EQUINE DISEASE SURVEILLANCE

2025 Q3 QUARTERLY REPORT

Produced by:

EIDS
Equine Infectious Disease Surveillance

UNIVERSITY OF CAMBRIDGE
Department of Veterinary Medicine

EQUINE DISEASE SURVEILLANCE QUARTERLY REPORT

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INTRODUCTION

Welcome to the Equine Disease Surveillance Report for the third quarter of 2025. This report is produced by Equine Infectious Disease Surveillance (EIDS), based within the Department of Veterinary Medicine at the University of Cambridge.

National disease data are gathered from multiple diagnostic laboratories and veterinary practices across the United Kingdom, offering a detailed overview of the occurrence of equine infectious diseases. Because the global equine population is highly interconnected through international trade and travel, countries routinely collaborate on infectious disease surveillance to share information and issue timely alerts. This report summarises both national and international findings.

We welcome comments and feedback, as well as suggestions or contributions for future focus articles. Previous reports can be found at www.equinesurveillance.org, and you can receive future quarterly reports free of charge by contacting equinesurveillance@vet.cam.ac.uk.

HIGHLIGHTS IN THIS ISSUE

NEWS ARTICLES:

- Significant rise in UK equine strangles diagnoses highlights importance of vigilance and vaccination
- A new case reporting, real-time analytics platform and weather risk model for Equine Grass Sickness
- EIDS autumn advisory: atypical myopathy seasonal cases

FOCUS ARTICLE:

- Tackling equine antimicrobial resistance: introducing REIN In AMR, a UK government-funded initiative

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NOTE:

The data presented in this report must be interpreted with caution, as there is likely to be some bias in the way that samples are submitted for laboratory testing. For example, they are influenced by factors such as owner attitude or financial constraints, or are being conducted for routine screening as well as clinical investigation purposes. Consequently, these data do not necessarily reflect true disease frequency within the equine population of UK.

WITH THANKS TO THE FOLLOWING SUPPPORTERS

Department for Environment Food & Rural Affairs

BEVA

Llywodraeth Cymru Welsh Government

Department of Agriculture, Environment and Rural Affairs

Scottish Government Riaghaltas na h-Alba gov.scot

NEWS ARTICLES

SIGNIFICANT RISE IN UK EQUINE STRANGLES DIAGNOSES HIGHLIGHTS IMPORTANCE OF VIGILANCE AND VACCINATION

Strangles is a highly contagious upper respiratory tract infection caused by the bacterium *Streptococcus equi* (*S. equi*), which can affect horses, ponies and donkeys of all breeds and ages. The disease is considered endemic within the UK horse population with surveillance of the disease undertaken by the Surveillance of Equine Strangles (SES) network an EIDS lead initiative, which monitors laboratory diagnoses. The network is comprised of 12 veterinary diagnostic laboratories and equine practices that confirm *S. equi* infection based on agent detection assays. With approximately 300 laboratory-confirmed cases reported in the UK each year (McGlennon, A., 2024), and many more likely undiagnosed, strangles continues to pose serious welfare and financial risks to the equine industry.

Throughout 2025 Equine Infectious Disease Surveillance (EIDS) has been monitoring diagnoses reported to SES, and as of the end of September 2025 over 360 laboratory diagnoses have already been reported – surpassing the previously referred to average total yearly diagnoses (Figure 1).

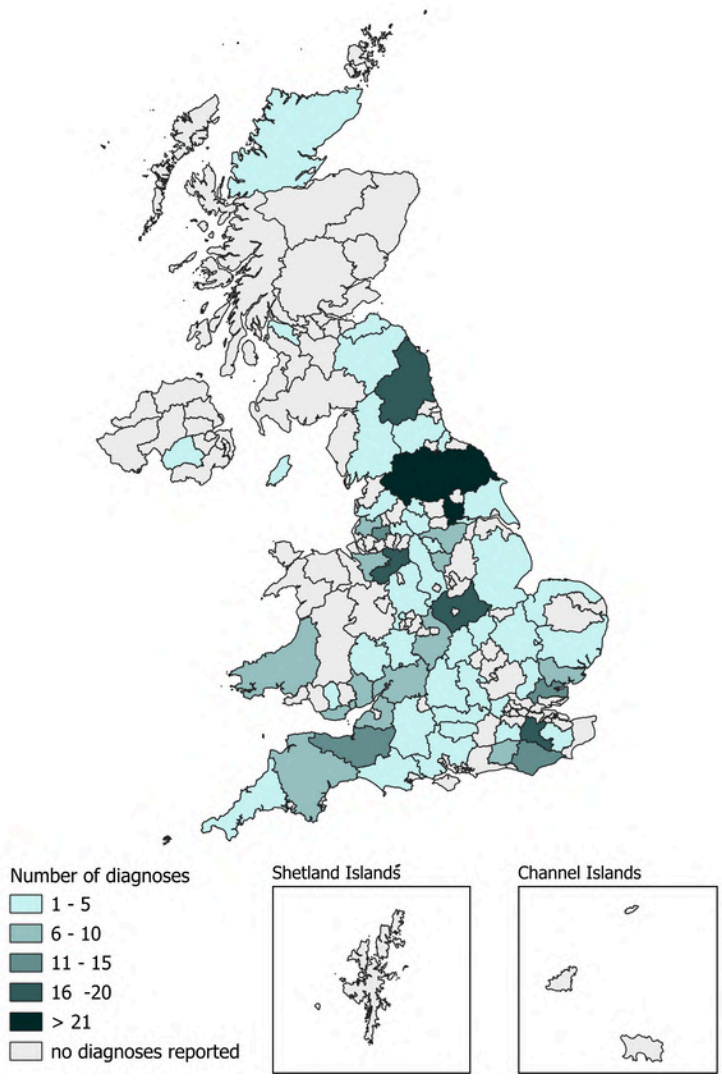

Figure 1: Number of positive *S. equi* diagnoses reported by the Surveillance and Equine Strangles (SES) network between January and September 2025.

To investigate this further, trends in the average number of monthly diagnoses were examined over recent years to determine whether the increase seen so far in 2025 represents a genuine rise in disease reports or falls within expected normal year-to-year variation.

The average number of positive strangles diagnoses per month has risen significantly in 2025 compared with the previous four years, which all saw increases after a lower number of strangles diagnoses made in 2020, linked to the effects of Covid-19.

Compared to 2021 the average monthly diagnoses were virtually identical in 2022 but significantly decreased in 2023 and 2024, followed by reported average monthly diagnoses in 2025 showing a marked rise (Figure 2).

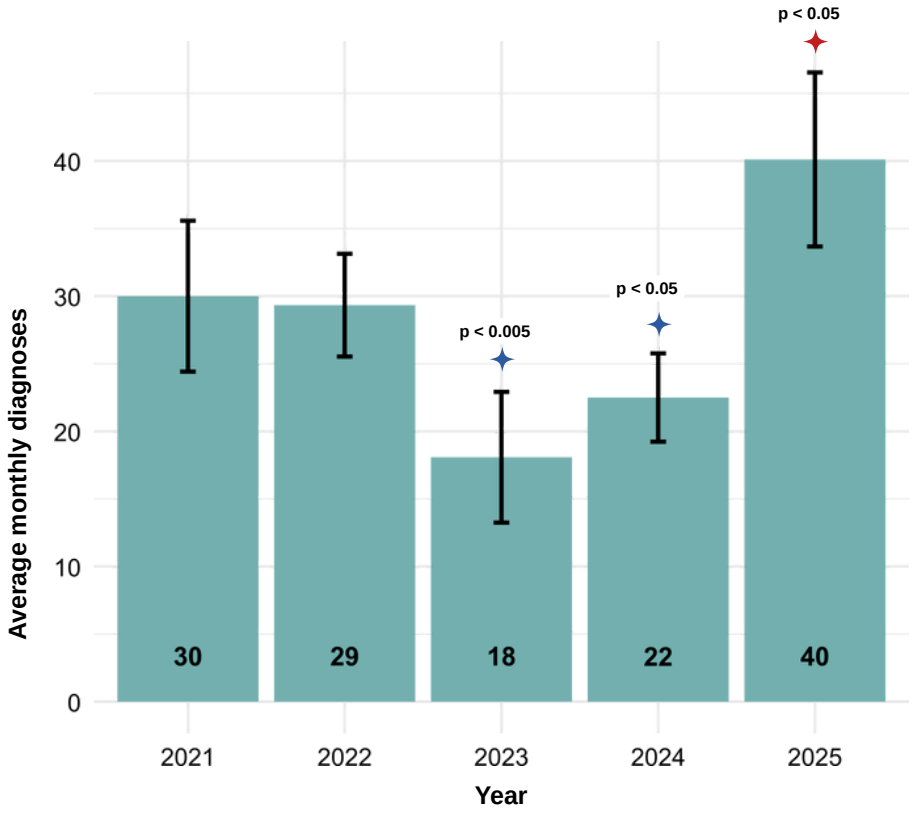

Figure 2: Average monthly counts of positive strangles diagnoses by year with 95% confidence intervals (bars) shows statistically significantly lower average monthly diagnoses in 2023 and 2024 (blue stars) but statistically significantly higher average monthly diagnoses in 2025 (red star) compared to 2021 as the baseline, which were virtually identical.

This significant rise highlights the importance of continued monitoring of diagnoses via the SES network and serves as a timely reminder for yard and horse owners to increase their day-to-day hygiene and biosecurity measures to reduce the risk of disease for their horses.

Previous research into *Streptococcus equi* circulation in the UK revealed rapid genetic changes in the bacterial population and frequent transmission between regions (McGlennon *et al.*, 2025). The study revealed a significant and rapid change in the *S. equi* strains during this period, suggesting that acutely infected or recently recovered short-term carrier horses play a more important role in transmission than long-term carriers. Transmission between different UK regions was observed, with nearly two-thirds of transmission pairs occurring between horses from separate regions and one major transmission chain spanning England, Scotland, Wales, and Northern Ireland within six-months.

The conclusions from the previous research and the increase in laboratory diagnoses observed recently by SES in 2025 are a stark reminder to the equine industry to work together to help reduce the risk of strangles spreading into new populations of horses.

EIDS recommend the adoption of vaccination using Strangvac, as an additional tool for the prevention and control of strangles. Strangvac is a modern, protein-based vaccine developed to help protect horses against strangles. Unlike traditional inactivated whole-organism or modified-live vaccines, Strangvac uses purified fragments of the bacterium to safely stimulate the horse's immune system without causing disease or triggering diagnostics tests. When used alongside good biosecurity and screening practices, it can reduce both the risk of infection and the spread of *S. equi* among horses. The vaccine may also be used to aid the control of confirmed strangles outbreaks as it will not trigger positive diagnostic tests that continue to be recommended for effective outbreak clearance prior to resuming normal activities and movements.

