Animal & Plant Health Agency

SRUC

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

Volume 28: Quarter 1 – January to March 2025

Highlights

Contents

Introduction and overview

This quarterly report reviews disease trends and disease threats in Great Britain (England, Scotland and Wales) for the first quarter of 2025, January to March. 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.

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, 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.

Industry

Agriculture and Horticulture Development Board (AHDB) lamb market updates

- **Prices:** Great Britain deadweight lamb prices have moved sideways, against seasonal norms, throughout the first 3 months of 2025 with the Old Season Lamb Standard Quality Quotation (OSL SQQ) at 728 pence per kilogram (p/kg) in the week ending the 29 March. A greater supply of larger, old season lambs carried over from last year are continuing to weigh on the market, driving down prices

amidst reduced demand compared to Q1 last year, due to the timing of religious festivals.

- **Production:** Q1 sheep meat production was down -4.3% year on year (y-o-y) to 66,000 tonnes. Significantly heavier carcase weights have supported production in March, making up for the lower throughputs in January and February. Total clean sheep slaughterings throughout the quarter totalled 2.8 million head: down -3.7% y-o-y. Adult sheep slaughter is down even further, totalling 318,000 head compared to 363,000 head in Q1 2024.
- **Trade:** UK sheep meat imports in the first 2 months of 2025 are up 12% on 2024 levels and up 59% from 2023 to 11,500 tonnes. Meanwhile, sheep meat exports were relatively flat on the year at 14,000 tonnes shipped between Jan-Feb 2025 representing a 0.9% fall in volumes year on year. However, export values are up 12% valuing £102 million reflecting good demand, despite the higher domestic lamb price at the start of the year.
- **Demand:** In the 12 week ending 23 March 2025 data, lamb saw a 16.9% decrease in volumes purchased year-on-year in the 12 w/e 23 March 2025. This sharp decrease is due to Easter falling earlier last year. Spend also saw a 12.7% decrease during the period, despite a 5.0% increase in average prices paid.

Acknowledgment for this update: Grace Bolton, AHDB.

Bluetongue serotype 3 (BTV-3)

The first case of the 2024 to 2025 vector season was confirmed in a ram in Norfolk on 26 August 2024. The affected animal presented with inappetence, ulcers in the mouth, mild crusting around the nostrils, and lameness in one leg. The total number of confirmed cases in Great Britain by the end of March for the season, was 256.

Pictures of clinical cases confirmed with bluetongue serotype 3 infection.

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 website and on GOV.UK for Bluetongue: information and guidance for livestock keepers and Bluetongue: how to spot and report it.

Unusual diagnoses

Thymoma in a goat

An adult castrated pet goat died suddenly and was submitted for postmortem examination. The main gross finding was an orange sized, pale mass in the cranial thoracic cavity,

which on incision was filled with cyst-like pockets of thick, gelatinous, dark brown material (see figure 1). The surface of the lung was covered in thick, gelatinous, dark yellow fibrin and pockets of dark yellow fluid. The lungs were deep purple and collapsed, and the liver was firm, dark, and adhered in places to the diaphragm. Histopathology was suggestive that the mass was a thymoma, a common and usually benign neoplasm in older goats, that can become cystic with necrosis. The inflammation of the pleura in this case was probably caused by ongoing haemorrhage from the mass. A mild, diffuse, centrilobular vacuolar hepatopathy was the cause of the gross changes in the liver, which may have been due to negative energy balance of terminal hypoxia. Bacterial cultures did not yield any growth, and no *C. perfringens* epsilon toxin was detected in intestinal contents. The ultimate cause of death in goats with thymomas is usually attributed to the space occupying nature and location of these tumours.

Figure 1: Incised thymoma located within the cranial thoracic cavity of an adult goat

Diaphragmatic muscular hypertrophy and rupture

A 2-year-old Texel ewe was submitted for postmortem examination to Carmarthen veterinary investigation centre (VIC) after being found dead. It was the third ewe to die suddenly in a group of 120 Texel ewes that had been recently housed. All 3 ewes had been scanned with twins and were due to start lambing imminently.

Grossly, a 12cm x 3cm area of diaphragm around the hiatus was friable and haemorrhagic. The left hemithorax contained three litres of blood, and a large blood clot, confirming a diagnosis of severe, fatal left-sided haemothorax due to haemorrhage from this diaphragmatic lesion. This was supported by histopathology which identified acute, marked expansion and dissection of the epimysium and muscle belly of left crural muscle with haemorrhage.

Cases of diaphragmatic rupture and/or haemorrhage in Texel and Texel-cross sheep have been previously described by Waine and Others (2019), suggesting a breed predisposition

to this condition. Laryngeal chondritis lesions affecting the arytenoid cartilage has been proposed as a possible risk factor for this condition, with upper respiratory airway resistance potentially playing a role in lesion development, however; no evidence of laryngeal chondritis was found in the ewe submitted. It was therefore speculated that increased intra-abdominal pressure from the gravid uterus may have been a contributing factor in this case.

Waine, K., Strugnell, B.W., Howie, F., Swinson, V. and Millar, M. (2019), 'Diaphragmatic lesions and fatal haemorrhage in Texel sheep'. Vet Rec Case Rep, 7: e000745

Ovine Protozoal Myeloencephalitis (OPM)

Two, 10-month-old ewe lambs were submitted to our surveillance pathology partner, RVC – Farm Animal Pathology Department, to investigate a problem of progressive hindlimb weakness and paresis, over several weeks, eventually leading to recumbency. Five animals in the remaining group were reportedly displaying similar clinical signs and there had been no response to treatment. Mentation in affected animals was normal, and they were still able to eat and drink.

No obvious lesions were seen grossly on examination of the brain and spinal cord; however, both submitted lambs were in very poor body condition with a significant gastrointestinal parasite burden confirmed on laboratory testing. In addition, *Mannheimia haemolytica* pneumonia was identified in one lamb.

A marked, non-suppurative encephalomyelitis with marked gliosis and formation of glial nodules was identified on histopathological evaluation of the central nervous system. The microscopic findings were not consistent with listeriosis or cerebrocortical necrosis (CCN) and Louping Ill Virus (LIV) was excluded by negative serological results. Although no protozoal meronts were detected in the sections examined, the histological features were highly suggestive of a protozoal infection, most likely *Sarcocystis* spp. This, combined with the significant gastrointestinal parasite burden, was deemed the likely cause for the wasting and final demise of these animals.

There are several different recognised *Sarcocystis* species and *Sarcocystis tenella* is considered the most likely causative agent of ovine protozoal myeloencephalitis (Caldow and others*.,* 2000). Past seroprevalence studies suggest that exposure to *S. tenella* infection can be demonstrated in over 80% of sheep. The presence of mature cysts embedded in striated muscle tissue, including the myocardium, is a common incidental finding and is rarely associated with any clinical manifestations. Carnivores (dogs and foxes) are considered to be the primary host, with sheep as the intermediate host in the life cycle. *S. tenella* infection in some animals will sporadically present as myeloencephalitis, typically being reported in animals under 12 months of age (Caldow and others., 2000; O'Toole and others., 1993), as is the case here. Outbreaks affecting multiple animals have also been described. The precise aetiology of the condition remains unclear, but it is suggested that husbandry factors may affect the degree of exposure to infective stages of the parasite. In OPM cases it is likely that affected animals are exposed to high levels of the parasite in contaminated faeces several months earlier in the grazing season, and that the weight of challenge initiates widespread infection extending into the nervous system.

