

IBR

An information leaflet for Irish farmers



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Vaccination is a key part of many control programmes for IBR



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IBR ERADICATION PROGRAMME

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Please refer to the disclaimer on the last page regarding information in this leaflet.

IBR (infectious bovine rhinotracheitis)

- Is caused by a herpesvirus (Bovine Herpes Virus-1 (BoHV-1)) also known as IBRV (IBR virus).
- Virus is spread mainly by close contact between animals.
- Airborne spread of virus may occur over distances of up to 5m.
- May also be spread by semen from infected bulls, using contaminated equipment and by people who have recently handled infected animals.

In this document we will refer to any infection with Bovine Herpes Virus-1 as IBR, even though some infections are not associated with obvious respiratory disease. Infections with IBR result in losses in production, animal welfare issues, potential trade barriers and reduction of the genetic pool available to AI stations.

Clinical signs associated with (but not unique to) IBR:

- Dullness and reduced appetite.
- High body temperature.
- Rapid and loud breathing, sometimes with coughing.
- Inflammation inside the nose and in the pink of the eye (conjunctiva) or less commonly on the lining of male or female reproductive tracts.
- Fluid discharge from nose and eyes.
- Inflammation of the throat (pharyngitis).
- Sudden reduced milk production, abortion, nervous signs (normally only in young calves).

Note that some infections may be subclinical i.e. show no obvious signs of disease but impact on production.

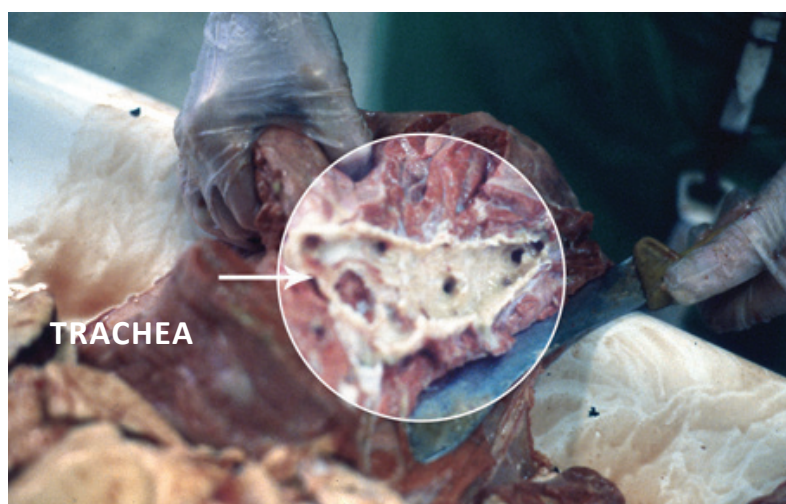
IBR in the herd

Introduction of 'apparently healthy' but latently infected carrier animals is the most common way of introducing the virus to a herd.

Latently infected animals have been previously infected with IBR, recovered from the disease but remain carriers for life. During periods of stress the virus can be reactivated and these animals will then spread the virus to susceptible comrades.

These in turn will become latently infected when they recover from the disease. The IBR virus then persists within the herd by way of latently infected carrier animals.

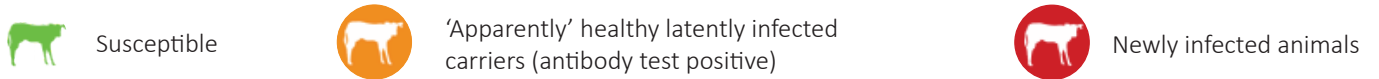
This cycle allows the virus to remain indefinitely within a herd. Figure 1 illustrates how latently infected animals spread infection to susceptible animals in a herd.



The discoloured, thickened and uneven lining of the trachea of an animal that has died from IBR. The inside of a healthy trachea should be smooth and a light pink colour.



Figure 1: Spread of IBRV within a herd following reactivation and shedding of virus from carrier animals.



What should I do about IBR?

Dealing with IBR usually requires a long term approach working closely with your own veterinary practitioner. If uncontrolled, IBR usually persists indefinitely in a herd (because all infected animals become 'latent carriers' for life).

Latently infected animals are almost always detectable by antibody testing. However, some animals (younger animals with maternally derived antibodies and vaccinated animals) may be antibody positive without having been infected and farmers should review all test results with their own veterinary practitioner.

Other sources of infection such as introduced animals or neighbouring stock must also be considered when formulating a control plan for IBR.



'Apparently healthy' animals can in fact be latently infected carriers making IBR control difficult. One of these animals is a latently infected carrier.

There are four key steps to the herd's control programme:



For more information, see the more detailed 'IBR in Cattle' information leaflet [click here](#).

Vaccination

Vaccination will be an important component of many control programmes. All vaccines licenced for use in Ireland are 'Marker' vaccines. Using the appropriate (gE) test, it is possible to distinguish infected from vaccinated animals, allowing the success of a control plan to be monitored. 'Marker' vaccines may contain either live or dead (inactivated) vaccine virus. Decisions on vaccination strategies should be made in conjunction with your own veterinary practitioner.

NOTE: Vaccinating an animal already infected with IBR will not remove an established latent infection.

IBR in herds that breed bulls for A.I. and semen collection centres

Control of IBR in herds aiming to send bulls to semen collection centres requires additional careful planning and should be discussed in detail with the herd's veterinary practitioner. Please also consult AHI information leaflets providing guidance to herds with potential beef or dairy AI sires for further information [click here](#).

This leaflet is an extract from the *IBR in Cattle Information leaflet for farmers, advisors and vets* which is available from the Animal Health Ireland website [click here](#).

Animals that have antibodies following infection or vaccination (with 'Conventional' or 'Marker' vaccines) against IBR cannot enter semen collection centres in Ireland

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