Animal & Plant Health Agency

SRUC

Great Britain cattle quarterly report, disease surveillance and emerging threats

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Introduction and overview

This quarterly report reviews disease trends and threats for the third quarter of 2025 (Q3), July to September. It is compiled using data available at the time of writing. It contains interesting cases, and analyses carried out on disease data gathered from APHA, SRUC Veterinary Services division of Scotland’s Rural College (SRUC), and Surveillance Pathology Partners; and intelligence gathered through the Cattle Expert Group networks. We are aware that there were SRUC data missing from the database at the time of writing. This could not be rectified in time, and analysis and trends based on later updated data may therefore differ from this report. The focus will therefore be on trends detected in APHA data from England and Wales, plus interesting and unusual cases from the GB Surveillance Network. In addition, links to other sources of information, including reports from other parts of the APHA and Defra agencies, are included. A full explanation of how data is analysed is provided in the annexe available on GOV.UK.

Bluetongue updates

The new 2025 to 2026 vector season started on the 1 July 2025. Between the start of the new season and 6 November 2025 there were 154 confirmed cases of bluetongue virus serotype 3 (BTV-3) (141 in England and 13 in Wales). In addition, six premises were confirmed with BTV-8. Figure 1 shows the geographic distribution of confirmed BTV cases between 1 July 2025 and 6 November 2025. Figure 2 shows the distribution of cases in relation to the cattle population density. These interactive maps can be found here: Bluetongue Cases and Zones.

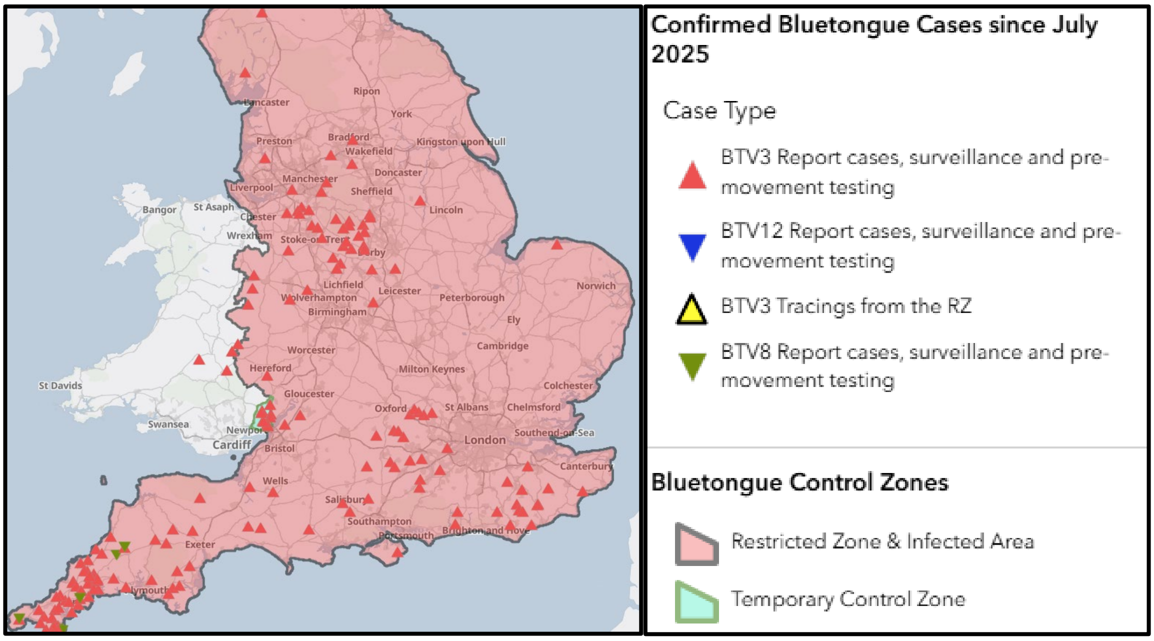

Figure 1: Map of England and Wales showing the confirmed bluetongue cases between July and 6th November 2025

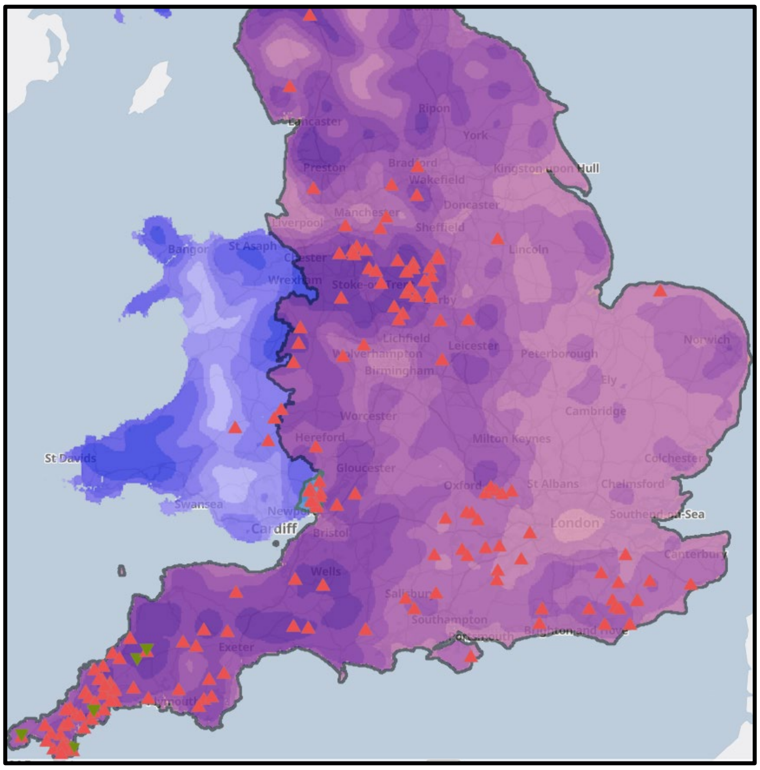

Figure 2: Map showing the locations of the bluetongue cases overlaid on the cattle population density map (where the darker shades of blue and purple indicate higher population densities)

Images of the clinical signs can be found here: Clinical signs of bluetongue | AHDB

Bluetongue virus is a notifiable disease. Suspicion of bluetongue virus in animals must be reported to the Animal and Plant Health Agency on 03000 200 301 in England, on 03003 038 268 in Wales, and to the local Field Services Office in Scotland. Further guidance and information are available on the Ruminant Health & Welfare site, Bluetongue: information and guidance for livestock keepers (GOV.UK) and on Bluetongue: how to spot and report it (GOV.UK).

Cattle disease surveillance dashboard outputs

The most frequent diagnoses from carcase submissions made in Q3 of 2025, compared to Q3 in 2024, and Q3 for 2015 to 2024 inclusive, through the Great Britain (England, Wales, and Scotland) scanning surveillance network, are illustrated in Table 1. These can be interrogated further using the interactive cattle disease surveillance dashboard which was launched in October 2017. Please see the note in the introduction on Page 2 regarding SRUC data.