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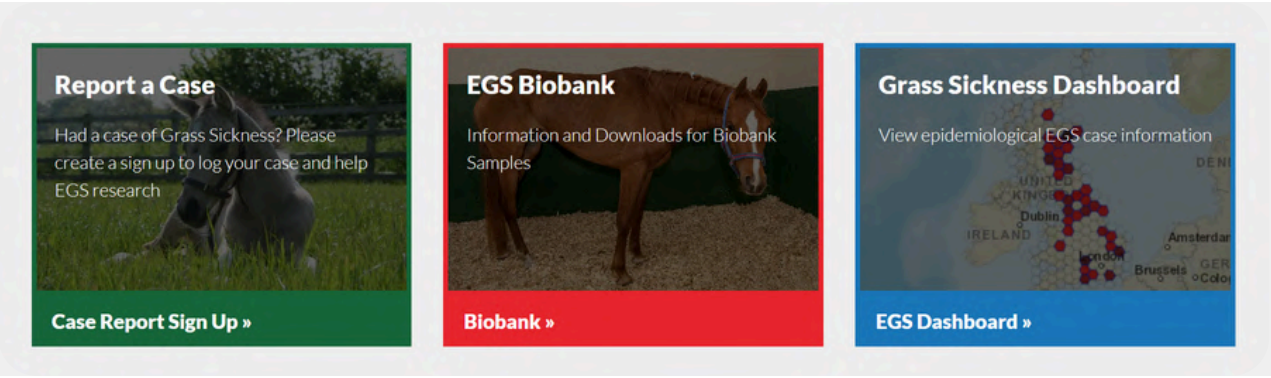
McGlennon, A. A., Verheyen, K. L., Newton, J. R., van Tonder, A., Wilson, H., Parkhill, J., de Brauwere, N., Frosth, S., & Waller, A. S. (2025). Unwelcome neighbours: Tracking the transmission of *Streptococcus equi* in the United Kingdom horse population. Equine Veterinary Journal. https://doi.org/10.1111/evj.14558

NEWS ARTICLES

A NEW CASE REPORTING, REAL-TIME ANALYTICS PLATFORM AND WEATHER RISK MODEL FOR EQUINE GRASS SICKNESS



During 2024, an Equine Grass Sickness Fund (EGSF) grant culminated in a new Equine Grass Sickness (EGS) case reporting system, found here: https://moredun.connectanimalhealth.com/apps/egssubscribe/.

This is now embedded in the EGSF website alongside a real-time analytics platform (Figure 1), so that owners can track the occurrence of cases across the UK and look at the disease profiles. As a result of this, Equine Infectious Disease Surveillance (EIDS) have enabled a real time reporting system for EGS which allows cases as they are reported to appear on their International Collating Centre (ICC), which is a massive step forward for timely EGS case reporting.

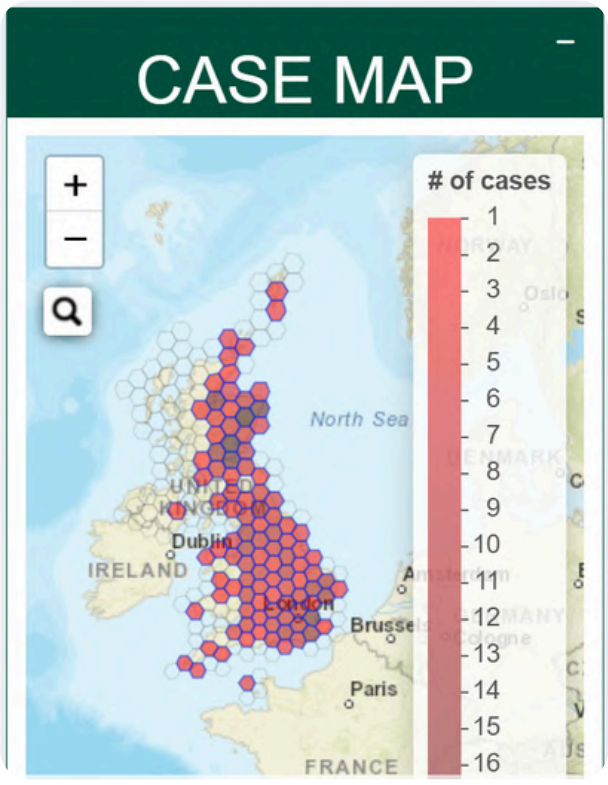


Figure 1: Location analysis of reported EGS cases in the UK, April 2010-May 2025, taken from the EGS real-time analytics platform.

In addition to this, a grant from RS Macdonald Charitable Trust has enabled EGSF, working with John Grewar (jDATA), Hayley Coulson and EIDS, to incorporate a new high risk weather alert system based on weather modelling and EGS case occurrence. The weather model was developed by Hayley's Master of Research project at the University of Edinburgh in 2024.

During this research, Hayley established that patterns of drought followed by heavy rain and large variations in temperature during high-pressure weather systems link to a higher incidence of EGS cases. The weather alert system uses a number of models to track weather forecasts across the UK and predict risk of EGS in a specific area chosen by the user on selecting their location on the map (Figure 2).

The predictions gain further accuracy by including any reported cases in the chosen locations within the model. Users of the alert system can opt to sign-up to weekly or monthly WhatsApp messages, which will contain the current risk forecast for their selected geographical area (e.g. the area that includes a livery yard or field) as shown in Figure 3.

The link to sign-up to the alert system can be found here: https://moredun.connectanimalhealth.com/apps/egssubscribe/ and EGSF would encourage all horse owners, particularly those on locations with previous EGS history, to sign up.

The alerts are based on the weather from the past 10 days plus one day in advance. It has been established that EGS has an "incubation period," and that previous weather is very important when making decisions related to EGS risk. The alert system is currently only available in the UK, but it is hoped to extend this to other countries with EGS cases.

Included on the platform are management options for owners to mitigate against any periods of heightened risks caused by weather. It is important to understand that mitigation of risk, is just that, and will not always result in no cases. Weather is only one of the factors that determine EGS risk (see Advice – Equine Grass Sickness Fund).

For further information please contact the Equine Grass Sickness Fund on info@grasssickness.org.uk

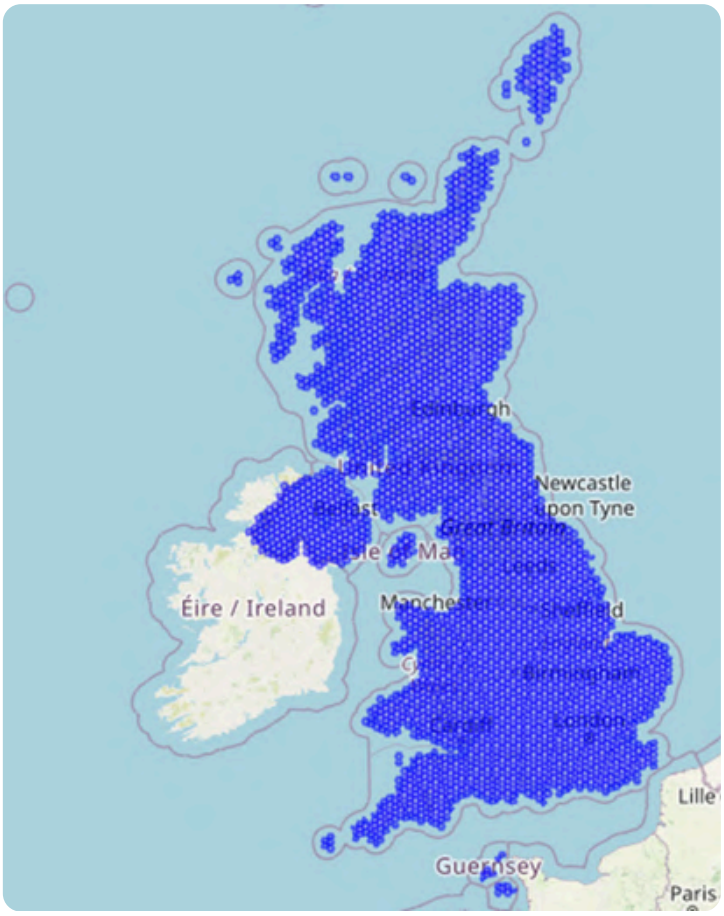


Figure 2: Specific smaller "hexagon" areas are selected by the user for weather risk WhatsApp alerts.

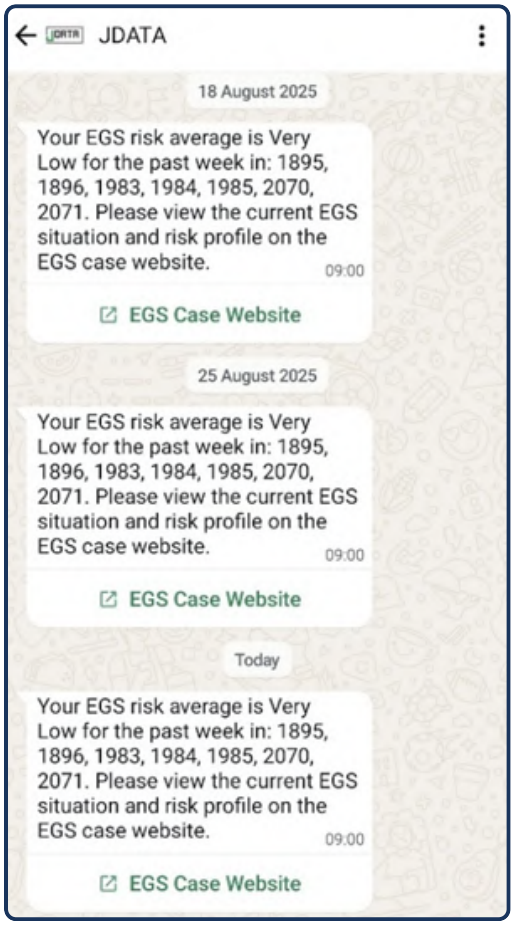


Figure 3: Screenshot of WhatsApp EGS risk alert messages.

NEWS ARTICLES

EIDS AUTUMN ADVISORY: ATYPICAL MYOPATHY SEASONAL CASES

As autumn progresses, EIDS would like to remind equine vets of the seasonal rise in atypical myopathy (AM) cases. This severe, pasture-associated condition is caused by the ingestion of hypoglycin A (HGA), a toxin found in the seeds, seedlings, and leaves of sycamore trees (*Acer pseudoplatanus*) and other *Acer* species, with mortality rates reported at approximately 74%. Horses grazing near these trees are particularly vulnerable in autumn and spring when seeds or young growth are most abundant.

CLINICAL PRESENTATION

- Widespread rhabdomyolysis affecting postural, respiratory, and cardiac muscles
- **Pigmenturia** (due to myoglobinuria)
- Generalised weakness, stiffness & lethargy
- Lateral recumbency
- Muscle tremors
- Sweating

Pigmenturia is considered the most specific clinical indicator of atypical myopathy

Prompt recognition is essential, though prognosis remains poor in many cases. Diagnosis relies on clinical signs - especially pigmenturia, markedly elevated muscle enzymes (CK, AST), and confirmation of hypoglycin A or its metabolites in blood or urine.

