

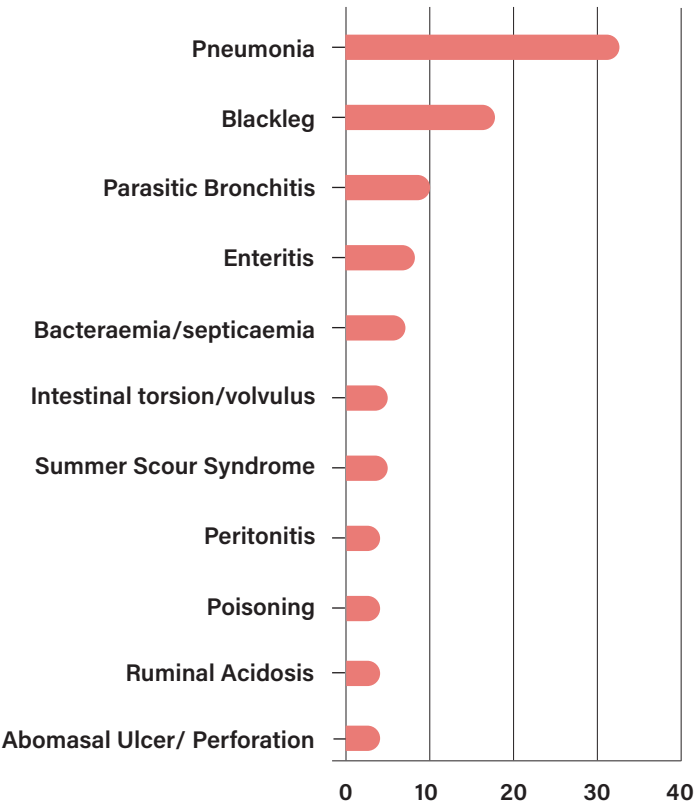
# REGIONAL VETERINARY LABORATORIES REPORT

August 2025

Regional Veterinary Laboratories (RVLs) carried out necropsy examinations on 439 carcasses and 26 fetuses during August 2025. Additionally, 1,621 diagnostic samples were tested to assist private veterinary practitioners with the diagnosis and control of disease in food producing animals. This report describes a selection of cases investigated by the Department of Agriculture, Food and the Marine's (DAFM) veterinary laboratories in August 2025. The objective of this report is to provide feedback to veterinary practitioners on the pattern of disease syndromes at this time of the year by describing common and highlighting unusual cases. Moreover, we aim to assist with future diagnoses, encourage thorough investigations of clinical cases, highlight available laboratory diagnostic tools and provide a better context for practitioners when interpreting laboratory reports.

## Cattle

Pneumonia and blackleg were the most common diagnoses at necropsy in cattle in the RVLs during August 2025.



**Table 1:** The most common diagnoses in cattle submitted for necropsy in August 2025.

## Gastrointestinal Tract

### Perforated abomasal ulcer

A five-month-old heifer with a history of being “off form” that had died after failing to respond to treatment was submitted to Kilkenny RVL. On necropsy, there was severe, fibrinous peritonitis with multifocal adhesions. There was a perforated abomasal ulcer. In addition, there were multifocal purulent abscesses, one near the liver and one near the bladder; infection of remnants of the umbilical vessels was suspected. *Trueperella pyogenes* was cultured from the abscesses.



**Figure 1:** Perforated abomasal ulcer in a five-month-old heifer. Photo: Aideen Kennedy.

### Dosing gun injury

Athlone RVL examined an 18-month-old heifer with a history of sudden death. The carcass preservation was very poor, with advanced tissue autolysis. There was a necrotic cellulitis in the subcutaneous tissues around the lower mandible and the submandibular area, and a necrotic glossitis and pharyngitis. A diagnosis of necrotic pharyngitis was made. The lesions were consistent with a dosing gun injury. Similar findings are more commonly seen in sheep, usually around two weeks post-drenching.



**Figure 2:** Dosing gun injury in a heifer. Photo: Denise Murphy.

### Intestinal volvulus/torsion

A five-month-old calf was found recumbent in the field before dying and being submitted to Kilkenny RVL. On post-mortem examination, there was an intestinal torsion at the root of

mesentery. The small intestine contents were bloody. The rumen contents were marginally acidic and, in addition, there was approximately 2kg of black plastic in the rumen (considered an incidental finding). The aetiology of torsions is usually unknown; however, a variety of factors can predispose to the development of torsions. They may occur subsequent to increased or decreased gastrointestinal motility which, in turn, is affected by enteritis, nutritional changes and upsets, gas accumulation and bloat, carbohydrate overload, and acidosis.



