PCHS NEWS

Premium Cattle Health Scheme

SRUC

2020 Issue

Welcome

Dear member,

Welcome to the 2020 edition of PCHS News. We would like to take this opportunity to thank you for using SRUC Veterinary Services as your health scheme provider. We greatly value your business. We have built up the Premium Cattle Health Scheme over many years, during which time we have listened closely to the views of our members and developed our service accordingly through significant investment in test development, our client database and support to our members and their vets. We believe that this is why we have remained the market leader in health scheme provision throughout the development and maturation of CHeCS.

We understand that while your veterinary practice may have advised you to join PCHS, the choice remained yours. We very much hope that you continue to feel that you made the right choice. If there is any health scheme matter that you would like to raise we would be pleased to have a discussion with you.

SRUC Veterinary Services Team

Johne's Disease Test Update

The PCR method used by SRUC Veterinary Services for detecting MAP (the organism that causes Johne's Disease) in faeces is changing. The new method has recently been UKAS accredited and involves an additional sample preparation stage and a change of test kit to give improved sensitivity for MAP detection.

The new test requires a larger volume of sample; **please ensure that you submit more than 10g of faeces for testing**.

The new PCR method can detect MAP positive samples from faeces as reliably as the PCR test on cultures grown from faeces, but it allows greater efficiency and reduces the time required for testing from more than 42 days to fewer than 10 days. Due to the improved sensitivity of the test, it is critical that best practice is observed during sample collection to prevent contamination, such as the changing of gloves between samples and samples being taken directly from the rectum of the animal. Also please note that all samples for the scheme must be collected by your vet and submitted in standard faeces sample pots: it is not acceptable to submit faeces in gloves.

John Scholefield Editor
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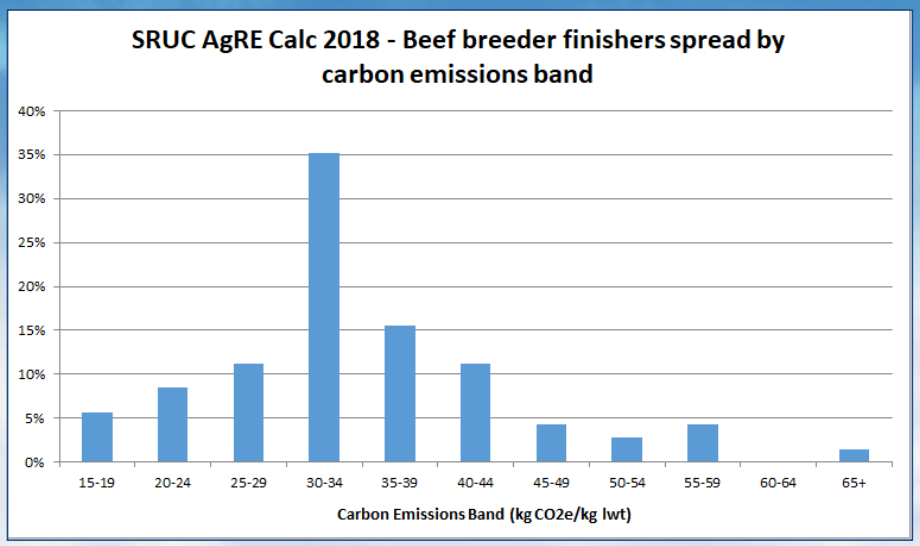
Premium Cattle Health Scheme

AgRE Calc© carbon calculator

Find out where you sit on the carbon scale … and how to improve with the AgRE Calc© carbon calculator from SAC Consulting



The need for farming to measure, manage and reduce its carbon footprint is growing steadily driven by the demands of consumers, governments and retailers. A resource use assessment, also known as a carbon footprint shows the quantity of greenhouse gas emissions produced from routine farm activities, highlighting areas where changes can be made that, when implemented, will reduce emissions. The three main greenhouse gases produced from agriculture include carbon dioxide, produced by burning fossil fuels; methane, produced as a natural by-product of animal digestion and nitrous oxide, which is released from soils following the application of nitrogen fertiliser (manufactured and organic) and soil disturbance.

SAC Consulting has been helping the livestock sector measure and reduce its carbon footprint for over 10 years and has developed an on-line service for the industry; AgRE Calc©. Backed by the latest science from SRUC Research coupled to the on-farm skills and knowledge of our consultants; AgRE Calc© offers a very practical and accurate assessment of a farm's performance for carbon and associated Key Performance Indicators.