Table 1: Great Britain scanning surveillance 10 most frequent carcase submission diagnoses in Q3 of 2025, Q3 of 2024, and Q3 for 2015-2025

10 most frequent carcase diagnoses Q3 2025	**10 most frequent carcase diagnoses Q3 2024**	**10 most frequent carcase diagnoses Q3 2015-2025**
1. Pneumonia due to *Mycoplasma bovis*	1. Pneumonia – not otherwise specified	1. Digestive disease due to other causes (not listed)
2. Pneumonia due to *Pasteurella multocida*	2. Pneumonia due to *Pasteurella multocida*	2. Pneumonia – not otherwise specified
3. Parasitic pneumonia	3. Digestive disease due to other causes (not listed)	3. Pneumonia due to *Mycoplasma bovis*
4. Salmonellosis due to S. Dublin	4. Coccidiosis	4. Pneumonia due to *Pasteurella multocida*
5. Pneumonia due to *Mannheimia haemolytica*	5. Parasitic gastroenteritis	5. Salmonellosis due to S. Dublin
6. Colisepticaemia	6. Parasitic pneumonia	6. Parasitic pneumonia
7. Pneumonia – not otherwise specified	7. Pneumonia due to *Mycoplasma bovis*	7. Cryptosporidiosis
8. Abomasal ulceration	8. Pneumonia due to *Mannheimia haemolytica*	8. Pneumonia due to *Mannheimia haemolytica*
9. Abomasitis NOS	9. Ruminal acidosis	9. Coccidiosis
10. Coccidiosis	10. Colisepticaemia	10. Colisepticaemia

Five of the Top 10 diagnoses for Q3 2025 belong to the respiratory syndrome category, and this is also a common finding in Q4 and Q1. *Mycoplasma bovis*, *Pasteurella multocida*, and *Mannheimia haemolytica* can be primary respiratory pathogens but are also frequently secondary respiratory infections, usually following a primary viral respiratory pathogen. Therefore, in investigating an outbreak of respiratory disease, it is important to choose carefully which calves to sample (either live or postmortem), and which samples to take, if accurate diagnoses are to be made from the acute phase of disease. Veterinary investigation officers are always happy to discuss sampling and may be able to undertake an investigative farm visit for farms with severe outbreaks or long-standing issues.

New and re-emerging diseases and threats

Changes in disease patterns and unusual diagnoses

Systemic disease

Salmonellosis due to *Salmonella* Dublin was the fourth most common diagnosis this quarter. In some cases, such as the one described below, salmonellosis in calves can present with clinical signs suggestive of respiratory disease.

Pneumonia in dairy calves due to *Salmonella* Dublin, *Mannheimia haemolytica* and *Mycoplasma bovis*

Two 7-week-old dairy replacement heifer calves died overnight and were submitted to investigate a pneumonia outbreak. Most of a shed of about 40 pre-weaned calves were affected, with seven deaths over the previous 20 days. At postmortem examination (PME) Calf 1 had severe bronchopneumonia (Figure 3), diarrhoea and pericarditis, and the findings were consistent with systemic disease, and Calf 2 had severe bronchopneumonia. *Salmonella* Dublin was cultured in systemic distribution in both calves, confirming salmonellosis as the likely cause of death. The severity of clinical disease is likely to have been exacerbated by concurrent disease.

Mannheimia haemolytica, Mycoplasma bovis, and *Mycoplasma arginini* were isolated from lung in both calves. *M. haemolytica* is an important respiratory pathogen of cattle as part of the Bovine Respiratory Disease (BRD) complex. Usually found as a commensal in the upper respiratory tract, stress or viral infection can trigger increased replication and production of virulence factors, allowing lower respiratory tract colonisation and pneumonia. *M. bovis* is a common respiratory pathogen and *Mycoplasma arginini* is generally considered to be a commensal but, there is increasing evidence of pathogenicity especially when combined with other infections. Mycoplasma had previously been suspected, and calves had recently received vaccination against *M. bovis*. Respiratory viruses were not detected though could not be ruled out due to the chronicity of the pathology.

A thorough review of calf management including vaccination protocols was recommended. A useful article on the diagnosis and control of *Salmonella* Dublin in dairy herds can be found here: https://inpractice.bmj.com/content/39/4/158

Figure 3: Lung consolidation and abscessation in a calf with pneumonia due to *Salmonella* Dublin, *Mannheimia haemolytica* and *Mycoplasma bovis*

Reports of salmonella in livestock, dogs, birds and wildlife in Great Britain can be found on GOV.UK. There was an increase in incidents of *Salmonella* Dublin in May 2025, compared to May for the five previous years.

Digestive system disease

The most common diagnoses in the digestive system disease category were abomasal ulceration and abomasitis. A case of abomasal disease in milk fed calves is described below.

Abomasal disease in milk-fed calves

Abomasal disease in milk-fed calves has again been frequently diagnosed across the surveillance network during the third quarter of 2025. Typically, affected calves are fed milk replacer, often via an automated machine, although occasional cases have been seen in calves fed whole milk, and rarely in suckled calves. Affected calves may be found dead or may present with enteric signs including abomasal bloat and or malaise prior to death. A range of abomasal pathology may be seen at PME including abomasal bloat, rupture, emphysematous abomasitis (Figure 4) and abomasal ulceration. Enteric pathogens such as *Cryptosporidium* spp., rotavirus and *Salmonella* Dublin have been detected in some of these cases although the primary problem is usually thought to be issues with feeding management such as incomplete mixing of milk replacer, over-feeding or poor hygiene.

Figure 4: Emphysematous and blackened abomasal mucosa in a calf with abomasitis

Liver fluke bulk milk serology

Figure 5 shows the proportion of National Milk Records (NMR) bulk milk samples testing positive for liver fluke antibody, by ELISA, by country, from Q1 2020 to Q3 2025 inclusive. In some cases, samples are not geo-referenced. They are included in the GB total only, and as such the percentage positive by country may not equate to the GB percentage positive.

This data is kindly provided under agreement from National Milk Records (NMR) to support the collection of disease surveillance information across GB. NMR provide milk testing for endemic disease in cattle. Most of the bulk milk samples tested will be routine quarterly surveillance (‘monitoring’) and a few may be part of a clinical disease investigation (‘diagnostic’) but these are not differentiated in Figure 5. In line with agreed APHA reporting, the number of samples tested is not shown. For further information on this data please contact vetenquiries@nmrp.com.

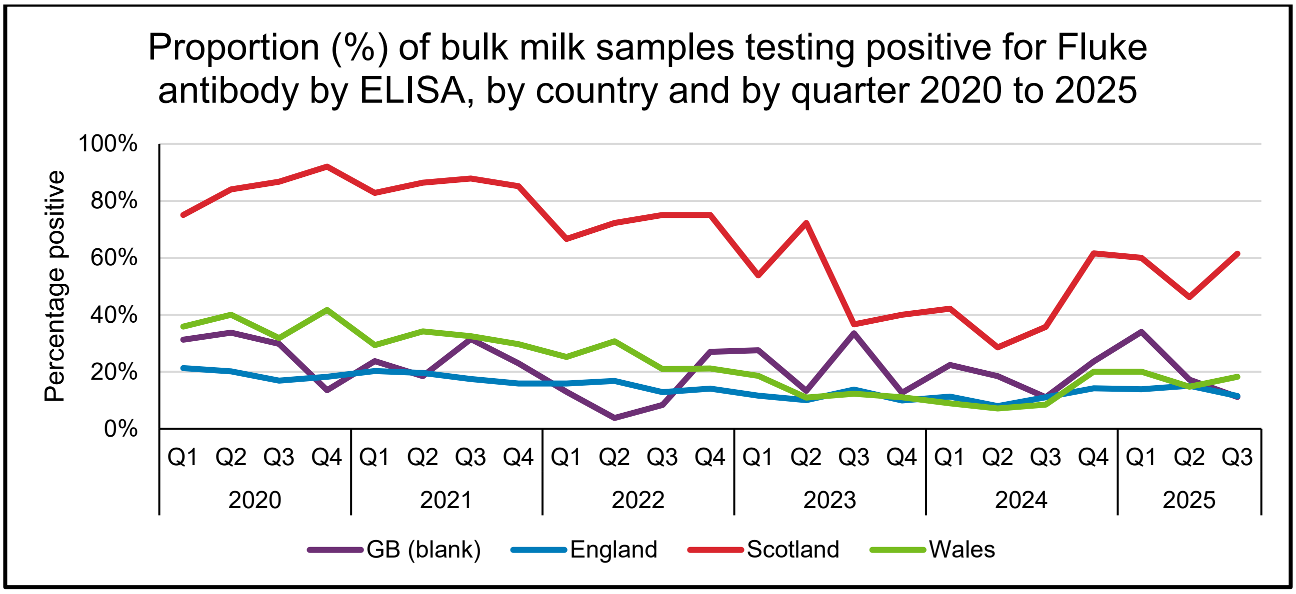

Figure 5: Proportion (%) of bulk milk samples testing positive for liver fluke antibody by ELISA, by country, and by quarter Q1 2020 to Q3 2025* (*to date)

Acknowledgements for the liver fluke data: Eamon Watson MRCVS, NMR Product Manager and Karen Bond MRCVS, NMR Veterinary Team Lead

Summer scour syndrome and idiopathic necrotising enteritis in grazing calves

Summer scour syndrome was the suspected diagnosis in three submissions to Starcross Veterinary Investigation Centre (VIC) in Q3. In all three cases, dairy calves between three and four months of age were affected with watery scour and weight loss reported in multiple animals in the groups following turnout. In two cases typical ulcerative glossitis and oesophagitis (Figure 6) were noted grossly, along with liquid intestinal content and poor fat reserves. In the third case, typical upper alimentary tract ulceration was not present however the intestinal mucosa appeared bright red with punctate haemorrhagic lesions over the caecal mucosa. Laboratory testing found no evidence of an endoparasite burden, cultures for *Salmonella* were negative and BVDV, MCF and BPSV were ruled out via PCR testing. The gross pathology and clinical signs were typical of those associated with Summer Scour Syndrome, which was further supported by histopathological findings of glossitis, oesophagitis, rumenitis and enteritis in these calves.

