

Should I vaccinate my herd against BVD?



With the commencement of Bovine Viral Diarrhoea (BVD) herd restrictions and resulting improved bio-containment of the BVD virus on affected farms, you may be asking how appropriate it is to vaccinate your herd. When considering the options, Animal Health and Welfare NI (AHWNI) recommends that the main factors to think about are firstly whether the virus has been present in your herd in recent years and secondly what the risk is of BVD virus being introduced to your herd, now and in the future.

Has your herd had a case of BVD in the last two years?

If BVD has been present in the last couple of years, there is a chance that the virus has continued to circulate and therefore there is a need to induce a protective immunity, through vaccination, in breeding cattle. This immunity will help to reduce the negative effects of the BVD virus on fertility, including failure to conceive, abortion, birth defects and most importantly protect against the birth of Persistently Infected (PI) calves. The presence of a BVD Positive animal in a herd does not induce immunity in the whole herd – a decision to cull a positive animal promptly is a wise and recommended course of action.

In the event of vaccinated cattle encountering the BVD virus, they are primed to mount an immune response to the virus and thus the risk of an infection becoming established (and persistently infecting the foetus) is reduced. The decision whether to vaccinate or not depends on the risk profile of the herd.

What is your purchasing frequency and policy?

Purchased animals are the most common source of the BVD infection in herds where BVD Positive results are disclosed for the first time. While the incidence of the BVD virus in NI has decreased, it is important to be aware that there is an accompanying decrease in natural immunity to the virus (due to reduced exposure), so vaccination can be useful if there are pressures in biosecurity. These pressures could be due to: a lapse in a vaccination programme; the introduction of contaminated material to the farm (such as via virus-contaminated equipment or clothing); or a challenge to herd biosecurity through neighbouring contacts or the introduction of stock that have been in contact with the virus prior to arrival.

Any herd which has been or is exposed to some or all of these risks in the absence of appropriate control measures has an increased probability of experiencing the spread of BVD into their herd.

When is vaccination necessary?

As the programme progresses, the prevalence of PI animals decreases, and this is followed by a decrease in the prevalence of animals with natural immunity following exposure. On the one hand this means that the likelihood of pregnant cattle being exposed to virus will decrease but on the other hand the potential negative impact of such exposure increases. The reduction in immunity may leave herds more exposed to large outbreaks should a PI animal be introduced.

Stopping a BVD vaccination programme prematurely, where biosecurity risks still exist, could be a very expensive exercise. Cost savings need to be balanced with the risk of BVD recurring. Carry out a full BVD investigation with your private vet if there has been previous infection in your herd.

What is the precise protocol for the BVD vaccine that you use?

It is important to be aware that BVD vaccines will not provide 100% protection in all circumstances, even when stored and used correctly, particularly where pregnant cattle are exposed to high levels of BVD virus. In some herds in NI, outbreaks of BVD have occurred where vaccination protocols were not carried out in line with the manufacturer's advice. Individual vaccine data sheets should be checked to ensure that the initial course (either 2 shots 4 weeks apart or a single shot) is completed three to four weeks before the breeding season. Many herds fall into an ideal window for BVD vaccination now – ie before breeding starts again. Booster vaccinations should be given, according to the specific instructions.

Have you discussed BVD vaccination with your vet?

Any decision to vaccinate your herd should be taken in conjunction with your veterinary practitioner, as management factors in each herd are unique. It is worth having a discussion with your vet about how to optimise vaccine use and value in a herd with an extended breeding season.

What timing should I use when also giving the Bluetongue vaccine?

It is not recommended that the BVD and the Bluetongue Virus (BTV) vaccines are given at the same time. Consult with your private vet for advice on how to stagger administration, for maximum effectiveness of both products.

Note for editors:

1. AHWNI is responsible for the delivery of the Northern Ireland Bovine Viral Diarrhoea Eradication Scheme. For more information on the operation of the Scheme, please contact AHWNI (email info@animalhealthni.com, tel. 028 7963 9333) or visit the AHWNI website www.animalhealthni.com.