There are no specific disease control measures but, prompt disposal of casualty sheep carcases and raw sheep offal, to prevent consumption by scavenging carnivores, will reduce opportunities for transmission of infection.

O'Toole, D, Jeffrey, M, Challoner, D, Maybey, R, and Welch, V (1993). 'Ovine myeloencephalitis-leukomyelomalacia associated with a Sarcocystis-like protozoan.' Journal of veterinary diagnostic investigation: official publication of the American Association of Veterinary Laboratory Diagnosticians, Inc, 5(2), 212–225

Caldow, GL, Gidlow, JR, & Schock, A (2000). 'Clinical, pathological and epidemiological findings in three outbreaks of ovine protozoan myeloencephalitis.' The Veterinary record, 146(1), 7–10

Goat disease surveillance dashboard outputs

The most frequent diagnoses from goat submissions made in Q1 of 2025, compared to Q1 in 2024, and Q1 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 small ruminant disease surveillance dashboard which was launched in October 2017.

Table 1: Great Britain scanning surveillance 5 most frequent goat submission diagnoses in quarter 1 (Q1) of 2025, Q1 of 2024, and Q1 for 2016 to 2025

	5 most frequent diagnoses Q1 2025	5 most frequent diagnoses Q1 2024	5 most frequent diagnoses Q1 2016 to 2025
1	**Parasitic gastroenteritis (PGE)**	Parasitic gastroenteritis	Parasitic gastroenteritis
2	**Johne's disease**	Johne's disease	Johne's disease
3	***Clostridium perfringens* type D disease**	*Clostridium perfringens* type D disease	*Clostridium perfringens* type D disease
4	**Lice**	Listeriosis (encephalitis)	Listeriosis (encephalitis)
5	**Neoplasm**	Chronic Fascioliasis	Hypocupraemia or hypocuprosis

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 Q1 of 2025, compared to Q1 in 2024, and Q1 for 2015 to 2024 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 Q1 of 2025, Q1 of 2024, and Q1 for 2016 to 2025

	10 most frequent diagnoses Q1 2025	10 most frequent diagnoses Q1 2024	10 most frequent diagnoses Q1 2016 to 2025
1	**Parasitic gastroenteritis (PGE)**	Schmallenberg abortion or stillbirth	Enzootic abortion
2	**Campylobacter abortion**	Enzootic abortion	Toxoplasma abortion
3	**Enzootic abortion**	Toxoplasma abortion	Campylobacter abortion
4	**Toxoplasma abortion**	Campylobacter abortion	Parasitic gastroenteritis (PGE)
5	**Schmallenberg abortion or stillbirth**	Parasitic gastroenteritis (PGE)	Chronic fascioliasis
6	**Chronic fascioliasis**	Abortion due to other causes	Schmallenberg abortion or stillbirth
7	**Pneumonia due to M haemolytica**	Congenital abnormality	Abortion due to other causes
8	**Listeriosis (encephalitis)**	Chronic fascioliasis	Sheep scab
9	**OPA (Jaagsiekte)**	Listeriosis (encephalitis)	Johne's disease
10	**Abortion due to other causes**	OPA (Jaagsiekte)	OPA (Jaagsiekte)

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

Abortion due to other causes includes bacterial infections such as E coli.

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 Great Britain, for the following diseases:

Increases:

- Parasitic gastroenteritis (PGE) NOS (not otherwise specified)
- Fetopathy due to Campylobacter
- Chronic fasciolosis (APHA only)
- Pneumonia due to Mannheimia spp.
- Hereditary or developmental abnormalities NOS
- Hyposelenaemia or hyposelenosis
- Hypocupraemia or hypocuprosis
- Maedi Visna
- Tick-born-fever

Decreases:

- Fetopathy due to Toxoplasma

Parasitology

Suspect acute cysticercosis causing parasitic hepatitis in lambs

Ten pre-weaned lambs died suddenly in a flock in Somerset. Postmortem examination findings included severe, extensive, haemorrhagic, raised tracts across the diaphragmatic surface of the liver; and many small cystic structures attached to the liver capsule (figure 2). In addition, there was evidence of larval parasite migration in the lungs. The unusual presentation was considered consistent with acute cysticercosis caused by *Cysticercus tenuicollis*, the metacestode stage of the *Taenia hydatigena* tapeworm. Confirmation using molecular techniques is in progress to confirm. The definitive host of *T. hydatigena* is canids, while sheep are intermediate hosts (along with other ruminants, pigs, and horses). Single or small numbers of large cysts attached to the mesentery or liver may be seen as incidental findings in carcases at abattoirs. Outbreaks of acute cysticercosis are uncommon and usually associated with exposure to dog faeces through contamination of feed. In this case the source remains unclear. Discussion of possible point sources of dog faeces, the worming of farm dogs, and risks related to access to pasture by other dogs (with owners using public footpaths) took place. It was considered likely that others in the group may develop cysts that may be noted at meat inspection.

Figure 2: Haemorrhagic raised tracts and small cystic structures on the surface of the liver of a pre weaned lamb, likely due to *Cysticercus tenuicollis*

Acute rumen fluke disease in adult ewes

Detection of rumen fluke (*Calicophoron daubneyi*) eggs in faeces samples is not uncommon, with the adult rumen fluke generally causing no ill health. However, disease and deaths due to severe enteritis caused by immature rumen fluke remains an unusual diagnosis. One case was investigated in Scotland in January this year, where 6 ewes died from a group of 30, over one week. Affected ewes were subdued, with reduced appetite, and with rapid weight loss in the 3 to 4 days before death. The group had been treated with a combination product containing triclabendazole and ivermectin and, had received oxytetracycline with no response to treatment. The group were moved to a different field, but deaths continued. A Suffolk ewe was examined postmortem. Rumen contents were wet and frothy and a few adult rumen fluke were present. The small intestine contained many juvenile rumen fluke, and liquid contents. Oxyclozanide treatment was advised, together with guidance on future monitoring using faeces sample testing.

Parasitic Gastroenteritis

A total of 109 incidents of Parasitic Gastroenteritis (PGE) were recorded across Great Britain in January to March, compared to 70 for the equivalent period in 2024. The diagnoses of PGE, as a percentage of diagnosable submissions, are illustrated in figure 3. There was evidence of lack of expected efficacy of the anthelmintic treatment used in some cases. Submissions were from hoggs and adult ewes, and poor condition, with

deaths, were often a feature. In one typical case, the carcase of a ewe lamb was received in mid-February from a group of 15, that had been treated with anthelmintic and flukicide three months earlier. Nutrition appeared adequate, with supplementary forage and concentrates available. Postmortem examination findings were poor body condition and enteritis, with significant worm burden confirmed. Significantly, faecal worm egg counting detected 1950 Trichostrongyle-type eggs per gram. Examination of washings of abomasal contents identified worms as follows: 2200 *Trichostrongylus axei*, 1000 *Teladorsagia* spp., 1700 immature worms. Small intestinal washings identified 700 adult *Trichostrongylus* spp. and 300 immatures.

Given the mild weather conditions over the winter, the risk of PGE lasted throughout winter, and may have remained undetected when many flocks ceased monitoring faecal egg counts in late Autumn.