This agricultural resource efficiency calculator determines on-farm emissions down to enterprise and per unit of output basis; the most meaningful comparisons when considering food production. Only by breaking down emissions and resource use by enterprise can weaknesses be identified and actions to improve performance be highlighted. Making more efficient use of resources i.e. inputs, strongly correlates with reduced production costs per kg of output, improving profitability of the farm business. Typically, we find that the better performing farms have the lowest carbon emissions.

Currently we have over 2,000 beef, sheep and dairy farms on our on-line database for comparison. This service is currently supporting Beef Efficiency Scheme participants in Scotland and supply chain groups across the UK. If you would like to learn more about the service and how SAC Consulting could help you lower your carbon footprint please contact; Julian Bell 0131 603 7524 – Julian.bell@sac.co.uk and visit: www.agrecalc.com

CHeCS Audit Report and what to do with Added Animals!

The CHeCS auditors continue to inspect our members, selecting a number of farms at random each year. Although the majority of the feedback from the audits shows that adherence to the CHeCS rules is generally very good, the main issues that arise are around purchased animals that are added to accredited herds.

The general advice from the CHeCS rules is that whenever possible, cattle should only be added to an accredited herd if they are from a herd that is accredited free from the disease in question, or in the case of Johne's Disease and Neospora at Risk Level 1. Otherwise they must be placed in isolation for the required period and tested for the diseases in question. The rules also outline the specific requirements for each disease scheme separately. An excerpt of the CHeCS technical document, focusing solely on the rules for added animals can be found at: www.bit.ly/PCHS_AddedAnimals

If, for example, your herd is accredited for BVD, Johne's Disease and IBR and the only suitable animal(s) that you can find for purchase are BVD accredited and with a Johne's Disease risk level that matches or is greater than your own, but no accreditation for IBR, then they must be isolated and tested for IBR in line with the rules or your whole herd's IBR accreditation is being put at risk.

It is also worth noting that even if you buy from an accredited herd, the animal will lose its status if they have mixed with non-accredited stock at any point (e.g. at a market, during transport or at a show without a section for accredited animals) and they will need to be isolated and tested. Also wherever possible when buying an accredited animal you should request the certification of accreditation from the source herd and send in a copy with any sample to be tested.

Mark Your Calendars

UPCOMING EVENTS

Every year SRUC Veterinary Services exhibit at a number of shows and events around the country to promote our health schemes. Our list of events for 2020 is below, we look forward to meeting you at one of them!

NBA Beef Expo	28th May	Darlington, Co Durham
NSA ScotSheep	3rd June	Dundee
Royal Highland Show	18th – 21st June	Edinburgh
Great Yorkshire Show	14th – 16th July	Harrogate, North Yorks
Royal Welsh Show	20th – 23rd July	Builth Wells, Powys
NSA Sheep Event	28th July	Malvern, Worcestershire
NSA South Sheep	TBC	TBC
Westmorland County Show	10th September	Milnthorpe, Cumbria
UK Dairy Day	16th September	Telford, Shropshire
Borderway Agri-Expo	TBC	Carlisle, Cumbria
Agrifest South West	TBC	Exeter, Devon
AgriScot	TBC	Edinburgh

Keep an eye on our social media channels to keep up to date! Follow us on @SRUCVets and on SRUCvets

PCHS Advisory Group

The PCHS Advisory Group's annual meeting took place in September 2019, to discuss all matters arising from the running of the accreditation schemes.
This year the group was able to take a tour of the new SRUC Veterinary Services labs at Penicuik, near Edinburgh, to see first-hand the facilities that are used for PCHS tests. It was agreed that the group will now also meet by conference call 6 months after the September meeting to discuss progress of issues raised.

The group consists of:

- **Keith Cutler – Endell Farm Vets**
- **Graeme Richardson – Thrums Veterinary Group**
- **Gareth Mulligan – Afon Veterinary Centre**
- **Wanda Hobbs – Aberdeen Angus Cattle Society**
- **Neil Shand – Simmental Cattle Society**
- **Simon Bainbridge – Commercial beef farmer**
- **Harri Parri – Stabiliser Cattle**
- **George Caldow – Head of SRUC Veterinary Services**
- **Dave Wilson – SRUC Veterinary Services St Boswells Centre Manager**
- **Alison Braddock – SRUC Veterinary Services Marketing and Business Development Manager**

We are extremely grateful for the time and effort that the group commit in support of PCHS.

