ahi MONTHLY NEWS

September Edition | 2023

AHIMONBULL 16.09.2023

IBR PROGRAMME
IBR, the disease

NATIONAL MASTITIS CONTROL PROGRAMME
Register for a free veterinary consult

HOOF HEALTHCHECK PROGRAMME
Is my housing contributing to lameness problems?

IRISH JOHNE'S CONTROL PROGRAMME
Completion of Ancillary PCR testing

www.AnimalHealthIreland.ie

To contribute to an economically, socially and environmentally sustainable farming and agri-food sector through improved animal health and welfare.

Animal Health Ireland, 2-5 The Archways, Carrick-on-Shannon, Co. Leitrim, N41 WN27
Phone 071 9671928 | Email ahi@animalhealthireland.ie | Website www.animalhealthireland.ie

To contribute to an economically, socially and environmentally sustainable farming and agri-food sector through improved animal health and welfare.

AHI gratefully acknowledges the financial and other contributions of our stakeholders.

Animal Health Ireland, 2-5 The Archways, Carrick-on-Shannon, Co. Leitrim, N41 WN27
Phone 071 9671928 Email ahi@animalhealthireland.ie

IBR - the disease

Maria Guelbenzu, IBR Programme Manager

IBR (Infectious bovine rhinotracheitis) is a highly infectious disease caused by a virus called bovine herpes virus-1 (BoHV-1). IBR has worldwide distribution and in addition to the impact on health and productivity also affects the trade of animals, semen and embryos.

In Ireland, IBR is mostly involved in respiratory infections, being one of the viral agents involved in the Bovine Respiratory Disease (BRD) complex. Infection with this virus is widespread in Ireland, with an estimated 75-80% of both beef and dairy herds containing animals that have been infected.

Cattle with IBR have a watery discharge from the nose and eyes and may present with red nose and eyes. Affected animals may be dull, off their feed and have a high temperature (107-108°F/41.7-42.5°C) and lack of appetite. The severity of the clinical signs is influenced by a number of factors, including whether the animal has other infections, degree of stress and age. Disease is typically milder in dairy herds where milk drop can be a significant feature, and more severe in beef units in the absence of immunity.

Animals that survive infection recover but develop a 'latent' or hidden infection, becoming lifelong carriers. This latent infection typically becomes established in the nerve cells within the animal's brain. During this latent period the carrier is not shedding virus. However, at times of stress such as transport, calving, nutritional stress or mixing of stock, the virus may be reactivated and can begin to multiply and be re-excreted, generally from the nose and eyes. This leads to new infections in other susceptible cattle, which in turn will also become latent carriers. These latently infected carriers play a central role in maintaining IBR in infected herds, where they act as a reservoir of infection, and in spreading infection between herds.

The nasal discharge from infected animals can contain very high levels of virus and as a result infection can spread rapidly through a herd when susceptible cattle come in contact with infectious cattle or items contaminated by them such as feeders and drinkers. It can also be shed from the reproductive tract, including semen, resulting in venereal transmission. Airborne spread may also occur over distances of up to 5m.

How to find out whether I have IBR in my farm?

A bulk milk antibody test (BMT) can be used as an initial screening test for a dairy herd. Negative marker (gE) bulk milk results with current kits will be typically obtained in herds where less than 10-15% of the milking cows are latently infected and there is little or no virus circulation. Note that the gE test result is not affected by vaccination. Antibody levels in the bulk milk will increase if the virus starts spreading within the milking herd. A positive bulk tank milk result will be obtained in herds with moderate to high prevalence of latently infected animals.

In beef herds, a cost-effective means to obtain an initial indication of the level of infection in a given herd can be achieved by applying a 'snap shot' test. This requires the sampling of 20-30 randomly selected animals over 9 months-old that are used or intended for breeding. It is important to include animals of all ages and groups in this testing to obtain a result that truly reflects the status of the herd. As with the BTM, a positive snap shot result (two or more positive animals) will indicate that the proportion of seropositive animals in the herd will typically be >15% and a negative result will indicate that it will typically be 0-15%, with the overall results giving an estimation of the prevalence of carrier animals in the herd.

The bulk tank milk and snap shot tests can be used to get an initial indication of the within herd prevalence, providing information to better manage risk, improve biosecurity and inform decisions on vaccination at herd level.

Where to get more advice on IBR?

Detailed information leaflets on IBR and herd biosecurity, along with answers to frequently asked questions on IBR and specific guidance for herds with bull calves that are potential AI sires, are available **here**.