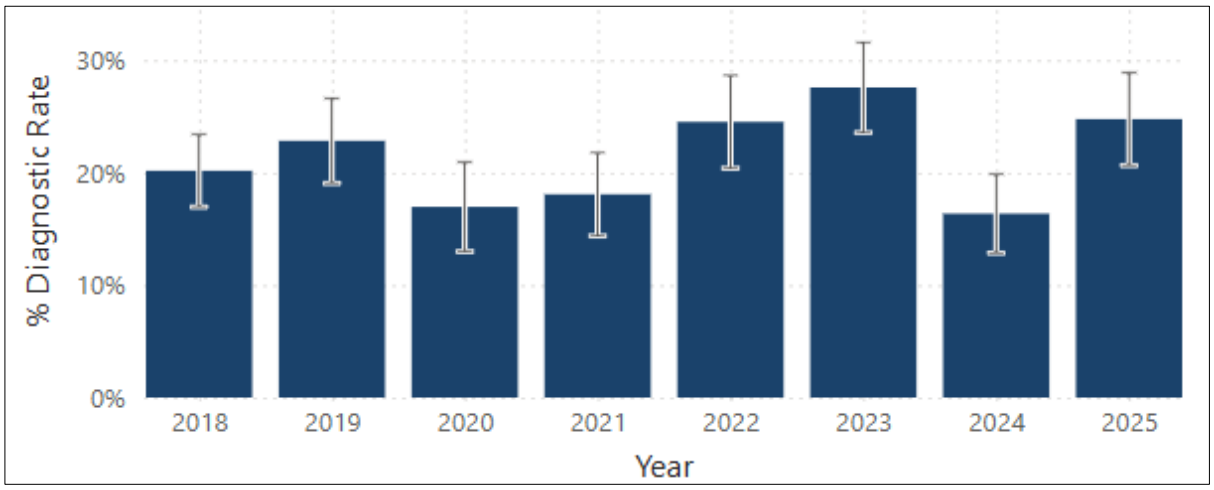

Figure 3: GB diagnoses of Parasitic Gastroenteritis in quarter 1, 2018 to 2025, as percentage of diagnosable submissions, indicating a consistent high level with some variation from year to year. The error bars indicate a 95% confidence interval.

Nematodirosis in lambs

Another endoparasitic disease of lambs, caused by the intestinal nematode *Nematodirus battus*, has been diagnosed less this spring than in 2024, as shown in figure 4. As shown on the SCOPS Nematodirus forecasting tool, the weather conditions favoured a slow trickle hatch of eggs. In most areas therefore, lambs did not face a mass hatch at the time when they were vulnerable but, faced a low-level infection over a period of weeks, allowing development of immunity.

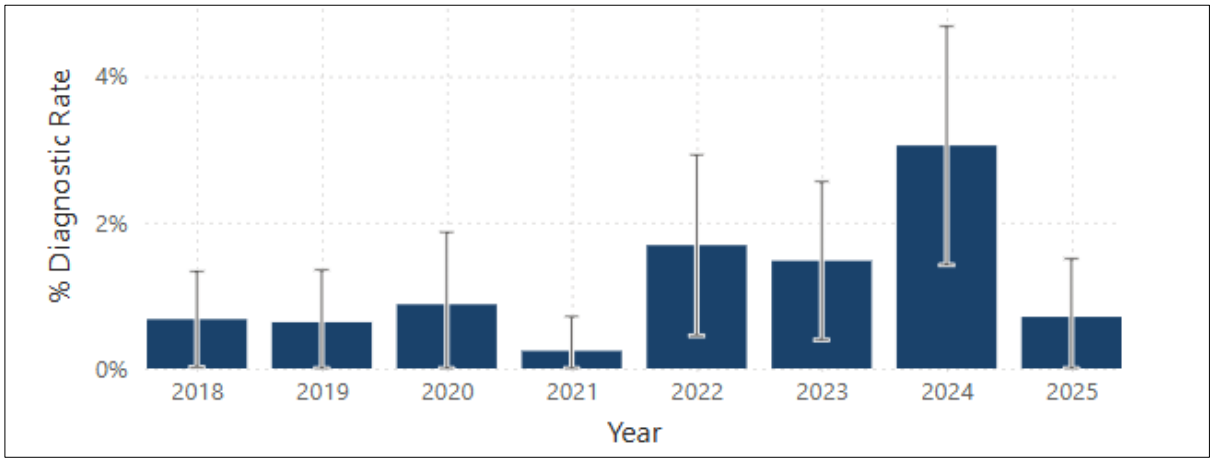

Figure 4: Diagnoses of Nematodirosis in sheep in GB in Q1 of 2025, have fallen, compared with the equivalent quarter 2024.

Fasciolosis

There have been more cases of acute fasciolosis in adult ewes (due to *Fasciola hepatica* the liver fluke) confirmed at postmortem examination in the first quarter of 2025 compared with recent years (figure 5). All cases were in Southwest England and Wales. Aute fluke is typically seen in late autumn to winter, but weather conditions affect when infections are acquired. More cases are seen when there have been high rainfall conditions in summer, which allows snails (which act as the intermediate host for the parasite) to multiply increasing numbers of cercariae on pasture. There has also been an increase in cases of chronic fasciolosis highlighted in disease trends data for APHA only. None of the flukicides have any persistent effect and it is still the case that many farmers are continuing to treat at set calendar dates, rather than basing treatment on diagnostic testing. In some years this will lead to treatment in advance of the risk, and sheep acquiring infection later in winter; then either succumbing due to high numbers of immature flukes causing liver damage and death or, having adult fluke still present where the choice of flukicide killed off late immatures and adults only, leaving late acquired fluke to develop to adulthood. Industry groups, which include representatives from APHA, continue to emphasise the ‘Test don’t guess’ message through engagement with vets, farmers, and Suitably Qualified Persons (SQPs), to encourage appropriate use of diagnostic tests and treatment, with the right product at the right time.

Suspected triclabendazole resistance was considered likely in some cases, including one submission of a Suffolk-cross yearling, one of 5 deaths in a group of 150 sheep exhibiting weakness and recumbency prior to death. The pale liver contained immature flukes within the liver parenchyma, and adult flukes in the bile ducts and gall bladder, despite having received two doses of triclabendazole within the previous month. Assessment of other factors that might have led to apparent treatment failure (product storage, calibration of drench gun, correct dosage for bodyweight, correct drench technique) was advised, as well as treatment with an alternative flukicide (active against late immatures and adults).

Investigation of triclabendazole resistance in the future through composite fluke egg counts (Daniel R and others, 2012) was recommended.

Daniel R, van Dijk J, Jenkins T, Akca A, Mearns R, Williams DJ. 'Composite faecal egg count reduction test to detect resistance to triclabendazole in Fasciola hepatica.' Vet Rec. 2012 Aug 11;171(6):153, 1-5. doi: 10.1136/vr.100588. Epub 2012 Jul 11. PMID: 22791519.

