

REGIONAL VETERINARY LABORATORIES REPORT

May 2026

Regional Veterinary Laboratories (RVLs) carried out necropsy examinations on 581 carcasses and 37 fetuses during May 2026. Additionally, 1,281 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 May 2026.

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 enteritis were the most common diagnoses at necropsy in cattle in the RVLs during May 2026.

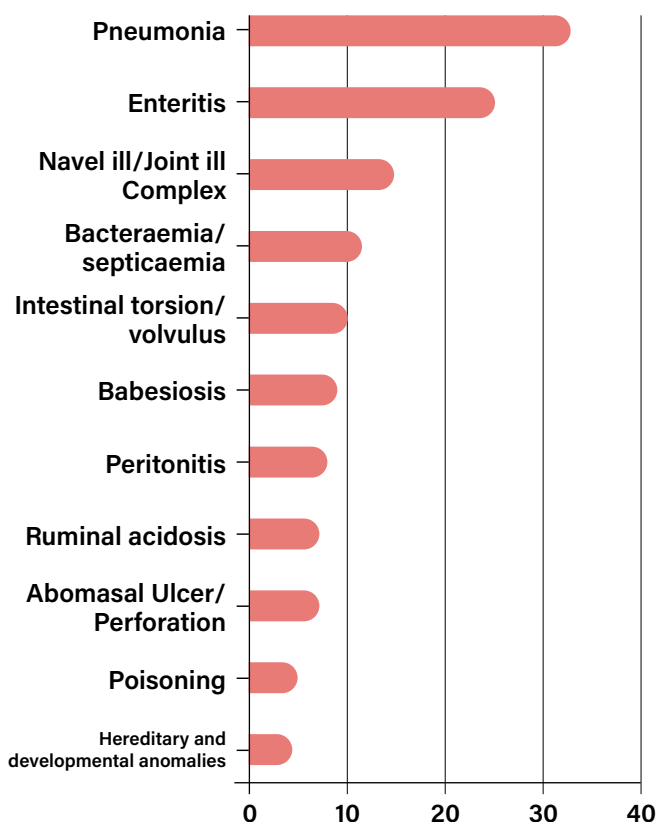


Table 1: The most common diagnoses in cattle submitted for necropsy in May 2026.

Gastrointestinal Tract

Bleeding abomasal ulcer

A four-year-old cow, eight days post-calving – had mild mastitis but had been milking well – was presented to Kilkenny RVL. The cow was reported to be recumbent and sweating prior to death. On post-mortem examination, the cow was pale. Large blood clots were present in the abomasum with multifocal abomasal ulceration and diffusely haemorrhagic small intestinal content. An exposed blood vessel was identified within one of the ulcers, confirming the source of the haemorrhage.

The aetiology of ulcers is not definitively known. Stress

and nutritional influences are two of the main risk factors.

Negative energy balance or management changes, such as mixing and concurrent disease, increase the risk of ulcer development.

High concentrate diets can lead to excessive production of volatile fatty acids; as they cannot all be absorbed by the rumen, they overflow into the abomasum and decrease the pH. In addition, ruminal acidosis increases histamine production, stimulating abomasal acid secretion, and further predisposes the mucosa to ulceration. The use of certain drugs, particularly non-steroidal anti-inflammatory drugs, is also recognised as a risk factor for abomasal ulceration.



Figure 1: Bleeding abomasal ulcer with an exposed blood vessel. Photo: Aideen Kennedy.

Abomasal rupture in a dairy cow

A three-year-old dairy cow who was four months in calf presented to Sligo RVL. She had been off form and eating very little for a few days prior to death. This was the second similar loss on the farm. The animal had been treated by the farmer.

On gross post-mortem examination, the cow had severely sunken eyes. Upon opening, the abomasum was on the right side of the abdomen, there was an acute abomasal rupture with severely congested abomasal mucosa. There was severe peritonitis and the peritoneal cavity contained a large volume of ingesta and blood-tinged fibrinous fluid. Caecal content was markedly watery.

Ocular urea levels were raised indicating an azotaemia, most likely due to circulatory compromise.

Based on clinical history and gross findings, a right displaced abomasum (RDA) with subsequent volvulus and perforation is considered the most likely sequence of events. RDA, similar to left displaced abomasum, will typically occur in the weeks post-calving but RDAs can also occur at any time. The predisposing risk factors are similar for both conditions.



Figure 2: Abomasal rupture in a dairy cow. Photo: Fiona Kane.

Right displaced abomasum and intestinal torsion

A seven-year-old cow was submitted to Kilkenny RVL. The cow was found dead having been milked normally earlier that day. Post-mortem examination revealed right displacement of the abomasum and torsion of the small intestines. The intestinal loops were markedly congested and had haemorrhagic contents. *Escherichia coli* was cultured from multiple organs. Magnesium concentrations on eye fluid analysis were low, indicating hypomagnesaemia secondary to a right displaced abomasum, was likely cause of death.