Would you like to register for a free veterinary consult?

Michelle McGrath, CellCheck Assistant Programme Manager

It's that time of year again when the majority of Irish dairy farms need to start planning for drying off their spring calving cows.

'Blanket dry cow therapy', where all cows are treated with dry cow antibiotic tubes, was traditionally recognised as best practice in mastitis control. However, the new Veterinary Medicine Regulations, which became law in January 2022, require farmers to begin to implement '*selective dry cow strategies*', which involve a more targeted use of antibiotic treatments. With the right hygiene, management and support, many herds are successfully reducing their antibiotic use at drying off, by developing selective dry cow strategies in consultation with their veterinary practitioners. It is important to remember that a selective dry cow strategy is not without risk and is not something to embark on without seeking professional support and advice. However, with preparation, planning and good management it can be successfully adopted on-farm.

Funded Dry Cow Consult - what does this involve?

A **free** Dry Cow Consult is available again this year for eligible herds, delivered through the Targeted Advisory Service on Animal Health (TASAH), funded by the Rural Development Programme and coordinated by Animal Health Ireland. This **free** 3-hour consultation is carried out with your selected trained veterinary practitioner (ideally this is your regular vet) and is an opportunity to assess the current drying off process and dry period performance and identify additional improvements that can be made. Milk recording results and farm records will be analysed to identify individual animals that could be dried off without any antibiotic treatment, and the best way of implementing this. It will also be an opportunity to discuss dry cow management and review housing.

Eligibility and Requirements

To be considered eligible for the free three hour consult with your vet, your herd must meet the following criteria:

- Average bulk milk tank SCC for the last 12 months is <200,000 cells/mL.
- At least 4 whole herd milk recordings in the last 12 months.

Applications for the 2023 drying off period are now open. Eligibility assessment of all applications received will be carried out at the start of October, at which time all applicants will be notified whether or not they are eligible for the free consult **here**.

Cell Count Solutions

However if you do not meet these criteria, or are having problems managing your SCC or have mastitis cases in your herd, an alternative consult called 'Cell Count Solutions' is now also available. This consult is also **free** and delivered by a trained veterinary practitioner, chosen by you, and is an opportunity for you to begin the process of mastitis problem-solving. It involves choosing a team of people you already work with including your milk quality advisor, milking machine technician, farm advisor and your vet, to support you along the road of investigating and resolving mastitis issues. The consult will look at all relevant areas, including the cow, the milking routine, the environment, records etc. so that you can develop a farm-specific plan **here**.

Lameness prevention: Is my housing contributing to lameness problems?