Members who wish to gain their BVD accreditation through the use of tissue testing must test every single animal that is born. Any animal being missed will lead to the loss of accredited status. Although accreditation is possible through tissue testing alone, we advise that check tests are also carried out for a more robust approach.

For PCHS members who are also testing as part of the BVDFree England, Stamp Out BVD campaign or the Welsh Government BVD scheme, the SRUC Veterinary Services labs can still accept these samples as long as they are accompanied by the PCHS paperwork and the additional scheme's paperwork. If samples are only sent for the BVDFree, Stamp Out BVD or Welsh Govt schemes and not to PCHS then your accredited status could be lost.

Mycoplasma Infections in Dairy Herds

Mycoplasma infections are commonly recognised in cattle. There are quite a diverse range of Mycoplasma species with some causing disease while others do not. Of these ***Mycoplasma bovis*** is probably the most important.

There are certain key facts that need to be considered when investigating, managing and treating ***Mycoplasma bovis*** infections and some of them are discussed below:

1. ***Mycoplasma species differ from many bacteria in that they do not have a cell wall***. This is not just of interest to scientists as it means that some of the commonly used antibiotics which act against bacterial cell walls (such as the penicillins) will not work. As with all bacterial diseases, deciding on an appropriate choice of antibiotic, targeting that treatment to the right animals early in the disease process and reviewing treatment outcomes is crucial for success. Veterinary advice here is crucial.
2. **The main disease presentations seen with *Mycoplasma bovis* infections are pneumonia, middle ear disease causing an ear droop or head tilt, mastitis and arthritis seen as non-foot lameness with joint swellings. Unfortunately many of these problems can be chronic with a variable response to treatment. *Mycoplasma bovis* infection may also occur with no clinical signs at all.** Clearly *Mycoplasma bovis* is not the only potential cause of any of these disease signs. A veterinary assessment of the disease situation on farm, plus taking appropriate samples for diagnostic testing will be required to consider the role Mycoplasma species are playing on farm.
3. **One of the main risk factors for having *Mycoplasma bovis* infections in a herd is a large herd size and purchasing cattle.** Ideally keeping disease out by having a closed herd is the way to go. If you can't, consider the potential risks from what you are buying with your vet and how you are going to mitigate the risk. Always consider that there is potential risk from bringing in carrier cows into a herd that is not infected, as well as a risk in bringing disease free non-immune cows into a herd with active infection.
4. **One of the main ways that infection spreads to calves is through feeding infected / contaminated cows milk and colostrum. Once established in a group of calves then it will spread mainly by aerosol transmission.** Clearly we need to feed colostrum to calves and therefore in endemically infected herds pasteurisation of colostrum could be considered. Not feeding cows' milk or waste milk to heifer or bull calves will also significantly reduce the risk of disease transmission. In addition to ensuring adequate draft free ventilation without chilling calves, keeping calf group size small and the age range within the calf group narrow helps reduce the risk of disease spread from older to younger calves. Getting as close as possible to an 'all in all out system' will really help.
5. **For calf pneumonia, *Mycoplasma bovis* usually acts in combination with other viruses and bacteria.** Therefore taking steps to ensure optimal environmental and feeder hygiene, ensuring calves are well fed with sufficient good quality calf milk replacer and reducing the challenge and effect of other respirator pathogens through vaccination will help for Mycoplasma control.
6. **Surveillance data shows that Mycoplasma bovis accounts for less than 1% of the diagnosed causes of mastitis with other more common mastitis bacteria such as *E coli* or *Streptococcus uberis* being far more important**. That said, on an individual herd basis some herds can experience a significant outbreak of *Mycoplasma bovis* mastitis, sometimes in conjunction with an arthritis at the same time. Mycoplasma are generally considered a 'contagious' type of bacteria, that will spread from cow to cow in the parlour. Creating a milking routine to minimise cow to cow spread is the aim, and again this will control much more than just Mycoplasma. In some cases, if Mycoplasma become established as a major cause of mastitis, more specific controls (like segregation or culling of carrier cows) cows can be required.