**Figure 3:** Red-coloured intestines in an intestinal torsion at the root of the mesentery of a calf. Photo: Aideen Kennedy.

### Summer scour syndrome

A February-born Hereford-cross heifer from a group of 30 weanlings was submitted to Limerick RVL with a history of chronic scour since turnout to pasture in May. All of the calves at pasture were similarly affected with no response to treatment, while 20 calves from the same farm which had been housed since birth continued to thrive. On post-mortem examination, there were multiple healed ulcers on the surface of the tongue; the oesophageal mucosa was inflamed with multifocal-to-coalescing necrotic ulcers extending the length of the oesophagus. There was consolidation of approximately 25 percent of the lungs with a cranioventral distribution. Histopathology of the oesophagus revealed a chronic oesophagitis with large numbers of lymphocytes and macrophages expanding the mucosa, with multifocal erosions, and there was a severe fibrino-suppurative bronchopneumonia in the lungs. The main findings were changes in upper digestive tract suggestive of summer scour syndrome (SSS) and pneumonia. *Bibersteinia trehalosi* was detected on polymerase chain reaction (PCR) testing from the oesophagus and *Mannheimia haemolytica* from the lungs. These bacteria are closely related; *B. trehalosi* can cause necrosis, ulceration and erosions of the oesophagus. The aetiology of SSS is currently unclear; it typically occurs in dairy calves within a month of turnout to lush grass high in crude protein and low in fibre, and affected calves are usually unresponsive to conventional treatments, only responding to removal from grass.



**Figure 4:** Summer scour syndrome in a heifer calf. The oesophageal mucosa was inflamed with multifocal-to-coalescing necrotic ulcers. Photo: Brian Toland.

Two calves were submitted to Kilkenny RVL with a history of wasting away and scouring. Both animals had mild oesophagitis, occasional ulcers on the tongue and on the rumen pillars. No significant agent was detected on lab tests. Histopathology changes suggested a role for summer scour syndrome.



**Figure 5:** Oesophagitis in a case of summer scour syndrome. Photo: Aideen Kennedy.

### Intussusception

Sligo RVL examined the carcass of an 18-month-old bull which had been noticed inappetent on the day prior to death, apparently in abdominal pain and passing only very small amounts of dark-red faeces. On post-mortem examination, there was an adhered intussusception of 30cm in length in the distal jejunum. Ruminal pH was at 4.56 indicating concurrent, severe ruminal acidosis. Review of feeding management was advised. It was unclear if the ruminal acidosis was present preceding the development of the intussusception.

### Respiratory Tract

#### Parasitic bronchitis/pneumonia

A Friesian weanling that had shown no response to treatment for a suspected pneumonia was presented to Limerick RVL for post-mortem examination. Necropsy revealed a heavy burden of lungworm (*Dictyocaulus viviparus*), in the upper airways, bronchi, and bronchioles, which were obstructing the airways; there was consolidation of approximately 5-10 percent of the lungs with a cranioventral distribution. Parasitic pneumonia ('hoose' pneumonia) was identified as the primary



cause of disease with *Mycoplasma bovis* and *M. haemolytica* detected on PCR and *T. pyogenes* on culture, and there was also a high strongyle worm egg burden of 850 eggs per gram (EPG).



**Figure 6:** A heavy burden of adult lungworm in the proximal trachea of a Friesian weanling. Photo: Brian Toland.

## Urinary/Reproductive Tract

### Bladder rupture

Athlone RVL examined a four-week-old calf with a history of suffering a small rectal prolapse the previous day and subsequently being found dead. On post-mortem examination, there was subcutaneous fluid in the ventral body wall from the prepuce to the pelvis. There was a large volume of slightly pink-tinged abdominal fluid with a urine smell and a small amount of urine in the urinary bladder. There was a 1-2cm area of haemorrhage on the serosal surface where the right ureter entered the bladder and a tear in the bladder wall there. The penile urethra was examined, and no gross obstruction was found. No crystals were seen in the urine or abdominal fluid. A conclusion of uroperitoneum secondary to bladder rupture was made. In cattle, bladder rupture is most commonly caused by urethral obstruction, particularly in males due to urolithiasis. Less common causes include urethral compression from injuries, inflammation, or tumours.