Figure 3: Congested intestinal loops due to an intestinal torsion. Photo: Aileen Kennedy.

Volvulus

The carcase of a two-week-old calf with a history of diarrhoea was submitted to Sligo RVL. On post-mortem

examination, the calf had severe dehydration. There was segmental volvulus of the jejunum with dark red-to-black, necrotic intestinal loops and fulminant fibrinous peritonitis. An infection with *Cryptosporidium parvum* was detected in intestinal contents.

Volvulus or intestinal torsions, in which no mechanical factor has been identified, are associated with altered intestinal motility. Predisposing factors include enteritis (viral, bacterial, and parasitic infections), dietary or management changes, and electrolyte disturbances.



Figure 4: Necrotic jejunal loops and peritonitis in a case of segmental volvulus in a calf. Photo: Rebecca Froehlich-Kelly.

Urinary/Reproductive Tract

Pyelonephritis

A four-week-old calf was submitted to Kilkenny RVL. The calf had been treated with antibiotics but failed to respond. On post-mortem examination, there was severe bilateral pyelonephritis and fibrinous peritonitis. Mild oedema of the navel was also present. In calves, pyelonephritis most commonly develops via ascending urinary tract infection or infection of the remnant of the foetal urachus subsequent to omphalophlebitis.



Figure 5: Severe nephritis with purulent material evident. Photo: Aileen Kennedy.

Nephritis

Sligo RVL examined the carcase of a one-week-old calf, with a history of initial pneumonia-like symptoms. There

was improvement following treatment, but the calf then subsequently developed severe dehydration and pain. On post-mortem examination, the kidneys bilaterally presented with extensive multifocal-to-coalescing, pale, raised lesions on the cortex extending into medulla. Ancillary testing yielded *Candida* spp from kidney tissue and *E. coli* from multiple organs. A concurrent *C. parvum* infection was present.

On histopathology, there was severe, multifocal-to-coalescing, chronic, necrotising nephritis with fungal hyphae confirmed as the aetiological agent. It was considered likely the fungal infection was facilitated by earlier antibiotic treatment.



Figure 6: Fungal nephritis in a calf. Photo: Rebecca Froehlich-Kelly.

Omphalophlebitis

A two-month-old calf with a history of right hindlimb lameness, progressing to bilateral hindlimb paresis was submitted to Sligo RVL. On post-mortem examination, there was severe, multifocal, randomly distributed hepatic abscesses. The umbilical vein remained patent, it was enlarged and contained purulent material. Septic arthritis affected all joints of the hindlimbs. *E. coli* was cultured from the liver. A diagnosis of omphalophlebitis with embolic bacterial dissemination was diagnosed in this case.



Figure 7: Hepatic abscessation associated with omphalophlebitis in a calf. Photo: Rebecca Froehlich-Kelly.



Figure 8: Septic fibrinopurulent arthritis in a case of omphalophlebitis in a calf. Photo: Rebecca Froehlich-Kelly.



Figure 9: Thickened umbilical vein in a case of omphalophlebitis in a calf. Photo: Rebecca Froehlich-Kelly.

Musculoskeletal

Chronic arthritis

A 13-year-old suckler cow presented to Sligo RVL with a four-month history of stiffness which was increasing in severity. The farmer reported weight loss despite the cow having a good appetite; she was treated on numerous occasions but due to no improvement was euthanised. There was marked muscle wastage of the hindquarters. Upon incision of the stifle joint there was thickening of the joint capsule, with extensive periarticular fibrous tissue evident. The synovial fluid was yellow with increased viscosity and contained fibrin strands. Stifle joints were bilaterally affected. Cultures from the affected joint were sterile. Polymerase chain reaction (PCR) testing of the joint fluid was negative for *Mycoplasma bovis* but positive by PCR for *Histophilus somni*. This animal also tested positive for tick-borne fever. Tick-borne fever is normally a self-limiting disease in adult cattle, but it can play a significant role in lowering the immune status, leaving the animal susceptible to secondary infections.