LIÈGE université
Myopathie atypique

The Atypical Myopathy Alert Group (AMAG) within the University of Liege, established in 2004, continues to monitor outbreaks and analyse data from two decades of surveillance. Their work has significantly advanced understanding of epidemiological risk factors and disease mechanisms. The group provides an email alert system to subscribers when more than three cases occur, in less than seven days, in three different locations.

EIDS collaborates with AMAG to encourage reporting of suspected cases. Reports from vets and/or owners of affected horses are vital to maintain an effective alert system that supports both clinical awareness and rapid response.

Moving into the autumn months EIDS encourages vets to remain vigilant, advise clients on pasture management strategies, and promote the reporting of cases to the AMAG network. Further resources are available at: https://www.myopathie-atypique.uliege.be/cms/c_4322323/fr/myopathie

TACKLING EQUINE ANTIMICROBIAL RESISTANCE: INTRODUCING REIN IN AMR, A UK GOVERNMENT-FUNDED INITIATIVE

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Introduction

Antimicrobial resistance (AMR), which is when microorganisms such as bacteria, viruses, fungi, or parasites no longer respond to agents used to kill them or inhibit their growth, has become a defining challenge across human and veterinary medicine. While AMR includes resistance in all types of microbes, bacterial antibiotic resistance represents its most prevalent, studied, and consequential form and is the focus of this article. Although global frameworks and national strategies set the direction for tackling AMR, gaps remain in species-specific surveillance. In equine practice, antibiotics are widely prescribed, yet data on resistance patterns are fragmented and under-reported. This article outlines the broader context of AMR surveillance, before focusing on the equine sector in the UK and introducing REIN In AMR, a new government-funded initiative to strengthen equine AMR reporting.

AMR is one of the most urgent health challenges worldwide and in the 21st century, extending beyond humans [1]. Infections caused by AMR organisms are challenging to treat because antimicrobials are becoming increasingly ineffective, resulting in higher mortality rates [2]. When resistance occurs across multiple drug classes, it is termed multidrug resistance (MDR), which is being reported with increasing frequency [3]. The World Organisation for Animal Health (WOAH) has stated that AMR threatens to undo decades of progress in public and animal health, resulting in the emergence of 'superbugs' that complicate the work of healthcare workers, veterinarians, and other animal health professionals [4]. Without effective action, AMR is projected to directly account for a cumulative total of 39.1 million (attributable) human deaths worldwide between 2025 and 2050, with 169 million deaths associated with AMR during the same period [5] (Table 1).

Table 1: Global estimates of human deaths attributable to and associated with antimicrobial resistance (AMR) in 2019, 2021, projected in 2050 and projected cumulative totals for 2025–2050. Attributable deaths are those directly caused by drug-resistant infections, whereas associated deaths capture cases in which AMR contributed to mortality [5].

Year	Millions (M) of human deaths attributable to bacterial AMR	Millions (M) of human deaths associated with bacterial AMR
2019*	1.27 M	4.95 M
2021*	1.14 M	4.71 M
2050 (projected forecast)	1.91 M	8.22 M
2025 – 2050 (projected cumulative global total)	**39.1 M**	**169 M**

*The decrease in both global AMR attributable and associated human deaths recorded in 2021 compared to 2019 has been attributed to effects from the COVID-19 pandemic [5]

As humans, animals and the environment are closely connected, AMR, which transcends species and ecosystems, is recognised as a significant One Health issue [4]. Since antimicrobials are essential to human and animal health, it is not feasible to stop their use when clinically justified. While all antimicrobial use (AMU) contributes to the development of resistance, misuse and overuse across One Health sectors remain the primary drivers of drug-resistant pathogens [2]. Alongside this, inadequate infection control, human and agricultural waste, contaminated environments and movement of infected people and animals further exacerbate the AMR issue [5].

In veterinary medicine, antimicrobials are widely used across various species and sectors, playing a critical role in animal health and production [2]. Many antimicrobial classes prescribed in human medicine are also used in animals [5]. While AMR has been extensively studied in humans, comparatively fewer studies have focused on other species, despite the overall volume of AMU in animals exceeding that in humans [6]. Consequently, studies are becoming increasingly focused on animals as key contributors to AMR. Curbing AMR in the animal health sector is a substantial challenge and requires better data to identify effective interventions and monitor progress. Structured surveillance systems and interventions are currently being developed and implemented worldwide.

AMR SURVEILLANCE

European surveillance frameworks

AMR surveillance in animals across Europe forms a cornerstone of the EU One Health Action Plan [7]. Under the framework of the Animal Health Law [8] and with the support from the European Food Safety Authority (EFSA), the European Commission coordinates efforts to identify, assess and monitor AMR- bacteria including those linked to transmissible animal diseases. EFSA coordinates mandatory AMR monitoring in zoonotic and commensal bacteria, including *Salmonella, Campylobacter*, and *Escherichia coli* (*E. coli*), collected from healthy food-producing animals and meat across EU Member States [9]. These Member States collect and submit harmonised AMR data from animals and food, which EFSA and the European Centre for Disease Prevention and Control (ECDC) jointly analyse and publish each year in the EU One Health AMR Summary Reports [9].

To strengthen AMR surveillance in animals, the European Antimicrobial Resistance Surveillance Network in Veterinary Medicine (EARS-Vet) provides a framework for integrating national veterinary AMR surveillance systems, operating in parallel with the human-health-focused European Antimicrobial Resistance Surveillance Network (EARS-Net) [10]. The network aims to describe the current AMR situation, monitor resistance trends, and detect emerging resistance in bacteria isolated from diseased animals across Europe [11]. EARS-Vet complements the surveillance systems of EFSA and ECDC by integrating national veterinary AMR data and adhering to European Committee on Antimicrobial Susceptibility Testing (EUCAST) standards to ensure comparability [10].

Across Europe, WOAH also contributes to advancing AMU and AMR monitoring. WOAH operates the ANIMUSE project, which monitors AMU by collecting data on the quantities and purposes of AMR in animals worldwide [12]. The Working Group on Antimicrobial Resistance (AMR WG) maintains a global perspective on AMR in animal health under the One Health approach and promotes the prudent use of antimicrobials [13]. These coordinated European initiatives offer a strong basis for AMR surveillance, supporting national systems like those in the UK to develop their own monitoring efforts.

AMR surveillance in the UK

The Veterinary Medicines Directorate (VMD) serves as the central authority on animal-related AMR in England. It has well-established surveillance programmes for AMR, including in bacteria isolated from healthy animals entering the food chain, and from clinical submissions, consistent with EFSA surveillance [15]. However, these programmes are limited to specific animal species, predominantly livestock. They also don't capture the results from the majority of veterinary antimicrobial susceptibility testing (AST) in the UK, which is performed in the private sector. This gap limits national understanding of AMR in animals, the ability to assess associated risks to human health, and the capacity to detect and respond to emerging threats.

The Private Laboratories Initiative (PLI) was established to address this gap by improving the sharing of AMR data held by Private Veterinary Laboratories (PVLs) with the government. This approach was pioneered by the Resapath project in France, which monitors AMR in key bacterial pathogens responsible for infections in domestic animals, including both livestock and companion animals [16]. The PLI aims to identify where privately-held animal AMR data are generated in the UK, what types of data are collected, and the methodologies used. Ultimately, the project aims to assess and improve the suitability of these data for inclusion in national AMR surveillance. By enhancing data flows from the private sector, PLI supports the UK's commitments, as outlined in the UK National Action Plan [17], to contain and control AMR through optimised surveillance. PLI currently sits within the Biosecurity Portfolio of the Integrated Security Fund, which is governed by the Cabinet Office, and delivers innovative programming to support the UK Government's Biological Security Strategy [18] and broader national security objectives.

The VMD leads PLI, which covers four major streams: farm animal, fish, companion animal, and equine. The delivery of the streams is shared between government and academia, each contributing complementary expertise. The farm animal and fish streams are led by the government agencies: APHA (Animal and Plant Health Agency) and Cefas (Centre for Environment, Fisheries and Aquaculture Science, respectively). Meanwhile, the University of Liverpool leads the companion animal stream through the Surveillance of Antimicrobial Resistance in Clinical Infections from Companion Animals (VetCLIN AMR) project.

The Equine Infectious Disease Surveillance (EIDS) group, based at the University of Cambridge, is leading the equine stream. EIDS was nominated for this role due to its expertise in equine infectious diseases, established national-scale surveillance capacity, and long-standing collaborations with an extensive network of equine PVLs in the UK, which have contributed data to Equine Quarterly Disease Surveillance Reports (EQDSR) for more than two decades. The collation of data from this network aligns strongly with the VMD's PLI objectives, enabling efficient collection, analysis, and sharing of AMR data from equine samples.

Antimicrobial use and resistance in the equine sector

The veterinary sector is striving to reduce AMU while upholding animal welfare and productivity standards [19]. Equines, represented by both professional and amateur leisure keepers, form a significant part of the veterinary industry and contribute substantially to both national and international economies [20]. However, bacterial diseases and the growing threat of AMR in horses can lead to severe health issues, economic losses, and restrictions on horse movement and trade [20]. In the UK, the equestrian market was valued at approximately £5 billion in 2023, supporting around 230,000 jobs and 1.82 million riders [21]. In UK equine practice, one study conducted in England reported that antibiotics are prescribed in approximately one in six consultations [22]. However, only about half of equine veterinary surgeons stated that they operated under formal stewardship policies [23]. The impact of antibiotic prescribing practices on AMR in horses is not well understood, at least in part because of the absence of robust surveillance data.

Within the equine sector, ongoing advances are being made in antimicrobial use (AMU) monitoring and stewardship. The Responsible Use of Medicines Alliance: Companion Animals and Equines (RUMA CA&E) is currently implementing a five-year national action plan on AMR to protect both people and animals [24]. This initiative focuses on antibiotic stewardship within the companion animal and equine sectors, encouraging the standardisation and collation of laboratory resistance data. Although progress is more advanced in the companion animal sector than in the equine field, this work demonstrates continued UK commitment to tackling AMR within a One Health framework. Further development in equine AMR surveillance includes the MonitorMe project, managed by the British Equine Veterinary Association (BEVA) [25]. This initiative allows veterinary practices to submit AMU data from their practice management systems (PMS) to BEVA, contributing to nationwide reporting of AMU in UK equine practices. As of 2024, MonitorMe represented approximately 25% of the UK equine population (183,134 horses out of an estimated 726,000, according to the 2023 British Equestrian Trade Association survey) [26]. Ongoing refinement of AMU monitoring will be essential to identify specific areas for improvement and ensure sustainable antimicrobial stewardship.

