Testing for EVH-1 at Colorado State University Veterinary Diagnostic Laboratory

http://www.dlab.colostate.edu/

For more information, call (970) 297-1287

In suspected EHV-1 cases, i.e., horses that attended the Ogden UT show or in contact with horses that came back from the show and are febrile, we are recommending submitting a nasal swab and a whole blood sample.

Use a sterile Dacron or cotton swab to swab the inside of the horse’s nasal passages and place the swab in a sterile, sealable tube like a red-topped tube or snap-cap tube. Do not put the swab into a bacteriology culturette.

Collect the whole blood sample in an EDTA (purple-topped tube). Ship both samples with a chillpak overnight by FedEx or UPS (not the USPS). Request an EHV-1 PCR test or a real-time EHV-1 PCR test. Samples that arrive before noon will be processed, tested and reported the same day. Each EHV-1 PCR test costs $35 and the real time PCR test is $40.

Virus isolation is much less sensitive than PCR so it is not recommended.

Serum antibody titers are also helpful. We recommend collecting a (acute) serum sample from the horse at the time other samples are collected. If the horse survives for another 2 weeks, collect a second (convalescent) serum sample. A 4 fold increase or greater in EHV1 titers between the two samples indicates exposure. However, there have been horses that had diseases caused by other agents that had an increase in EHV-1 titers presumably due to stress and recrudescence of the virus. Having these samples is also useful if the horse turns out not to have EHV-1 and you want to investigate other possible agents that have serologic tests such as flu or EPM.

If horses are dead or euthanized with typical neurologic signs for EHV-1 associated disease, then a sample of spinal cord or brain from an area with evidence of hemorrhage or malacia should be submitted fresh and shipped as described above. In addition, tissue with lesions submitted in 10% buffered formalin for histopathology.

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