



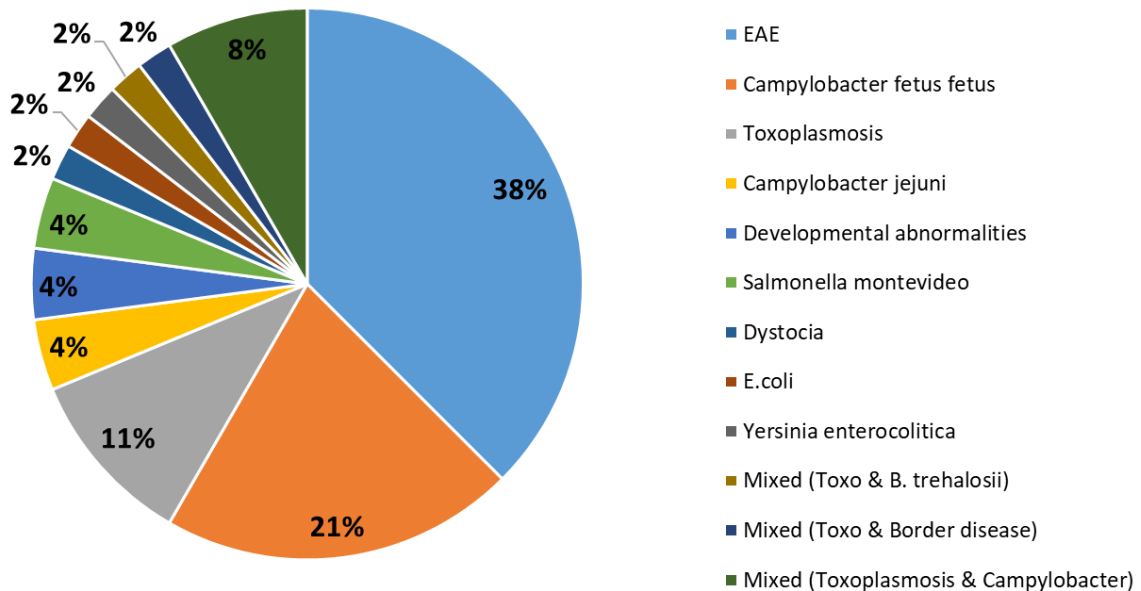
Ovine Abortion Special

The results are in, please see our summary of ovine abortion causes diagnosed at WVSC during the 2022-2023 lambing season.

WVSC Ovine Abortion Diagnoses in 2023 (Diagnosis rate 48/71 = 67.6%)



Canolfan
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Enzootic abortion is still our single most common diagnosed cause of ovine abortion in samples submitted to us here in WVSC. *Campylobacter fetus fetus* is a close second with 10 cases and 4 cases where it was identified in addition to toxoplasmosis.

In over 67% of cases submitted a diagnosis was reached, and this is higher than in previous years.

Tick-related diseases diagnosed include two cases of tick-borne fever (TBF) and one case of Louping ill virus. In an incident involving tick borne fever, a lamb was submitted for postmortem examination (PME) to investigate lamb deaths on a farm, without any other clinical signs. Lowland ewes brought on to the farm were also displaying a variety of clinical signs. The gross findings in the lamb, including splenic enlargement, were consistent with a systemic disease and that, along with the vague signs

in the brought-in ewes suggested a tick-borne disease could also be an issue. A pure growth of *Bibersteinia trehalosi* confirmed systemic pasteurellosis in the lamb which would have been enough to cause death on its own. A high faecal coccidia oocyst count with morphology suggestive of pathogenic coccidial species was also a significant finding. However, *Anaplasma phagocytophilum* was detected by PCR in samples from the lamb and the ewe. *A. phagocytophilum* is spread by ticks and is the organism which causes TBF. It is, therefore, likely that the ewes introduced to the farm had not been previously exposed to TBF and were naive and were susceptible to the immunosuppressive effects of the organism.

Ruminant Nutrition 19/20th September with Kate Phillips at the Royal Welsh Showground. A highly recommended course for Vets to understand and get your head around sheep nutrition. Email us to book. £500 for 2 days.

In the second incident four or five young lambs had died following a period of being listless, weak, thin, and limp. Many *Ixodes* sp. ticks were visible on the skin of a lamb submitted for PME. The carcass was pale, and the lamb had a pneumonia and fibrinous pleurisy. *Staphylococcus aureus* which is the commonest bacteria cultured from cases of tick pyaemia was isolated from lung and the presence of *A. phagocytophilum* was confirmed by PCR.

Advanced Parasitology on Wed 4th October at the Royal Welsh Showground. Stewart Burgess and Philip Skuce from Moredun and Sian Mitchell previously of APHA. Get up to date with your parasitology knowledge and learn from those at the forefront of parasitology research.

Louping ill was confirmed on a farm with no previous history of the disease. Four yearling ewe-lambs had died in a group of 60 ewes in a hill flock comprising 300 ewes. They were grazing a hill and had been treated for ticks with cypermethrin. They previously grazed the land as lambs last year. Some of the affected ewe-lambs were found dead but one was found with acute onset clinical signs of facial asymmetry, circling, lethargy, ataxia and inappetence. It was treated with penicillin but died overnight and was submitted for PME. Several lymph nodes and the spleen were enlarged otherwise PME findings were unremarkable. Histopathology revealed a non-suppurative encephalitis consistent with louping ill which was confirmed with immunohistochemistry (IHC) and PCR testing.

Hepatic necrobacillosis was diagnosed in a four-week-old lamb on a farm where five lambs had been found dead at around three weeks of age. The liver had multiple yellow irregular shaped areas within the parenchyma and the carcass was jaundiced. Histopathology showed changes in the liver consistent with hepatic necrobacillosis with intralobular bacteria suggestive of *Fusobacterium* species. *E. coli* was also isolated suggesting a concomitant colisepticaemia.

Fig 1: Liver lesions consistent with hepatic necrobacillosis



Streptococcus suis type 2 was cultured from the spleen of an eight-week-old weaner submitted for postmortem after being found dead. Four piglets had died from a group of 14 on this commercial indoor breeder-finisher unit. Gross necropsy findings were non-specific although there was evidence of tail biting, ear tip necrosis and a mild peritonitis. A septicemia caused by *Streptococcus suis* type 2 was confirmed through bacterial culture of the spleen. No underlying viruses were identified.

Fig 2: Ear tip necrosis in a weaner pig



Strep suis type 2 is the most common serotype causing primary disease in post-weaned pigs in the UK. The disease causes septicemia with sudden death, meningitis, arthritis and endocarditis also seen in post-weaned pigs.

WVSC VDIs: Bev. Hopkins and Jon. King

**Wales Veterinary
Science Centre
Y Buarth, Aberystwyth,
Ceredigion, SY23 1ND**



01970 612374



enquiries@wvsc.wales



<http://www.wvsc.wales>



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Please check the eligibility for **free carcass collection** via this website:

<http://apha.defra.gov.uk/postcode/pme.asp>

The suitability of submissions for a postmortem exam. must always be discussed with the WVSC duty vet.