Colin Mason – SRUC Veterinary Services Dumfries Centre Manager

Member Profile:

David & Annabel Stanners
Low Chesterhope Farm, West Woodburn, Northumberland

David and Annabel are first generation farmers who started their herd of Luing cattle at Knowsley Estate in Merseyside. Having previously worked as stock managers for Knowsley, the estate's decision to no longer own cattle themselves lead to David and Annabel becoming contract farmers on the estate so that they could keep their own herd. Breeding pedigree Luings, they became members of PCHS in 2013 in order to gain accreditation for BVD and Johne's Disease, allowing them to sell cattle at the breed society sales. Until February 2019, David was also the chairman of the Luing Cattle Society for two years.

While BVD accreditation was achieved easily through check tests, two positive results for Johne's Disease over the years mean that the herd is currently Risk Level 2, but hopes to achieve Risk Level 1 at the next herd test.

In order to progress their business, David and Annabel began to search for a farm of their own, looking at land as far south as Derbyshire to as far north as Aberdeen, but by chance eventually settling on a property in their native Northumberland. Relocating to the farm at West Woodburn in October 2016, they now farm a total of 600 acres, 200 of which is fell, 300 of rough ground or pasture and 100 acres that can be mowed, running a herd of 80 cows, as well as a flock of 700 ewes.

Dr Grove-White of the University of Liverpool put together a health plan for the herd's move to Northumberland. As the herd had never had neighbouring cattle at Knowsley, the plan recommended vaccinating for BVD, to avoid the naïve herd being introduced to the disease in their new home, as well as advice for IBR, ticks, liver fluke and more.

The farm's vet, Lee-Anne Oliver of Scott Mitchell Associates in Hexham, believes that as well as the good management practices in place, the herd's freedom from BVD is a major contributing factor to the remarkably low antibiotic usage on the farm, with no calf pneumonia present. Other performance data shows that the management practices and husbandry on the farm have certainly paid off:

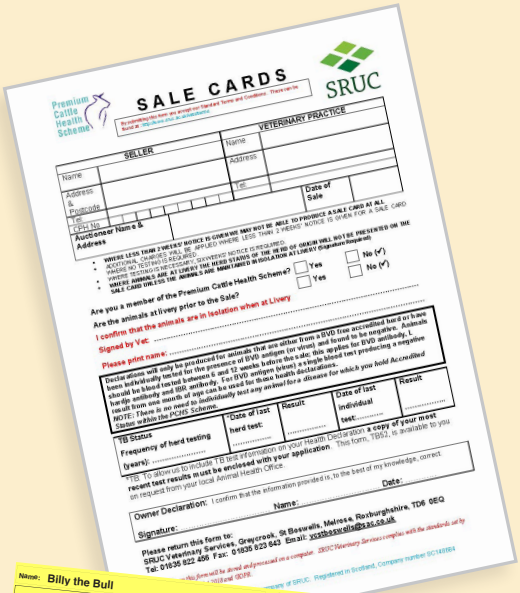
- Heifers are calved at two years old with excellent fertility rates (97% of cows to the bull weaned a calf in 2016)
- A tight calving pattern allowing them all to be weaned at the same time (up to 66% of calves being born in the first 3 weeks of the calving period)
- Very low mortality rates for calves under one month of age (0 – 1%)
- Low mortality rates from one month old to weaning (2% in 2014, 0% in 2016 and 1% in 2017).

The herd is closed, with the only exception being purchased bulls. Accredited bulls are always sourced, with the majority coming from Johne's Disease Risk Level 1 herds. Any heifers that are not retained in the herd are sold for breeding stock at the Luing society sales, while bullocks are currently sold as stores either privately or at the native breed sales at Hexham, although David hopes to sell some as bulls at the society sales in the near future.

Looking ahead, the Stanners have considered the IBR scheme; however several of their cows have been vaccinated with non-marker vaccines by previous owners, meaning accreditation could not be achieved while these animals remain. Instead, gaining accreditation for Neospora is the next goal for the herd.

David and Annabel have also set up a farm shop earlier this year, to sell their own beef and lamb as well as pork from a small number of pigs reared especially for the shop. Visit www.facebook.com/tynedaleluing for more information.

Bovine Health Declaration – Pen or Sale cards


SALE CARDS

SRUC

Premium Cattle Health Scheme

SELLER

VETERINARY PRACTICE

Are you a member of the Premium Cattle Health Scheme?

Are the animals at livery prior to the Sale?

I confirm that the animals are in isolation when at Livery

Signed by Vet:

Please print name:

TB Status

Frequency of herd testing (years):

Owner Declaration: I confirm that the information provided is, to the best of my knowledge, correct.

