

IDEXX Reference Laboratories responds to EHV-1 cases

Reports of an equine herpesvirus myeloencephalopathy (EHM) outbreak caused by the neuropathogenic form of equine herpesvirus type 1 (EHV-1) have surfaced within the last several weeks. Cases have been reported in various locations across the United States and Canada. While the true extent of this disease outbreak is still uncertain, control of the outbreak is critically dependent on biosecurity. Part of the biosecurity measure is to accurately identify infected horses in a timely manner using the appropriate diagnostic tests.

Diagnostic options

Real-time PCR has become the diagnostic test of choice because of its high-analytical sensitivity and specificity. Virus isolation, another available methodology, is time-consuming and less sensitive than real-time PCR. IDEXX offers a range of RealPCR™ testing options for identification of horses infected with EHV-1. All IDEXX EHV-1 RealPCR tests also include detection of neuropathogenic EHV-1 strains containing a mutation that is highly associated with neurologic clinical signs.

Horse populations recommended for testing

- Sick or healthy horses exposed to EHM-confirmed horses.
- Horses with neurological signs of EHM, including high fever, ataxia, partial or complete paralysis, and incontinence.
- Horses that are quarantined until EHV-1 infection is confirmed or eliminated based upon both a negative PCR test and a lack of clinical signs for the disease.

IDEXX RealPCR tests and panels

When to use	Test name and contents	Test code
Screening of nonclinical or clinical horses with known exposure to equine herpesvirus (EHV)	Equine Herpesvirus Types 1 (EHV-1) and 4 (EHV-4) RealPCR™ Tests Equine herpesvirus type 1 (EHV-1; includes identification of wild-type and mutated neuropathogenic strains) and equine herpesvirus type 4 (EHV-4) RealPCR™ tests	EQHVD
Horses with neurological clinical signs compatible with equine herpesvirus myeloencephalopathy (EHM)	Equine Neurologic Disease Panel Equine protozoal myeloencephalitis (EPM) by Western blot (serum), West Nile virus IgM antibody by capture ELISA, equine herpesvirus type 1 (EHV-1; wild-type and mutated neuropathogenic strains) RealPCR™ tests	NEURO
Comprehensive testing for horses with respiratory signs and unknown exposure history	Equine Respiratory RealPCR™ Panel (Comprehensive) Equine adenovirus, equine influenza virus (EIV/H3N8), equine herpesvirus type 1 (EHV-1; wild-type and mutated neuropathogenic strains), type 2 (EHV-2), type 4 (EHV-4), and type 5 (EHV-5); equine rhinitis A virus (ERAV); equine rhinitis B virus (ERBV); <i>Streptococcus dysgalactiae</i> subsp. <i>equisimilis</i> ; <i>Streptococcus equi</i> subsp. <i>equi</i> ; and <i>Streptococcus equi</i> subsp. <i>zooepidemicus</i> RealPCR™ tests. Includes culture (organism ID only) on selective media for β-hemolytic <i>Streptococcus</i> spp.	ERCD
	Equine Respiratory RealPCR™ Panel (Standard) Equine influenza virus (EIV/H3N8), equine herpesvirus type 1 (EHV-1; wild-type and mutated neuropathogenic strains) and type 4 (EHV-4), <i>Streptococcus dysgalactiae</i> subsp. <i>equisimilis</i> , <i>Streptococcus equi</i> subsp. <i>equi</i> , and <i>Streptococcus equi</i> subsp. <i>zooepidemicus</i> RealPCR™ tests; includes culture (organism ID only) on selective media for β-hemolytic <i>Streptococcus</i> spp.	ERDD
Treatment monitoring of EHV-1 confirmed horses	Equine Herpesvirus Type 1 (EHV-1) RealPCR™ Test Includes identification of wild-type and mutated neuropathogenic strains	EH1D

Specimen requirements

7 mL EDTA whole blood and/or deep nasopharyngeal swabs; keep refrigerated. Nasal swabs are used to detect animals shedding the virus or that were recently exposed to a confirmed case. A whole blood specimen is recommended from a symptomatic animal to detect viremia. Submission of both specimen types for EHV RealPCR testing is ideal. For nasopharyngeal swabs, please submit dry, plastic-stemmed swabs, without transport media, in an RTT or WTT (plain plastic tube); keep refrigerated.

For equine neurologic panel submissions, also include 2 mL serum (no hemolysis or lipemia) for serology.

For respiratory disease panel submissions, deep nasopharyngeal swabs (one from each nostril) are the preferred specimen type and should be collected prior to antibiotic administration. For culture, please submit an additional culture swab in transport media.

Learn more about the diagnosis and management of equine herpesvirus infections at idexx.ca/EHV.

Ordering your tests online

Did you know that you can search for diagnostic tests, create requisitions, and review status and results on vetconnectplus.ca?

Customer support services

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