



Animal &  
Plant Health  
Agency



# Great Britain small ruminant quarterly report, disease surveillance and emerging threats

## Volume 28: Quarter 3 – July to September 2025

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## Introduction and overview

This quarterly report reviews disease trends and disease threats in Great Britain (England, Scotland and Wales) for the third quarter of 2025, July to September. It contains analyses carried out on disease data gathered from the Animal and Plant Health Agency (APHA), the Veterinary Services division of Scotland's Rural College (SRUC) and partner postmortem providers; and intelligence gathered through the Small Ruminant Species Expert networks. In addition, links to other sources of information, including reports from other parts of the APHA and the Department of Environment, Food and Rural Affairs (Defra) agencies, are included. A full explanation of [how data is analysed](#) is provided in the annexe available on GOV.UK.

### IMPORTANT NOTICE REGARDING THE DATA USED IN THIS REPORT

The analysis and reporting in this report are based on data available on 18 November 2025. Analysis and trends based on later updated data, may therefore differ from this report.

## APHA's Emerging and Endemic Disease Alert System (EEDAS)

This is a component of the communications from our scanning surveillance network and a system that the APHA uses to keep you up to date with significant disease alerts and information, projects, publication of reports and other items. This is independent of the notifiable disease alert system.

To receive these notifications please respond to [siu@apha.gov.uk](mailto:siu@apha.gov.uk), providing your preferred:

- email address you would like us to use
- mobile telephone number if you wish to receive text alerts

We hope that you find this EEDAS messaging system to be beneficial, and any suggestions or feedback are welcome.

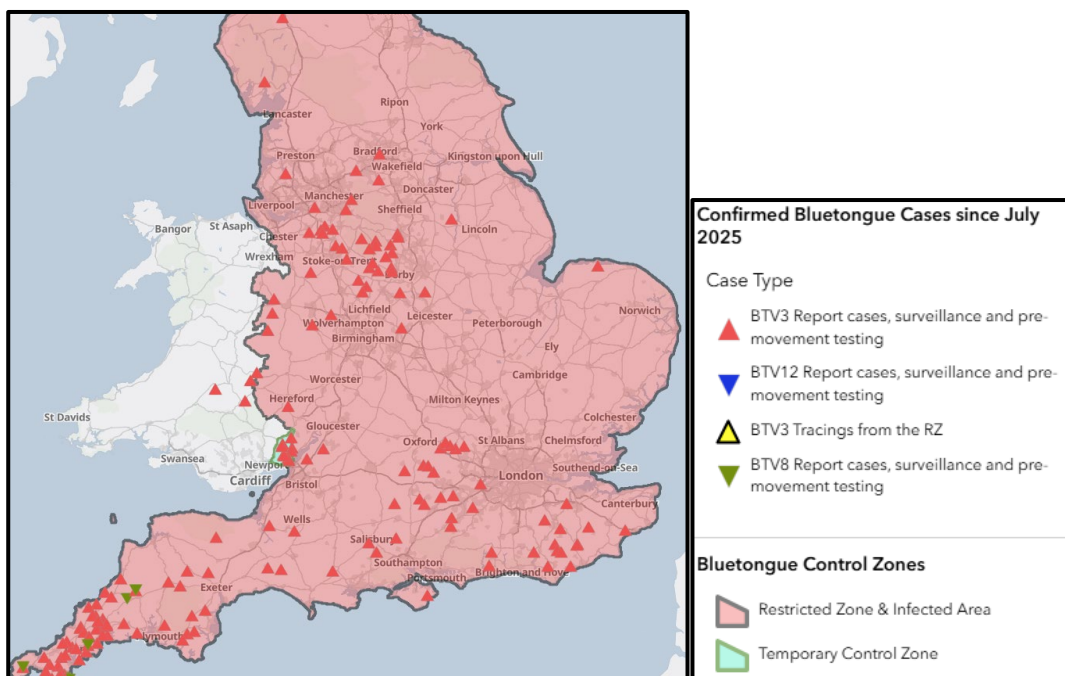
# Issues and trends

## Weather

Details can be found at the [Met Office climate summaries](#) and the [Met Office UK temperature, rainfall and sunshine anomaly graphs](#).

## Bluetongue

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. These interactive maps can be found at [Bluetongue Cases and Zones](#).



**Figure 1: Map of England and Wales showing the confirmed bluetongue cases between July and 6<sup>th</sup> November 2025**

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 \(GOV.UK\)](#).

# Unusual diagnoses

## Congenital neurological symptoms associated with a lysosomal storage disease in a goat kid

A neonatal goat kid was euthanased and submitted for postmortem examination (PME). Clinically the animal displayed a head tremor, blindness, and deviation of the neck and had been unable to stand since birth. Gross findings were unremarkable; however, histopathology of the brain and spinal cord found changes consistent with a lysosomal storage disease, most likely mucopolysaccharidosis (MPS) type III, a group of diseases commonly known as Sanfilippo syndromes. These are typically autosomal recessive disorders and the fact that the twin sibling was unaffected further supports this diagnosis. There was no evidence of Schmallenberg virus (SBV) involvement.

## Pasteurellosis due to *Mannheimia glucosida* in a 3-month-old lamb

A 3-month-old fattening lamb was submitted to Carmarthen Veterinary Investigation Centre (VIC) to investigate the cause of death. It was the second lamb that had died over a period of 3 days. The lamb group had recently been wormed with oral ivermectin and administered a vitamin drench. An oral white anthelmintic had been given earlier in the season. The submitted lamb was noticed to be showing signs of lethargy and malaise during gathering of the lambs and was removed from the main mob. It was treated with injectable Penicillin and Streptomycin. Two days following antibiotic treatment, the lamb was again lethargic with a mild nasal discharge, then, following a short period of tremors, recumbency and death ensued. The lambs had been weaned 1 week previously, and ad-lib creep feed had been available for several weeks prior to weaning. The dams were vaccinated with multi-valent clostridial vaccine pre lambing.

The main findings on PME were changes to the respiratory system, with a large volume of pink-white froth in the internal and external nares. The larynx and the tracheal mucosa were dark purple colour and contained a large volume of pink-white froth. The lungs were diffusely a very dark purple colour, oedematous and heavy with the cranial, middle and the ventral aspect of the caudal lobes having a bright purple mottled colouration.