Dennis Howard, Hoof HealthCheck Technical Working Group Member

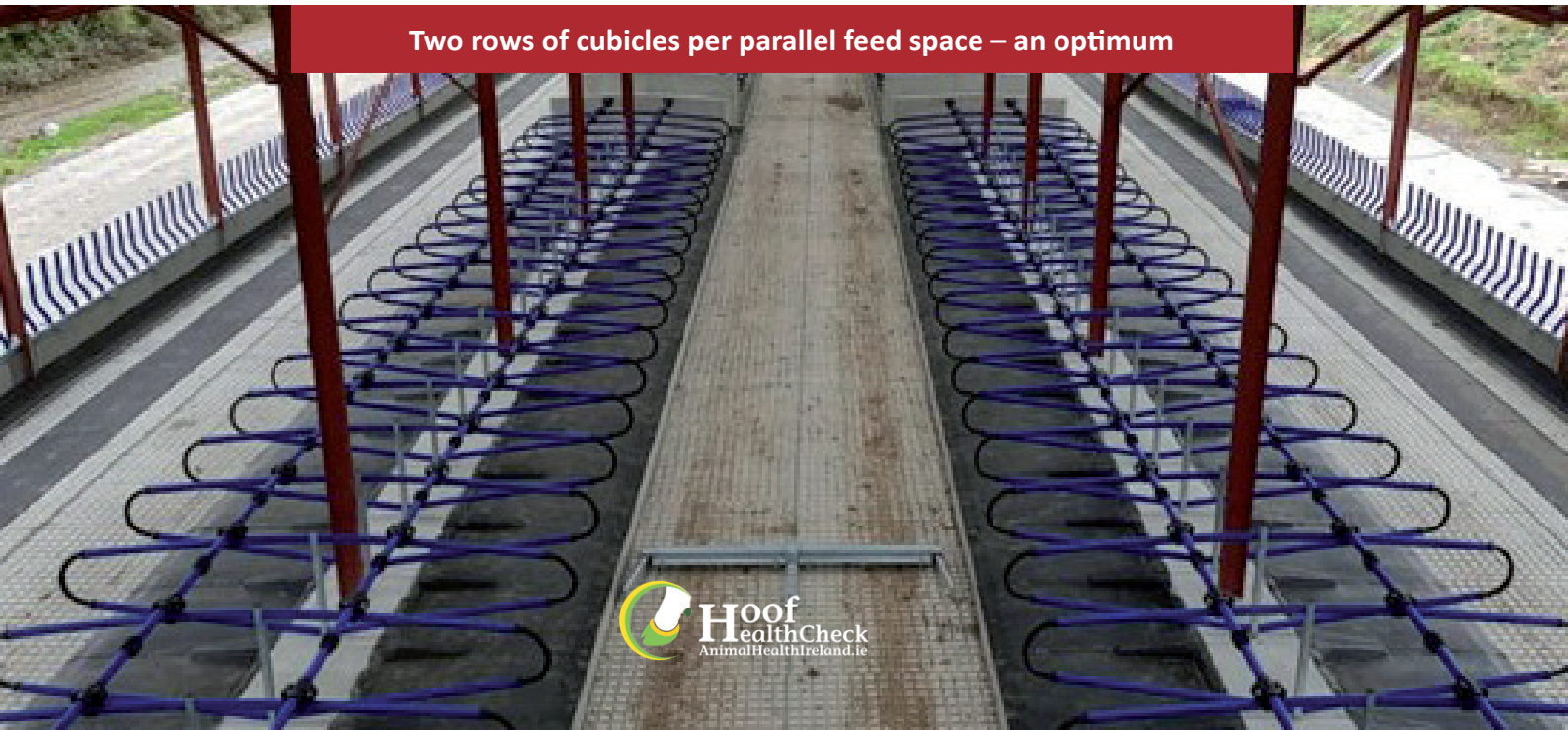
Despite the grass based nature of the system on the majority of Irish dairy farms, cows spend a significant portion of the year fully housed. The quality of the winter accommodation has an impact on hoof health. In an optimal housed environment, about 70% of a cow's time budget should be spent lying or eating..

Lying time

A cow should spend at least 12 hours a day lying. Too much time spent standing on concrete will adversely impact hoof health. Having at least one comfortable cubicle per cow will maximise lying time for all cows. Too many cows (more than 20%) perching or standing in cubicles is a sign of poor design or lack of comfort. Small changes like repositioning the neck rail and fitting a brisket board can often improve cubicle use and lying time.

Feed space

Inadequate feed space will mean more competition at the barrier when feed is being put out or pushed up. Stronger dominant cows will feed first while weaker subordinate cows must wait. Competition at the barrier will also impact hoof health due to the shearing forces applied when cows are pushing. The solution is having a feed space per cow. Two rows of cubicles with a parallel feed barrier offer an optimum in terms of feed space and cubicle access – see picture.



Two rows of cubicles per parallel feed space – an optimum

Cleanliness

If cows have to stand excessively in manure, the incidence of infectious lameness like digital dermatitis (Mortellaro) and slurry heel are likely to increase. Having adequate space, adequate ventilation and ensuring that scrapers are running with adequate frequency will ensure cows are standing on a clean surface. Scrapers not running often enough can result in cows being foot bathed in manure as they step over the scraper.

Five meter feed passage

Conclusion

Dairy cow housing impacts cow wellbeing, cow performance and hoof health. Reviewing your housing system with a critical eye may identify areas for improvement. Often small changes in management and/or design can have a significant impact. Larger investments may be difficult to justify in the short term, but will easily pay for themselves in term of cow performance, cow longevity and cow wellbeing.

Completion of Ancillary PCR testing as part of IJCP requirements

Liam Doyle, Johne's disease Programme Manager

The Irish Johne's Control programme (IJCP) places certain requirements on its members as part of their involvement. These requirements are:

- Nomination of an Approved Veterinary Practitioner (AVP), these being private veterinary practitioners who have undertaken Johne's Disease (JD) training delivered by AHI.
- Regular completion of a Veterinary Risk Assessment and Management Plan (VRAMP) by a nominated AVP.
- An annual Whole Herd Test (WHT) of eligible animals (those aged 2 years and above) in years one to four of the programme using either a milk or blood sample from each animal.
- Ancillary testing of faecal samples (by PCR) of all animals following ELISA test-positive or inconclusive results in herds where infection has not already been confirmed (i.e., absence of previous faecal-positive result).
- Veterinary investigation, funded through the Targeted Advisory Service on Animal Health (TASAH) under the Rural Development Programme, following positive ancillary test results.
- Members undertake not to move any animal that is inconclusive, positive or suspect based on testing for JD, except directly to a knackery, licensed slaughter premises, feedlot or herd from which animals are exclusively sent to slaughter.