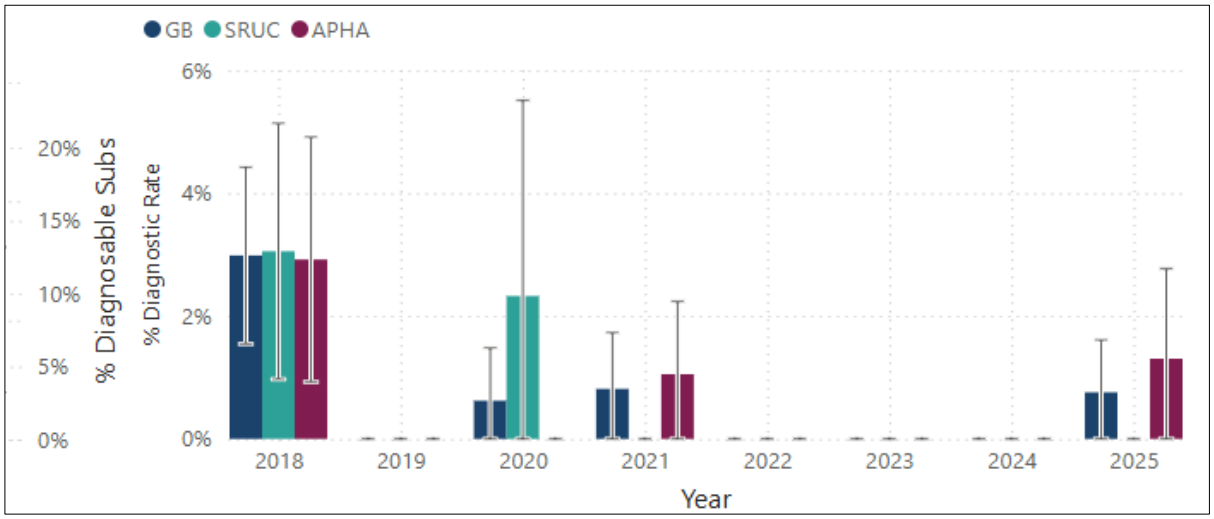

Figure 5: Q1 diagnoses of acute fasciolosis increased in 2025 compared with Q1, 2022 to 2024. All the cases in 2025 were from APHA submissions

Sheep scab due to *Psoroptes ovis*

A syndromic alert indicates a decrease in sheep scab diagnoses in quarter one of 2025 compared to the same quarter for the preceding five years (Figure 6). The majority of the diagnoses (9) were made in Scotland, where sheep scab is a notifiable disease, meaning that any suspicion of disease must be reported to APHA Scotland, see Sheep scab: how to spot and report the disease for more information.

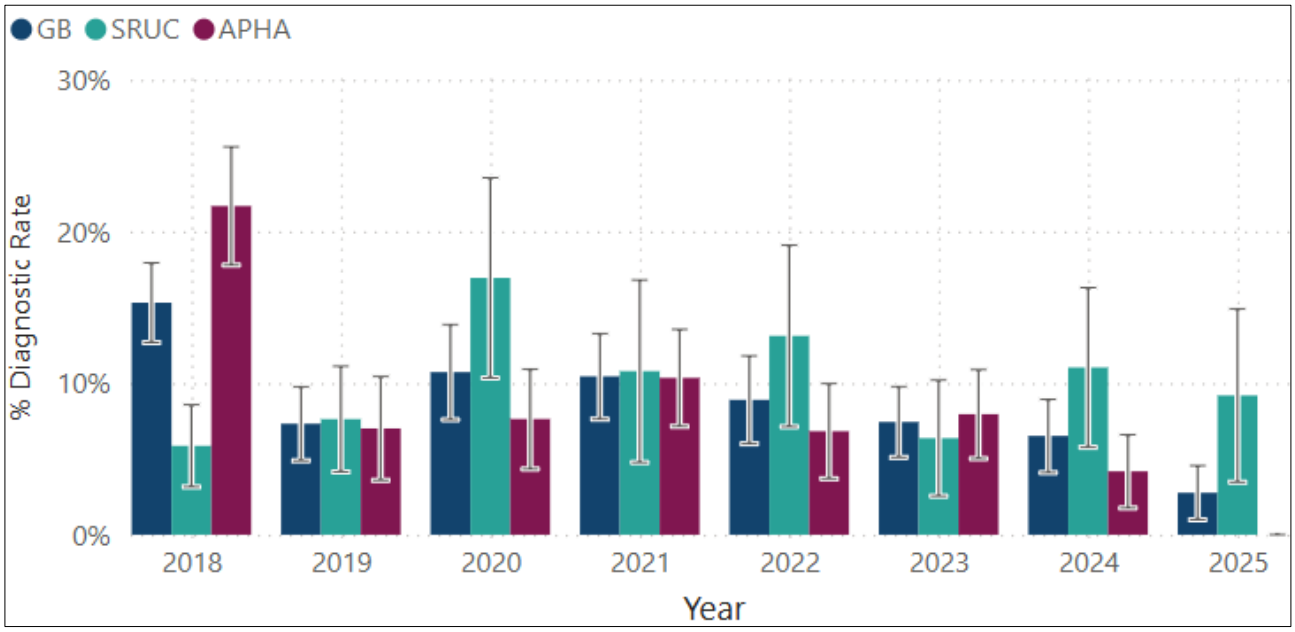

Figure 6: Diagnoses of sheep scab in GB for quarter 1 by region, as a percentage of diagnosable submissions, indicating a fluctuating trend in Scotland and a general decline in recorded incidents in England and Wales over recent years

Despite the continuation of free ectoparasite testing for sheep showing clinical signs of sheep scab in Wales, the number of diagnoses made in Wales during quarter 1 of 2025 has decreased markedly compared to the mean for the previous 5 years (one incident in 2025 compared to a mean of 20 incidents for 2020 to 2024). The reduction in diagnoses made in Wales may be due in part to the ongoing Gwaredu Scab eradication scheme, which may have resulted in more 'in-house' examination of skin scrapes for scab mites being undertaken by private veterinary practices, rather than samples being submitted to APHA for testing.

Systemic disease

Hyposelenaemia and hyposelenosis

The number of diagnoses of hyposelenaemia and hyposelenosis during quarter one of 2025 was significantly increased compared to the same quarter for the preceding 5 years. Most diagnoses (20 out of 22) where made in Northen England or Scotland. The most common presenting sign for this diagnosis was wasting, followed by sudden death and diarrhoea (Figure 7).

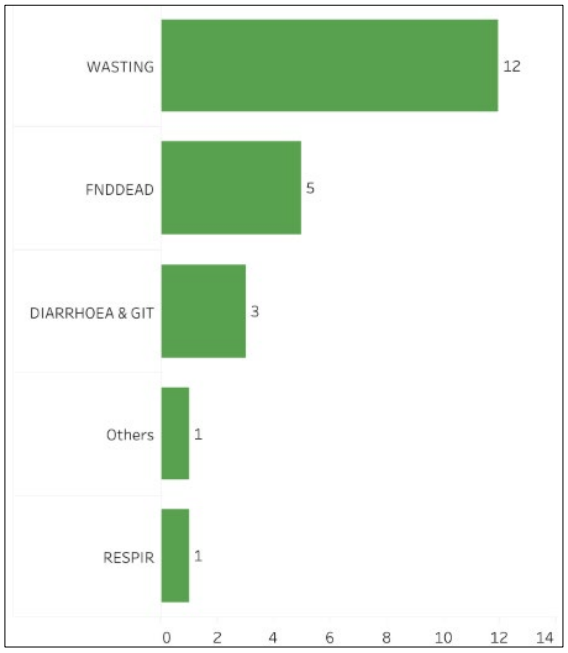

Figure 7: Most common presenting clinical signs for diagnoses of hyposelenaemia and hyposelenosis during quarter 1 of 2025. The most common presenting sign was wasting, followed by sudden death and diarrhoea

Hypocupraemia and hypocuprosis

The diagnostic rate for hypocupraemia or hypocuprosis during quarter 1 of 2025 was higher than the same quarter for the preceding 7 years (Figure 8). Similar to hyposelenaemia or hyposelenosis, the most common presenting sign for diagnoses of hyposelenaemia or hyposelenosis was wasting, followed by sudden death.