Signature:

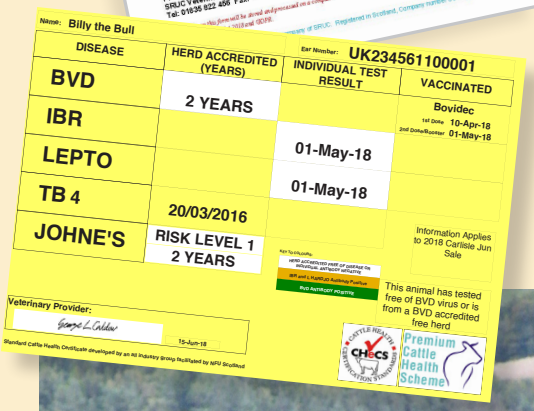
Name:

Date:

Please return this form to:

SRUC Veterinary Services, Greycrook, St Boswells, Melrose, Roxburghshire, TD6 0EQ

Tel: 01835 822 456 Fax: 01835 823 643 Email:


Name: Billy the Bull

Ear Number: UK2345611000001

DISEASE	HERD ACCREDITED (YEARS)	INDIVIDUAL TEST RESULT	VACCINATED
BVD	2 YEARS		Bovidec 1st Dose 10-Apr-18 2nd Dose/Booster 01-May-18
IBR		01-May-18	
LEPTO		01-May-18	
TB 4	20/03/2016		
JOHNE'S	RISK LEVEL 1 2 YEARS		

Information Applies to 2018 Carlisle Jun Sale

This animal has tested free of BVD virus or is from a BVD accredited free herd

Veterinary Provider:

15-Jun-18

Standard Cattle Health Certificate developed by an all industry group facilitated by NFU Scotland

CHeCS

Premium Cattle Health Scheme

Bovine Health Declarations, otherwise known as Pen or Sale Cards, are produced by CHeCS Health Scheme providers so that you can promote your accredited high status livestock to potential buyers.

Last year the PCHS Team produced around 1250 pen cards for 200 of our 4000 members. Our busiest months are February, March, May and October so please allow extra time planning during this period. To ensure we are able to get the correct information and cards to you on time please follow these three simple steps:

1. Please plan ahead and organise your testing so that you receive your Sale Cards promptly. We need 2 weeks' notice before an event and 6 weeks' notice if testing is required as well
2. Check the requirements of your individual breed society and liaise with your vet to ensure all necessary testing is undertaken
3. Download a Sale Card application form from www.cattlehealth.co.uk – ensure you fill in the information you want to be displayed as it is your responsibility to do this. Your PCHS accredited status will automatically be added to the Sale Card

The Sale Card application form asks for the following information:

- Your details (name, address, CPH)
- Auction details and date
- Veterinary Practice details – and vet signature where animals are at livery
- TB52 (summary of your most recent TB test) or TB accreditation level
- Animal Identities
- Tick any required tests. Detail vaccination information: vaccine names and dates given for IBR, Leptospirosis and BVD

Important things to consider:

If your animals are at livery, they must be kept isolated if they are to keep the health status of your holding, otherwise they will have the health status of the livery premises. To qualify for a sale card, all animals must be from a BVD accredited herd or be individually tested for BVD virus. In the case of Johne's Disease, the herd status is noted and not the individual animal's status. Please note that your Johne's Disease herd status only applies to home bred animals.

Test results that are more than 3 months old CANNOT be used except a BVD Antigen (virus) test which lasts a lifetime.

Looking ahead

We are currently looking at an online system for producing sale cards – more info will be given as soon as possible.

BVD Free ENGLAND

BVDFree England aims to be a 'one stop' platform to display BVD status for herds in England, allowing farmers buying cattle to independently verify if individual animals or herds have been tested for BVD and whether they have gained herd status.
For those already accredited with PCHS we can upload your status onto our website for free, this benefits both schemes, as you have another space to present your achievement and BVDFree England are able to demonstrate the appetite and importance of BVD testing and eradication.

PCHS need your permission to upload this to our database.
This takes two minutes and can be done via their website at:
www.bit.ly/PCHS_BVDFree

Thank you for your support.