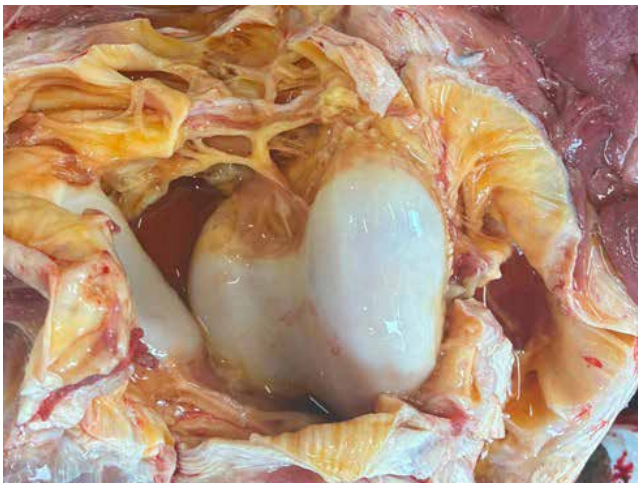


Figure 10: Chronic arthritis in the stifle joint of a cow. Photo: Fiona Kane.

Miscellaneous

Leukosis

A nine-month-old suckler weanling died suddenly and was presented to Dublin RVL. He had been bought in two months previously.

Upon post-mortem examination, adjacent to the oesophagus there was a large (approximately 40cm x 8cm) cylindrical soft tissue mass. The external surface had an irregular texture, was dark red-to-black, diffusely congested, and had fibrinous adhesions to the surrounding tissue. Upon incision, the tissue was interspersed with multifocal, pale cream, firm lesions of varying sizes. They were well demarcated, and some had a laminated appearance. Cranial lymph nodes were moderately enlarged.

Histopathology of the mass and cranial lymph node showed sheets of round cells with large basophilic nuclei and scant amount of eosinophilic cytoplasm. There was a low mitotic rate. Findings were consistent with thymic lymphoma. Enzootic Bovine Leukosis – from which Ireland is free – was ruled out by PCR testing of tissue from the mass and local lymph node. A diagnosis of Sporadic Bovine Leukosis (SBL) is the most likely cause. It can occur in three forms: juvenile, thymic, and skin forms. Cattle older than two years of age are rarely affected.

This weanling had a concurrent severe pneumonia, which was the final cause of death.



Figure 11: Soft tissue mass in the neck of a nine-month-old weanling calf. Photo: Fiona Kane.

Trauma

Sligo RVL examined the carcass of a three-month-old heifer which had been observed with walking difficulties after another animal mounted her in the crush during routine handling. She was found dead the following day. Post-mortem examination revealed a large intramuscular haematoma in the lumbar region extending into the retroperitoneal space and associated with extensive peri-renal haemorrhage. There was marked pallor of the carcass consistent with significant blood loss. Traumatic haemorrhage and renal failure were diagnosed as the likely cause of death.



Figure 12: Intramuscular haematoma in a traumatic injury in a heifer. Photo: Rebecca Froehlich-Kelly.



Figure 13: Extensive perirenal haemorrhage after a traumatic injury in a heifer. Photo: Rebecca Froehlich-Kelly.

Sheep

Parasitic gastroenteritis and pneumonia were the most common diagnoses at necropsy in sheep in the RVLs during May 2026.

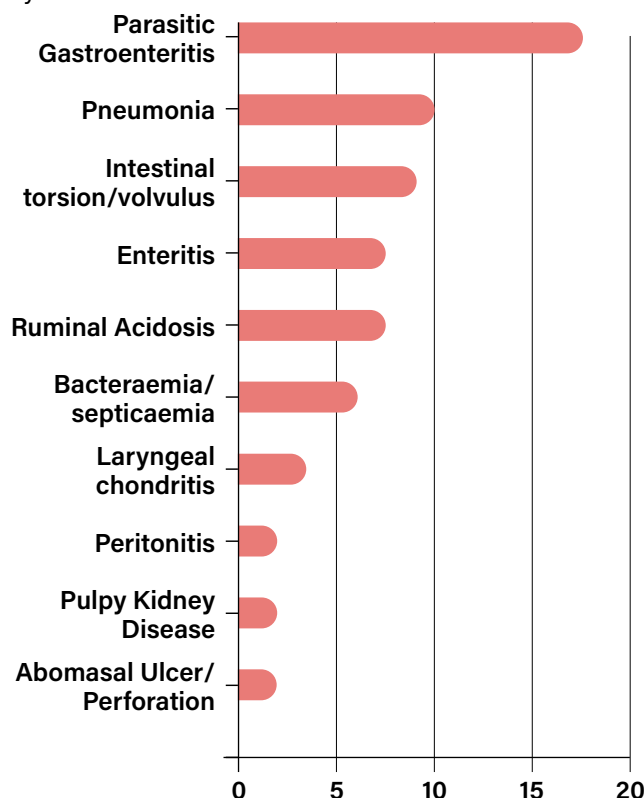


Table 2: The most common diagnoses in sheep submitted for necropsy in May 2026.

Gastrointestinal Tract

Coccidiosis

Sligo RVL diagnosed coccidiosis in several cases in lambs. In one example of such a case, there was coccidiosis with terminal enterotoxaemia in a five-week-old lamb. The animal had been found dead without prior signs of illness. On post-mortem examination, there was a large, sero-fibrinous clot present in the pericardial sac.