One example of where improved data on AMU and AMR could enhance clinical outcomes is in the field of equine reproductive medicine [27]. *E. coli* and beta-haemolytic *Streptococcus* species (BHS) are the bacteria most frequently isolated from the reproductive tract of mares [28]. Antibiotics are frequently administered to mares to prevent post-mating infections, persistent breeding-induced endometritis (PBIE), and early embryonic loss. However, indiscriminate treatment of mares without clinical signs or ancillary diagnostics may contribute to AMR in equine reproductive pathogens [27]. Responsible AMU, therefore, requires careful clinical evaluation and ongoing monitoring of infection status [3]. UK studies have reported consistent levels of intrauterine AMU in breeding mares: in 47% of pregnancies in 2013–2014 [29] and in 50% in 2018–2019 [30]. While these studies are not directly comparable due to differences in methods and populations, they collectively suggest frequent use of intrauterine antimicrobials over the last decade. However, consistent surveillance data on AMU and AMR in horses in the UK limits the ability to assess trends over time. This underscores the importance of coordinated surveillance initiatives to enhance AMR monitoring in the equine population.

THE REIN IN AMR PROJECT

Project overview

EIDS, with funding from the VMD, is exploring access to and the analysis of data generated by PVLs to expand national surveillance efforts for AMR in horses. In doing so, EIDS is seeking to better safeguard equine health and welfare, whilst also reducing risks to human health arising from AMR in the equine sector. The **REIN In AMR** project, standing for '**R**eporting **E**quine **I**nfections and **N**on-susceptibility using **In**-vitro **A**nti-**M**icrobial **R**esistance testing', is being developed by EIDS and overseen by VMD as part of PLI.

REIN In AMR

Progress to date

The project's progress at the time of writing in October 2025 is depicted in Figure 1 and includes a successfully completed pilot study. EIDS conducted the pilot phase between October 2024 and March 2025 to make an initial evaluation of the feasibility of the overall project's aim of collecting AST and AMR data from equine PVLs. This initial phase focused on defining methods for AST data collection to support surveillance, establishing communication channels with PVLs, and aligning with national surveillance frameworks in other species, thereby laying the groundwork for broader implementation. For proof of concept, a single PVL was engaged to demonstrate that meaningful collaboration was achievable between PVLs, EIDS and the VMD's PLI. A standardised questionnaire was designed in collaboration with the other PLI streams to capture information on AST methods, as well as attitudes and willingness to share AST and AMR data. Once collaboration was formalised, the PVL involved in the pilot study supplied EIDS with AST and AMR data. EIDS has started analysing these data to assess data formatting, management, and assist in developing approaches for storing, summarising and monitoring trends among longitudinal data.

Following the success of the pilot study, a second phase of the project was subsequently approved for the period July 2025 to March 2026. This phase aims to expand the number of participating PVLs within the project and develop IT systems to support the sustainable collection, analysis and reporting of AST data for surveillance. Following the same methods used in the pilot study, the second phase will look to gain a deeper understanding of AST methods used across multiple equine PVLs, as well as exploring barriers and incentives to active participation in the REIN In AMR project. Efforts to secure future funding alongside the VMD to further progress the project, after March 2026, are now underway.

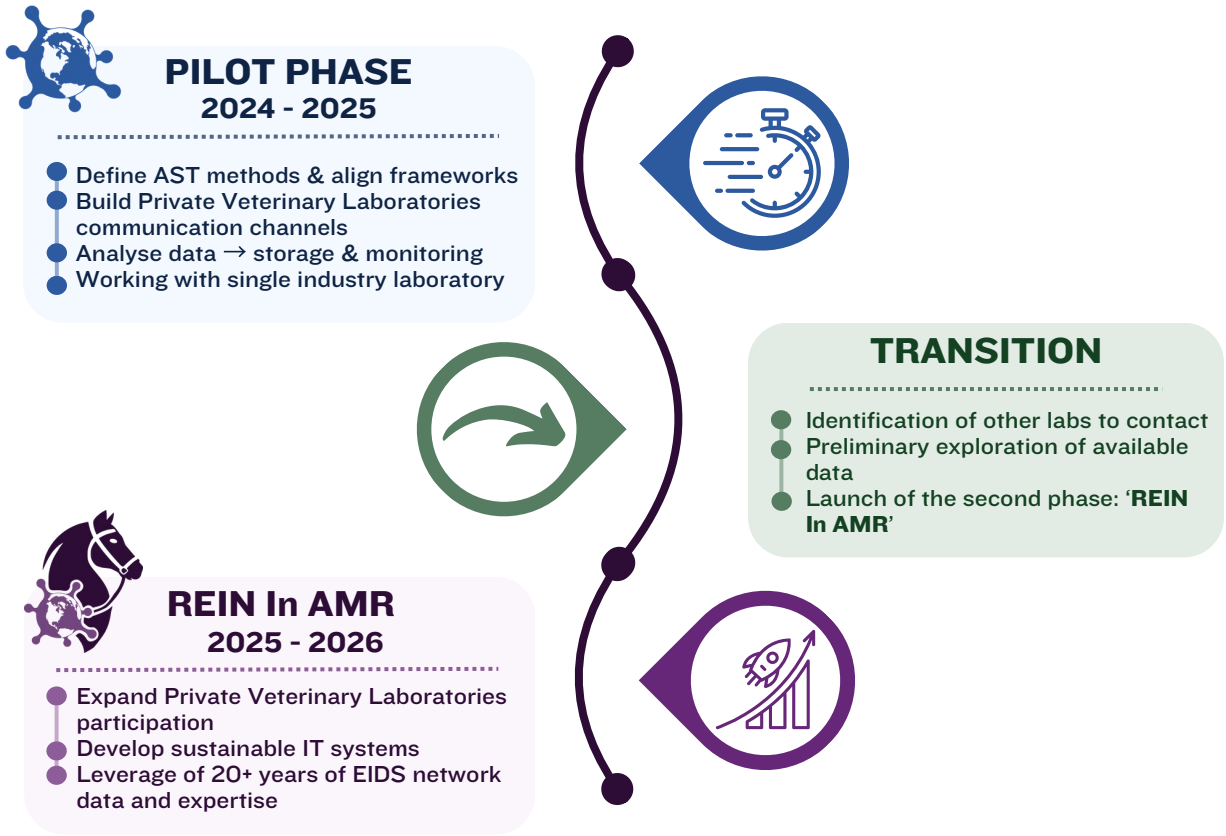

Figure 1: REIN In AMR Project roadmap depicting the three main phases from 2024 to 2026

Participating laboratories will have future access to private dashboards summarising their individual AST and AMR results. There will also be a public-facing REIN In AMR dashboard that presents anonymised, aggregated data from all PVLs, and which will be modelled on existing EIDS dashboards, such as for the EquiFluNet (https://equinesurveillance.org/equiflunet/) and Surveillance of Equine Strangles (SES) (https://equinesurveillance.org/ses/) initiatives. Alongside these dashboards, a central database with an online submission platform is also being developed to help streamline submission of AST and AMR data, minimising the time and effort required from PVLs and to support efficient data cleaning and storage by EIDS. Participating laboratories will also be thanked and acknowledged on the REIN In AMR dashboard, recognising their collaboration and support in monitoring AMR in the equine sector. EIDS has also created branded materials, as illustrated in this report, for use by collaborating laboratories to demonstrate their commitment to improving AST methods and AMR surveillance, if desired.

To improve and standardise AST methodologies across PVLs, a proficiency testing scheme that has been developed as part of the VetCLIN AMR project at the University of Liverpool, will be available to the REIN In AMR collaborating PVLs. This initiative will establish a quality assurance process, enabling laboratories to benchmark their methods and performance, identify methodological gaps, and, over time, enhance the reliability of AST and AMR data generated for the VMD's PLI.

REIN In AMR alongside the other PLI species-specific streams, is already positioned to deliver novel insights into AMR in the UK equine sector. By acquiring and utilising data from PVLs, the project will enhance AMR surveillance and should directly inform infection control and prevention strategies, as well as policy interventions. These foundations will not only demonstrate the power of AMR surveillance but also build the case for sustained investment going forward across multiple veterinary species. Ultimately, REIN In AMR is designed to strengthen surveillance through cross-sector collaboration, which will be essential for safeguarding both animal and human health within a One Health framework.

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The views expressed in this focus article are those of the author and independent of the Equine Quarterly Disease Surveillance Report.

UK Infectious Disease Reports

This section summarises notifiable disease investigations followed by laboratory confirmed endemic infectious disease outbreaks reported in the United Kingdom during the third quarter of 2025. Each reported outbreak may involve more than one animal. To view current outbreak reports, see www.equinesurveillance.org/iccview.

No reported outbreak(s) in a region does not necessarily mean the area is free from the disease. When a particular disease is reported as 'endemic', disease outbreaks are common and at an expected level.

NOTIFIABLE DISEASES

The APHA Veterinary Exotic Notifiable Disease Unit (VENDU) co-ordinates the investigation of suspected exotic notifiable disease in Great Britain on behalf of Defra, Welsh Government and Scottish Government. Further information about notifiable diseases is available on https://www.gov.uk/government/collections/notifiable-diseases-in-animals.

It should be noted that all information relating to equine notifiable disease investigations (including suspect cases that are subsequently negated) will appear in this section and are not broken down by body system. APHA non-negative test results that are referred to below do not equate to confirmed positive cases and are therefore not included in quarterly laboratory results tables. Confirmed positive results are based on APHA investigations and follow confirmation on official samples. Non-notifiable diseases will appear in their relevant system section.

SURRA:

Non-negative serology results were reported from two separate horses during routine pre-export testing. Following two APHA investigations, all official samples tested negative, thereby clearing both horses for export.

WEST NILE VIRUS:

There were seven test to exclude (TTE) cases for WNV, all of which tested negative.

Equine Herpes Virus

EHV-1 NEUROLOGICAL INFECTION

In Q3 2025 there were no reported outbreaks of EHV-1 neurological infection.

EHV-1 RESPIRATORY INFECTION

In Q3 2025 there were no reported outbreaks of EHV-1 respiratory infection.

EHV-1 REPRODUCTIVE INFECTION

In Q3 2025 there were no reported outbreaks of EHV-1 reproductive infection.

EHV-4 RESPIRATORY

SUMMARY

Two outbreaks of Equine Herpes Virus-4 (EHV-4) respiratory infection were reported to EIDS during Q3 2025, one in July and one in September.

Information regarding these two reported outbreaks is summarised in Table 1.

Frequency of reported laboratory diagnosed outbreaks of EHV-4 respiratory infection across the UK during 2025 Q3.

Table 1: EHV-4 respiratory infection outbreaks reported 1 Jul to 30 Sep 2025.