There is still very little known about this emerging syndrome and the cause or causes of it are uncertain. However, it typically presents as scour, wasting and ulceration of the upper and/or lower gastrointestinal tract in young dairy calves approximately one-month post-turnout. One theory for the development of the oesophageal lesions in summer scour syndrome is the presence of ruminal acidosis leading to rumenitis and dysbiosis with the resulting acid reflux producing oesophageal ulceration. A change in diet (including turnout on lush pasture), and poor rumen development, are suspected contributing factors. The acidosis, gastrointestinal inflammation and maldigestion become self-perpetuating producing signs of scour and weight loss. Although the underlying causes of summer scour syndrome are unknown, some tentative recommendations were made to avoid future cases by:

- Evaluation of the nutrition of young calves to promote good rumen development, including the early exposure of calves to a high-quality starter ration, fresh clean water, and fibre.
- Careful weaning of calves to again ensure the rumen has developed appropriately.
- Reviewing how the calves are turned out onto pasture, for example, use pasture that is less lush, offer a more gradual transition period (strip graze with runback access to conserved forage).
- Continued monitoring for worm and coccidial burdens in young calves as these can be initiating factors for chronic intestinal inflammation. Cases of scour in pre-weaned calves should also be treated promptly for the same reason.

Figure 6: Oesophagitis in a case of Summer Scour Syndrome

Idiopathic Necrotising Enteritis (INE) in a suckler calf

Idiopathic Necrotising Enteritis (INE) can present with similar non-responsive scour in young calves as demonstrated in a 2.5-month-old suckler calf submitted to Penrith VIC. In this case small, circular, necrotic lesions were found on the tongue and caudal pharynx and the distal small intestine contained liquid haemorrhagic content. Intestinal mucosa appeared thickened, corrugated and necrotic (Figure 7). Similarly to cases of SSS, testing for common causes of scour including BVD was unremarkable and histopathology demonstrating severe intestinal necrosis with mucosa populated by mononuclear cells, with an absence of neutrophils confirming the diagnosis. Crucial differences between INE and SSS are that the former is a condition of grazing suckler calves, usually between six and twelve weeks of age, affecting often single animals in the group with a high mortality rate. SSS, in contrast is a high morbidity condition of weaned grazing dairy calves, up to twelve months of age. As suggested by the name, the underlying cause/s of INE are uncertain and no specific control measures exist.

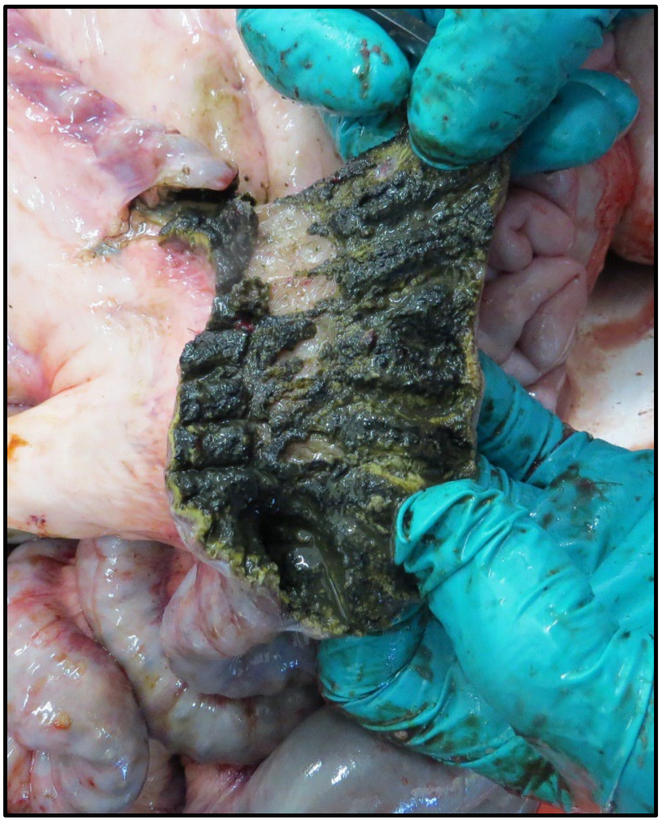

Figure 7: Intestinal necrosis in a case of Idiopathic Necrotising Enteritis

Yersiniosis with concurrent pneumonia and PGE

A two-month-old dairy calf was submitted after being the second in the group to die at grass over a short period. Respiratory signs were also reported in multiple other animals. Alongside very poor fat reserves, intestinal contents were watery and the small intestinal mucosa was thickened. *Yersinia pseudotuberculosis* was isolated from the caecal contents and histological examination revealed acute superficial enteritis with bacterial colonisation, supporting yersiniosis as the cause of death. This diagnosis, also reported in Q4 2024 and Q1 2025, is often secondary to other infectious/non-infectious stressors and may also be predisposed to by weather conditions which promote high bacterial burden. In this case both a chronic pneumonia and underlying parasitic gastroenteritis were additionally diagnosed. The majority of cases diagnosed across the surveillance network are reported in winter and spring (Figure 8).

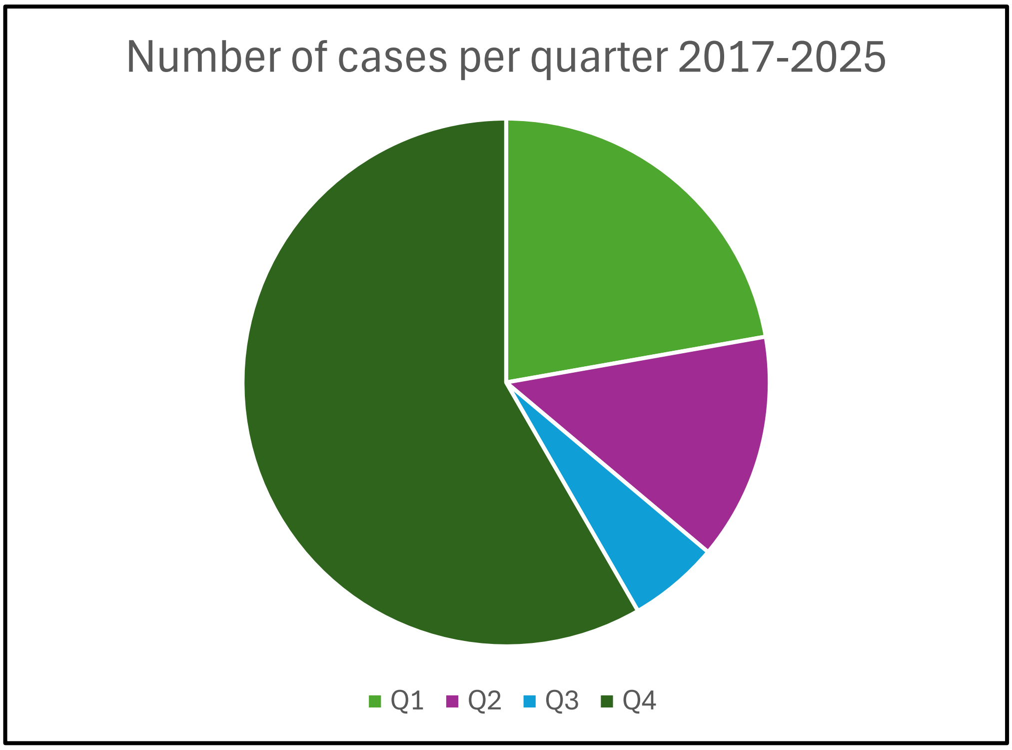

Figure 8: Cases of yersiniosis in cattle and small ruminants diagnosed in England and Wales by quarter

