

Biosecurity to control infectious disease

The best way to deal with disease is to prevent it in the first place. Preventative medicine is the most economic, time efficient and welfare-friendly way to approach disease control.

A key part of preventative medicine is having a good biosecurity plan in place.

The diseases in cattle we are most concerned about are listed below:

- TB
- BVD
- IBR
- Johne's
- Digital dermatitis
- Leptospirosis
- Neospora
- Staph aureus

The list of potential risks is much longer, however the principles of biosecurity apply to all diseases. The consequences of introducing a new disease onto farm or allowing one to easily spread can be devastating to herd productivity and welfare.



Biosecurity can be broken down in 2 parts. Firstly, to stop diseases not present on the farm from entering the herd and secondly, to stop diseases already present on farm from spreading further.

1. Preventing disease entry onto farm:

Whether your herd is free of a disease or not it is imperative to try and prevent a new disease or further disease from entering your herd.

The main risk factor is buying in cattle. Many of the diseases above can be present in apparently healthy animals but these animals will still be an infection risk. BVD creates persistently infected animals that can look normal but still be shedding large amounts of virus. Cows that have been infected with IBR remain

infected for life even after clinical signs are no longer present. Times of stress can cause these animals to begin shedding virus again in large numbers. Johne's infected animals can again be shedding bacteria in large numbers well before the classic picture of a Johne's cow losing weight and scouring becomes apparent.

When considering buying in cattle it is important to try and get a picture of the farm they are coming from. If this information is not easy to find out we can ring the vendor's vet to find out the herd's infectious disease status. Do they monitor? Do they have a history of large numbers of infected cows? Are they accredited? Do they vaccinate?

It is strongly recommended that all animals brought onto the farm are isolated, in a separate air space to all other stock, for 28 days. Unless the herd you are buying from is accredited for the diseases of concern, in this time it is advisable to blood test bought in animals for presence of infectious disease. The cows should also be closely monitored for signs of disease. As previously mentioned often the stress of transport can cause animals to exhibit clinical signs and become an infection risk once more. These guidelines also apply for your own cattle when they return to your herd, for example, following a show or a bull that was loaned out. They may have had contact with infectious disease while they were on another holding so should be isolated for 28 days.

It is important to think about protecting your own herd from bought in cattle and also the bought in cattle from diseases already present in your herd. If you are vaccinating for any infectious diseases (BVD, IBR, Lepto) then all bought in animals should be fully vaccinated while in isolation to stop them succumbing to a disease present in your herd that they have not encountered before.



Many of the diseases of concern can survive for relatively long periods in the environment in faeces and bedding. To this end, it is important to bear in mind the infection risk of shared equipment and farm visitors. Ideally no equipment should be shared between holdings but if it must be it should be cleaned and disinfected between premises. Disinfection facilities should be provided for all farm visitors to disinfect on and off farm. The disinfectant we use is FAM30. An iodine based disinfectant that at concentration of 1:25 is enough to kill most infectious diseases including TB.

Contact with neighbour's cattle of unknown disease status is another way animals in your herd can contract disease. If any of your grazing borders onto ground where other herds of cattle are grazed, then barriers should be double fenced with a gap of at least 2 metres. It's easy to say you run a closed herd if you don't buy in, but it's not truly closed if your cattle have contact with a neighbour's cattle!

Slurry and natural water courses need to be stored correctly/fenced off to stop the spread of disease from farm to farm and within a farm. Youngstock are particularly susceptible to diseases carried in slurry and contaminated water.

2. Preventing disease spread on farm:

If a disease is present on farm biosecurity still plays an important role in preventing further spread to other animals.



All animals showing signs of ill health should be examined and treated appropriately by you or a vet. Sick animals should also be isolated to prevent further spread in case the disease is infectious. Equipment used to treat sick animals should be well maintained and disinfected between animals. Calf scour can spread particularly quickly between animals if drenching and feeding equipment is not disinfected between calves.

Youngstock are very vulnerable to infectious disease. Their immune system is not yet used to many of the diseases to which adult cattle are immune. Because of this, care should be taken when mixing adults and immature cattle. Adult cattle will still shed levels of disease that can be harmful to younger animals, of

particular importance are Johnes and pneumonia pathogens.

Control of vermin and wild birds is an important aspect of biosecurity as they can spread disease between premises and within a herd. Vermin play a key role in spread of Salmonella.



Vaccination is just one way to protect your cattle from infectious disease. Vaccines are available for BVD, IBR, Leptospirosis and many pneumonia pathogens. Vaccination usually consists of a primary course followed by yearly or 6 monthly boosters. These vaccines provide good immunity to these diseases, prevent spread within the herd and reduce clinical effects on individual animals.

As we all know prevention is better than cure. If we can prevent disease before it happens it will save time, money and improve cow health.

If you have any questions about biosecurity please give us a ring at the practice. We use a piece of software call MyHealthyHerd which is the industry standard monitoring tool for national eradication schemes for BVD and Johnes's. All of our farms can be registered very easily and progress monitored at routine vet visits.

All the best,

Chris



Drug ordering!

The most efficient way to order drugs is on our dedicated text order line. Please text orders through with your name, farm name and amounts needed to:

07860026331

If you are paying by BACS please quote your client reference number. This can be found beneath your address on the invoice and starts with GFP followed by 5 digits. This will make it much easier and quicker to process your payments. Thank you.