Total outbreaks reported	**2**	
	n	%
Total horses sampled	2	100%
Sample type		
Swab	2	100%
Nasopharyngeal	1	50%
Nasal	1	50%
Signalment		
Sex of horse indicated	2	100%
Female	2	100%
Male	-	-
Breed of horse	2	100%
Native UK pony	1	50%
Sports horse	1	50%
Age of horse	2	100%
Range	4 months - 4 years	
Clinical signs reported*	4	
Lethargy	1	25%
Nasal discharge	2	100%
Pyrexia	1	25%
Vaccination status	2	100%
Unvaccinated	2	100%
Month		
July	1	
August	0	
September	1	

*From 2 diagnoses

Eight additional outbreaks of EHV-4 respiratory infection were notified to EIDS, however, no epidemiological data could be obtained. This was either due to the submitting veterinary practice not providing the necessary data or a request for the information not to be circulated. ***EIDS encourages veterinary surgeons receiving positive laboratory results to complete EIDS' online reporting form*** *and provide additional details allowing for anonymised reporting of disease occurrence, thereby greatly enhancing the level of ongoing surveillance of equine infectious diseases in the UK.*

NB: *Figures in the UK Infectious Disease Report may differ, due to EIDS lacking permission to report some outbreaks or not receiving real-time epidemiological data*

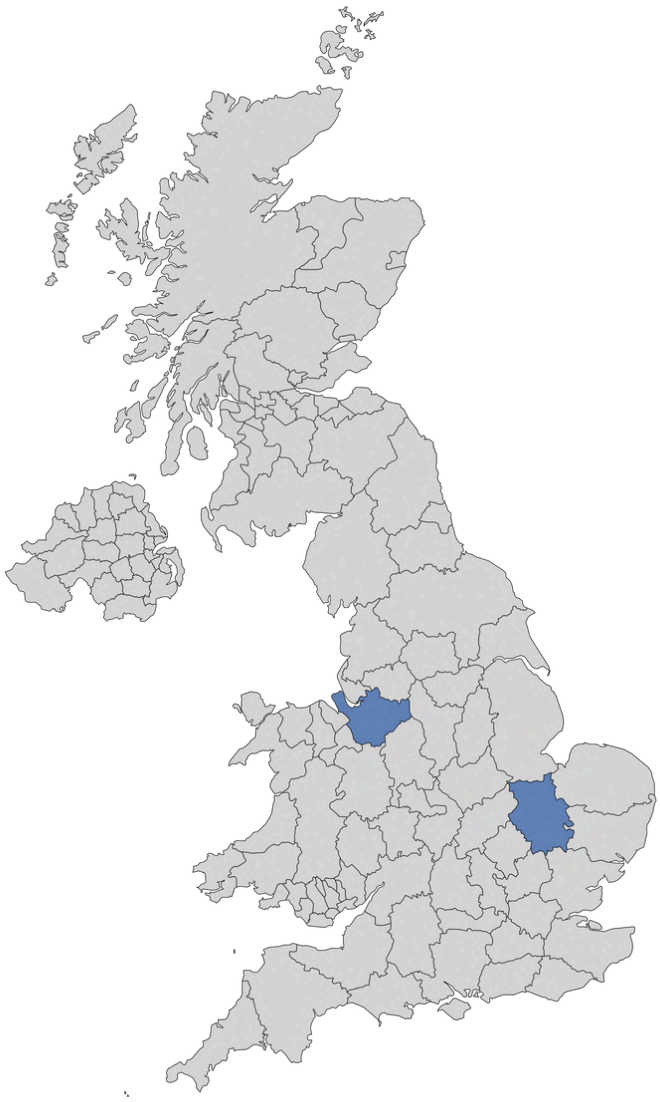
Equine Influenza

SUMMARY

Two outbreaks of equine influenza (EI) were reported to EIDS during Q3 2025, one in July and one in September.

One outbreak was reported to have involved animal movements prior to the first diagnosis.

Information regarding these two reported outbreaks is summarised in Table 2.



Frequency of reported laboratory diagnoses of EI across the UK during Q3 2025, totalling two diagnoses from two outbreaks.

One additional EI outbreak was notified to EIDS, however, no epidemiological data could be obtained. This was either due to the submitting veterinary practice not providing the necessary data or a request for the information not to be circulated.

Table 2: Equine influenza outbreaks reported 1 Jul to 30 Sep 2025.

Total outbreaks reported	2	
	n	%
Total horses sampled	2	100%
Sample type		
Swab	2	100%
Nasopharyngeal	2	100%
Signalment		
Sex of horse indicated	1	50%
Female	1	100%
Male	-	-
Breed of horse	1	50%
UK Native horse	1	100%
Age of horse	50%	100%
Age	6 years	
Clinical signs reported*	7	
Coughing	2	25%
Lethargy	1	14%
Nasal discharge	2	26%
Pyrexia	1	14%
Lymphadenopathy	1	14%
Vaccination status	2	100%
Vaccinated#	1	50%
Unvaccinated	1	50%
Month		
July	1	
August	0	
September	0	

*From 2 diagnoses
#The vaccinated horse was due its annual booster a month after being affected

NB: *Figures in the UK Infectious Disease Report may differ, due to EIDS lacking permission to report some outbreaks or not receiving real-time epidemiological data.*

HBLB SURVEILLANCE SCHEME

Veterinary surgeons suspecting EI can submit samples for PCR testing with **the scheme covering the cost of the laboratory testing**. Veterinary surgeons wishing to use this scheme can sign up here: www.equinesurveillance.org

2025 Q3 EI SEQUENCE ANALYSIS

The HBLB-funded equine virology group at the University of Cambridge have sequenced the full genome of two new equine influenza viruses in the third quarter of 2025, from horses in Cambridgeshire and West Yorkshire, for the latter of which no epidemiological details were provided, nor permission to report. These show a high degree of similarity to the last virus sequenced in the second quarter from a horse in Cumbria, and when analysed as a group reveal six new amino acid changes in the virus currently circulating in the UK. These altered amino acids are distributed over five different viral proteins, with two changes to the viral haemagglutinin (HA) and one each in neuraminidase (N), and the three polymerase protein subunits (PA, PB1 and PB2). These changes occur against the background of the sequence previously found in viruses circulating in the UK in 2025 showing that the currently circulating virus is derived from the most recent strain. The apparent jump in evolution of the virus (i.e. six simultaneous mutations across five segments) could be due to low sampling rates of the current viral strain, or an importation event from Europe which has highly similar viruses to the UK.

THREE AMINO ACID CHANGES OF PARTICULAR INTEREST:

HA Y233H:

This position within the haemagglutinin protein is close to the binding site of HA to its sialic acid receptor and changes here have been associated with changed affinity to the α2,6 (found in humans) and α2,3 (found in birds and horses) forms of the sialic acid receptor. A change at this position can therefore alter the host species specificity of the virus. Changes at position 233 have been found to alter the overall tertiary structure of HA, which could produce antigenic changes to the protein over multiple antigenic sites.

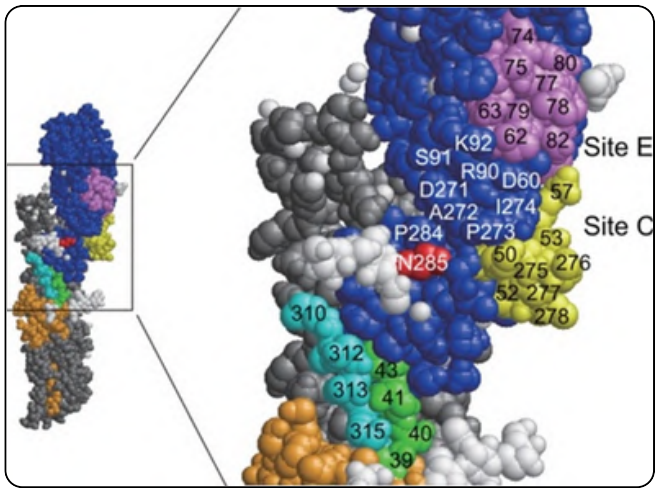
HA R57K:

This is part of the major antigenic site C of HA and so a change here could reduce the efficacy of current vaccines to protect against the virus. This will be tested using an HI assay against sera from vaccinated ferrets to check whether the sera is still able to inhibit the virus.

PB2 D678G:

This position forms part of the nuclear localisation signal (NLS) of PB2, and is usually a highly conserved aspartic acid (D). The NLS binds to host proteins (importins) and a change at this site may alter the species specificity and host range of the virus.

These amino acid changes have been found in the three most recently identified equine influenza isolates. Analysis of further isolates will determine how widespread they are and whether they have become part of the dominant circulating strain of equine influenza in the UK.



HA3 AA 57 in site C - (J Virol. 2014 Jul;88(13):7130–7144)

Surveillance of Equine Strangles

	n	%
Total horses sampled	113	100%
Sample type*	125	
Swab	44	35%
Nasopharyngeal	35	80%
Nasal	5	11%
Abscess	2	5%
Unspecified	2	5%
Guttural pouch lavage	69	55%
Other	12	10%
Diagnostic tests		
PCR only requested	97	86%
PCR and culture requested	9	8%
iiPCR	3	3%
Culture only requested	3	3%
iiPCR and qPCR	1	11%
Signalment		
Sex of horse indicated	77	68%
Female	34	44%
Male	43	56%
Breed of horse	72	64%
Native UK pony	27	38%
Sports horse	26	36%
Crossbreed	4	6%
Native UK horse	11	15%
Non-UK native horse	4	6%
Age of horse	65	58%
Range	1 month - 30 years	
IQR	3 - 14 years	
Median	7 years	
Clinical signs reported**	108	
Nasal discharge	32	30%
Pyrexia	19	18%
Glandular swelling	21	19%
Abscess	10	9%
Other	4	4%
Coughing	11	10%
Lethargy	5	5%
Chondroids	3	3%
Respiratory noise	3	3%
Reason for sampling reported		
Total reasons*	88	
Clinically ill horse	26	30%
Post infection screening	19	22%
Strangles suspected	24	27%
Post seropositive ELISA	7	8%
Pre/post movement screening	6	7%
In contact	4	5%
Other	2	3%

*can include multiple entries per submission

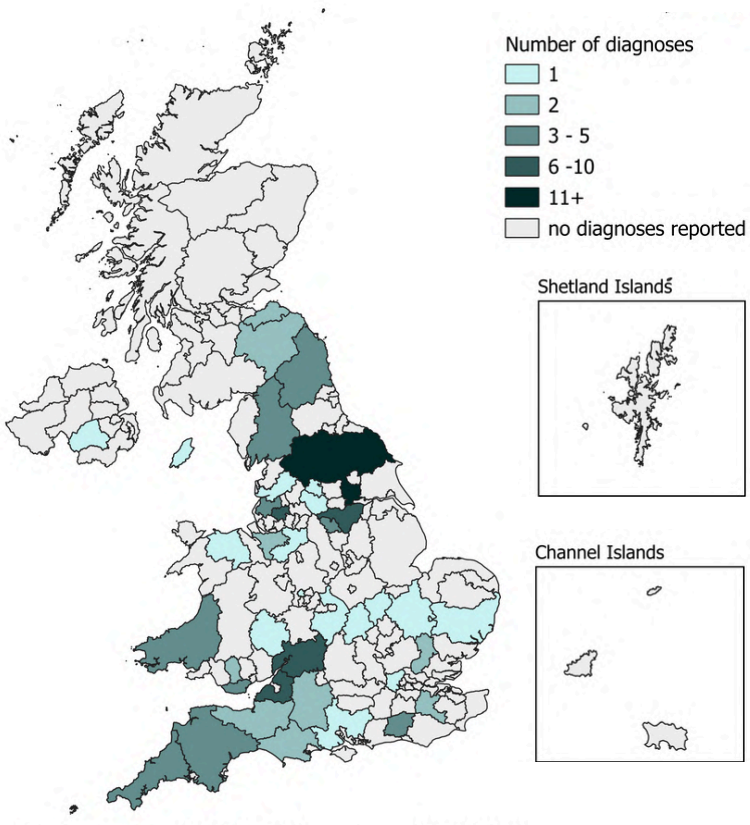
**From 48 diagnoses

Left Table 3: *S. equi* samples reported 1 Jul to 30 Sep 2025.