A heavy growth of *Mannheimia glucosida* was cultured from lung tissue and a moderate burden of coccidia and gastrointestinal nematodes were detected.

*Mannheimia glucosida* is an inhabitant of the upper respiratory tract in healthy sheep but can also be pathogenic, causing pneumonic pasteurellosis as seen in this lamb.

*Mannheimia glucosida* can also cause mastitis in sheep. As well as control strategies to limit the risk of pasteurellosis within the flock, it was also advised to monitor the parasitic burden and coccidiosis burden of the lamb mob throughout the current grazing season, as the parasitology results may have been affected by recent treatment.

## Goat disease surveillance dashboard outputs

The most frequent diagnoses from goat submissions made in Q3 of 2025, compared to Q3 in 2024, and Q3 for 2016 to 2025 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 small ruminant [disease surveillance dashboard](#) which was launched in October 2017.

**Table 1: Great Britain scanning surveillance five most frequent goat submission diagnoses in quarter 3 (Q3) of 2025, Q3 of 2024 and Q3 for 2016 to 2025**

	5 most frequent diagnoses Q3 2025	5 most frequent diagnoses Q3 2024	5 most frequent diagnoses Q3 2016 to 2025
1	<b>Parasitic gastroenteritis (PGE)</b>	Parasitic gastroenteritis	Parasitic gastroenteritis
2	<b>Coccidiosis</b>	<i>Clostridium perfringens</i> type D disease	Johne's disease
3	<b>PGE - Haemonchosis</b>	PGE - Haemonchosis	<i>Clostridium perfringens</i> type D disease
4	<b><i>Clostridium perfringens</i> type D disease</b>	Johne's disease	Coccidiosis
5	<b>Pneumonia (<i>Mycoplasma</i>)</b>	Coccidiosis	PGE - Haemonchosis

Parasitic gastroenteritis (PGE) excludes PGE due to *Haemonchus* and PGE due to *Nematodirus*.

## Sheep disease surveillance dashboard outputs

The most frequent diagnoses from sheep submissions made in Q3 of 2025, compared to Q3 in 2024, and Q3 for 2016 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 small ruminant [disease surveillance dashboard](#) which was launched in October 2017.

**Table 2: Great Britain scanning surveillance 10 most frequent sheep submission diagnoses in Q3 of 2025, Q3 of 2024, and Q3 for 2016 to 2025**

	10 most frequent diagnoses Q3 2025	10 most frequent diagnoses Q3 2024	10 most frequent diagnoses Q3 2016 to 2025
1	Parasitic gastroenteritis (PGE)	Parasitic gastroenteritis (PGE)	Parasitic gastroenteritis (PGE)
2	PGE due to <i>Haemonchus</i>	PGE due to <i>Haemonchus</i>	PGE due to <i>Haemonchus</i>
3	Pine or cobalt deficiency	Pine or cobalt deficiency	Pine or cobalt deficiency
4	Pneumonia due to <i>M. haemolytica</i>	Pneumonia due to other causes	Pneumonia due to <i>M. haemolytica</i>
5	Hyposelenaemia	Pneumonia due to <i>M. haemolytica</i>	Pneumonia due to other causes
6	PGE due to <i>Nematodirus</i>	Hyposelenaemia	PGE due to <i>Nematodirus</i>
7	<i>Clostridium perfringens</i> type D disease	Coccidiosis	Hyposelenaemia
8	Pneumonia due to other causes	Pneumonia due to mycoplasma	Coccidiosis
9	Tickborne fever	Tickborne fever	<i>Clostridium perfringens</i> type D disease
10	Systemic pasteurellosis	Systemic pasteurellosis	Chronic fascioliasis

Parasitic gastroenteritis (PGE) excludes PGE due to *Haemonchus* and PGE due to *Nematodirus*.

Pneumonia due to other causes include abscessation and other bacteria not specifically described.

# Changes in disease patterns and risk factors

## Syndromic analysis for sheep

Syndromic alerts were raised this quarter, in comparison to the quarter average of the previous 5 years for England and Wales, for the following diseases:

### Increases

- *Bibersteinia trehalosi* septicaemia
- Ovine Pulmonary Adenocarcinoma
- Tick-borne fever

## Parasitology

### Goats

Several cases of coccidiosis were diagnosed on carcase submissions this quarter. These were typically in recently weaned goats ranging in age from 11-16 weeks. In all cases, diarrhoea and mortality in the group were described. Where submissions comprised more than one carcase the coccidial oocyst counts often varied considerably between faecal samples from individual animals. In one case where 3 kids were received, all had reddening of intestinal mucosa with pneumonia in one. The coccidial oocyst counts were <50 oocysts per gram (opg), 17750 opg and 129300 opg respectively, demonstrating the value in submitting samples for testing from more than one animal when investigating disease. The consistency of the faeces can affect counts, in addition to those affected, being at different stages of patency of infection. In this case one kid had 98% *Eimeria arloingi* and 2% *Eimeria ninakohlyakimovae* oocysts on speciation; the other had all the main pathogenic species comprising 29% *E. arloingi*, 34% *E. ninakohlyakimovae*, 25% *Eimeria christensenii* and 2% *Eimeria caprina*.

Haemonchosis was diagnosed in several cases based on examination of faeces samples (faecal worm egg count and differential fluorescence of *Haemonchus* sp. eggs). In one typical case samples from a group of Golden Guernseys with pale mucous membranes had a high faecal egg count and 86% of eggs were identified as *Haemonchus* sp.