Figure 14: Sero-fibrinous clot from the pericardial sac in a lamb with enterotoxaemia. Photo: Rebecca Froehlich-Kelly.

There was also cerebellar herniation. *Clostridium perfringens* and its epsilon toxin were detected in intestinal contents,

as well as a heavy infection with coccidia. Coccidiosis and likely terminal Clostridial enterotoxaemia (pulpy kidney) were diagnosed as cause of death.



Figure 15: Herniation of the cerebellar vermis through the foramen magnum in a lamb with enterotoxaemia. Photo: Rebecca Froehlich-Kelly.

Cestodiasis and mineral deficiency

A ten-week-old lamb was submitted for necropsy at Dublin RVL. The lamb had a massive number of tapeworms (*Moniezia* sp.) within the intestinal lumen. Additionally, it had hepatic cobalt (Co) and copper (Cu) concentrations below the reference ranges, whilst molybdenum (Mo) was elevated. Sulphur and Mo can form complexes in the rumen that bind Cu, making it unavailable (commonly known as 'copper lock-up'). Without sufficient Cu available in the rumen, these complexes can absorb into the blood and exert systemic effects on Cu availability. *Moniezia* spp. are of very low pathogenic potential, but their presence in a large number suggests a flawed parasite control regimen. Moreover, Cu and other trace elements are absorbed in the intestine, and a severe gastrointestinal parasitism, as in this case, and/or intestinal damage could hamper absorption.



Figure 16: Tapeworms (*Moniezia* sp.) within the intestinal lumen of a lamb. Photo: Sebastian Mignacca.

Dosing gun injury

A three-month-old lamb was submitted to Dublin RVL. It was found in respiratory distress and euthanised on welfare grounds; the private veterinary practitioner (PVP) suspected an oral dosing injury and given the poor prognosis, took the

decision of euthanasia. The group of animals had been orally dosed four days previously



Figure 17: Submandibular swelling due to a dosing gun injury. Photo: Sara Salgado.

The lamb was in good body condition, and the gross examination revealed moderate submandibular swelling. Extensive pharyngeal/retropharyngeal trauma, haemorrhage, and oedema was observed tracking through the peri-oesophageal and submandibular tissues, classic damage from a rough or incorrectly angled dosing gun nozzle. These injuries are easy to miss externally but can lead to abscessation, dysphagia, aspiration, and death.



Figure 18: Diffuse subcutaneous bruising over the throat. Photo: Sara Salgado.

Dosing Gun Injuries

Practitioners advising farm clients have a key role in preventing iatrogenic oral dosing injuries through targeted husbandry guidance. Equipment selection should be species and weight appropriate: bolus guns must match the manufacturer-specified device for each product. Drenching guns should be calibrated and maintained to deliver accurate volumes without excessive nozzle pressure. Farmers should be counselled that adequate physical restraint is essential. Sudden head movement during bolus delivery is a primary mechanism of pharyngeal and oesophageal trauma, and liquid drenching performed in an improperly restrained or incorrectly positioned animal carries a significant aspiration risk.

Where clinical signs of dysphagia, hypersalivation, cervical swelling, coughing, or respiratory distress develop in the days following oral dosing, iatrogenic

trauma should feature prominently in the differential diagnosis alongside infectious and metabolic causes.

Musculo-skeletal

Omphalitis and arthritis

A two-week-old lamb that could not stand was submitted to Kilkenny RVL. There were multiple swollen joints that contained purulent material. The navel was infected, the umbilical vein tracking to the liver had suppurative inflammation. There was multifocal abscessation in the liver and a fibrinous peritonitis. Omphalitis and arthritis (also known as navel ill/joint ill complex) were diagnosed, leading to liver abscessation and peritonitis. A review of navel hygiene at lambing was recommended.



Figure 19: Septic arthritis or "joint ill". Photo: Aideen Kennedy.

Miscellaneous

Cobalt deficiency

A one-year-old hogget, which became very thin and listless, was submitted to Kilkenny RVL. The carcass appeared pale. The liver was very pale and friable. There was abomasum fold oedema. The lungs were mildly congested. On histopathology, there was multifocal hepatocyte vacuolation suggestive of ovine white liver disease, and Co deficiency was confirmed on biochemistry. Co is required for synthesis of Vitamin B12 by the ruminal microflora. Vitamin B12 is required for the metabolism of propionic acid by the liver for energy. Poor utilisation of propionate then leads to reduced appetite and subsequent ill thrift.



Figure 20: A pale, friable "white liver" typical of cobalt deficiency. Photo: Aideen Kennedy.