The Surveillance of Equine Strangles (SES) network enables the ongoing assessment of the disease's true welfare impact, highlighting trends over time and different geographical areas. The SES network is comprised of twelve diagnostic laboratories based across the UK.

A total of 113 cases with positive diagnoses of *S. equi* were reported by SES Laboratory during Q3 2025 from samples submitted by 60 veterinary practices in the UK. Information regarding reported samples is summarised in Table 3.

NB: *Figures in the UK Infectious Disease Report may differ, due to EIDS lacking permission to report some outbreaks or not receiving real-time lab data.*

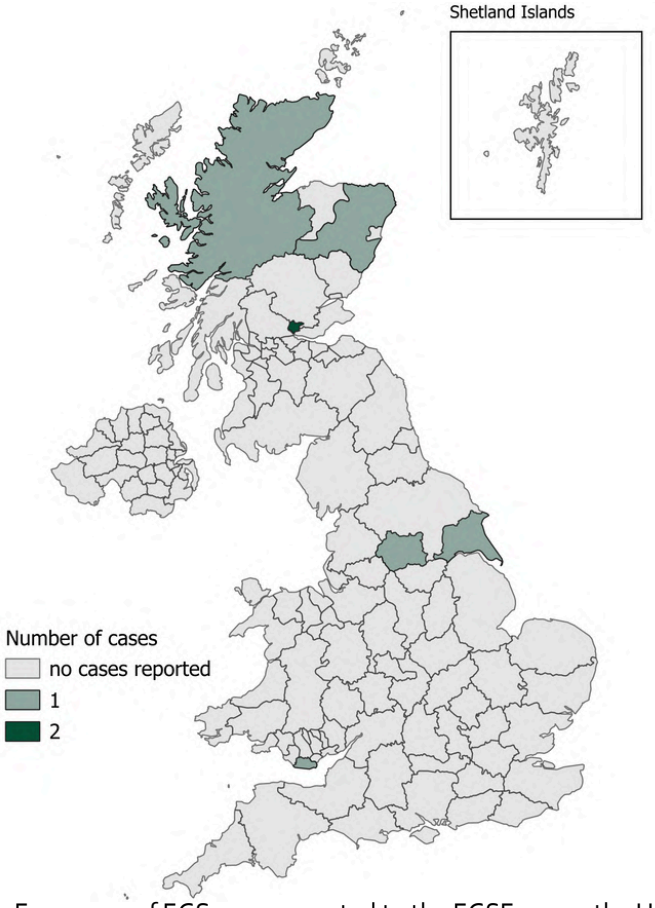


Frequency of reported laboratory diagnoses of *S. equi* across the UK from SES during Q3 2025. Diagnoses are mapped by submitting vet practice location.

Equine Grass Sickness

An equine grass sickness (EGS) surveillance scheme was established in spring 2008 facilitating the investigation of changes in geographical distribution and incidence of EGS in Great Britain. Having up to date anonymised reports from across the country provide accurate representation of EGS cases nationwide and is vital to help continue epidemiological research into the disease.

Reporting cases of EGS to the Equine Grass Sickness Fund (EGSF) can be done by either the attending veterinary surgeon or the owner, at http://grasssickness.org.uk/casereports.



Frequency of EGS cases reported to the EGSF across the UK during Q3 2025.

In Q3 2025 seven cases of EGS were reported to EGSF. Cases were reported across England (n= 2, 29%), Scotland (n= 4, 57%) and Wales (n= 1, 14%). Information regarding reported cases is summarised in Table 4.

Table 4: Equine Grass Sickness cases reported to the EGSF 1 Jul to 30 Sep 2025.

	n	%
Total cases reported	7	100%
EGS presentation	6	86%
Acute	3	50%
Subacute	3	50%
Chronic	-	-
EGS outcome	7	100%
Survivor	-	-
Non-survivor	6	86%
Unreported	1	14%
EGS diagnoses	7	100%
Clinical signs alone	5	71%
Histological confirmation	2	29%
Month of diagnosis	7	100%
July	4	57%
August	2	29%
September	1	14%
Signalment		
Sex of horse indicated	7	100%
Female	2	29%
Male	5	71%
Breed of horse	7	100%
Native UK pony	3	43%
Sports horse	3	43%
Crossbreed	1	14%
Age of horse	7	100%
Range	5 - 17 years	

Please note that figures for EGS contained in the laboratory report may differ to the number of cases reported here, which are reported by both owners and veterinary surgeons.

RedWatch

RedWatch is a targeted surveillance initiative designed to capture detailed clinical case data on both small and large redworm infections.

No cases of cyathostominosis or *Strongylus vulgaris* were reported to RedWatch during Q3 2025.

RedWatch: supporting equine parasite surveillance during the high-risk season

Incidence of cyathostominosis infection typically increases in autumn and winter. Therefore, as we move into the high-risk period for redworm-associated disease, we are encouraging veterinary surgeons across the UK to support our RedWatch initiative by reporting cases via our online platform.

Through RedWatch, we aim to strengthen understanding of disease burden and distribution, building a clearer national picture of redworm-related disease as patterns of parasite prevalence evolve.

Submissions from veterinary surgeons are vital to this effort and can be made easily via our online form. By contributing, equine vets play a direct role in shaping future guidance on parasite control, supporting research into disease risk, and helping safeguard equine health.

All data are handled securely and anonymised for analysis. Your reports, however few or many, make a real difference in advancing our collective understanding and management of redworm disease across the UK.

REPORT A CLINICAL CASE OF REDWORM

www.equinesurveillance.org/redwatch

Equine Infectious Disease Surveillance

RedWatch

VIROLOGY

The results of virological testing for July to September 2025 are summarised in Tables 6 to 9. Please note, APHA's sample population is different to the other contributing laboratories as their tests are principally in relation to international trade.

GASTROINTESTINAL DISEASE

Table 6: Results of virological testing for gastrointestinal diseases between 1 Jul to 30 Sep 2025.
CLs = laboratories contributing tested samples

Test	Detection	Samples tested (n)	Positive (n)	CLs (n)
Adenovirus HI	Antibody	41	0	1
Coronavirus PCR	Agent	63	0	2
Rotavirus ELISA	Antibody	0	0	^
Rotavirus-A PCR	Agent	48	1	2
Rotavirus-B PCR	Agent	47	0	2
Rotavirus antigen ELISA/Strip test/LFT	Agent	13	1	5

HI Haemagglutination inhibition, LFT Lateral flow test, ^ no laboratories reporting tested samples this quarter

RESPIRATORY DISEASE

Table 7: Results of virological testing for respiratory diseases between 1 Jul to 30 Sep 2025.
CLs = laboratories contributing tested samples

Test	Detection	Samples tested (n)	Positive (n)	CLs (n)
EHV-2 PCR	Agent	26	2	2
EHV-5 PCR	Agent	27	7	2
Influenza HI	Antibody	41	0	1
Influenza PCR (APHA)	Agent	254	0	1
Influenza PCR	Agent	433	3*	7
Influenza LAMP	Agent	11	0	1
ERV-A/B CFT	Antibody	10	0	1
ERV PCR	Agent	2	0	1

CFT Complement fixation test, EHV Equine herpes virus, ERV Equine rhinitis virus, HI Haemagglutination inhibition, IFAT immunofluorescent antibody test, LAMP loop mediated isothermal amplification, *Figures reported here may differ to the endemic diseases section due to EIDS not receiving details from the submitting veterinary practice or the owner requesting details not to be circulated, ^ no laboratories reporting tested samples this quarter

Table 8: Results of virological testing for multiple/miscellaneous/neurological diseases between 1 Jul to 30 Sep 2025. CLs = laboratories contributing tested samples

Test	Detection	Samples tested (n)	Positive (n)	CLs (n)
EHV-1 LAMP	Agent	13	1	1
EHV-1/-4 PCR (APHA)	Agent	0	0	^
EHV-1 PCR	Agent	653	1*	7
EHV-1 VI	Agent	0	0	^
EHV-4 PCR	Agent	653	27*	7
EHV-4 LAMP	Agent	13	0	1
EHV-4 VI	Agent	0	0	^
EHV-1 IFAT - Ag	Agent	0	0	^
EHV-1/-4 CFT	Antibody	231	3	2
EHV-1/-4 CFT (APHA)	Antibody	0	0	^
EHV-1/-4 IFAT - Ag	Agent	0	0	^
EIA ELISA	Antibody	247	0	6
EIA Coggins (APHA)	Antibody	7401	0	1
EIA Coggins	Antibody	3	0	1
Hepacivirus PCR	Agent	31	1	1
Parvovirus PCR	Agent	31	0	1
Papilloma virus PCR	Agent	2	2	1
WNV IgM ELISA (APHA)	Antibody	5	0	1
WNV IgG ELISA (APHA)	Antibody	2	0	1
WNV PCR (APHA)	Agent	0	0	^

CFT Complement fixation test, EHV Equine herpes virus, EIA Equine infectious anaemia, IFAT immunofluorescent antibody test, LAMP loop mediated isothermal amplification, VI Virus isolation, WNV West Nile Virus
*EHV figures reported here may differ to the endemic section figures due to non-reporting by vets,
^ no laboratories reporting tested samples this quarter

Table 9: Results of virological testing for reproductive diseases between 1 Jul to 30 Sep 2025.
CLs = laboratories contributing tested samples

Test	Detection	Samples tested (n)	Positive (n)	CLs (n)
EHV-3 PCR	Agent	1	0	1
EHV-3 VI	Agent	0	0	^
EHV-3 VN	Antibody	0	0	^
EVA ELISA*	Antibody	343	6	6
EVA PCR (APHA)	Agent	0	0	^
EVA PCR	Agent	7	0	1
EVA VN (APHA)**	Antibody	495	1	1
EVA VN**	Antibody	94	64	2

EVA Equine viral arteritis, EHV Equine herpes virus, VI Virus isolation, VN Virus neutralisation
*Positive samples then undergo VN testing as the confirmatory test
** EVA Artervac vaccine is now available (June 2025) but due to the unavailability since March 2023, all stallions will have lapsed vaccination status at the time of re-vaccination. If sero-positivity at the time of first vaccination cannot be attributed to prior vaccination and confirmed by testing alongside archived serial samples that show a stable or declining titre, the case must be reported to APHA for investigation under the EVA Order 1995. Additionally, mares that are sero-positive within two weeks of mating must also be investigated.
^ no laboratories reporting tested samples this quarter

BACTERIOLOGY

A summary of the diagnostic bacteriology testing undertaken by different contributing laboratories is presented in Tables 10 to 13. The BEVA laboratory registering scheme is for the testing of CEM (*Taylorella equigenitalis*), *Klebsiella pneumoniae* and *Pseudomonas aeruginosa*. Granting and maintenance of approval depends on a laboratory achieving correct results in quality assurance tests and reporting data to this report. BEVA publishes a list of approved laboratories annually. Fifteen BEVA approved laboratories in the UK contributed data for this report, either by providing testing figures from PCR and/or culture testing or by confirming that no tests or positive diagnoses were recorded during the reporting period.

