Within the equine population, equine herpesvirus (EHV) is considered a globally ubiquitous disease, with EHV 1 and 4 amongst the most frequent causes of respiratory disease. Previous prevalence estimates indicate the majority of mature horses will have been infected with EHV-1, EHV-4, or both during their lifetime. Beyond respiratory disease, EHV-1 is associated with both abortion and neurological disease, leading to major welfare and financial implications.

The predominant factor in this endemic state arises from the establishment of long-term latency within the host. Recrudescence occurs during periods of stress, such as management changes or increased disease burden. When considering risk factors in new outbreaks one should include the increasing level of international travel and trade, leading to a constant global mixing of the equine population in potentially stressful conditions and, therefore, an increased risk of exposure to EHV.

Veterinary focus is, principally, aimed at halting transmission in an attempt to reduce morbidity and mortality. For this to be achieved successfully epidemiological analyses, in conjunction with molecular diagnostic techniques, are paramount in identifying transmission links including index cases, super-spreaders and other potential sources (e.g. sub-clinical cases), allowing early disease detection and appropriate control measures.

The Animal Health Trust plays a pivotal role in the diagnosis of EHV outbreaks and hands-on support in implementing appropriate control measures through the combined skills of our Diagnostic Laboratory Services, Pathology and Epidemiology Teams.

Abortions or neonatal foal death may be submitted through our Pathology department for EHV clearance or full foetal death investigation. Our pathologists will coordinate a multi-disciplinary investigation for EHV through gross post-mortem examination, histopathological examination and qPCR on liver, lung, spleen, adrenal gland and thymus from the foetus and the cervical star, body and both horns from the placenta. As atypical EHV-1 abortions may occur, wherein EHV-1 resides solely in the placenta, submission of placental tissue with or without the foetal tissue is always encouraged as these cases may serve as a source of sustained transmission if missed. For submission forms, and to see what types of testing we offer, visit our website at www.ahtdiagnostics.co.uk

Neurologic cases may present following respiratory signs or as primary neurologic only cases. Clinical signs may vary in severity from mild paresis to recumbency with incontinence. In suspected neurologic cases nasopharyngeal swabs and/or sera from the case, and/or in-contact animals, for qPCR and complement fixation (CF) testing are strongly advised, this can help to identify the current infectiousness and the extent of the recent infection spread within the outbreak population. Where applicable, post-mortem examination can also be an appropriate option to confirm a diagnosis of EHV-1 neurological disease where the above sampling methods are not feasible.

As the Trust offers a unique multi-disciplinary approach, a full history, including duration, clinical signs, vaccination status and premises details can aid interpretation of results by our Epidemiology Team. This enables our epidemiologists to tailor their advice on appropriate sample collection and outbreak management to your specific situation.