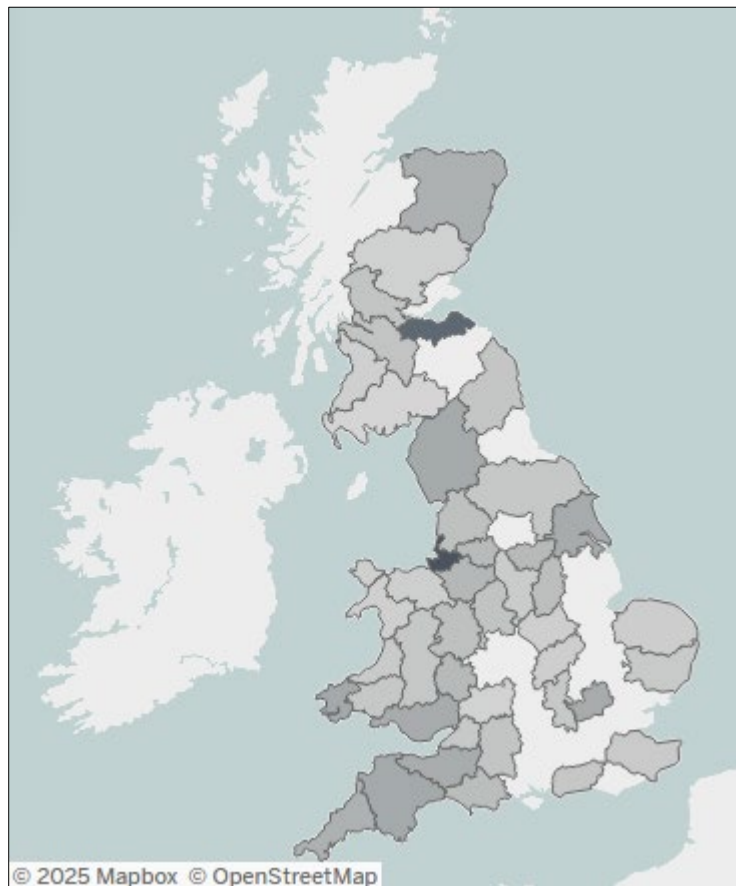
### Sheep

There were no confirmed cases of acute fasciolosis in quarter 3 this year, continuing the trend for later acquisition of infections in sheep. This was likely influenced by drought conditions earlier in the year affecting the intermediate snail host presence on pasture. Messaging within the sector continues to emphasise these changes, and the need to use

diagnostic tests to determine infection status and age of fluke present, to inform the need to treat, and choice of flukicide.

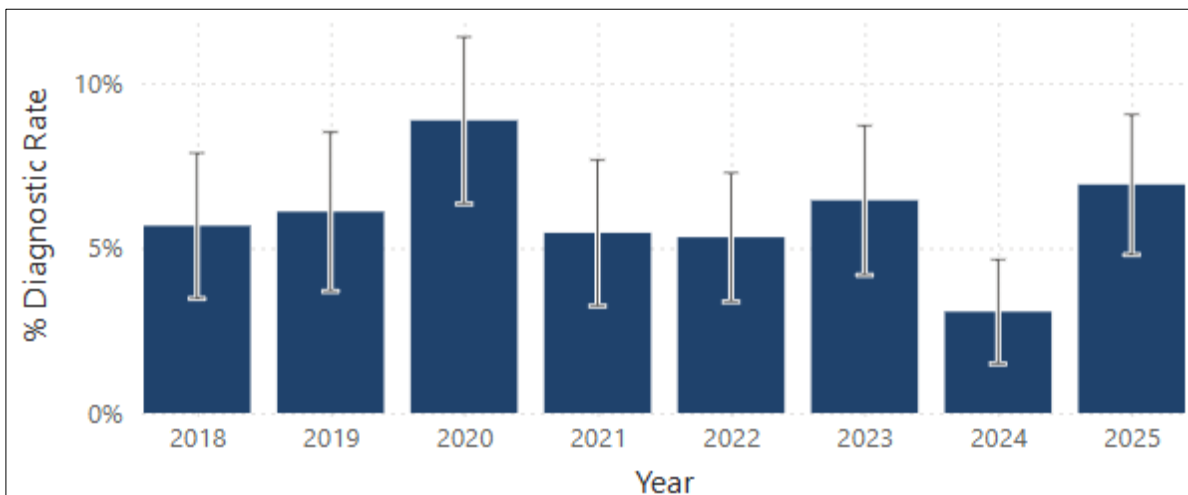
Diagnoses of haemonchosis continued throughout the summer period in most areas of GB (figure 2), with 38% in adult sheep, 35% in post weaned lambs and 9% in pre-weaned lambs (the remainder had age not known or were mixed age groups). “Found dead” and “wasting” were the most reported presenting sign. From postmortem examination of carcasses, worm egg counts on faeces, and total worm counts on abomasal and small intestine contents, were used to confirm the cause of death. The number of adult *Haemonchus* sp. worms present in the abomasum exceeded burdens associated with fatal disease (3 000-10 000) in many cases, in addition to the presence of immature larval stage 4 (L4s). Mixed infections with other gastrointestinal nematode species were common.

From faeces sample submissions, Trichostrongyle-type egg counts were often very high and the proportion of *Haemonchus* sp. eggs was determined using differential staining (Peanut agglutinin or PNA) to reach a diagnosis. Mixed infections were common and determining the proportion of *Haemonchus* sp. can help with decisions on which anthelmintic to use. Some cases had low faecal egg counts, as shown in one case where Haemonchosis had been diagnosed at postmortem examination and a wormer treatment given to the remainder of the group. Deaths continued and postmortem examination of a second ewe showed only 600 Trichostrongyle-type eggs in faeces, but 9 500 adult *Haemonchus* sp. worms and over 5 000 immature L4s were counted in abomasal contents, reflecting ongoing risk from pasture.



**Figure 2: Map showing that haemonchosis was confirmed in sheep in many regions of GB in Q3, 2025**

Diagnoses of parasitic gastroenteritis due to *Nematodirus battus* showed an increase in the period compared to the same period in 2024 (figure 3), mainly in northwest England and Scotland. Deaths typically occur in young lambs when the weather conditions favoured a mass hatch of eggs on pasture, and this coincides with pre-weaned lambs beginning to eat more grass. In some years and in some parts of GB the hatch will occur gradually, and, in this scenario, lambs may face a trickle challenge allowing immunity to develop without deaths occurring. Sheep keepers may utilise the Sustainable Control of Parasites in Sheep (SCOPS) forecast tool, based on meteorological data, to predict the risk for their farm. Many, however, use a fixed date for treatment each year, which means that some years anthelmintic treatment may be given too early or too late, and this may have led to an increase in cases this quarter.