Suspected lack of moxidectin efficacy in *Cooperia oncophora* in first grazing season calves

Severe diarrhoea and weight loss was reported in two groups of homebred calves from a dairy herd, aged 6 and 8 months old. The calves had been turned out in April and June to set-stocked fields used for youngstock every year and were supplemented with silage and 2kg/head of concentrate. Both groups had recently been treated with pour-on moxidectin with disappointing clinical response. Pooled faecal egg counts at 11-12 days post treatment detected 50 eggs per gram of faeces (epg) in the older group and 800 epg in the younger group. Additional individual faecal samples collected from both groups underwent faecal egg counting with counts ranging from 140 to 1660 epg at 14 days post moxidectin (6-month-old group) and <10 to 140 epg at 13 days post moxidectin (8-month-old group). A good clinical response was observed following subsequent treatment with fenbendazole. Coproculture of residual faeces was undertaken at Moredun Research Institute, with 98% of the resulting 3rd stage larvae speciated as *Cooperia oncophora*. No concerns were identified regarding dose rate, administration technique or product storage, raising the suspicion of lack of efficacy of moxidectin in this *Cooperia oncophora* population. This suspicion was reported to the marketing authorisation holder. Further discussion highlighted that moxidectin had been used exclusively in first grazing season calves on the farm for several years. Both repeated use of the same anthelmintic class and repeated annual use of the same fields for youngstock are recognised risk factors for development of anthelmintic resistance. Development of anthelmintic resistance in GB cattle herds is an emerging issue that should be considered when reviewing herd health plans or advising on roundworm control.

Respiratory system

Mycoplasma bovis as cause of bilateral otitis and pneumonia in two calves

A farm rearing approximately 2,000 dairy bred calves annually reported cases of head tilt, ear droop, chronic pneumonia, and progressive wasting, affecting eight calves within a batch of 80 animals aged between 8 and 14 weeks. These calves had entered the rearing unit six weeks earlier, originating from multiple dairy sources. One dairy farm supplied about 75% of the affected group, and all affected calves were sourced from that farm. The calves with clinical signs were administered three courses of antimicrobial therapy, including penicillin/streptomycin, long-acting tetracycline, florfenicol, and macrolides, with poor clinical response. The two calves submitted for postmortem examination were euthanised, and both received their last antimicrobial treatment at least ten days before submission.

Both calves were in poor body condition. Bilateral otitis media (Figure 9) was present in both animals, characterised by accumulation of purulent exudate and swollen necrotic tympanic bullae. These lesions correlate with the clinical signs of ear droop and head tilt reported on-farm. Both calves had cranioventral lung consolidation with multiple caseous nodules present. The lesions in lung and middle ear were suggestive of mycoplasmosis due to *Mycoplasma bovis*, and it was detected by PCR in the lung and ears of both calves. No other respiratory pathogens were detected, although the prior antimicrobial treatments could have affected bacteriology.

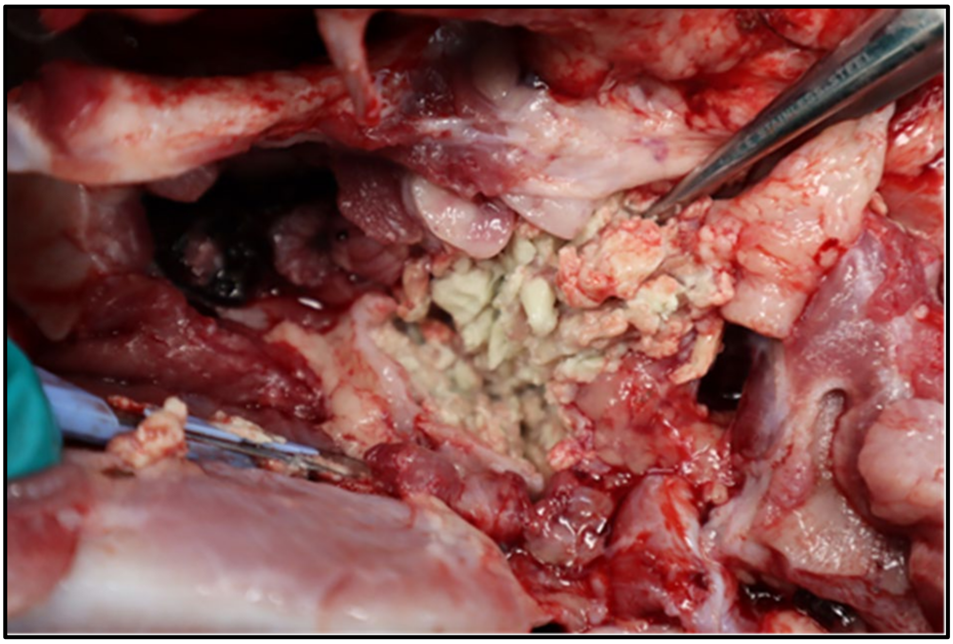

Figure 9: Purulent exudate in the ear of a calf with *Mycoplasma bovis* otitis media

Infectious bovine rhinotracheitis (IBR) gE bulk milk serology

Figure 10 shows the proportion of National Milk Records (NMR) bulk milk samples testing positive for IBR gE antibody (used for herds vaccinating with a gE deleted IBR vaccine), by ELISA, by country, from Q1 2020 to Q3 2025 inclusive. In some cases, samples are not geo-referenced. They are included in the GB total only and as such the percentage positive by country may not equate to the GB percentage positive.

This data is kindly provided under agreement from National Milk Records (NMR) to support the collection of disease surveillance information across GB. NMR provide milk testing for endemic disease in cattle. Most of the bulk milk samples tested will be routine quarterly surveillance ('monitoring') and a few may be part of a clinical disease investigation ('diagnostic') but these are not differentiated in Figure 10. The values indicate a high level of, and widespread, IBR exposure in England, Scotland, and Wales. In line with agreed APHA reporting, the number of samples tested is not shown. For further information on this data please contact vetenquiries@nmrp.com.