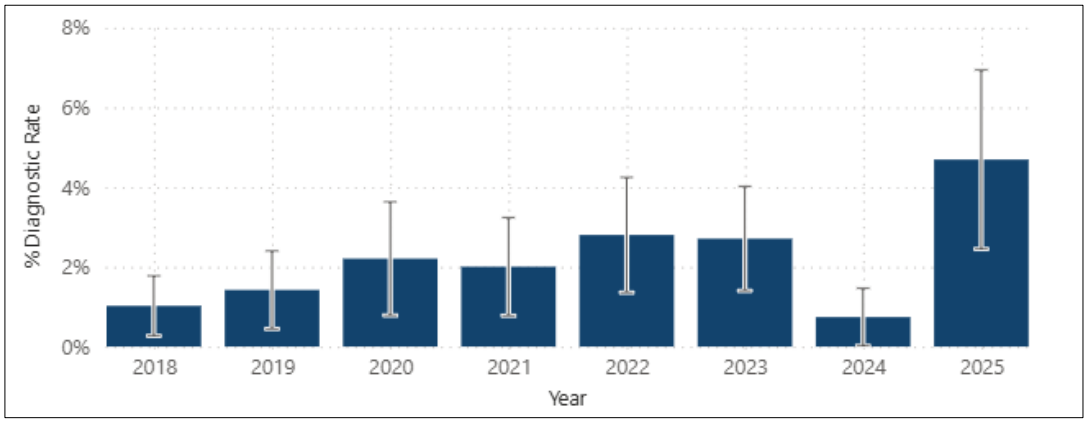

Figure 8: GB incidents of hypocupraemia / hypocuprosis for quarter 1, as a percentage of diagnosable submissions, indicating an increase in 2025 compared to previous years

Diagnoses of both hyposelenaemia or hyposelenosis and hypocupraemia or hypocuprosis are often made alongside concurrent disease, with the most common being parasitic gastroenteritis. On some occasions multiple trace elements deficiencies were diagnosed within one submission. It is difficult to establish what proportion of the deficiencies came

before the concurrent disease or were a result of the concurrent disease. Blood testing for trace elements. Blood testing of cohorts for trace element levels, in addition to further investigation of concurrent disease, is usually advisable.

Yersinia pseudotuberculosis associated with abortions and enteritis in sheep.

Yersinia pseudotuberculosis infection is rarely identified in sheep in the UK. It was confirmed as the cause of *abortions* in sheep in 2 cases during this quarter, one was submitted to Starcross Veterinary Investigation Centre (VIC) and one to the Cambridge Surveillance Pathology Provider centre. The postmortem findings in one case included frank haemorrhage and a large blood clot in the abdomen, originating from a liver tear. The liver was enlarged and had multi-focal 1-2mm circular pale lesions throughout the parenchyma. Several similar foci were present in the spleen. The lungs were purple, fleshy and firm. The pericardial sac contained an excess of pale fluid and a fibrin clot. In both cases the organism was isolated from foetal stomach content and foetal liver. The diagnosis was confirmed with histopathology, identifying multifocal suppurative pneumonia, hepatitis, splenitis and suppurative tubulointerstitial nephritis with bacterial colonies resembling *Yersinia* spp.

Two found-dead Welsh hill lambs were submitted to Shrewsbury VIC for postmortem examination, from a 30-ewe flock in a group of eight fattening lambs. Both were in a good body condition, with evidence of diarrhoea. Postmortem examination revealed a congested liver with occasional small (less than 1mm diameter) white foci in one lamb. Approximately 50 percent of the small intestines of this lamb had mucosal ulceration (Figure 9), varying from tiny pinprick ulcers and tiny red nodules in clusters, to marked thickening of the Peyer's patches with ulcerated areas coated in a yellow, roughened, diphtheritic exudate. The mucosa of the caecum was thickened, with multifocal 3-5 mm diameter ulcers. The other lamb had a fibrinous peritonitis, with adhesions and a congested liver. Reddening of the lungs, and enlarged spleens, suggested a septicaemia in both lambs. *Yersinia pseudotuberculosis* was isolated from the liver, lung, spleen and intestinal contents of the first lamb, and from the intestinal contents of the second lamb. *Yersinia pseudotuberculosis* enteritis and septicaemia cases are unusual in sheep, and in this case the lesions were particularly severe, therefore a concurrent immunosuppressant was suspected. One lamb tested PCR positive for *Anaplasma phagocytophilum*, suggesting that it may have played a role.

Shrewsbury VIC also detected *Yersinia pseudotuberculosis* in a dead weaned lamb submitted from a flock of 60 ewes. It was reported that 15 others had died in a group of 50. PGE had previously been identified, and the lambs were treated with anthelmintic, but there was continued weight loss and scouring. They were fed adlib hay and a small quantity of concentrate. The lamb was emaciated and showed no specific pathology other than patchy lung consolidation and enlarged mesenteric lymph nodes, suspected to be associated with the past PGE. There were no nematodes identified in the abomasum or intestine indicating effective anthelmintic treatment. *Yersinia pseudotuberculosis* was isolated from the liver, and *Mannheimia haemolytica* in mixed culture from the lung.

Yersinia pseudotuberculosis is associated with wet, muddy, waterlogged conditions; exposure of feed material to silt can also trigger outbreaks. It can be carried by several wild and domestic species but only occasionally causes clinical disease or death. Stress, poor nutrition, immunosuppressive conditions or concurrent gastrointestinal worms are recognised risk factors for disease. Treatment relies on early detection of cases and a good response is typically seen to tetracycline antibiotics. More information can be found in this WOAH yersinia pseudotuberculosis pdf. The organism is also zoonotic, primarily as a food-borne disease following consumption of contaminated food and water.

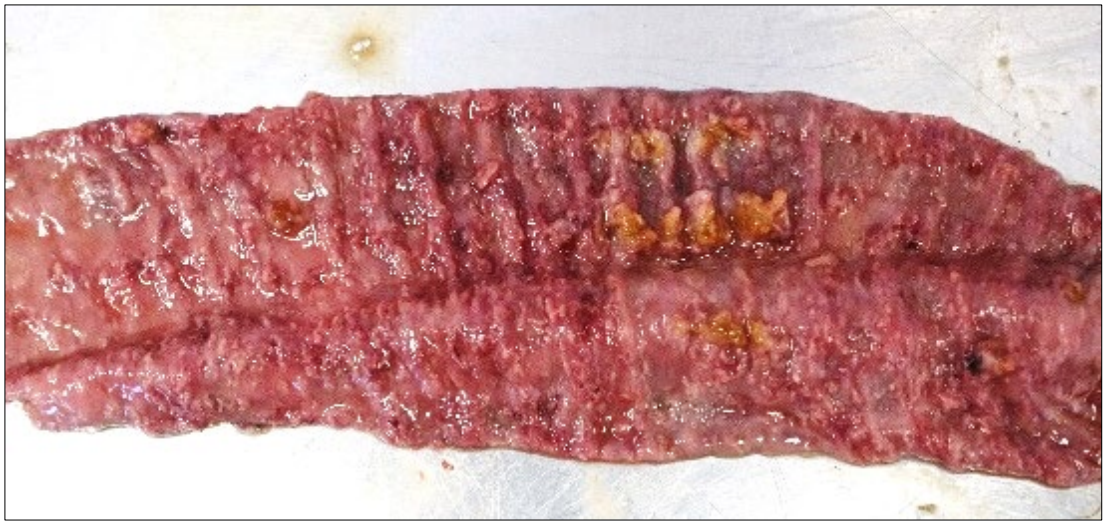

Figure 9: Severe small intestinal ulceration in a lamb with *Yersinia pseudotuberculosis* enteritis

Persistent infection of Border disease and concurrent diseases causing ill-thrift in lambs

Two lambs were euthanised and submitted to Carmarthen VIC to investigate ill-thrift affecting 300 out of 450 in this lamb crop from a hill flock. Ten lambs had died.

