

BVD | FACTSHEET

PRE-BREEDING BIOSECURITY REVIEW IN BVD-FREE HERDS



Considerable progress has been made in the national BVD eradication programme. In the first three months of 2018, only 0.04% of calves born have been considered to be persistently infected (PI) with BVD virus. Over 86% of approximately 83,000 breeding herds have been awarded negative herd status (NHS), indicating that all cattle in the herd have a negative result and that the herd has not contained a PI for at least 12 months. A further 10,000 herds have not contained a PI for at least 12 months but still contain one or more animals whose status is not known and preventing them from obtaining NHS and accessing the associated lower testing costs.

A key focus for the programme in 2018 remains the prompt identification and removal of PI calves. However, just as important is avoiding the creation of further PI calves to be born in 2019, particularly in herds which were previously free.

DAFM automatically notify herd owners of the increased biosecurity risk when a PI calf has been retained (still alive more than 5 weeks after its initial positive test) in a contiguous herd. In such circumstances ensuring that appropriate biosecurity measures are in place is

particularly important. However, the presence of any PI in a neighbourhood is a potential source of infection, even if it is removed within this 5 week window (as the great majority of PIs now are). Therefore the absence of a neighbour notification does not necessarily mean that there is no infection risk in neighbouring herds.

PI calves are born as a result of their dam being infected with BVD virus early in pregnancy, which in turn results in infection of the unborn calf. When this happens between approximately 30 and 120 days of pregnancy (the window of susceptibility), the calf will be born PI if it is carried to term rather than being aborted.

As a consequence of the highly seasonal calving pattern in Ireland, the majority of pregnant animals go through this window of susceptibility at a similar time, following the onset of breeding in April or May. For this reason, all herds are encouraged, in collaboration with their veterinary practitioner, to review their biosecurity practices before breeding commences to minimize the likelihood of pregnant cattle being exposed to BVD virus in the coming months. For herds that are currently BVD-free, such exposure must necessarily come from outside the herd, through either direct or indirect contact with other cattle that are excreting the virus.

Based on the outcomes of RDP-funded investigations by trained veterinary practitioners of over 1,400 herds with PI births in 2017, the following were identified as the most likely pathways by which infection was introduced to pregnant cattle during the window of susceptibility, and should therefore be the focus of biosecurity reviews. While carried out with BVD in mind, attention to these areas will reduce the likelihood of introducing infectious diseases in general.

- 1. Boundary contact.** Wherever possible, cattle up to 120 days of pregnancy should not graze at boundaries where nose to nose contact with other cattle is possible. Boundaries should be sufficient to provide a gap of at least 3m and prevent cattle breaking in or out (even if only on a temporary basis using an electric fence).
- 2. Purchased cattle (or those returning from sales, shows or contract rearing).** While the movement of PI animals is prohibited by legislation, it is possible that purchased cattle could come in contact with BVD virus immediately prior to, or during, the process of being sold or transported. This is particularly the case where animals from different herds are in contact and the purchasing farm's own transport is not being used. Exposure under these circumstances will lead to the cattle being transiently infected (TI) with BVD virus. While TI cattle will only excrete virus for a short time, if they come in immediate contact cattle in early pregnancy then there is a risk of creating PIs. Therefore purchased cattle should be held in a quarantine facility (building or paddock) for at least 28 days, with particular care taken to avoid them coming in contact with pregnant stock.

Where purchased cattle are pregnant, there is also the further risk that they may be carrying a PI calf. These are often referred to as Trojan dams and account for up

to 10% of all PI births. It is important that their calves are tested promptly. Your veterinary practitioner can advise on measures to minimize the risk where pregnant cattle must be purchased. The use of hired, leased or borrowed bulls also poses a potential risk.

- 3. Movement of personnel without adequate attention to hygiene.** All individuals coming onto a farm, including employees, relief workers, professionals and the herdowner pose a potential risk. In the absence of any control measures, this risk increases in proportion to the number of other herds that the individual has had contact with previously, and the closeness of contact with cattle in those herds. Therefore, only essential personnel should contact cattle, particularly in early pregnancy, and all personnel, including the farmer, should use farm-specific boots and clothing or take steps to ensure that adequate cleaning and disinfection procedures are followed where there is a risk of contamination. It is best practice to keep a record of all farm visitors.
- 4. Equipment.** Movement or sharing of large (e.g. trailers) or small items (e.g. nose tongs, dehorner) of equipment should be avoided where possible. Otherwise these should be thoroughly cleaned and disinfected before use.
- 5. Vaccination.** While vaccination will not prevent the entry of BVD virus onto a farm, it can minimize the impact of accidental introduction. Herdowners are encouraged to discuss potential changes to their vaccination policy, and their herd's biosecurity, with their own veterinary practitioner.

For more information on biosecurity, [click here](#).
For maps showing the distribution of both live and retained PIs nationally, [click here](#).