves that initially had positive test results tested positive again on confirmatory testing.

Are movement restrictions in place?

Movement restrictions are in place on APHIS. For animals born on or after 1st March 2016, only negative (BVDN) animals can be sold at market, sold directly to another herd or exported (including via an Export Assembly Centre).

Those that do not have a recorded test result (that is, where they have not been tested or where unsuitable samples have been submitted) should either have a supplementary tag applied so that a sample can be taken and submitted to an approved testing laboratory, or have a blood sample taken for testing by your private vet.

For animals born before 1st March 2016, those animals that are positive (BVDP), inconclusive (BVDI), dam of a PI (DAMPPI) or offspring of a PI (OFFPI) cannot be sold at market, sold directly to another herd or exported (including via an Export Assembly Centre).

Which animals are banned at abattoirs?

PI cattle born on or after 1st March 2016 are banned from slaughter plants. The ban has full support from NIMEA, the UFU and other industry organisations and is regarded as a significant step towards eradicating BVD in Northern Ireland.

Will my herd or other herds be affected if I keep a BVD PI animal?

PI animals are the major source of BVD infection for other animals. Contact with susceptible pregnant cattle is likely to lead to the birth of further PI calves. Any female PIs that do go on to reach breeding age will produce PI calves.

- **Keeping PI animals leads to even more disease**

Research* has shown that retaining BVD positive calves doubles the risk of having further PIs during the following year.

- **Retaining PI animals increases the risk of spread to neighbouring herds**

The risk of a herd having BVD almost doubles if a neighbouring herd has a PI animal.

If a PI calf is housed with other calves, will the other calves will become infected?

PI cattle are highly infectious, with virus being present in all body fluids, including dung.

They are highly efficient transmitters of the virus to animals, either through direct (e.g. nose to nose) contact or indirectly, through contamination of the environment. It is highly likely that other cattle in contact with PIs will experience a transient (short term) infection. Transiently infected cattle are at a greater risk of other diseases such as pneumonias and scours.

What about the dams of PI calves?

Culling of a single positive calf should not be the only measure taken to protect your herd from BVD.

The mothers of all PI calves should be blood sampled and tested for BVD. If the dam tests positive, then all of her offspring are likely to be positive and should be treated as PI until tested. These animals can present the same risk to your herd as the initial PI calf, and should be culled as soon as possible.

Why isn't long term isolation a realistic option?

Keeping a PI animal in the medium to longer term presents a continual risk to your herd. The animal needs to be housed in a separate airspace to other cattle. Given that the BVD virus is so infectious, it is extremely difficult to avoid the transfer of the disease via equipment or clothing. Once a positive result is received, the animal should be isolated immediately, until it is humanely destroyed.

What steps should I take to prevent accidental introduction of BVD infection to my herd?

The single biggest risk of introduction is through purchased animals, which should have a negative test result for BVD virus prior to purchase. Purchased in-calf cows or heifers should not be introduced to the herd until they have calved and tested negative.

*Refs: Graham et al, 2015 and 2016

To find out more contact the AHWNI helpdesk on (028) 7963 9333 or email info@animalhealthni.com or log onto www.bvdni.com



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