New licensed claim for Bovilis® IBR Marker Live
(IBR) Infectious Bovine Rhinotracheitis

As the name suggests it is an infectious respiratory disease of cattle

With significant annual increases in average herd size, number of calf registrations and cattle imports, the need for implementation of adequate biosecurity and appropriate herd protection measures against infectious diseases is critical.

Between 2010 and 2016:

- Average herd size increased nationally from 58 to 62
- 16% rise in calves born on Irish farms

Factors influencing disease occurrence

As stock numbers increase, housing capacity does not always follow, leaving buildings overstocked. Overcrowding, mixing of age groups, inadequate feeding levels and poor ventilation are important risk factors for the occurrence of bovine respiratory disease. Stressors such as weaning, parturition, transportation and travelling through a market, all have a negative effect on immune defence mechanisms. Consequently, viruses such as infectious bovine rhinotracheitis virus (IBR) have an opportunity to cause respiratory disease.
Vaccination Protocol - New Thinking On IBR Control

There are many benefits to beginning calf vaccination early in life. Research has shown that in the first two months of life, dairy calves that are successfully treated for a single case of Bovine Respiratory Disease (BRD) produce 4% less milk in their first lactation and 8% less in their second lactation. Both clinical and subclinical disease can cause a reduction in daily live weight gain in both beef and dairy calves. Therefore reducing the incidence of bovine respiratory disease makes economic sense.

Q&A on Bovilis® IBR Marker Live

Q What has changed between the old protocol and this new protocol?

The old licence claim stated that after the primary course of Bovilis® IBR Marker Live was administered, booster vaccines had to be administered every 6 months thereafter to maintain duration of immunity. The new licence claim states that after the initial injection of Bovilis® IBR Marker Live is administered, a second re-vaccination must be administered 6 months later, booster vaccines can then be administered no greater than every 12 months to maintain duration of immunity (figure 2). Figure 2 below clearly highlights the new Bovilis® IBR Marker Live vaccine protocol.

Q When do I start vaccinating against IBR?

The time to start vaccinating against IBR depends on the particular situation of each herd. MSD Animal Health propose taking the whole herd approach to protecting cattle against IBR by starting with the young stock. Calves from 3 months of age can receive a 2 ml shot of Bovilis® IBR Marker Live into the muscle. In herds where IBR is widespread, a 2 ml shot can be administered up the nose from 2 weeks of age. 1 ml in either nostril.

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**Bovilis® IBR Marker Live Vaccination Protocol - Intranasal: From 2 weeks of age (optional)**
- Intramuscular injection (IM): From 3 months of age

**Figure 2**

*In high prevalence herds, vaccination can be carried out by intranasal administration to calves from two weeks of age. When the first vaccination is given between the age of 2 weeks and 3 months, a second vaccination should be given at an age of 3-4 months.*
Q Where can I find out more information about this new protocol?

The best place to find out more information about the new Bovilis® IBR Marker Live protocol is by talking to your local vet. They will be able to advise you if your herd is ready to move onto the new Bovilis® IBR Marker Live vaccination protocol. If you are looking for additional information have a look at our web page, www.bovilis.ie/ibr/

Q Which vaccine should I use - live or inactivated?

MSD Animal Health advise using a Live vaccine to control IBR. In order to get your herd onto a single annual booster to protect against IBR, cattle must receive the primary course of the live vaccine (figure 2). Bovilis® IBR Marker live or inactivated can be used for the animals annual booster vaccinations thereafter. Inactivated vaccines should be used in pedigree herds, except in bulls that are intended for use as future AI sires. These bulls cannot be vaccinated with any type of IBR vaccine or they will be precluded from use for AI. Speak with your vet for more information about using the inactivated vaccine.

Q Will there be an eradication scheme in Ireland?

A decision on when an IBR eradication scheme will be implemented in Ireland has not yet been confirmed. According to Animal Health Ireland, a study on losses to Irish farmers due to IBR is currently underway. The IBR Technical Working Group (TWG) is currently developing options for an eradication programme. The outputs of this work will inform the benefits element of a cost-benefit analysis (CBA) for a national IBR eradication programme. Foodwise 2025 suggested that a national eradication programme is not too far away.
Clinical Signs

Clinical infections usually occur when animals are infected for the first time – this is called the primary infection. Subclinical infections are those that do not have overt clinical signs and for this reason can go unnoticed in a herd. Subclinical IBR can result in losses of 2.6kg of milk/cow/day.

Signs relating to Respiratory Disease

- Depression
- Loud, fast breathing
- Reduced appetite
- Abortion
- Discharge from the nose and eyes
- Fever (as high as 42°C)
- Reduced milk yield

A recent seroprevalence study in Ireland showed that almost 75% of herds had evidence of exposure to IBR. The seroprevalence for dairy and beef herds was not significantly different but there was a significant provincial difference, with Leinster having the highest incidence and Munster the lowest. County-level seroprevalence information from the same study (and a related study in Northern Ireland), not included in the publication, are given in the map opposite.
Key take home messages:

- Almost 75% of herds in Ireland are exposed to the disease\(^1\)
- MSD Animal Health are advising farmers to **start vaccinating their calves** against IBR from 3 months of age
- Bovilis® IBR Marker Live is the only live IBR vaccine with 12 month duration of immunity claim
- Bovilis® IBR Marker Live is the ONLY single dose IBR Marker vaccine for use either intramuscularly or Intranasally\(^4\)
- Available in 5, 10, 25 and 50 dose bottles

References

4. From the age of 3 months onwards. Between 2 weeks and 3 months old - intranasal only and boost at 3-4 months old
*Herd with high prevalence of IBR need to be encouraged to vaccinate calves from 2 weeks of age intranasally.
**When first vaccination is given between 2 weeks and 3 months intranasally, a second vaccination should be given at 3-4 months old intramuscularly.

Bovilis® IBR Marker live contains live, attenuated IBR marker vaccine BHV-1 strain GK/D (gE-).
For the active immunisation of cattle against infectious bovine rhinotracheitis virus. Withdrawal period: zero days.
Legal Category: ROC
Use Medicines Responsibly
For further information see SPC, contact prescriber or MSD Animal Health,
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