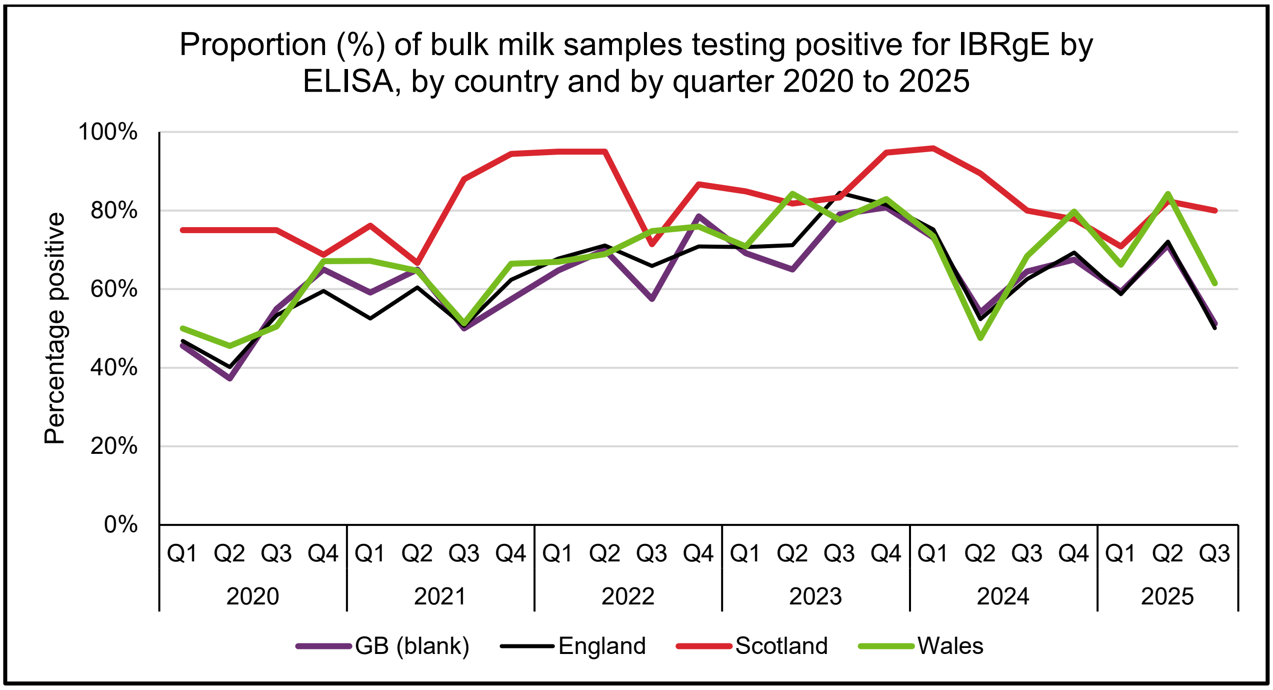

Figure 10: Proportion (%) of bulk milk samples testing positive for IBRgE antibody by ELISA by country and by quarter Q1 2020 to Q3 2025* (*to date)

Acknowledgements for the IBR data: Eamon Watson MRCVS, NMR Product Manager and Karen Bond MRCVS, NMR Veterinary Team Lead

Infectious bovine rhinotracheitis (IBR) in a six-month-old calf

A six-month-old beast was submitted to investigate the cause of death after a 96-hour period of waxing and waning respiratory disease. The animal was part of a batch of store cattle bought in two months previously from a calf-rearer. Animals received a combined Parainfluenza-3, Bovine Respiratory Syncytial Virus and *Mannheimia haemolytica* vaccine and a Bovine Herpes Virus-1 (BoHV-1) marker vaccine prior to arrival. The animal was initially found down four days prior to submission, then initially responded to tulathromycin, penicillin and streptomycin injection before deteriorating after 48 hours. Marked respiratory effort was noted prior to death. The group were receiving a total mixed ration (TMR) with grass and maize silage, wheat, and calf-rearing nuts. No other animals were affected, although some animals have been reported as having weeping eyes and conjunctivitis. A severe fibrinopurulent tracheitis was found on postmortem examination, with areas of multifocal to coalescing haemorrhages in the submucosa (Figure 11). There was a focal area of lung consolidation affecting the right middle and accessory lobes. Bacteriology was unrewarding but PCR testing of bronchial swabs detected BoHV-1 at Ct values of 16 and 18.

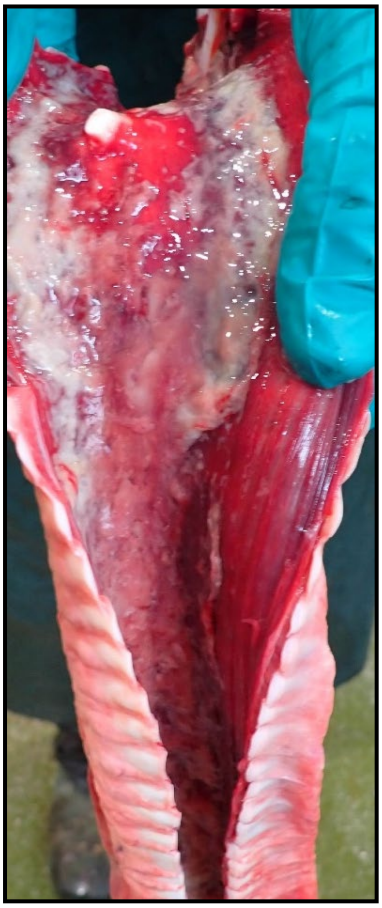

Figure 11: Tightly adhered layer of fibrin over the tracheal mucosal surface consistent with IBR (BHoV-1 infection)

Musculoskeletal system

White muscle disease affecting suckler calves

A three-month-old beef calf was euthanised the day of submission for postmortem examination to investigate three calves noticed to 'Have gone off their back legs'. The submitted calf was initially examined by the private vet following presentation of acute pneumonia. After three days it was unable to stand and was euthanised. Antimicrobial treatment, steroid, NSAIDs and a vitamin E/Selenium injection had been given over the course of illness with no improvement. Significant gross postmortem findings were:

- Pale striated muscle with white deposits (Figure 12)
- Streaky “brush stroke” lesions affecting predominantly left ventricular cardiac tissue
- Cranio-ventral consolidation of the lung lobes.

Selenium levels were confirmed low (0.36 mg/kg DM, ref range 0.9-1.75 mg/kg DM) and histopathology confirmed severe changes to the skeletal and cardiac muscles, consistent with nutritional myopathy (vitamin E/Selenium deficiency). The acute pneumonia presentation here was considered secondary to cardiac failure and pulmonary oedema. Urgent supplementation of the group with vitamin E and selenium was recommended. Since treatment, no other calves were reportedly affected and the other two calves gradually improved. Treatment of individuals with cardiac pathology is rarely successful.

Figure 12: Pale striated muscle and linear 'streaks' in a suckler calf with white muscle disease

Laminitis in young diary heifers

A live 6-month-old British Friesian heifer was presented to the private vet for examination and euthanasia to investigate long-standing stiffness, forelimb lameness, and overgrowth of hooves resulting in reluctance to bear weight. Twenty of around 400 heifers had been affected. Sectioning of the feet showed relatively normal hind digits, but significant changes in the front toes, affecting the distal phalanx P3. There was downward rotation and sinking of the P3, congestion of the corium, haemorrhage where the distal tip of P3 was close to the thin sole, altered claw shape with overgrowth and irregular ridging of the wall, and suspected degeneration of the bone in the central area of P3. The pathology was consistent with the effects of laminitic changes, exacerbated by turn out on to hard ground. Interventions discussed to help the others affected included improving conformation by trimming, providing softer underfoot conditions, NSAIDs, and reviewing the diet.

Urinary system

No significant trends this quarter.

Nervous system and organs of special sense

Listerial encephalitis in a 5-month-old calf following negation as suspected BTV

A 5-month-old Belgian Blue cross heifer calf was euthanised and submitted for PME. The calf had been purchased from a market and reared on a bucket. The calf showed mild neurological signs and was noted to be running around the shed and bumping into objects. It was reported as a suspected BTV case, but testing returned a negative result. The calf did not show any improvement following treatment with oxytetracycline and meloxicam over a period of a week.

At gross PME the animal was in relatively poor condition, with the main findings being changes seen in the alimentary system. The omasum was enlarged, hard and impacted, which may have possibly been preventing digestive material from progressing through the alimentary system. Impaction of the omasum often is secondary to other diseases of the digestive tract, although primary impaction can occur when the diet consists of long, tough, fibrous material, and due to restricted access to clean water. Changes were also seen in the abomasal and intestinal mucosa.

Histopathology of the brain diagnosed a rhomboencephalitis, and the lesion distribution and histopathology were suggestive of chronic listerial encephalitis (likely due to *Listeria monocytogenes).* Infection most commonly arises from the oral cavity and can be associated with tooth eruption leading to an ascending neural infection (usually of the trigeminal nerve). Predisposing factors include feeding silage with a high listerial burden and floor feeding in muddy conditions. Histopathology of other fixed tissues detected only mild lesions in the small and large intestine; with findings in the small intestine likely due to historic coccidial challenge, and coccidial organisms were detected in the large intestine. A count of 2200 coccidial oocysts was detected on faecal egg counting, and 48% of those speciated were pathogenic (*Eimeria bovis* and *E. zuernii*).