Significant findings from gross postmortem examination of one lamb included a severe pneumonia, accompanied by extensive pleuritis and abscessation. Histopathology demonstrated a severe bacterial pneumonia and the suggestion of involvement of a low pathogenic *Mycoplasma spp.,* and *Mycoplasma arginini* was detected from lung by denaturing gradient gel electrophoresis (DGGE). *Trueperella pyogenes* was cultured from the lungs and pleural cavity, and both this organism and *M. arginini* were considered likely to be secondary opportunistic pathogens. This animal was positive for Border disease virus on PCR testing, and immunohistochemistry (IHC) indicated it was likely a persistently infected animal. There were also skin lesions consistent with orf, with an associated secondary bacterial infection (for example, *Streptococcus sp. or Staphylococcus sp*.), and liver selenium concentration was at the lower end of the borderline range.

The second lamb was emaciated with chronic non-progressive pneumonia diagnosed on histopathology. *Mycoplasma ovipneumoniae* was detected from lung by DGGE, which is thought to be a significant predisposing or primary agent in most cases of ovine respiratory

complex. Tetracycline-resistant *Mannheimia haemolytica* was cultured in systemic distribution, indicating systemic pasteurellosis. There was also infection with the lungworm *Dictyocaulus filaria* likely also contributing to respiratory disease.

Both lambs had parasitic gastroenteritis with a mixed worm population, including a low percentage of *Haemonchus spp.*

Systemic Staphylococcus aureus infection

An 8-day-old lamb was submitted to Carmarthen VIC to investigate malaise in three lambs from a group of 24 (with 12 ewes) in one pen; two had died 12 to 24 hours later. The lambs were born inside, and after 2 days in individual pens, were moved to a group pen. The ewes were reported to have plenty of milk and lambs had suckled colostrum well. Navels had been treated with iodine and tails ringed while in individual pens.

Postmortem findings included liver enlargement, patchy lung reddening with scattered two mm diameter abscesses, cranioventral lung consolidation, multifocal 2-4 mm diameter pale cystic structures within myocardium (shown in Figure 10), pericardial fibrin clot, generalised lymphadenopathy and purulent foci in the kidney. Pure *Staphylococcus aureus* was isolated in systemic distribution. *S. aureus* can gain entry via any skin wound and may have been related to tail-ringing in this case, as no other wounds were found. Although *S. aureus* septicaemia is often associated with tick borne fever, this was ruled out here by negative *Anaplasma phagocytophilum* PCR results, and no evidence of tick exposure in this group.

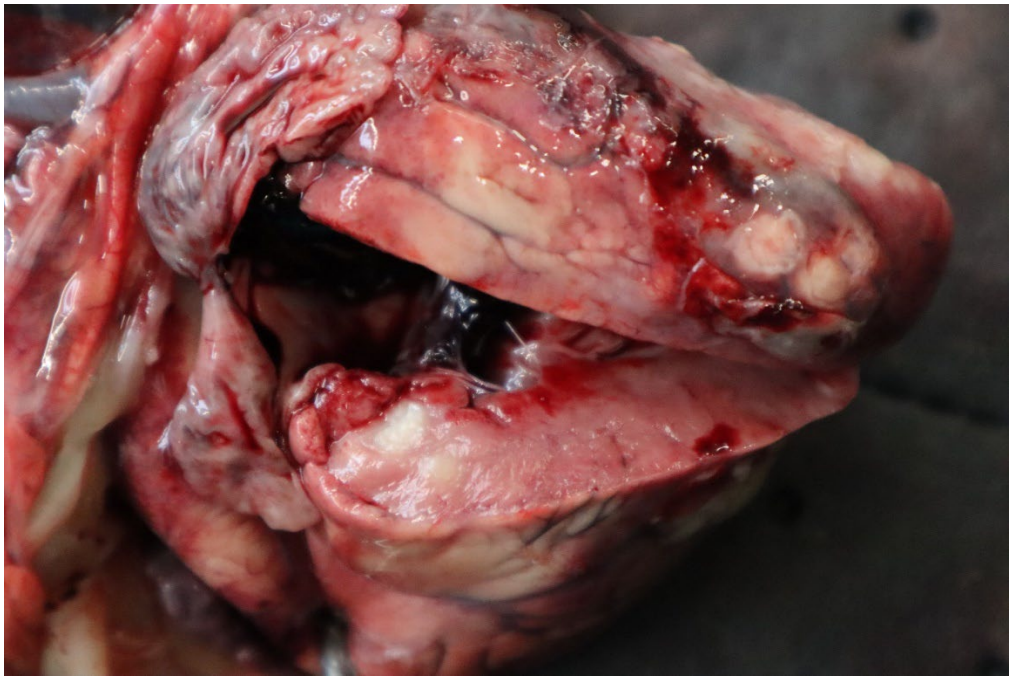

Figure 10: Multifocal pale lesions within myocardium of an 8-day-old lamb infected with *Staphylococcus aureus*

Respiratory disease

Pneumonia due to Mannheimia

There was an increase in the incidents diagnosed in Great Britian with pneumonia due to *Mannheimia* spp. Forty incidents were recorded for Q1, 2025, compared to 26 and 27 for the equivalent quarters in 2024 and 2023 respectively (Figure 11). The increase was mainly in cases from APHA.