**Figure 3: GB diagnoses in Q3 of PGE Nematodirosis in sheep as % of diagnosable submissions, showing an increase in 2025 compared to 2024. The error bars indicate a 95% confidence interval.**

## Systemic disease

### Drenching gun injury with subsequent spread of infection to the brain in a lamb

A 4-month-old lamb was submitted to Starcross Veterinary Investigation Centre after displaying neurological signs, including unilateral paralysis, which had not responded to antibiotic and steroid treatment. The group had been wormed two weeks previously, and two other animals had shown similar signs prior to dying. Gross postmortem findings were consistent with a drenching gun injury leading to swelling and abscessation of the soft tissues around the left side of the larynx (figure 4), which likely occurred at the time of anthelmintic drenching. There was evidence of subsequent spread of infection to the brain, most likely via the haematogenous route, with small abscesses throughout the left cerebral hemisphere (figure 5), which accounted for the presenting signs. A review of drenching technique on farm was recommended.



**Figure 4: Drenching gun injury leading to swelling and abscessation of the soft tissues of the larynx of a 4-month-old lamb**



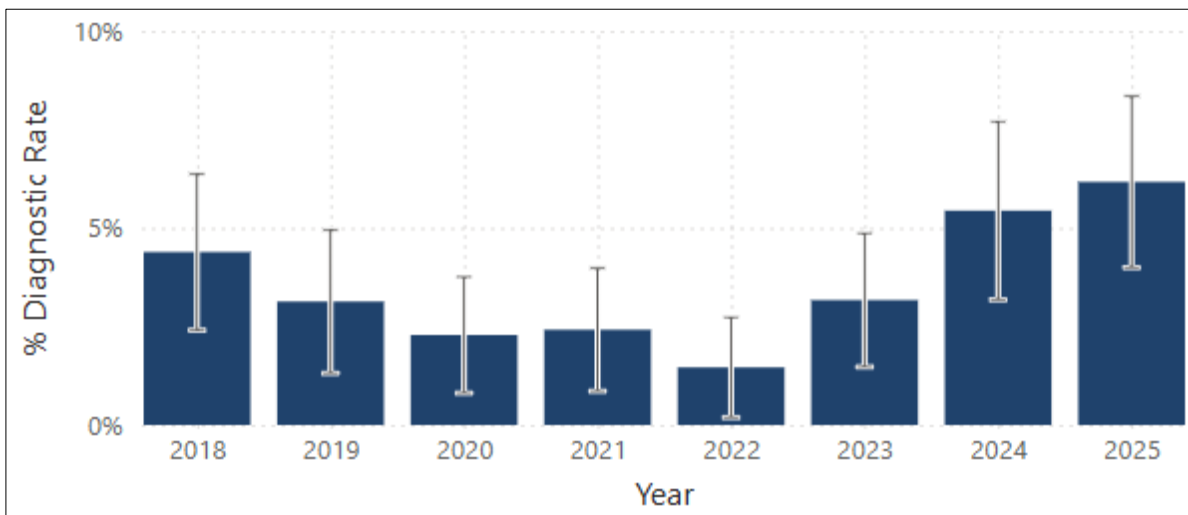
**Figure 5: The tip of the scalpel points to an abscess in the cerebral hemisphere of 4-month-old lamb, secondary to a drenching gun injury**

## Post-dipping cellulitis, lameness, diarrhoea and mortalities

Severe cellulitis, lameness and diarrhoea, affecting approximately 50 per cent of 1200 ewes and 2000 lambs, were reported during the two weeks after a flock had been dipped. Thirty lambs were found dead across multiple fields during this period, and the carcasses of 6, 4-month-old lambs were submitted for postmortem examination. Five of the 6 examined exhibited severe, predominantly unilateral cellulitis over the thorax and abdomen, with a pocket of pus corresponding to the vaccination site. A range of bacteria was cultured including *Streptococcus uberis*, *Trueperella pyogenes*, *Fusobacterium* sp. and *Bacteroides* sp. *Erysipelothrix rhusiopathiae* was cultured from the liver of the sixth lamb, and from the lung of a ewe. *Listeria monocytogenes* was isolated from the lung of a second diarrhoeic ewe. The history indicated that the lambs had received a benzimidazole drench, and their second clostridial vaccination, prior to being dipped along with the ewes. Dipping had taken place over 48-hours without replenishment of the dip solution at the end of day one. Environmental conditions were not ideal, and the dip was thought to have become heavily contaminated with bacteria. It was suspected that the vaccination site acted as a point of entry for infection, followed by the development of cellulitis. Whole flock treatments with ampicillin and oxytetracycline were carried out with a good response. Approximately 5 per cent of cases remained chronically lame and were culled.

## *Bibersteinia trehalosi* septicaemia

There was a significant increase in diagnoses of *Bibersteinia trehalosi* septicaemia recorded for GB during this quarter (figure 6). APHA recorded 9 cases, where their total for the previous 5 years was 31 (mean of 6.2). SRUC recorded 16, where their previous 5-year total was 26 (mean of 5.2). Two of the total cases were yearlings, the remainder were post weaned lambs, and in 15 cases (60%) there was a concurrent disease. PGE was the most diagnosed concurrent disease, but there were also several cases with concurrent Tick-borne fever infection. The late summer/autumn period is typically when outbreaks of *Bibersteinia trehalosi* septicaemia are seen in weaned growing lambs. The specific factors triggering outbreaks are not always clear, however, weather factors, diet change, handling stress, and co-infections such as worms may be involved. The recorded numbers diagnosed will very much underestimate the true numbers of cases occurring, with many diagnosed in the field based on clinical signs and sudden deaths occurring in weaned lambs during the late summer/autumn. Cases diagnosed at the veterinary investigation centres are potentially the more significant cases, where there have been higher losses of lambs in a short period of time.