REPRODUCTIVE DISEASE

Table 10: Results of bacteriological testing for reproductive diseases between 1 Jul to 30 Sep 2025.
CLs = laboratories contributing tested samples

Test	Detection	Samples tested (n)	Positive (n)	CLs (n)
CEM *Taylorella equigenitalis* PCR (BEVA)	Agent	333	0	8
CEM *Taylorella equigenitalis/asinigenitalis* culture* (BEVA)	Agent	475	0	11
CEM *Taylorella equigenitalis* PCR (APHA)	Agent	188	0	1
CEM *Taylorella asinigenitalis* PCR (APHA)	Agent	188	0	1
CEM *Taylorella equigenitalis/asinigenitalis* culture* (APHA)	Agent	1661	0	1
Klebsiella pneumoniae PCR (BEVA)	Agent	332	4	7
Klebsiella pneumoniae culture (APHA)	Agent	60	1	1
Klebsiella pneumoniae culture (BEVA)	Agent	501	4	11
Klebsiella pneumoniae capsule types 1 PCR	Agent	0	0	^
Klebsiella pneumoniae capsule types 2 PCR	Agent	0	0	^
Klebsiella pneumoniae capsule types 5 PCR	Agent	0	0	^
Pseudomonas aeruginosa PCR (BEVA)	Agent	333	5	7
Pseudomonas aeruginosa culture (APHA)	Agent	60	0	1
Pseudomonas aeruginosa culture (BEVA)	Agent	501	5	11

BEVA British Equine Veterinary Association approved laboratories, CEM contagious equine metritis (*Taylorella equigenitalis*), **Taylorella asinigenitalis* and *Taylorella equigenitalis* are morphologically indistinguishable by culture and therefore if a sample is positive by culture, it should be screened for both species by multiplex PCR,
^ no laboratories reporting tested samples this quarter

RESPIRATORY DISEASE

Table 11: Results of bacteriological testing for respiratory diseases between 1 Jul to 30 Sep 2025.
CLs = laboratories contributing tested samples

Test	Detection	Samples tested (n)	Positive (n)	CLs (n)
Streptococcus equi ELISA Antigen A/C (ISL)†	Antibody	5014	524	5
Streptococcus equi PCR	Agent	2223	151	11
Streptococcus equi LAMP	Agent	18	0	1
Streptococcus equi culture	Agent	759	33	10
Rhodococcus equi ELISA#	Antibody	27	12	1
Rhodococcus equi PCR	Agent	63	16	3
Rhodococcus equi culture	Agent	65	14	4
Streptococcus zooepidemicus PCR	Agent	481	119	2
Streptococcus zooepidemicus culture	Agent	1754	106	5

LAMP loop mediated isothermal amplification, †seropositivity may be attributed to disease exposure, infection or carrier states, #seropositives include exposure to the virulent form of *R. equi* or the presence of maternally derived antibodies, the *S. equi* agent detection tests presented here are for individual tests, not individual horses. Therefore, they differ from the SES data presented in Table 3, which represents individual cases

MISCELLANEOUS DISEASE

Table 12: Results of miscellaneous bacteriological testing between 1 Jul to 30 Sep 2025.
CLs = laboratories contributing tested samples

Test	Detection	Samples tested (n)	Positive (n)	CLs (n)
MRSA culture	Agent	835	1	7
Borrelia burgdorferi ELISA	Antibody	57	10	3
Borrelia burgdorferi PCR	Agent	2	0	1
Burkholderia mallei (Glanders) CFT (APHA)	Antibody	685	0	1
Leptospira MAT	Antibody	0	0	^
Leptospira PCR	Agent	2	0	1
Anaplasma ELISA	Antibody	58	14	3
Anaplasma PCR	Agent	0	0	^

CFT Complement fixation test, LFT Lateral flow test, MAT microagglutination testing antibody, MRSA methicillin resistant *Staphylococcus aureus*, ^ no laboratories reporting tested samples this quarter

GASTROINTESTINAL DISEASE

Table 13: Results of bacteriological testing for gastrointestinal diseases between 1 Jul to 30 Sep 2025. CLs = laboratories contributing tested samples

Test	Detection	Samples tested (n)	Positive (n)	CLs (n)
Campylobacter culture	Agent	30	1	5
Clostridium perfringens ELISA	Toxin	167	0	2
Clostridium perfringens LFT	Toxin	54	4	3
Clostridium perfringens PCR	Agent	19	3	1
Clostridium difficile ELISA	Toxin	136	17	1
Clostridium difficile LFT	Toxin	85	2	4
Clostridium difficile PCR	Agent	21	1	1
Lawsonia intracellularis IPMA	Antibody	33	14	1
Lawsonia intracellularis PCR**	Agent	32	2	2
Salmonella Typhimurium PCR‡	Agent	155	0	3
Salmonella Typhimurium WGS (APHA)‡	Agent	7	7	1
Salmonella Typhimurium culture‡	Agent	175	5	6
Salmonella Other *spp* PCR‡	Agent	173	10	6
Salmonella Other *spp* WGS (APHA)‡	Agent	9	9	1
Salmonella Other *spp* culture‡	Agent	353	11	8
Enterobacter culture	Agent	2072	164	5
E. coli culture	Agent	2153	306	7

LFT Lateral flow test, IPMA immunoperoxidase monolayer assay, WGS whole genome sequencing, **identified using PCR applied to faeces, ‡Under the Zoonoses Order 1989, it is a statutory requirement to report and serotype positive cases for *Salmonella spp*. A positive case may have repeat samples taken.

APHA SALMONELLA RESULTS

Sixteen samples were submitted this quarter to the Animal and Plant Health Agency (APHA) and all were positive for Salmonella. Of these, the serovars reported were *S*. Typhimurium (7 isolates), *S*. Agama (3 isolates), *S*. Newport (2 isolates) and single isolations of *S*. Coeln, *S*. Durham, *S*. Fulica and monophasic *Salmonella* Typhimurium.

S. Typhiumurium has been associated with a number of different sources including livestock, dogs, wildlife and feed, and monophasic *S*. Typhimurium is often associated with pigs. *S*. Newport and *S*. Agama are found in wildlife including badgers and *S*. Coeln has been found in equine samples and also isolated from animal feed.

This wide range of associations highlights the zoonotic potential of Salmonella infections which is particularly important in companion animals such as horses. For more information from APHA about Salmonella in Great Britain, please see the newly published 2024 Salmonella in animals and feed surveillance report https://www.gov.uk/government/publications/salmonella-in-animals-and-feed-in-great-britain

PARASITOLOGY

A summary of parasitology testing undertaken by contributing laboratories is presented in Tables 14 and 15.

ECTOPARASITES AND OTHER SKIN PATHOGENS

Table 14: Results of ectoparasitology testing between 1 Jul to 30 Sep 2025.
CLs = laboratories contributing tested samples

Test	Detection	Samples tested (n)	Positive (n)	CLs (n)
Mange *Sarcoptes scabiei*	Agent	261	0	7
Mange *Chorioptes spp*	Agent	261	0	7
Mange *Trombicula spp*	Agent	240	0	5
Mange *Demodex equi*	Agent	249	0	6
Lice *Damalinia equi*	Agent	231	1	3
Lice *Haematopinus asini*	Agent	206	0	3
Ringworm PCR	Agent	101	24	3
Ringworm culture	Agent	317	79	6
Ringworm microscopy	Agent	55	1	5
Dermatophilosis culture	Agent	62	6	3
Dermatophilosis microscopy	Agent	39	0	2
Candida culture	Agent	0	0	^
Candida microscopy	Agent	65	2	2

^ no laboratories reporting tested samples this quarter

Table 15: Results of endoparasitology testing between 1 Jul to 30 Sep 2025.
CLs = laboratories contributing tested samples

Test	Detection	Samples tested (n)	Positive (n)	CLs (n)
Ascarids faecal exam	Agent	44454	252	13
Strongyles (large/small) faecal exam	Agent	45596	11782	15
Strongyloides faecal exam	Agent	44749	346	12
Craterostomum acuticaudatum culture	Agent	24	0	1
Strongylus edentatus culture	Agent	24	0	1
Strongylus equinus culture	Agent	24	0	1
Strongylus vulgaris culture	Agent	24	0	1
Tapeworm ELISA saliva	Antibody	7605	2805	1
Tapeworm ELISA serum	Antibody	1229	560	1
Tapeworm faecal exam	Agent	42468	188	9
Oxyuris equi faecal exam	Agent	39296	1	4
Oxyuris equi tape strip	Agent	447	35	5
Dictyocaulus arnfieldi Baermanns	Agent	43	1	3
Fasciola hepatica faecal exam	Agent	36	0	4
Fasciola hepatica sedimentation	Agent	47	0	2
Fasciola hepatica serology	Antibody	0	0	^
Cryptosporidia mZN	Agent	15	0	1
Cryptosporidia PCR	Agent	0	0	0
Cryptosporidia snap test	Agent	38	0	3
Cryptosporidia faecal exam	Agent	15	0	1
Cryptosporidia strip test	Agent	8	1	1
Giardia snap test	Agent	35	2	2
Giardia smear test	Agent	15	0	1
Coccidia faecal exam	Agent	1823	3	5

mZN Modified Ziehl-Neelsen stain , ^ no laboratories reporting tested samples this quarter

TOXICOSIS

A summary of diagnostic toxicosis testing undertaken by contributing laboratories is presented in Table 16. Results for toxicosis are based on histopathology or clinical signs.

Table 16: Results of toxicosis testing between 1 Jul to 30 Sep 2025.
CLs = laboratories contributing tested samples

Test	Samples tested (n)	Positive (n)	CLs (n)
Grass Sickness*	15	5	1
Atypical myopathy/Seasonal Pasture Associated Myopathy	0	0	^
Hepatic Toxicosis - Ragwort	36	5	1
Hepatic Lipidosis	1	1	1
Hepatic Encephalopathy	2	2	1
Tetanus	0	0	^
Botulism	0	0	^

*Figures for EGS contained in the EGSF Report may differ to the number of cases reported here, which are laboratory reported cases only. ^ no laboratories reporting tested samples this quarter

MISCELLANEOUS

A summary of miscellaneous testing undertaken by contributing laboratories is presented in Table 17.