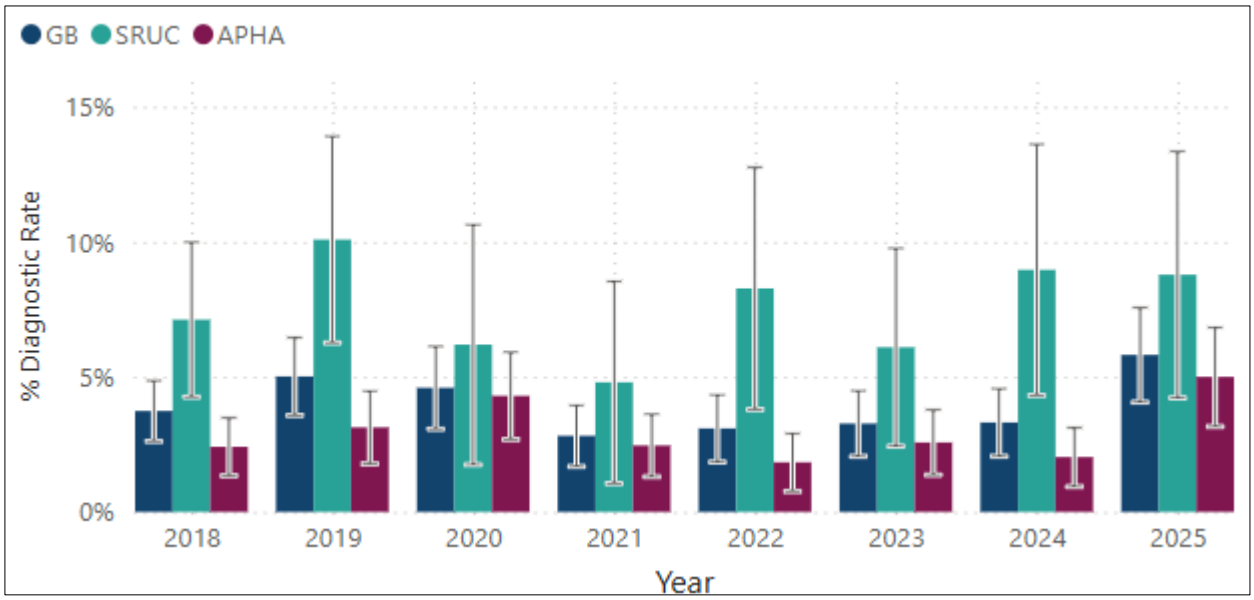

Figure 11: Q1 diagnoses of pneumonia due to *Mannheimia* spp. in GB increased in 2025 compared with Q1, 2022 to 2024. The GB increase was related to an increase in APHA recorded cases

Maedi Visna

Ten incidents were recorded for Maedi Visna in Great Britian in Q1, 2025, compared to 4 and 6 for Q1 in 2024 and 2023 respectively. The numbers are too low to indicate any significant change in trend, but it is likely to be a condition that is significantly underdiagnosed.

Circulatory disease

Tick borne fever (TBF)

Although numbers are low, there is an increasing trend in incidents diagnosed with TBF (due to *Anaplasma phagocytophilum*) in Great Britian in Q1 as shown in figure 12. The geographic distribution of these cases recorded over recent years is shown on a map in figure 13. The most common presenting signs are reproductive issues, followed by abortion, wasting, found dead and nervous signs. Further information available from the Tick-borne disease story on Tableau Public.

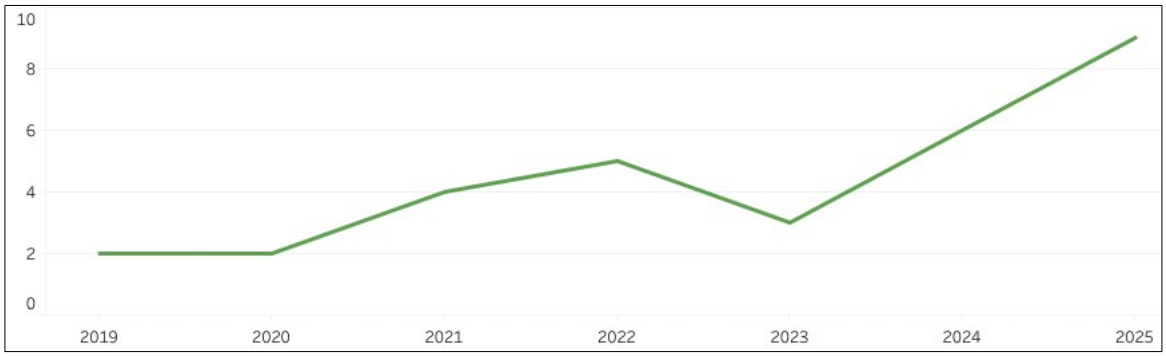

Figure 12: An increasing trend over recent years in incidents diagnosed with TBF in GB in Q1 2025

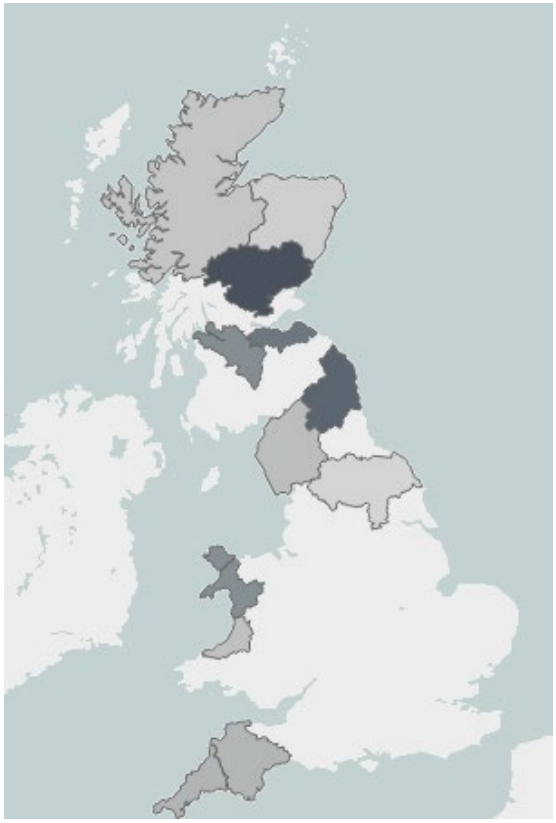

Figure 13: Geographic distribution of TBF cases recorded in Q1 over recent years in Great Britian, indicating cases were recorded in South-east England, Northern England, Wales and Scotland. The darker shade indicates a relatively higher incidence of cases based on the population density in that county.

TBF cases were confirmed in 4 flocks in Wales (one in Ceredigion and 3 in Northwest Wales) through the Wales Veterinary Science Centre. All were in adult ewes of hill breeds, presenting with found dead in one case, wasting in one case, both wasting and found dead in one case, and nervous signs in one case. TBF was confirmed by PCR on spleen in all cases. The immunosuppressive effects of TBF can lead to a range of other diseases. In one of these cases, the ewe had concurrent lungworm and secondary bacterial pneumonia confirmed on histopathology. Another case had PGE, with a high faecal worm egg count of 2,400 Trichostrongyle-type eggs, which explained the wasting seen.

Muskulo-skeletal

No significant changes.

Urinary disease

No significant changes.

Nervous Disease

No significant changes.

Reproductive

Fetopathy

Schmallenberg virus (SBV) positive cases have continued during the 2024 to 2025 lambing season, but with far fewer numbers than the previous season. VIDA recorded fetopathy incidents for Q1 for GB shows Campylobacter as the most common cause, followed by Enzootic Abortion in Ewes (EAE) and Toxoplasmosis (Figure 14).

Campylobacter is a type of bacteria with several different species, of which some can cause food-borne illness in people, and abortions in sheep and cattle. In sheep, it is mostly associated with late term abortions or the birth of dead or weak lambs. Abortion caused by Campylobacter tends to peak every 3 to 4 years; the exact reason for this is unknown but is suspected to be due to the gradual replacement of immune animals with susceptible replacements. Up to 20% of the group may abort, but ewes generally remain well in themselves apart from a mild transient diarrhoea in some. An outbreak is usually confined

to one lambing season, as exposed animals will develop immunity. Figure 15 shows the circular ‘target’ lesions in the liver of a lamb that was aborted due to Campylobacter.