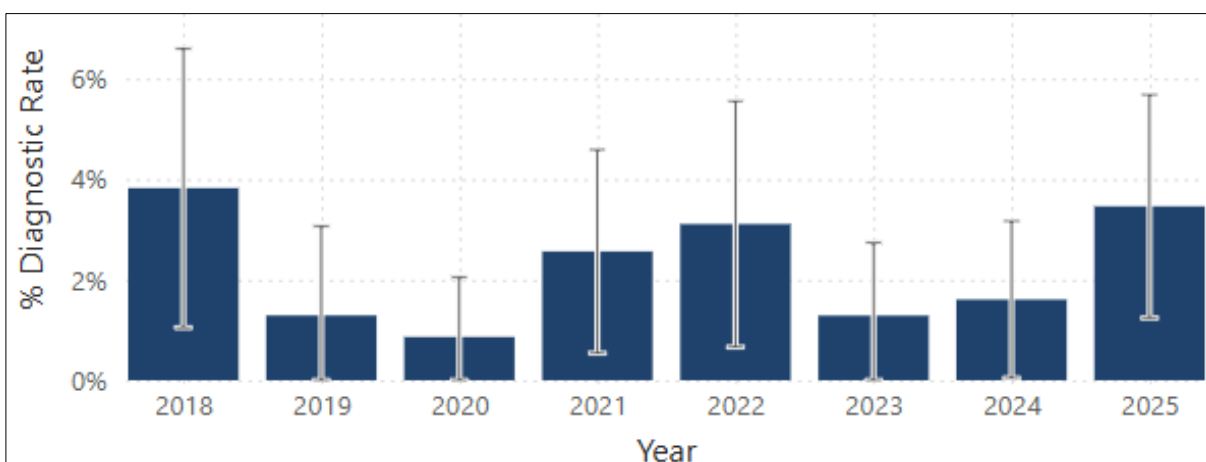


**Figure 6: GB diagnoses for Q3 of *Bibersteinia trehalosi* septicaemia in sheep as % of diagnosable submissions, showing an increase year-on-year from 2022. The error bars indicate a 95% confidence interval.**

## Respiratory disease

### Ovine Pulmonary Adenocarcinoma

There was a significant increase in Ovine pulmonary adenocarcinoma (OPA) diagnoses recorded by APHA this quarter (figure 7), with 9 diagnoses where only 21 had been recorded by APHA over the previous 5 years (mean of 4.2 per year). One diagnosis was in a 10-month-old lamb, the remainder were adults, and the majority were from lowland flocks, from a wide range of regions in England and in Wales. In most cases “found dead” was the reported clinical sign, with “wasting” described for some and respiratory signs observed infrequently. A bacterial co-infection, mostly *Mannheimia haemolytica* pneumonia, was diagnosed in two-thirds of the cases, occurring secondary to the OPA but causing acute death of those cases.



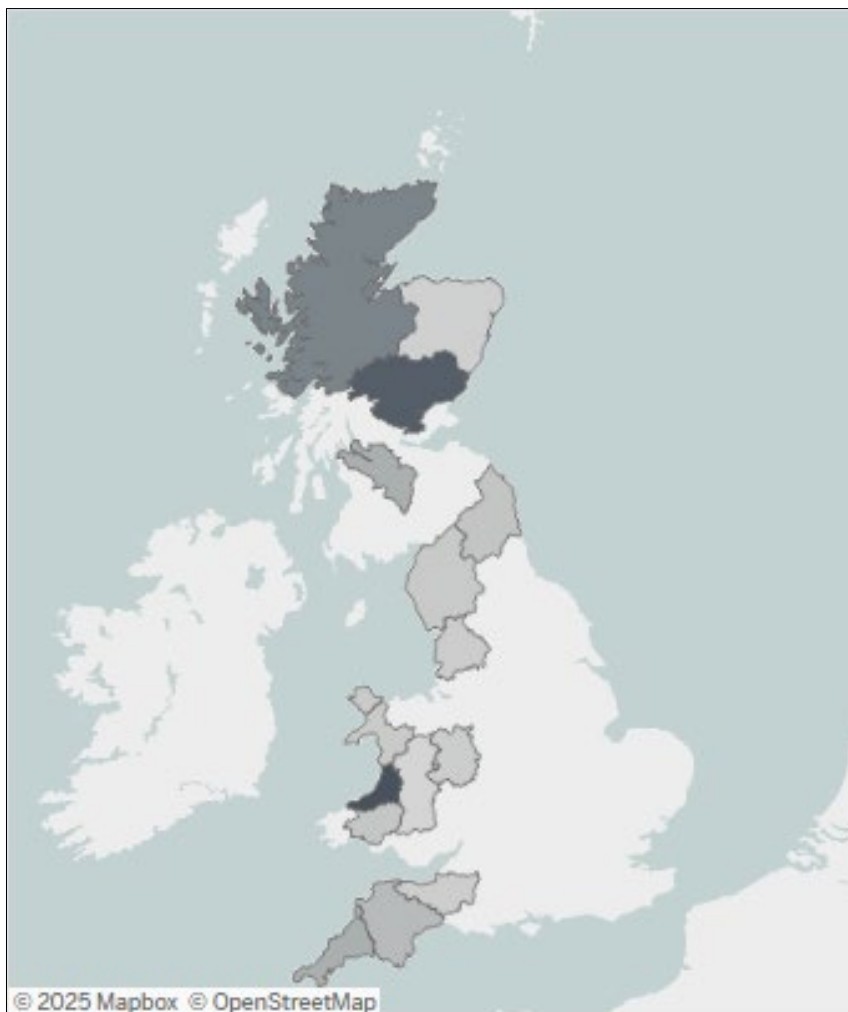
**Figure 7: APHA diagnoses for Q3 of *Ovine pulmonary adenocarcinoma* in sheep as % of diagnosable submissions, showing an increase in 2025 in comparison to previous years. The error bars indicate a 95% confidence interval.**

## Circulatory disease

### Tick-borne fever infection (*Anaplasma phagocytophilum*)

There was a significant increase in diagnoses, with 27 diagnoses of Tick-borne fever (TBF) this quarter, 14 recorded by APHA and 13 recorded by SRUC, where 72 had been diagnosed over the previous 5 years in this quarter (mean of 14.4). Most cases (19) had a concurrent disease diagnosis which included parasitic gastroenteritis, a *Pasteurella/Mannheimia* infection, Mycoplasmosis and Louping Ill, and a range of other infections such as Listeriosis, Pulpy Kidney and Erysipelas. Ten TBF diagnoses were recorded in adult sheep, 13 in post weaned lambs and 4 in preweaned lambs, and production types were recorded as 14 from hill or upland flocks, 11 from lowland flocks, and two cases recorded as finishers, with cases detected in Scotland, the North of England, Wales and South-west England (figure 8).

This represents an increasing trend of TBF diagnoses, which may in part be driven by increasing tick-borne diseases generally, likely resulting from factors such as warmer temperatures and changing land use. The availability of a TBF PCR as an improved diagnostic test, and an increased awareness of the test will also have an influence.