Skin disease

Photosensitisation in dairy heifers

Lesions related to photosensitisation were detected in one of two affected in-calf dairy heifers, from a herd of 600 adult cows. Postmortem examination confirmed sloughing of white-haired non-pigmented areas of skin, particularly on the flanks, with marked skin necrosis (Figure 13) and ‘cracking’ especially on legs (Figure 14), and some sloughing over the hocks. No other significant pathology was evident on postmortem examination, and histopathology on the liver found no evidence of hepatopathy, suggesting a primary plant intoxication (type 1 photosensitisation). In such cases the disease is caused by absorption of a photodynamic agent from one or more of many different plant species including St John’s wort (*Hypericum perforatum*) and buckwheat (*Fagopyrum esculeatum*), or certain drugs such as sulfonamides and tetracyclines.

Figure 13: Skin necrosis on non-pigmented areas of skin in a heifer with photosensitisation

Figure 14: Cracking of the non-pigmented skin in a heifer with type-1 photosensitisation

Circulatory disease

Babesiosis in an adult milking cow in Wales

An 8-year-old dairy cow presented with a two-day history of lethargy, reduced milk yield, and red urine, and died despite Imidocarb treatment. Significant gross findings included jaundice (Figure 15), thin and watery blood, haemoglobinuria, dark kidneys and a distended gall bladder containing thick, dark-green bile. Initial differential diagnoses of leptospirosis, bracken fern intoxication, and copper toxicity were ruled out on further testing and histopathology, and a diagnosis of babesiosis was confirmed on PCR testing of EDTA blood. Additionally, spleen was positive for *Anaplasma phagocytophilum* the causative agent of tick-borne fever. Coinfections with these two agents are thought to increase mortality rates.

Figure 15: Yellow discoloration of the carcase of a cow with babesiosis

The number of cases of babesiosis are usually expected to rise in Q3, coinciding with tick moulting and feeding behaviour. Below is a round-up of some other interesting babesiosis cases from Q3 2025:

- A ten-year-old suckler cow in Dorset which died during TB testing after a twelve-hour history of intermittent recumbency. Watery blood with a PCV of 6% was noted. Despite grazing heathland, the farm had never previously experienced babesiosis.
- A six-month-old beef heifer in Devon which had displayed haemoglobinuria and a PCV of 8% whilst on rough grazing. This was the only animal affected, and a blood

smear performed in house demonstrated presence of piroplasms. Inverse age resistance to *B. divergens* in calves is independent of maternal immune status and declines steadily with time. It is worth noting that many sources of literature cite animals up to 9-12 months of age being innately protected against disease, however this has not been demonstrated here, and we have heard of other smear positive cases in calves as young as five months of age that had exhibited malaise.

- A fifteen-month-old heifer, the second to display malaise in the group of 90 purchased animals. Wasting was reported in the group. Worming had been carried out at spring turnout and the grazing was extensive, however parasitology revealed a worm egg count of 2,450epg, indicative of concurrent parasitic gastroenteritis.
- An adult cow on a farm that had experienced 'redwater' cases since 2023. A farm visit carried out by APHA earlier in the year identified the presence of red and roe deer, and rough away-grazing of a separate beef herd on the holding, as potential contributory factors to infection in dairy cattle.

Reproductive system – abortion, stillbirth, and congenital deformities

The most frequent diagnoses from abortion and stillbirth submissions made in the third quarter (Q3) of 2025, compared to Q3 in 2024, and Q3 for 2015 to 2025 inclusive, through the Great Britain (England, Wales, and Scotland) scanning surveillance network, are illustrated in Table 2. These can be interrogated further using the interactive cattle disease surveillance dashboard which was launched in October 2017.

Table 2: Great Britain scanning surveillance 10 most frequent abortion and stillbirth submission diagnoses in Q3 of 2025, Q3 of 2024, and Q3 for 2015-2025

10 most frequent abortion diagnoses Q3 2025	10 most frequent abortion diagnoses Q3 2024	10 most frequent abortion diagnoses Q3 2015-2025
1. Fetopathy due to *Salmonella* Dublin	1. Fetopathy due to *Salmonella* Dublin	1. Fetopathy due to *Salmonella* Dublin
2. Fetopathy due to *Neospora* infection	2. Fetopathy due to *Neospora* infection	2. Fetopathy due to *Neospora* infection
3. Fetopathy due to *Bacillus licheniformis*	3. Fetopathy diagnosis not listed	3. Fetopathy diagnosis not listed
4. Fetopathy due to *E. coli*	4. Fetopathy due to *Bacillus licheniformis*	4. Fetopathy due to *Trueperella pyogenes*
5. Fetopathy diagnosis not listed	5. Fetopathy due to *Listeria*	5. Fetopathy due to *E. coli*

6. Fetopathy or stillbirth due to congenital abnormality	6. Fetopathy due to thyroid hyperplasia	6. Fetopathy due to *Bacillus licheniformis*
7. Fetopathy due to traumatocia or bradytocia	7. Fetopathy due to fungi	7. Fetopathy or stillbirth due to congenital abnormality
8. Fetopathy due to fungi	8. Fetopathy due to *Trueperella pyogenes*	8. Fetopathy with BVD detected in the fetus
9. Fetopathy due to Leptospira	9. Fetopathy with BVD detected in the fetus	9. Stillbirth due to dystocia
10. Fetopathy due to *Trueperella pyogenes*	10. Fetopathy or stillbirth due to congenital abnormality	10. Fetopathy due to fungi

Abortion due to *Salmonella* Dublin in dairy heifers

Fetopathy due to S. Dublin was the most common cause of abortion in Q3 2025. A 6-month gestation foetus was submitted to investigate abortion in five freshly calved heifers, from an autumn calving herd, over a fortnight. The heifers were not unwell at the time of abortion but some developed metritis. There were no significant gross findings on examination of the foetus and placenta. *Salmonella* Dublin was cultured in pure growth from foetal stomach contents, confirming this as the cause of abortion.

Schmallenberg virus serology

Figure 16 shows the proportion of National Milk Records (NMR) bulk milk samples testing positive for Schmallenberg virus(SBV) antibody, by ELISA, by country, from Q1 2020 to Q3 2025 inclusive. This data is kindly provided under agreement from National Milk Records (NMR) to support the collection of disease surveillance information across GB. NMR provide milk testing for endemic disease in cattle. Most of the bulk milk samples tested will be routine quarterly surveillance ('monitoring') and a few may be part of a clinical disease investigation ('diagnostic'), but these are not differentiated in Figure 16 In line with agreed APHA reporting, the number of samples tested is not shown. For further information on this data please contact vetenquiries@nmrp.com.

Notes about Figure 16:

1. Where no samples were tested for SBV in a quarter, this is labelled as NT (not tested) on the graph.

2. Where samples were tested, but with no positive results, these are shown as blank columns on the graph.

3. In some cases, samples are not geo-referenced. They are included in the GB total only and as such the percentage positive by country may not equate to the GB percentage positive.