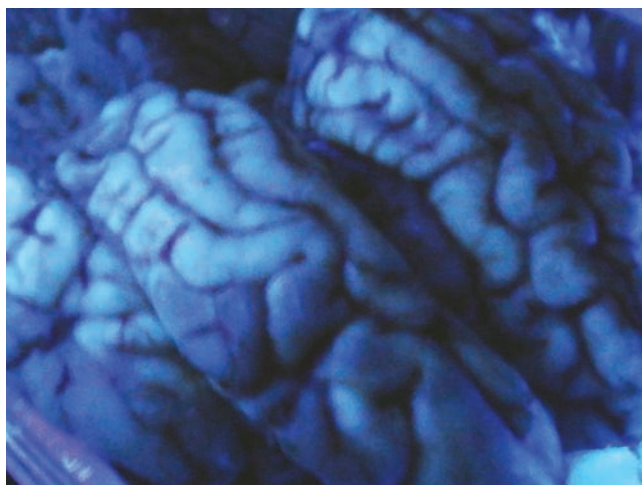


**Figure 7:** A perforation of the bladder wall of a young calf. Photo: Denise Murphy.

## Nervous System

### Cerebrocortical necrosis

A five-month-old calf that had been frothing at the mouth and displaying neurological signs was submitted to Kilkenny RVL. Examination of the brain showed multifocal areas that fluoresced under an ultraviolet (UV) light. The abomasal mucosa was also thickened, and the intestinal contents were fluid. A high strongyle count was recorded on McMaster's testing of the intestinal contents. Histopathology changes were consistent with a diagnosis of cerebrocortical necrosis (CCN). CCN has been associated with two types of dietary triggers: altered thiamine status and high sulphur intake. Restricted water availability can also increase the risk of developing CCN, and any enteric inflammation, including that from parasitism, which reduces small intestinal absorption of the vitamin, can potentially precipitate this disease.

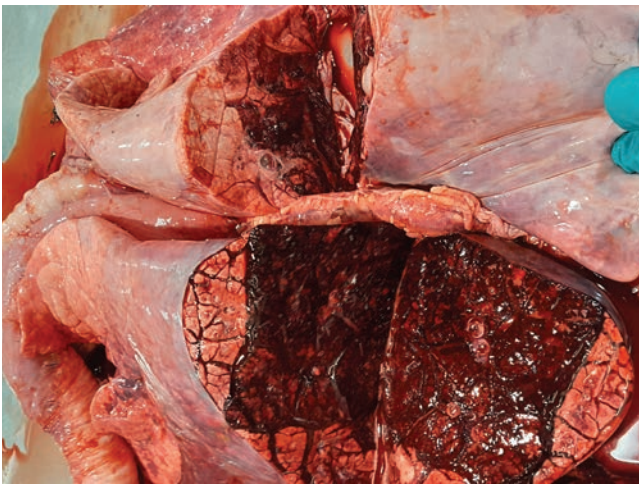


**Figure 8:** Areas of fluorescence in the cerebrum of a young calf that died as a result of CCN. Photo: Aideen Kennedy.

## Musculoskeletal

### Clostridial diseases

Athlone RVL examined a five-month-old weanling with a history of hindlimb lameness, which had been brought indoors and was treated without response and subsequently died. It was the second similar loss in two days. There were dry, haemorrhagic lesions characteristic of myositis in the quadriceps muscles of both hindlimbs with subcutaneous haemorrhage and oedema. There was a well-demarcated, square, firm haemorrhagic lesion in the right caudal lung lobe and a similar smaller lesion in the left caudal lobe. The myocardium was unremarkable. *Clostridium chauvoei* was detected in the muscle lesions by fluorescent antibody technique (FAT) confirming the diagnosis of clostridial myositis ('blackleg'). Advice was given regarding the vaccination of comrades with a multivalent clostridial vaccine.



**Figure 9:** A haemorrhagic lesion in the lungs of a weanling where *Clostridium chauvoei* was detected in the muscle tissue. Photo: Denise Murphy.

