UF College of Veterinary Medicine
UNIVERSITY of FLORIDA

Neurological EHV-1 Outbreak Information Clinical Signs/Testing

Websites for Information

http://www.doacs.state.fl.us/ai/Announcements/20061216EquineVirus1.shtml
http://www.aaep.org/index.php?tried_cookie_test=true
http://www.faep.net/home.htm
http://ces.ca.uky.edu/lddc/services.htm

Contact Information:

Florida Department of Agriculture & Consumer Services; Dr. Michael Short 850-410-0900

Veterinarians with suspect cases of EHV-1 must report to FDACS immediately

Incubation Period: 1 to 10 days, primarily 1-3 days
Viral Shedding: 7-10 days, can be up to 28 days from onset of signs in some instances
Transmission: 1) nose to nose contact 2) people through contamination of hands and equipment 3) inanimate objects such as water buckets, bits, clippers, etc, 4) aborted placenta and fetal tissues.

Neurological horses are capable of shedding high amounts of virus

Environmental Contamination: Herpesviruses are easily inactivated with quaternary ammonium compounds (http://www.answers.com/topic/quaternary-ammonium-compound) or bleach (10%). Hand washing and soap/water washing of equipment will minimize contamination. *However, without this, herpesviruses can persist in the environment for a week and sometimes for up to 30 days*.

Horses can be clinically normal and still shed virus!

Clinical Signs:

Respiratory signs may be minimal and of short duration.
Increased rectal temperature may be the only clinical sign

Horses can have two fever spikes
The initial rise in rectal temperature is usually mild-101.5 to 102.5°F

After the initial temperature rise, which may be missed, the horse can either be clinical normal, develop respiratory signs of nasal discharge, increased temperature (> 102.5), minimal coughing, can abort if pregnant, or, *in a small number of cases develop neurological signs*.

Neurological signs: Horses become ataxic (incoordination), inability to empty bladder, and weakness of the tail. Some horses will become completely paralyzed; the prognosis for these horses is poor. In a small number of cases, horses can show abnormal mentation and develop cranial nerve signs. Most horses become mildly to moderately neurologic and stabilize rapidly. The neurologic signs can persist but most horses are normal by 3 to 6 months after onset of clinical signs.

Abortion: pregnant horses can experience spontaneous abortion between 7 days and several months after exposure. The mare will exhibit limited initial signs.

Testing:

UPON onset of clinical signs (temperature), a **nasal swab** and a blood sample **(purple top tube)** should be performed. Nasal shedding can be of short duration.

At this time, the most rapid testing is by PCR.
http://ces.ca.uky.edu/lddc/forms/LDDCAccession.pdf
The test is EHV-1/EHV-4 PCR

Send samples on ice packs (no wet ice!) to:

Livestock Disease Diagnostic Center 859-253-0571
1490 Bull Lea Road
P.O. Box 141125
Lexington, KY 40512-4125