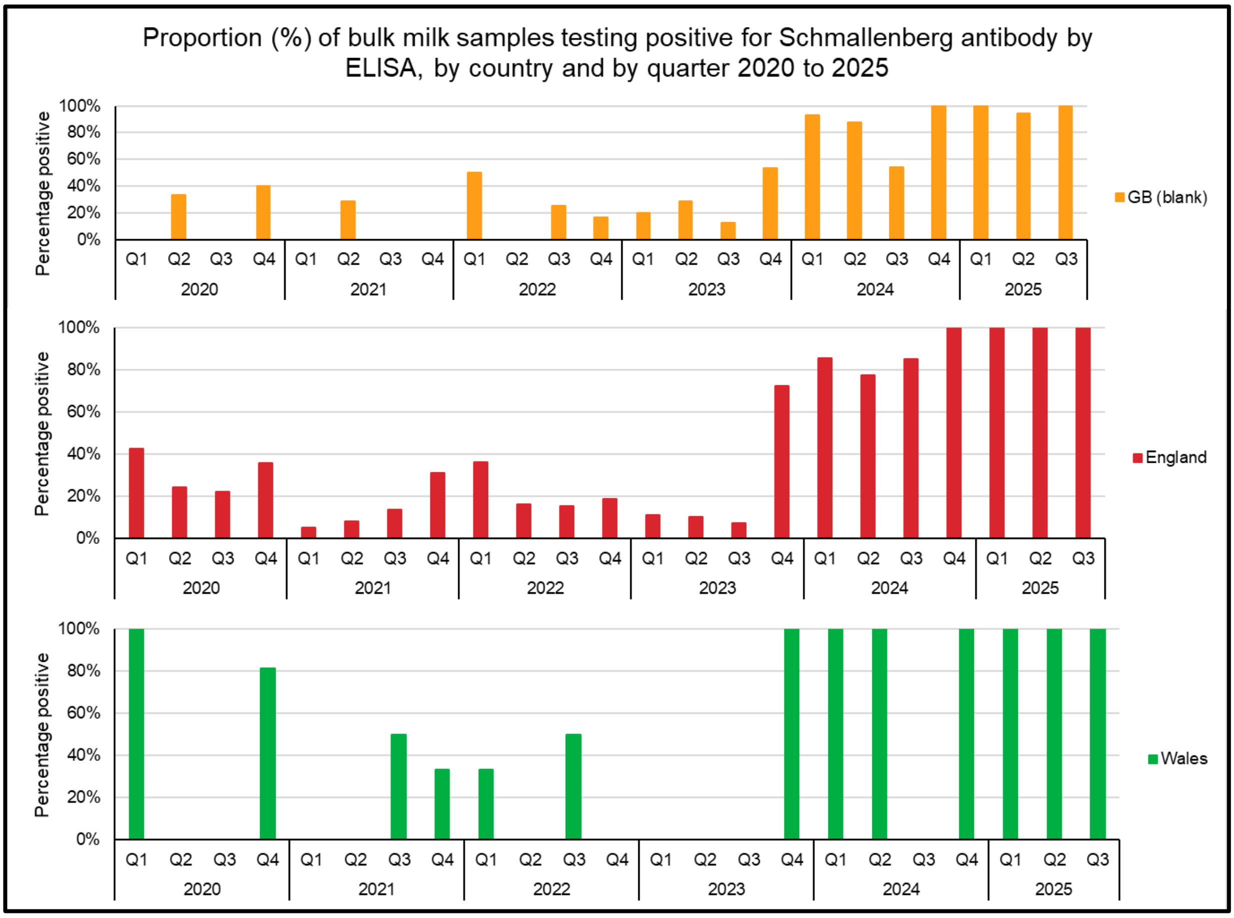

Figure 16: Proportion (%) of bulk milk samples testing positive for SBV antibody by ELISA, by country, and by quarter Q1 2020 to Q3 2025* (*to date)

Acknowledgements for the SBV data: Eamon Watson MRCVS, NMR Product Manager and Karen Bond MRCVS, NMR Veterinary Team Lead

Congenital hypotrichosis in a Holstein calf

A Holstein calf sired by a new AI bull was born without a developed haircoat and was submitted for postmortem examination. Gross examination found the pigmented and non-pigmented parts of the skin to be equally affected (Figure 17). There was also marked subcutaneous oedema over the head, body and legs. The calf tested negative for BVDV. Histopathology of various skin sections confirmed congenital hypotrichosis. Apart from BVD, iodine deficiency (unlikely in this multiparous cow on a dairy ration), and genetic abnormalities are potential causes of this condition. Both viable and non-viable forms of congenital hypotrichosis have been previously described in Holstein Frisian calves, and the latter was suspected in this case.

Figure 17: Hair loss due to congenital hypotrichosis in a Holstein calf

Alpha-mannosidosis in a Belted Galloway calf

A Belted Galloway calf was submitted to investigate ongoing issues with stillbirths and poor calf viability. The submitted calf was deformed and had been stillborn. The farm had sixty animals, with thirty breeding cows. At the time of submission, for the 2025 calving season, six calves had been born either with deformities or poor viability, dying shortly after birth. Eighteen other calves had been born healthy, without known issues. Previous submissions of calves had not yielded a diagnosis despite extensive testing.

Gross postmortem findings included arthrogryposis of the hindlimbs, hepatomegaly, a flaccid rounded heart, and excess foetal fluid within the abdomen.

Due to the BTV situation at that time for that area, and lesions seen in the brain, after triage, a test to exclude for Bluetongue Virus was actioned, alongside other testing for Schmallenberg virus, BVD, and general bacteriology. All testing returned negative results. Histological examination revealed degeneration and atrophy of the brain (in particular the hindbrain) and accumulation of intracellular storage material in the brain, liver cells, renal tubular epithelium and, possibly, bronchiolar epithelium, consistent with a lysosomal storage disease. The spectrum of changes was consistent with what has been reported in cases of alpha-mannosidosis in the Belted Galloway breed.

Alpha-mannosidosis is a recessive genetic condition, recognised in Belted Galloway, Angus, and Murray Grey cattle. Affected calves may be stillborn or, if born alive, show progressive neurological impairment from birth. Skeletal deformity (including arthrogryposis) and growth retardation is often also reported in cases. The enlargement of the liver and kidneys in these cases is due to accumulation of storage material in hepatocytes and tubular epithelium. Neuronal degeneration and loss led to atrophy of the brain and compensatory dilation of the ventricular system (hydrocephalus). The globoid, flaccid enlargement of the heart may also be related to the storage disorder, although no storage material was evident on light microscopy.

It was advised that the farmer considered screening his herd for the condition to identify any carriers, and plan breeding to reduce the risk of further calves being affected. Further information on the condition, and testing available, can be found in the references below.

Embury DH, Jerrett IV. Mannosidosis in Galloway Calves. Veterinary Pathology. 1985;22(6):548-551. doi:10.1177/030098588502200607

Entry in the Online Mendelian Inheritance in Animals catalogue: https://www.omia.org/OMIA000625/9913/

Belted Galloway Society: http://www.beltedgalloways.co.uk/features/alpha-mannosidosis/

Persistent hyperplastic primary vitreous in a suckler calf

A two-month-old suckler calf was submitted to investigate the cause of congenital blindness. The animal had been born mid-June to a multiparous cow. Fertility issues had been reported in the herd with several animals testing positive on serology for Schmallenberg virus (SBV). The animal was born blind, although there was a pupillary light reflex present on examination. No other issues were reported in other calves. The calf showed no behaviour consistent with being a BTV-related “dummy” calf . The dams had been vaccinated against *Clostridium chauvoei.* The herd was BVD negative on a recent youngstock screen. During the housed period cows were fed rolled barley, protein concentrate mix and round bale grass silage. The animal was accepted for postmortem examination after Bluetongue virus-3 had been excluded on clinical grounds.

There were mild ocular changes seen on initial gross examination, consisting of microphthalmia and an opacity of the lens. There were no changes in the brain suggestive of in-utero BTV-3 infection. Ocular pathology once fixed was striking (Figures 18 & 19). The corneas of both eyes appeared cloudy, and there was bilateral lens opacity. On cut sections the lens in both eyes appeared displaced rostrally into the anterior chamber, as well as filling the anterior chamber in one eye. A thickened, cream coloured membrane was attached to the posterior pole of both lenses. A thin membranous cord led from the membrane to the optic disc. Otherwise, both lenses appeared formed. The retina, in the worst affected eye, appeared thickened and folded. Histopathology was consistent with hyperplastic primary vitreous with a persistent hyaloid artery, retinal dysplasia, bilateral cataract, and microphthalmia. This condition has not been reported in cattle, although it has been reported in other farmed species (swine and camelids), alongside companion animals (dogs and cats), with a genetic component proposed in the former.