**Figure 8: Map showing the geographic distribution of TBF for Q3, with cases recorded in Scotland, the North of England, Wales and South-west England**

### **Systemic mannheimiosis and TBF infection causing sudden death of yearling ewes**

A yearling ewe was 1 of 6 to die over a 48hr period, with ticks noticed on the affected animals. Gross postmortem examination revealed a large volume of straw-coloured fluid in the pleural space, consolidation of parts of the cranial lung lobes, and small white miliary lesions throughout the liver (figure 9) . *Mannheimia haemolytica* was isolated from both the liver and lung, confirming death had been due to a systemic mannheimiosis. Concurrent Tick-borne fever was confirmed with PCR testing of spleen. As systemic mannheimiosis is not commonly diagnosed in this age of sheep, and immunosuppression due to the tick-borne fever infection could have been a significant factor contributing to this outbreak.



**Figure 9: White miliary lesions throughout the liver of a ewe that died from systemic mannheimiosis and TBF infection**

## **Musculo-skeletal**

### **White Muscle Disease in a growing lamb**

Following the sudden death of two, 13-14-week-old lambs, a carcass was submitted to Carmarthen VIC for postmortem examination. The lambs were at grass with their dams and did not receive any supplementary feed. They had been treated with a combined product containing albendazole, cobalt and selenium five weeks previously.

Unfortunately, the carcase was severely autolysed and had been scavenged, but there was some evidence of a systemic infection grossly, including fibrin tagging between the lungs and internal thoracic wall, and increased pericardial fluid containing a fibrin clot. *E coli* was isolated on bacterial culture of the lungs, spleen, and brain confirming a terminal septicaemia, most likely due to the loss of intestinal integrity prior to death.

Examination of fixed heart muscle showed white streaks within the myocardium (Figure 10), and subsequent histopathological evaluation of the heart found substantial myocardial necrosis. There was a polyphasic pattern of necrosis and repair indicating an ongoing insult to the heart muscle. In young ruminants this pattern of injury and repair is most often seen with vitamin E or selenium deficiency (white muscle disease). Biochemical testing of liver found selenium levels to be at the bottom end of the normal range, a cause for concern in a rapidly growing animal. A complete trace element audit, to include blood sampling of different epidemiological groups with supplementation as appropriate, was recommended. Immediate provision of the lamb group with an injectable formulation of selenium and vitamin E was also advised.



**Figure 10: White discoloured areas in the myocardium of a lamb with white muscle disease**

## Urinary disease

No significant changes to trends. See acorn toxicity case under Toxicity.

## Nervous disease

### **Mannheimia haemolytica meningitis**

Wales Veterinary Science Centre reported two separate cases of meningitis caused by *Mannheimia haemolytica* this quarter.

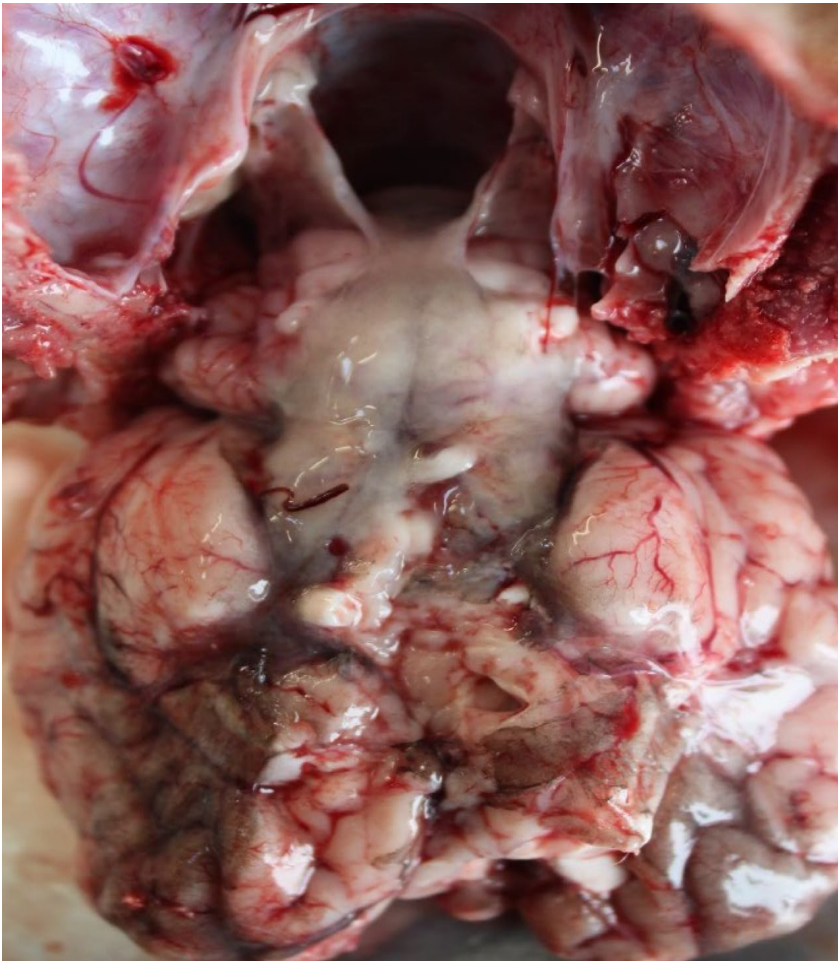
The first case was a three-month-old Texel-cross lamb that had been found recumbent with reduced mentation and opisthotonus. Postmortem examination found translucent, creamy, purulent material around the cerebellum and on the ventral aspect of the brainstem (Figure 11). *Mannheimia haemolytica* was isolated on culture of the brain. Gross examination of fixed brain identified purulent exudate within mildly dilated lateral ventricles, in and around the 4th ventricle, on the ventral aspect of the medulla, obex and proximal spinal cord, and on the dorsal aspect of the cerebellar vermis. Histopathological evaluation confirmed a marked, diffuse, fibrinosuppurative meningitis and ventriculitis. Small colonies of fine, gram-negative coccobacilli were seen associated with these lesions supporting the bacteriological findings.



**Figure 11: Translucent creamy purulent material over the brainstem of a lamb with meningitis due to *Mannheimia haemolytica***

Similar gross findings were seen in the second case, a four-month-old Charolais-cross lamb that had been found dead at grass. Again, a collection of mucopurulent fluid was seen around the brain stem (figure 12) on postmortem examination and *Mannheimia haemolytica* was isolated on bacterial culture. Histopathology in this case also identified a diffuse fibrinosuppurative meningitis and choroiditis and fine gram-negative coccobacilli were seen in association with the lesions.