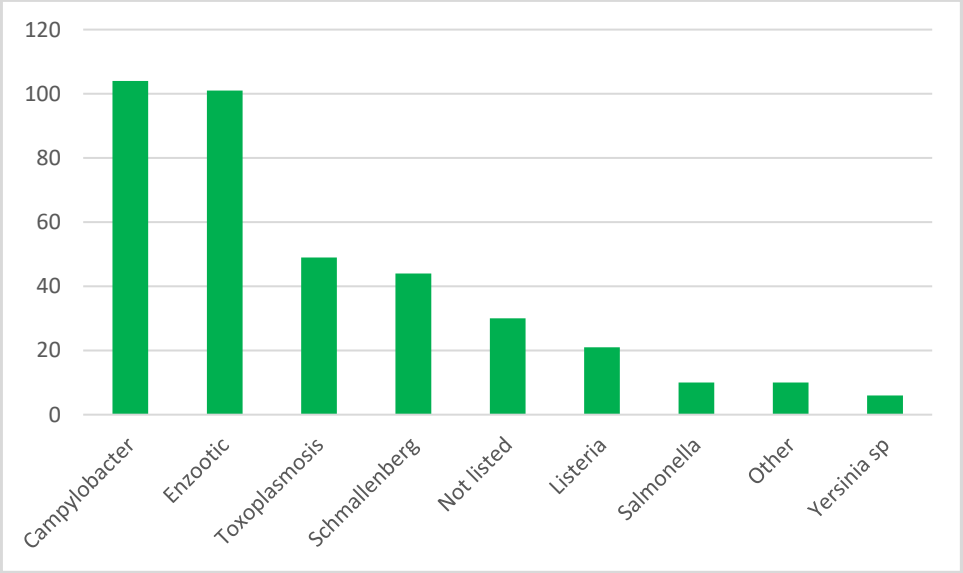

Figure 14: VIDA recorded fetopathy incidents for Q1, 2025 for Great Britian shows Campylobacter as the most common cause, followed by Enzootic Abortion in Ewes (EAE) and Toxoplasmosis. The ‘Not Listed’ category includes causes such as *E coli*, and ‘Other’ includes listed causes with low numbers such as *Bacillus licheniformis* and *Trueperella pyogenes,* that have been added together.

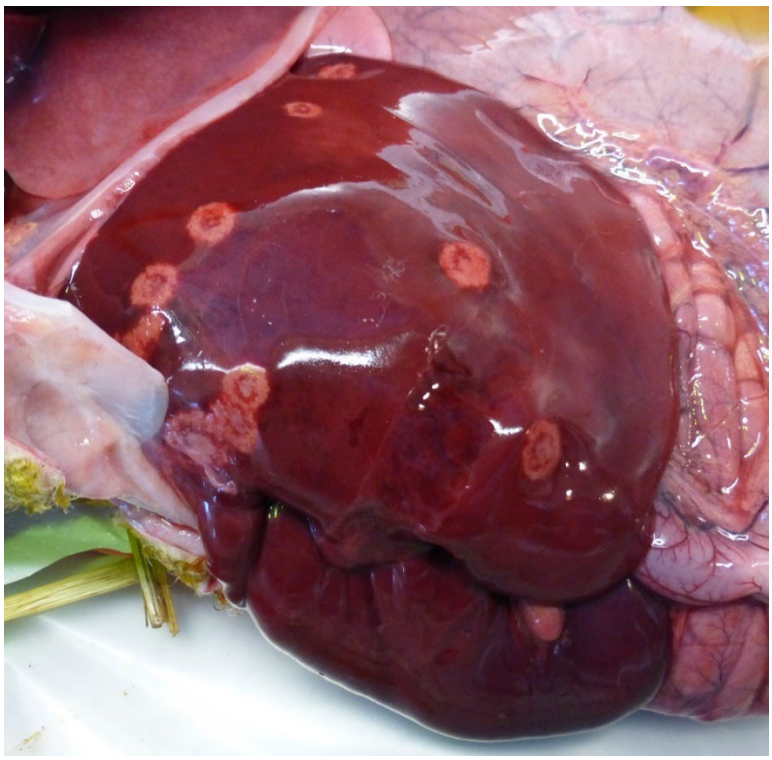

Figure 15: Pale circular ‘target’ lesions in the liver of a lamb that was aborted due to Campylobacter infection.

Smith, J, Brzozowska, A and Dempsey, L (2023), '*Campylobacter* species abortion in sheep'. Veterinary Record, 193: 443-445. Accessed 20 June 2025

SKIN

Ovine ulcerative dermatitis

Samples were submitted to Starcross VIC from adult Romney ewes with suspected ovine ulcerative dermatitis. Lameness in the flock was generally not an issue but had been getting worse over a period of . weeks. Some ewes were lame with footrot and scald type lesions, whilst others displayed skin lesions in the absence of lameness. Some clinical response to long-acting tetracycline antibiotics was reported. *Staphylococcus aureus* and tetracycline-resistant *Streptococcus dysgalactiae dysgalactiae* were isolated in mixed growths from skin swabs and treponeme PCRs performed on skin samples were all negative.

Starcross VIC also received reports of ulcerative lesions which bled profusely, on the lower limbs and at the level of the coronary band (Figure 16) in a group of recently purchased ewes. Many ewes had developed the lesions over several weeks. Affected ewes were not lame and there was a good response to penicillin treatment. Swabs were submitted from two recent cases. *Streptococcus dysgalactiae dysgalatiae* was isolated on bacterial culture. No Treponemes were detected by PCR. Histopathology confirmed a diffuse, erosive to ulcerative, crusting, pustular suppurative dermatitis but the underlying aetiology was not elucidated. The laboratory findings, gross appearance of the lesions and clinical progression were highly suggestive of ulcerative dermatitis.

As reported previously *Streptococcus dysgalactiae dysgalatiae* appears to be a consistent bacteriological finding in these cases but its significance remains unclear. Currently, the epidemiology of the condition is poorly understood and there is little published in the literature. Further reading is available about Novel ulcerative leg lesions in yearling lambs: Clinical features, microbiology and histopathology on the Science Direct website.

Figure 16: Ulcerative bleeding skin lesion at the coronary band of a sheep affected with ovine ulcerative dermatitis. With kind permission from the private veterinarian involved in the case.

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.

Antimicrobial use and resistance

The Veterinary Antibiotic Resistance Sales and Surveillance (UK-VARRS) Report 2023 has been published by the Veterinary Medicines Directorate (VMD).

This latest UK-VARSS report continues to document downward trends in sales of veterinary antibiotics in the UK. In addition, the latest RUMA Targets Task Force report can be found on the RUMA website.

The Medicine Hub, developed and resourced by AHDB, is a centralised national database for the collection and collation of antibiotic use data in UK sheep and cattle. It is a voluntary industry initiative which facilitates national reporting and builds evidence of the sector's responsible approach to antibiotic use. This data provides a useful indication of antibiotic use in the sheep sector. View the Medicine Hub for dairy, beef and sheep farmers on the AHDB website.

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 pages on GOV.UK.

TSE

Surveillance for transmissible spongiform encephalopathies (TSEs) is carried out 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 carries out 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

View the monitoring for major, notifiable or new and emerging animal disease outbreaks internationally and in the UK on GOV.UK.

Publications of interest

APHA Surveillance Reports on GOV.UK

Monthly APHA disease surveillance reports

APHA focus articles in the Veterinary Record

SRUC-VS Surveillance Reports

Scottish Government Veterinary Services Programme

SRUC Veterinary surveillance blogs

Veterinary surveillance blogs

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 www.gov.uk/government/publications

Any enquiries regarding this publication should be sent to us at

[Rudolf.reichel@apha.gov.uk]

www.gov.uk/apha

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.