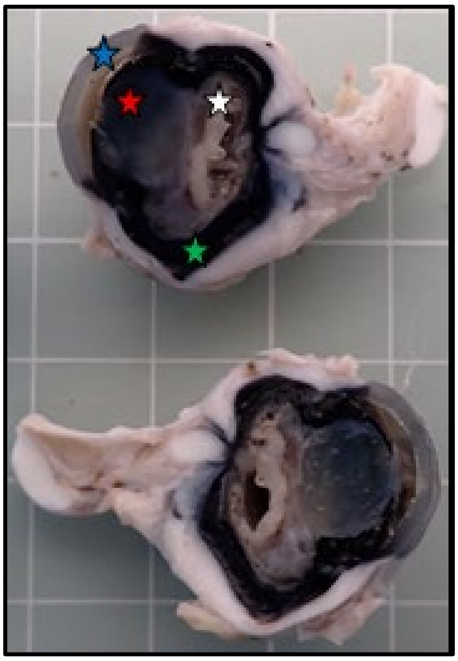

Figure 18: please see below

Figure 18 (above) and 19 (below): persistent hyperplastic primary vitreous of both eyes. White star indicates thickened cream coloured membrane. Red star indicates rostral displacement of the lens into the anterior chamber. Green star indicates thickening and folding of the retina. Blue star indicates thickening and opacity of the cornea

Mastitis

There were no significant trends for this quarter.

Centre of Expertise for Extensively Managed Livestock

The COEEML was developed by APHA to address potential surveillance gaps for extensively managed animals. Extensive management of livestock potentially makes regular or close inspection for disease detection more challenging. The Centre is based at the APHA Veterinary Investigation Centre in Carmarthen; however, it is a Great Britain-wide resource and forms part of the wider veterinary surveillance system operated by APHA. For more details, please see the COEEML pages on the Vet Gateway.

Antimicrobial use and resistance

The Veterinary Antibiotic Resistance Sales and Surveillance (UK-VARRS) Report 2024 has recently been published by the Veterinary Medicines Directorate (VMD): Veterinary Antimicrobial Resistance and Sales Surveillance 2024 - GOV.UK

In addition, the latest RUMA Targets Task Force report can be found at: Latest RUMA Agriculture Targets Task Force report released – 18 November 2025 – RUMA

The Medicine Hub, a voluntary industry initiative, developed and managed by AHDB, was launched in 2021 and provides a central location for the collection of medicine data, including antibiotic use: Medicine Hub for dairy, beef and sheep farmers | AHDB

Chemical food safety

The latest Chemical Food Safety Reports can be found at: APHA chemical food safety reports (livestock) - GOV.UK

Toxic conditions

Ragwort poisoning in fatteners

A heifer and a bullock, from a group of 39 cattle aged approximately 12 months, which had been on the premises for three months and which had been euthanased, were submitted to APHA Shrewsbury for postmortem examination. The group was in poor condition, and eleven other animals were reported to have died. Both had a large volume of ascitic fluid, marked oedema in the mesentery and abomasal folds, excess fluid in the pericardial sac, pleural effusion, and pale firm small livers. Histopathological examination identified a marked, chronic, hepatopathy with portal fibrosis, ductular reaction, bile twiglets and hepatocyte hypertrophy. These features were typical of pyrrolizidine alkaloidosis which usually develops after long term exposure to the hepatotoxin of ragwort (*Senecio jacobaea*). Young growing cattle are the most susceptible and the prognosis in affected cattle is guarded. It is recommended to investigate for possible access to ragwort which should be removed, or the animals prevented from eating, to prevent further animals being exposed. The food safety aspect should be considered in older animals that are at finishing weight.

Acorn (Quercus) toxicity in a five-month-old lamb

There were cases of acorn toxicity seen in cattle and sheep in Q3 2025. A lamb was submitted to investigate increased mortality. From a batch of 250 lambs, ten had died over the preceding three days. Clostridial vaccination had been administered, and regular faecal egg counts had performed. The lambs were last treated with levamisole three days prior to submission, following a high faecal egg count of 850epg. Mineral drenches had been administered to the lambs earlier in the year.

At postmortem examination, petechial haemorrhages were noted, scattered diffusely throughout the subcutaneous tissues. The rumen was distended with gas. The ruminal contents were green foam mixed with grass and large numbers of acorns (200g of whole acorns were recovered, with more partially digested or broken into pieces). The pH of the rumen liquor was 6.2. The intestinal contents were liquid brown. A large tapeworm was found in the small intestine and caecal worms were also detected. The right kidney was enlarged, friable, and dark red in colour. Faecal egg counts demonstrated a high *Trichostrongyle* count of 1400epg. Speciation testing indicated 6% of these were *Haemonchus*.

The most significant gross postmortem finding was the presence of large numbers of acorns in the rumen. The swollen and haemorrhagic kidneys were also highly suspicious of acorn toxicity. It was advised to remove the lambs from the affected field, or if this was not possible, to consider fencing off the area where acorns had fallen, or to regularly remove the acorns that have fallen to the ground.

The anthelmintic treatment, administered three days prior to submission, made interpretation of the faecal parasitology difficult. Nonetheless the faecal egg count was still high and there was visible evidence of caecal worms and tapeworms within the alimentary tract. Further screening of the remainder of the group was advised, as well as a post-treatment reduction test, to ensure that to the product used had been effective.

Horizon scanning

International Disease Monitoring (IDM) horizon-scanning activities monitor for major, notifiable, or new and re-emerging animal disease outbreaks worldwide. This is done to provide an early warning and to assess the risks they may pose to the United Kingdom (UK), particularly for those diseases which impact on animal health and welfare, international trade, public health, or wider society. IDM also assess the risk that animal diseases might come into the UK through the trade in animals or animal products (legal or illegal), through movements of wildlife, or through the movement of fomites and vectors such as insects which may carry infectious disease. These outbreak assessments are used to guide decisions how to manage or reduce the risks and are published on the web: Animal diseases: international and UK monitoring.

Bluetongue virus (BTV) in Europe: Further information can be found at: Bluetongue virus in Europe.

Epizootic Haemorrhagic Disease (EHD): Epizootic haemorrhagic disease in Europe

Foot and Mouth Disease (FMD):
Links to information on differential diagnoses can be found here:
Differential diagnosis of diseases causing oral lesions in cattle - Holliman - 2005 - In Practice - Wiley Online Library
Differential diagnosis of oral lesions and FMD in sheep

Influenza A (H5N1) of avian origin in domestic livestock in the USA

On 25 March 2024, the United States of America (USA) made an immediate notification to the World Organisation for Animal Health (WOAH) of an outbreak of influenza A of avian origin (H5N1) affecting dairy cattle in Texas. The outbreak strain, a high pathogenicity avian influenza (HPAI) virus strain, belonged to clade 2.3.4.4b, genotype B3.13. This genotype has never been detected outside of the Americas. Further information can be found here: Influenza A (H5N1) of avian origin in domestic livestock in the USA - GOV.UK

APHA publications of interest

Monthly APHA disease surveillance reports can be found at this link: APHA disease surveillance monthly reports - GOV.UK (www.gov.uk)

APHA focus articles in the Veterinary Record can be found at: APHA focus articles in the Veterinary Record - GOV.UK (www.gov.uk) including a recently published surveillance focus article on Nodular skin disease in cattle (wiley.com)

The 2024 edition of the *Salmonella* in animals and feed in Great Britain (previously called *Salmonella* in Livestock Production in GB) has been published and is now available here: Salmonella in animals and feed in Great Britain

SWINSON V; REICHEL R; PITTALIS L; BIDEWELL C; WIGHTON H (2025)
Brain lesions in BTV-3-positive calves in England (letter).
Veterinary Record 196 (5) 192-193 https://doi.org/10.1002/vetr.5293

MASTIN A; Gubbins S; Ashby M; PAPADOPOULOU C; WADE C; Batten C (2023) BTV and EHDV – what's new and what do I need to know? Veterinary Practice: InFocus 4th October 2023. BTV and EHDV – what's new and what do I need to know? - Veterinary Practice (veterinary-practice.com)

Data Protection:
For information on how we handle personal data visit www.gov.uk and search Animal and Plant Health Agency Personal Information Charter.

This publication is available at:

https://www.gov.uk/government/collections/animal-disease-surveillance-reports

Any enquiries regarding this publication should be sent to us at SIU@apha.gov.uk

http://apha.defra.gov.uk/vet-gateway/surveillance/index.htm

The Animal and Plant Health Agency (APHA) is an executive agency of the Department for Environment, Food & Rural Affairs, and also works on behalf of the Scottish Government and Welsh Government and Food Standards Agency to safeguard animal and plant health for the benefit of people, the environment and the economy.