*Mannheimia haemolytica* is an unusual cause of meningitis in sheep. Interestingly, neither sheep had evidence of concurrent pneumonia, so the source of infection remained unclear.



**Figure 12: Mucopurulent material around the brainstem of a lamb with meningitis due to *Mannheimia haemolytica***

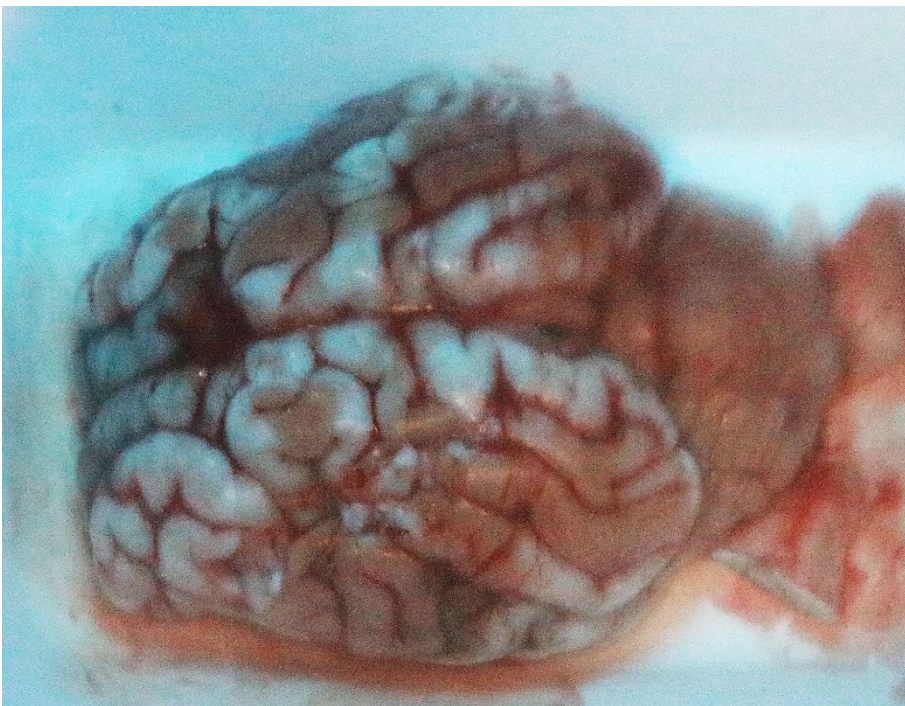
### **Cerebrocortical necrosis (CCN), Haemonchosis and cobalt deficiency in weaned lambs showing neurological signs and deaths**

A dead lamb was submitted to Shrewsbury Veterinary Investigation Centre for PME to investigate the cause of neurological signs, after 4 lambs had developed similar signs within a 10-day period, in a group of 150, mostly replacement, female lambs. There were 550 ewes in the flock, and another 250 lambs in another unaffected group. The affected lambs had presented with circling, recumbency, blindness, incoordination, “eye turning in” and “eye flicking” (presumed nystagmus). The cases had only occurred in the lambs in one field, where there had been similar problems the year before. The lambs had been weaned onto this field 2-3 weeks previously and had received a home-mix lamb creep feed.

Postmortem examination revealed submandibular oedema, enlarged mesenteric lymph nodes and a thickened abomasal mucosa, findings consistent with a significant parasitic gastroenteritis (PGE), and a trichostrongyle-type worm egg of 7050 eggs per gram was confirmed in the large intestinal contents. Worm washes indicated this had been

predominantly contributed to by *Haemonchus* sp. Examination of the brain of this lamb however, found evidence of swelling and there was symmetrical pale UV light fluorescence of the dorsal cerebrum (figure 13), typical of cerebrocortical necrosis (CCN), which was also confirmed histologically as a likely thiamine-dependent form. Dietary change post-weaning, PGE, ruminal upset including acidosis, certain toxic plants (such as thiaminase producing ferns), and water deprivation are considered potential risk factors for thiamine dependent CCN. Cobalt deficiency has also been linked to increased risk of CCN.

Interestingly the liver of this lamb had distinct firm areas throughout, and histology indicated there were changes suggestive of a cobalt or vitamin B12 deficiency, and liver testing confirmed a low borderline liver cobalt result. The farmer had noticed the lambs had seemed hesitant to use the water drinker; therefore, water deprivation may also have been a factor in this case, and the farmer was going to address this with a new drinker. Kidney-lead values were at background levels only, excluding the likelihood of lead involvement.