Lorna Gow - AHDB

Tackling bovine TB

Having worked as a farm animal vet in the south of England since 1990, I have seen many changes in the TB testing requirements for cattle within our practice area. From only adult animals being tested every four years to all animals every six months (with pre-movement testing required before an animal is sold if it has not undergone a routine test within the previous 60 days); and from the identification of an inconclusive reactor being a noteworthy event, to the frequent identification of infected animals. I have therefore taken great interest in the government's plans to eradicate bTB and in the debate about whether culling badgers can have any meaningful role in achieving this aim.

Irrespective to the answer to this debate it seems to me that the placing of bTB under statutory control has moved attention away from the fact that this disease is just another infectious disease of cattle (and other species), albeit with its own particular management and diagnostic challenges. As such, management of the current epidemic should be focused, as it would be in the control and eradication of any infectious disease of cattle, on certain key epidemiological areas including identifying and managing reservoirs of infection and addressing routes of disease transmission.

The current government test and cull programme is aimed at identifying and removing reservoirs of disease in cattle. This is clearly an important part of the control of this disease but one that currently is in use largely in isolation and is failing to achieve the desired outcome. While increasing testing frequency or even using enhanced testing strategies or technologies may improve the efficiency of this part of the programme, it is not adding any material change to the overall strategy and so is unlikely to exert any significant change to the outcome over current policy.

If we are to achieve success in the control and eventual eradication of this disease, more attention needs to be given to breaking pathways of transmission, whether cow-to-cow or wildlife-to-cow transmission.

Controlling cow-to-cow transmission within a herd requires managing our herds to optimise immunity and effectively isolating high-risk animals. Although vaccination may be considered the holy grail of disease prevention, it remains at least 10 years away, and the limitations of current mycobacterial vaccines need to be remembered alongside other factors that might affect individual and herd-level immunity, including nutritional status and endemic immunosuppressive disease status. Controlling cow-to-cow transmission between herds requires good boundary biosecurity and appropriate risk assessment and quarantine procedures, including ongoing testing of purchased animals.

Controlling wildlife-to-cow transmission requires a different approach to biosecurity to minimise contact between herds and potentially infected wildlife. In particular, the management of cattle feed stores on many farms could easily be improved with minimal effort, and careful grazing management might help keep cattle and other bTB-susceptible wildlife apart.

This is exactly the approach to TB control espoused in the CHeCS TB risk level scheme and is an approach that has been successful over many years in controlling and, in some cases, eradicating other non-statutory infectious diseases of cattle. This has now been acknowledged by government which is proposing not to increase the testing frequency for herds that engage with a CHeCS TB scheme in the high-risk area and has already been enacted in the edge area.

Given the reasoned probability of success of such an approach, the benefits of improved herd health management with respect to numerous other infectious diseases, and a reduced requirement for whole herd TB testing, it would seem illogical not to take full advantage of this offer of an alternative and enhanced strategy for the control and eradication of bTB presents.

Adapted from a letter by Keith Cutler (CHeCS board member) originally published in the Vet Record

Herd Level Diagnosis of Salmonella Dublin

Salmonella Dublin is a bacterial infection that has a significant impact on productivity and welfare in infected cattle herds. It can spread to humans and has a higher mortality in humans than other strains of Salmonella. The clinical presentation can be very variable, and abortions, diarrhoea, pneumonia, milk drop and ill-thrift are common clinical signs.

It is a frequent diagnosis, with more than 1200 diagnoses made by APHA and SRUC diagnostic laboratories in the last five years. It occurs more commonly in dairy herds, with 85% of the cases diagnosed by SRUC Veterinary Services originating from dairy cattle. Analysis from other European countries suggests that costs in the first year of an outbreak can be as much as €52,000, with ongoing annual losses of €34,000. Losses result from a number of factors, including abortions, calf losses and a reduction in milk yield.

The initial costs of an outbreak, and the success of an eradication program, depend on hygiene and management measures. A risk assessment document exists to help manage the critical husbandry factors that should be altered to reduce spread of Salmonella Dublin and aid in its eradication. Testing in dairy herds can be carried out by bulk tank testing. Eradication schemes for Salmonella Dublin are in progress in Denmark and the Netherlands. In the Danish eradication scheme status is assigned on the basis of four bulk tank antibody results, taken at three month intervals. Serology can also be carried out on blood samples, allowing beef herds to diagnose and monitor the condition.

Eradication schemes in other European countries have made good progress, and on average it takes just two years for a herd to eradicate Salmonella Dublin.

Katrina Henderson – SRUC Veterinary Services Dumfries VIO

Meet the Team

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