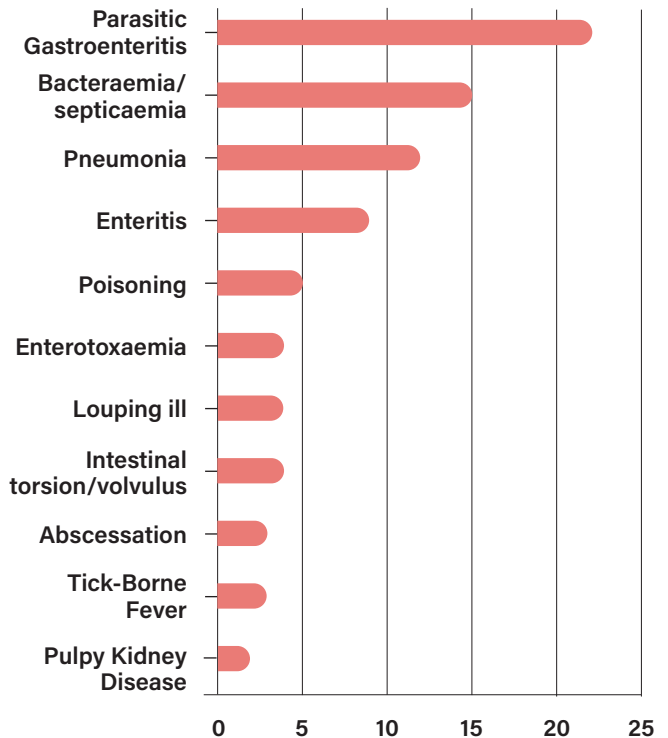
As is common at this time of the year, there were several cases of clostridial diseases in cattle in Sligo RVL. There were some cases of blackleg and pseudo-blackleg. *C. chauvoei*, the cause of blackleg was detected in the myocardium of a seven-month-old calf, which had been found dead. Grossly, there was a severe focal area of gangrenous myositis emitting a characteristic smell upon incision. There was also fibrinous pericarditis.

In another calf of similar age, which also had been found dead suddenly, dry myositis was found in the musculature of the tongue. *Clostridium septicum* and *Clostridium novyi* were detected in this case in the lesion by FAT. This causes a condition commonly referred to as pseudo-blackleg or false blackleg.

There was also a case of 'black disease' (infectious necrotic hepatitis), caused by *C. novyi* which was diagnosed in an eight-year-old cow that had appeared off form and bloated in the days before death. Black disease usually presents with a pale necrotic lesion on the hepatic surface surrounded by a haemorrhagic border. The omentum and peritoneum are often reddened. The diagnosis is made by the detection of the agent from the lesion by FAT.

## Sheep

Parasitic gastroenteritis and bacteraemia/septicaemia were the most common diagnoses at necropsy in sheep in the RVLs during August 2025.



**Table 2:** The most common diagnoses in sheep submitted for necropsy in August 2025.

## Gastrointestinal Tract

### Haemonchosis

Two four-month-old lambs with a history of ill-thrift and lethargy were submitted to Kilkenny RVL. On necropsy, both lambs were very pale. There were large numbers of *Haemonchus contortus* in the abomasum. In addition, one lamb also had pneumonia with consolidation of approximately 15 per cent of its lung tissue and adhesions between the pleura and the pericardium. *M. haemolytica* was cultured from the lungs of the lamb with pneumonia. Extremely high strongyle egg counts of 27,000 and 18,000EPG were obtained. Examination of cohorts for signs of anaemia and a review of dosing was recommended.



**Figure 10:** Pneumonia in a lamb that had concurrent haemonchosis. Photo: Aideen Kennedy.



## Salmonellosis

Sligo RVL examined the carcasses of three three-year-old ewes that had been noticed sick before death and did not improve on treatment. Despite moderate-to-poor preservation of the carcasses, severe necrotising typhlitis and, in one case, abomasitis was apparent in all animals. On histopathology, there was diffuse, severe, acute enteritis and typhlitis with loss of crypt architecture and mucosal haemorrhage. *Salmonella enterica* serovar Typhimurium was cultured from the faeces of all of the ewes. Due to its zoonotic potential and its potential implications for public health this is a notifiable agent, so the respective regional veterinary office (RVO) was notified. The PVP and owner were informed and advised to review the biosecurity and hygiene measures in place.