Table 17: Results of miscellaneous testing between 1 Jul to 30 Sep 2025.
CLs = laboratories contributing tested samples

Test	Detection	Samples tested (n)	Positive (n)	CLs (n)
Babesia caballi cELISA (APHA)	Antibody	468	0	1
Babesia caballi IFAT (APHA)	Antibody	505	2	1
Babesia caballi cELISA	Antibody	50	1	1
Theileria equi cELISA (APHA)	Antibody	468	5	1
Theileria equi IFAT (APHA)	Antibody	505	6	1
Theileria equi cELISA	Antibody	50	2	1
Dourine CFT (APHA)*	Antibody	614	1#	1
Dourine IFAT (APHA)	Antibody	7**	0	1

CFT Complement fixation test, IFAT Immunofluorescent antibody test, *CFT suspect/positive samples are then tested by IFAT as a confirmatory test for Dourine, #The positive on Dourine CFT was positive at 1/10, and sent for the confirmatory IFAT which was found negative, **The Dourine IFAT tests were definitely from non-negative CFT results

LABORATORY REPORT END

UK Post-Mortem Examination Reports

Details about *post-mortem* examinations (PME) were reported by **four UK Veterinary Schools and four other contributing laboratories**. In this section PME cases are summarised by age stage and the main body system involved. Over time, it is hoped that additional temporal and spatial data will be made available for inclusion.

During this quarter, PME reports were provided for 14 abortions, four foals and 35 adult horses.

Right: Regional locations of PME surveillance contributors. Purple shading indicates regions where contributing laboratories are located

ABORTIONS

Between July and September 2025 there were a total of 14 abortions reported. A summary of their details are provided below in Table 18.

Table 18: Post-Mortem Examination (PME) details for abortions reported between 1 Jul to 30 Sep 2025.

PME Diagnosis	Diagnostic certainty		Region of PME contributor
	Suspect	Certain	
Placental		**3**	
Ischaemic necrosis of the cervical pole	-	2	East & South East
Acute placentitis (autolysed)	1	-	East & South East
Umbilical		**9**	
Umbilical cord torsion	4	4	East & South East
Umbilical cord compromise	1	-	East & South East
No diagnosis reached		**2**	
Autolysed	-	1	East & South East
Placenta missing	-	1	East & South East

FOALS

Between July and September 2025 there were four foal deaths reported.
A summary of their details are provided below in Table 19.

Table 19: Post-Mortem Examination (PME) details for foal deaths reported between 1 Jul to 30 Sep 2025.

PME Diagnosis	Total	Region of PME contributor
Gastrointestinal	**2**	
Enteritis, peritonitis, septicaemia	1	East & South East
Colon impaction and rupture	1	East & South East
Musculoskeletal	**2**	
Osteomyelitis (proximal phalanx) secondary to *Rhodococcus equi* infection	1	East & South East
Pedal osteomyelitis	1	East & South East

ADULT DEATHS

Between July and September 2025 there were a total of 35 adults deaths reported.
A summary of their details are provided below in Tables 20 - 22.

Table 20: Post-Mortem Examination (PME) details for adult deaths relating to neoplasia, cardiovascular and gastrointestinal reports between 1 Jul to 30 Sep 2025.

PME Diagnosis	Total	Region of PME contributor
Neoplasia	**3**	
Haemangiosarcoma - multifocal intramuscular	1	East & South East
Lymphoma - multicentric	1	East & South East
Neoplasm - malignant, unspecified	1	West & South West
Cardiovascular	**1**	
Myocarditis - lymphocytic and eosinophilic, associated with third degree AV block	1	East & South East
Gastrointestinal	**9**	
Gastric		
Gastric impaction	1	North West England
Chronic gastritis & ulceration, pyloric stenosis	1	East&South East
Small intestinal		
Strangulating/pedunculated lipoma, intestinal rupture	1	East & South East
Segmental strangulation - mesodiverticular band	1	East & South East

ADULT DEATHS CONT...

Table 21: Post-Mortem Examination (PME) details for adult deaths relating to gastrointestinal, hepatic, miscellaneous, musculoskeletal and 'no diagnoses reached 'reports between 1 Jul to 30 Sep 2025.

PME Diagnosis	Total	Region of PME contributor
Gastrointestinal cont...		
Large intestinal		
Ileocaecal intussusception and secondary post-operative septic peritonitis	1	East & South East
Caecal impaction	1	East & South East
Ceocecal intussusception, septic peritonitis	1	East & South East
Vascular compromise causing segmental mucosal reddening and haemorrhage of pelvic flexure	1	East & South East
Colitis - fibrinonecrotising, suspect positive for *Clostridium difficile*	1	East & South East
Hepatic	**1**	
Hepatopathy, hepatic encephalopathy	1	Scotland
Miscellaneous	**2**	
Splenic rupture, diaphragmatic rupture, haemoperitoneum, secondary to trauma	1	East & South East
Sweet itch, chronic laminitis, RAO	1	West & South West
Musculoskeletal system	**11**	
Head trauma	1	East & South East
Hindlimb fracture - third metatarsal	1	East & South East
Chronic laminitis	1	West & South West
Gastrocnemius rupture	1	East & South East
Tenosynovitis - digital flexor tendon sheath (DDFT tear)	1	North West of England
Osteoarthritis - distal interphalangeal joint	1	East & South East
Osteoarthritis - site unspecified	2	West & South West
Osteoarthritis - tarsus	1	West & South West
Pelvic fracture - site unspecified	2	West & South West
No diagnosis reached	**3**	
Sudden death - cause unknown (multiple deaths on two separate premises, suspicious of a single point-source toxin, pending further test results)	2	East & South East
Sudden death - cause unknown, suspected thromboembolism associated with aortic valvular papillary fibroma/fibroelastoma-like lesion	1	East & South East

ADULT DEATHS CONT...

Table 22: Post-Mortem Examination (PME) details for adult deaths relating to renal, reproductive and respiratory reports between 1 Jul to 30 Sep 2025.

PME Diagnosis	Total	Region of PME contributor
Renal	**1**	
Cystitis - chronic, ulcerative, haemorrhagic & ureteritis	1	East & South East
Reproductive	**1**	
Ovarian cyst, haemoperitoneum	1	East & South East
Respiratory	**3**	
Laryngeal paralysis and guttural pouch fibrosis	1	East & South East
Laryngitis - severe subacute and oedema	1	East & South East
Pulmonary fibrosis	1	Northern Ireland

PME REPORT END

International Collating Centre

ICC 2025 Q3 SHORT REPORT

The International Collating Centre (ICC) Q3 2025 report has been circulated to subscribers. A short summary is presented below with the full version available online (https://equinesurveillance.org/iccview/resources/2025Q3summ.pdf), countries are coded according to ISO 3166 international standard. The ICC provides almost daily email updates on national and international equine disease outbreaks, contact equinesurveillance@vet.cam.ac.uk to subscribe. Current and previous outbreak reports can be found online in an interactive platform www.equinesurveillance.org/iccview/.

ICC 2025 Q3

512 reports issued
averaging 8 reports per working day

RESPIRATORY CONDITIONS (192 reports)

EHV-1
(n=16)

FR DE IT ZA CH USA

EHV-2
(n=1)

BE

EHV-4
(n=30)

FR DE IE NL UK

EHV-5
(n=1)

IT

SALMONELLOSIS
(n=1) *confirmed from a lung sample*

DE

STRANGLES
(n=105)

CA FR DE IE NL SE CH USA

RHODOCOCCUS EQUI
(n=30)

FR IE NL

EQUINE INFLUENZA
(n=8)

EC IN UK USA

NEUROLOGICAL CONDITIONS (228 reports)

EEE
(n=30)

CA USA

EEV
(n=1)

ZA

EHV-1
(n=7)

CA FR DE IT JP ZA USA

WNV
(n=189)

CA FR DE HU IT USA

RABIES
(n=1)

USA

REPRODUCTIVE CONDITIONS (15 reports)

CEM
(n=7)

DE

LEPTOSPIROSIS
(n=2)

DE

S. ZOOEPIDEMICUS
(n=2)

BE FR

EHV-1
(n=4)

AR BE IE

GASTROINTESTINAL CONDITIONS (18 reports)

SALMONELLOSIS
(n=16)

DE IE NL

SE CH USA

ROTAVIRUS
(n=1)

AR

CORONAVIRUS
(n=1)

NL

MISCELLANEOUS CONDITIONS (59 reports)

PIROPLASMOSIS
(n=8)

IT NA ZA

AHS
(n=1)

ZA

POTOMAC HORSE FEVER
(n=3)

USA

EGS
(n=12)

UK

HENDRA
(n=1)

AU

EIA
(n=22)

BE BG CA CL

FR DE HU IT USA

ANAPLASMOSIS
(n=8)

DE NL

LEPTOSPIROSIS
(n=1)

CH

PIGEON FEVER
(n=1)

USA

LYME DISEASE
(n=1)

CH

CORONAVIRUS
(n=1)

BE

International Collating Centre

The ICC continues to be a vital resource in the ongoing monitoring and management of equine health worldwide.

ACKNOWLEDGEMENTS

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- Agri-Food & Biosciences Institute of Northern Ireland
- Animal and Plant Health Agency
- Ashbrook Equine Hospital
- Austin Davis Biologics Ltd
- Axiom Veterinary Laboratories Ltd
- B&W Equine Group Ltd
- Biobest Laboratories Ltd
- BioTe Veterinary Laboratories
- The Donkey Sanctuary
- Donnington Grove Veterinary Group
- Hampden Veterinary Hospital
- The Horse Trust
- IDEXX Laboratories
- Langford Veterinary Services
- Liphook Equine Hospital
- MBM Equine
- Nationwide Laboratories
- Newmarket Equine Hospital
- Rainbow Equine Hospital
- Rossdales Laboratories
- Royal Veterinary College
- Sussex Equine Hospital
- Three Counties Equine Hospital
- University of Bristol
- University of Cambridge
- University of Edinburgh
- University of Glasgow
- University of Liverpool
- Valley Equine Hospital
- VPG (Veterinary Pathology Group) Exeter
- VPG (Veterinary Pathology Group) Leeds
- Westgate Laboratories Ltd

All laboratories contributing to this report operate Quality Assurance schemes. These schemes differ between laboratories; however, all the contagious equine metritis testing reported was accredited by BEVA, with the exception of the APHA, which acts as the reference laboratory.

We are extremely grateful to the Horserace Betting Levy Board (HBLB), Racehorse Owners Association (ROA) and Thoroughbred Breeders' Association (TBA) for their continued combined contribution to Equine Infectious Disease Surveillance.

We welcome feedback including contributions on focus articles to the following address:

Email: equinesurveillance@vet.cam.ac.uk
Website: www.equinesurveillance.org

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