**Figure 13: Pale autofluorescence of the brain of a lamb with thiamine dependent cerebrocortical necrosis or CCN**

## Reproductive

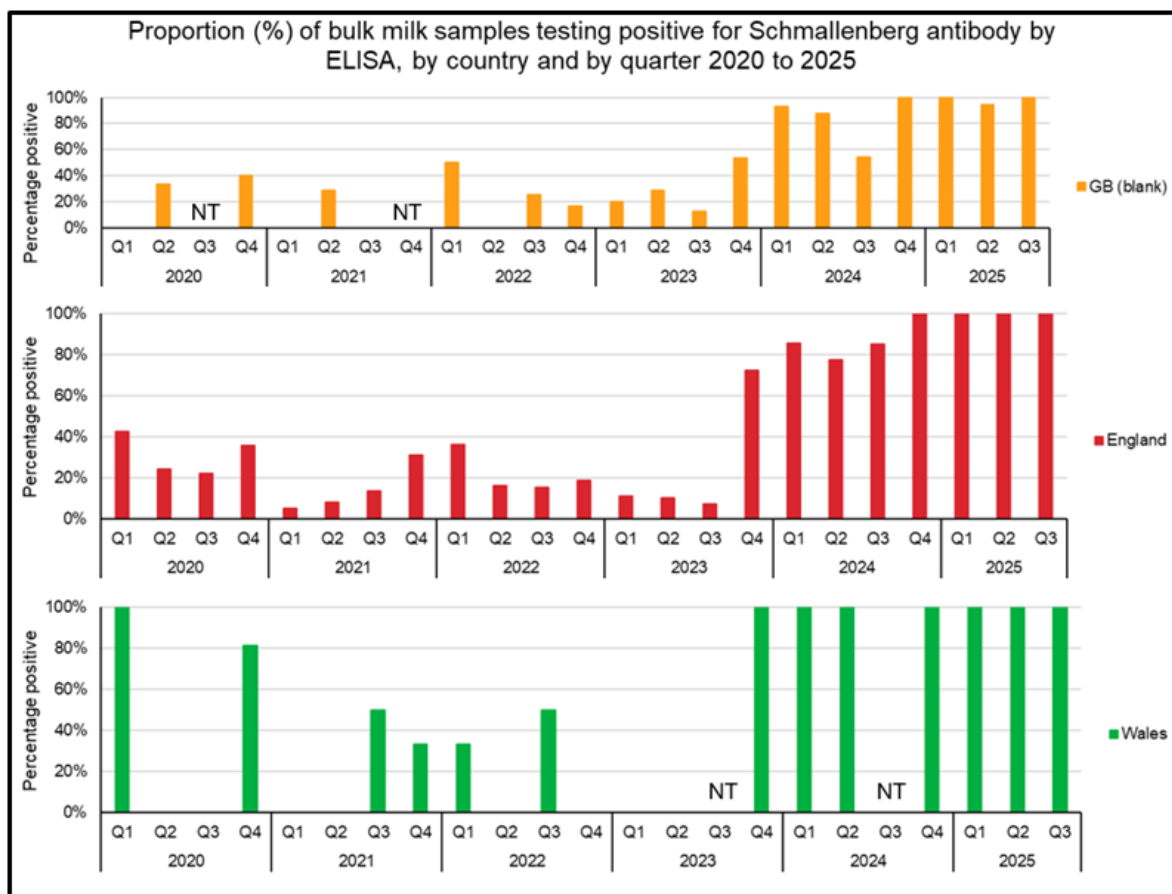
### Schmallenberg virus(SBV) National Milk Records (NMR) antibody data

This data is from cattle only but provides a useful indication of the level and distribution of exposure of cattle to Schmallenberg virus. Figure 14 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. The data show high levels of positive seroconversion in 2024 and 2025 for both England and Wales. 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 12. 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](mailto:vetenquiries@nmrp.com).

#### Notes about Figure 14:

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 14: A graph showing 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.**

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

## Skin

No significant changes.

## Salmonellosis

### Salmonella Typhimurium

A wether ram was submitted to Wales Veterinary Science Centre after being found dead. This was the second death in a group of 35 grazing animals. *Salmonella* Typhimurium Sequence Type 19 was isolated in pure growth from the liver and lung confirming a diagnosis of Salmonellosis.

Reports of [salmonella in livestock, dogs, birds and wildlife in Great Britain](#) on GOV.UK.

## Chemical food safety

[Chemical Food Safety Reports](#) can be found on GOV.UK.

## Toxicity

### 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 the product used had been effective.

## 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](#)

## Centre of Expertise for Extensively Managed Livestock (COEEML)

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, see the [Animal disease scanning surveillance](#) <http://apha.defra.gov.uk/vet-gateway/surveillance/experts/exten-man-livestock.htm> pages on GOV.UK.

# TSE

Surveillance for transmissible spongiform encephalopathies (TSEs) is conducted in the United Kingdom in animals susceptible to the disease. This includes cattle, sheep, and goats. The main aim is to monitor trends in disease incidence and prevalence, to evaluate the effectiveness of TSE disease controls.

There are 2 categories of surveillance – passive and active.

## Passive surveillance

This is when an animal with clinical signs suspicious of BSE or scrapie is reported to an APHA Office to be investigated. Such cases are slaughtered, and the examination of the brain determines whether the animal was affected by a TSE.

APHA has been recording and analysing data from reported cases in cattle since the start of the BSE epidemic in 1986, and for scrapie in sheep and goats since this disease became notifiable in 1993.

## Active surveillance

The UK conducts active surveillance for TSEs.

The UK has:

- tested cattle since July 2001
- tested sheep and goats since January 2002
- conducted a survey in 2007 and 2008 of farmed and wild deer

View the [updated TSE statistics](#) on GOV.UK.

## 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](#)

The **Biothreats Emergence, Analysis and Communications Network (BEACON)** is an open-source informal surveillance program designed to revolutionize global biothreats surveillance and response. Leveraging advanced artificial intelligence (AI), large language models (LLMs) and a network of globally based experts, BEACON rapidly collects, analyses, and disseminates information on emerging infectious diseases affecting humans, animals, and the environment.

## Publications of interest

### APHA Surveillance Reports on GOV.UK

[Monthly APHA disease surveillance reports](#)

[APHA focus articles in the Veterinary Record](#)

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](#)

### SRUC-VS Surveillance Reports

[Scottish Government Veterinary Services Programme](#)

### SRUC Veterinary surveillance blogs

[Veterinary surveillance blogs](#)

### Other Publications

1. Ganter, M. (2025). **Anemia in Sheep and Goats**. In: Simões, J. (eds) Encyclopedia of Livestock Medicine for Large Animal and Poultry Production. Springer, Cham. [https://doi.org/10.1007/978-3-031-52133-1\\_276-1](https://doi.org/10.1007/978-3-031-52133-1_276-1)

2. Jorquera R, Partridge S, Man C, Reichel R, Swinson V, Little R, Peden R. **Impact of BTV-3 infection in British livestock during the 2024/25 vector season.** *Veterinary Record*. 2025 Aug 2;197(3):98-100.
3. Elliott S, Clifton R, Lovatt F, Tarlinton R. **Survey to determine the farm-level impact of Schmallenberg virus during the 2023–2024 UK lambing season.** *Vet Rec*. 2025;e5595. <https://doi.org/10.1002/vetr.5595>
4. Ozmen O, Secilmis H, Ayozyger LEO, Karakurum MC. **Clinical and pathological insights into severe acute copper poisoning in sheep with extreme liver and kidney accumulation.** *Vet Rec Case Rep*. 2025; 13:e70062. <https://doi.org/10.1002/vrc2.70062>

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This publication is available at <https://www.gov.uk/government/collections/animal-disease-surveillance-reports>

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APHA is an Executive Agency of the Department for Environment, Food and Rural Affairs and also works on behalf of the Scottish Government, Welsh Government and Food Standards Agency to safeguard animal and plant health for the benefit of people, the environment and the economy.