## Respiratory Tract

Ovine pulmonary adenocarcinoma

Ovine pulmonary adenocarcinoma (OPA) caused by jaagsiekte sheep retrovirus was diagnosed in an eight-month-old lamb which had been noticed with dyspnoea and frothing before death. The lungs presented with multifocal, well-demarcated, pale areas of consolidation. Jaagsiekte sheep retrovirus was detected by PCR. The diagnosis of OPA was confirmed by typical histopathological changes.

## Nervous System

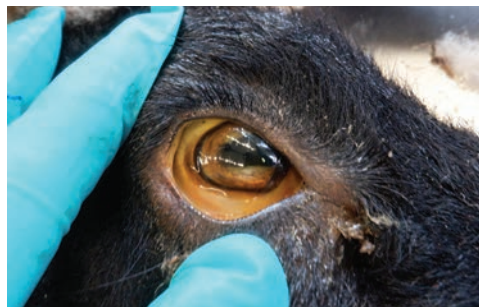
### Louping Ill

Three five-month-old lambs which had been noticed at first to be staggering, then recumbent, were submitted to Sligo RVL. On post-mortem examination, their adipose reserves were depleted. The perineal wool of all three animals was extensively caked with faeces and there was chronic parasitic gastroenteritis with transparent, fluid-filled intestines. There was concurrent segmental coccidiosis. In accompanying blood samples, antibodies to louping ill virus (LIV) were detected at a level suggestive of recent infection. Antibodies to *Anaplasma phagocytophilum* (the causative organism of tick-borne fever) were also detected. Louping ill was diagnosed by histopathology as the cause of the observed nervous signs. The concurrent tick-borne fever detection highlighted the exposure to ticks. The parasitic gastroenteritis observed on post-mortem examination was chronic and together with the tick-borne fever would have caused immunosuppression exacerbating the severity of the LIV infection. LIV is most commonly diagnosed in immunologically naive lambs during their first grazing season or bought in animals when they are exposed to an area with LIV-infected ticks.

## Poisonings

### Copper poisoning

Two six-month-old lambs were submitted to Kilkenny RVL having displayed no clinical signs prior to death. Both lambs were very jaundiced. The kidneys were 'gun metal black' in both carcasses. The livers were jaundiced. One lamb had port-wine-coloured urine. Biochemistry results confirmed copper toxicity as the cause of death.



**Figure 11:** Jaundiced mucous membranes in a lamb where copper poisoning was diagnosed. Photo: Aideen Kennedy.

Sligo RVL examined the carcass of an 18-month-old ewe which had presented with severe weight loss and diarrhoea. There was no improvement despite dosing and treatment. On post-mortem examination, there was depletion of internal adipose depots. The liver was discoloured (orange). Copper concentrations in hepatic tissue samples were at the upper end of the reference range, whereas renal cortex copper concentrations were confirmed in the toxic range. There was concurrent parasitic gastroenteritis. Copper poisoning was diagnosed as the cause of death. It was thought likely that copper had been administered to the animal to treat the ill thrift caused by parasitic gastroenteritis.

## Pigs

### Chronic Abscessation in Weaners

An increase of lameness and joint swelling was investigated in four weaner pigs (two first-stage and two second-stage weaners) in Dublin RVL. *Streptococcus suis* was suspected by the PVP. Gross post-mortem findings included: chronic, periarticular, abscessation of multiple joints; multifocal pulmonary abscesses; and systemic abscessation throughout the carcasses. Lesions were chronic and characterised by fibrosis, necrosis, and purulent exudate. Bacteriological culture identified *T. pyogenes* in multiple sites, including joints, lungs, and abscesses. Given the chronic nature of the lesions, *T. pyogenes* was considered a secondary opportunistic invader rather than the initiating agent. Further diagnostic investigations of acute, untreated cases were recommended to elucidate the primary pathogen in these cases.



**Figure 12:** Right tarsus of a weaner pig: chronic severe circumferential periarticular fibrosis, extending up to approximately 4/5cm in width. There was moderate periarticular oedema. The bone was very brittle, and note the presence of pus in the bone marrow cavity (osteomyelitis). Photo: Sara Salgado.