Testing for Johne's disease as part of the Irish Johne's Control Programme is a combination of the ELISA test (Whole Herd Test on blood or milk) and the ancillary PCR faecal test. Whenever an animal discloses a positive or inconclusive ELISA result and the herd has not previously had a faecal PCR positive test, then these animals must be faecal PCR-tested. These samples should be submitted for testing within 45 days of the date of their positive or inconclusive ELISA result. There are, however, two exceptional circumstances where an animal with a positive or inconclusive ELISA result will not require an ancillary PCR test. These are when the ELISA test samples were collected and submitted to the laboratory within 7 days after calving (for an ELISA test on a milk sample only) or within 90 days after a TB skin test (on blood or milk). In each of these scenarios, the follow-up test should be an ELISA re-test on a blood or milk sample, after the expiry of the 7-day or 90-day period, respectively. In these scenarios, neither the ELISA re-test nor an ancillary PCR test will be funded by the programme. Wherever possible you should therefore schedule ELISA testing to avoid these periods.

With Johne's disease positive or inconclusive ELISA result animals in herds which have not previously disclosed an ancillary PCR positive (and not covered by the two exceptional circumstances described above), ancillary testing is funded. However, it is vital to check the eligibility status for funding of individual animal faecal PCR tests with your vet (AVP) or on the Johne's disease dashboard on ICBF, before submitting samples to the laboratory.

The reason that ancillary PCR testing is not required or funded in herds which have previously had a positive result to a PCR test is that these herds are already confirmed to be infected and animals within these herds disclosing a positive or inconclusive ELISA result are also considered to be infected without the need for PCR testing.

All members of the IJCP are now notified by text message whenever Johne's results are uploaded to ICBF and a link is provided to view the results. The message will also highlight the fact that positive or inconclusive ELISA results were disclosed at the test and direct you to contact your AVP and provide a link to your herd's Johne's dashboard on ICBF where further information is available. Examples of the type of the message a herdowner will receive after completing their herd test and dependent on test results are shown below in Table 1.

AHI: IJCP 2023 Johnes ELISA results upload: Not all negative. WHT Not yet complete. VRAMP Not complete. Contact your vet. More see https://johnes.icbf.com
AHI: IJCP 2023 Johnes faecal PCR results upload: All negative. WHT Not yet complete. VRAMP Complete. Contact your vet. More see https://johnes.icbf.com
AHI: IJCP 2023 Johnes ELISA results upload: All negative. WHT Complete. VRAMP Not Required. Contact your vet. More see https://johnes.icbf.com
AHI: IJCP 2023 Johnes ELISA results upload: All negative. WHT Not yet complete. Not Required. Contact your vet. More see https://johnes.icbf.com
AHI: IJCP 2023 Johnes ELISA results upload: Not all negative. WHT Complete. VRAMP Not complete. Contact your vet. More see https://johnes.icbf.com

Table 1. Examples of messages which a herdowner member of the IJCP will receive after their ELISA herd test results are uploaded to ICBF.

Remember, if you currently have any animals in your herd which require ancillary PCR testing and these have not been completed, please contact your vet to arrange the sampling. If you require futher information about the Irish Johne's Control Programme, please refer to the Animal Health Ireland website for further details **click here**.

ANIMAL HEALTH IRELAND

www.animalhealthireland.ie

BVDFree Animal Health Ireland.ie | CellCheck Animal Health Ireland.ie | Beef HealthCheck Animal Health Ireland.ie | Johne's Control Animal Health Ireland.ie | IBRFree Animal Health Ireland.ie | Pig HealthCheck AnimalHealthIreland.ie

BioSecurity Animal Health Ireland.ie | CalfCare Animal Health Ireland.ie | Hoof HealthCheck AnimalHealthIreland.ie | Parasite Control Animal Health Ireland.ie

Animal Health Ireland, 2-5 The Archways, Carrick-on-Shannon, Co. Leitrim, N41 WN27

Phone: 071 9671928 | Email: ahi@animalhealthireland.ie | Website: www.animalhealthireland.ie