



Maryland Department of Agriculture

Agriculture | Maryland's Leading Industry

Office of Marketing
Animal Industries and Consumer Services

Larry Hogan, Governor
Boyd K. Rutherford, Lt. Governor
Joseph Bartenfelder, Secretary
Julianne A. Oberg, Deputy Secretary

Animal Health

The Wayne A. Cawley, Jr. Building
50 Harry S. Truman Parkway
Annapolis, Maryland 21401
www.mda.maryland.gov

410.841.5810 Baltimore/Washington
410.841.5999 Fax
800.492.5590 Toll Free

Collection & Submission of Samples for Equine Neurologic Syndrome

Criteria for Reporting: All neurologic equine cases that are possibly infectious or contagious must be reported to the Maryland Department of Agriculture (410-841-5810 during business hours, 410-841-5971 after-hours & weekends). Primary differentials are Rabies, Equine Herpesvirus-1 (EHV-1), and Arboviruses during mosquito season. There is no laboratory fee* when this testing is done on a reported neurologic case. Testing supplies may be picked up from the Frederick Animal Health Laboratory (FAHL) or the Salisbury Animal Health Laboratory (SAHL).

Samples must be submitted to the Frederick Animal Health Laboratory at 1840 Rosemont Ave Frederick MD, 21702 within 48 hours of collection. To assure same-day EHV-1 and/or Rabies results, samples must be received by 12 noon. Same-day results are not typically available for tests sent out. **CALL AHEAD of sample collection & submission** (FAHL – 301-600-1548).

Submission of all sample types is required for reported neurologic cases (postmortem submission for rabies testing)

TEST	LAB	SAMPLE	COMMENTS	TURN AROUND TIME
EHV-1	FAHL	10-20 ml EDTA whole blood	<i>A minimum of 10 ml blood is required for accurate PCR.</i>	Same day if received by 12 noon; additional time required for sub-typing.
		Nasal swab	<u>Swabs</u> - Sterile polyester-tipped are best. Do not use calcium alginate swabs or swabs with wooden sticks. <u>Media</u> - 1 ml Viral Transport Media (VTM). 1 ml sterile saline is acceptable if immediately transported to lab & kept cold.	
Arbovirus	MDH/other*	10-20 ml serum	Performed if EHV-1 is negative. Typically, MDH arboviral surveillance season spans from July 1 to Oct 31. Free testing may not be available outside of this time period.	Determined by lab performing test.
Rabies (non-human exposure)	FAHL	Brain	Submission of entire brain, head, or carcass is acceptable. Please note, the standard equine disposal fee listed on the laboratory fee schedule may apply to whole equine carcass submissions. Please contact lab prior to submission.	Same day if received by 12 noon.
Rabies (human exposure)	MDH			Determined by MDH.

*Please note, communication with the MDA is required to determine availability of Arbovirus testing. Testing at the Maryland Department of Health (MDH) may not be available out-of-season. If an alternative lab must be selected for this reason, Arbovirus testing may be fee based.

Procedure:

- Follow standard safety & biosecurity guidelines for EHV-1 & zoonotic disease exposure.
- Blood- Collect via normal jugular venipuncture. Tube types & required volumes are outlined above.
- Nasal swabs- Double swab (two swabs at once along the left or right ventral meatus, being careful to avoid the false nostril, until you are in the horse's nasal passage). Rotate the swab to increase the collection of respiratory secretions. Place nasal swabs in VTM or saline tubes, assuring tips of swabs are fully submerged.
- Label all tubes with horse name, owner's last name, date of collection, and any other relevant information.
- Samples must be doubled bagged with absorbent material & wrapped with sufficient padding to assure ice packs do not cause the samples to freeze. **Frozen samples are unacceptable for testing.**
 - Packing & shipping should be done according to current requirements for biological specimens.
 - Send to the FAHL via early a.m. overnight delivery. Hand delivery is also acceptable. **Samples are not routinely accepted on weekends or state holidays.** Prior to submission, please discuss with MDA if delivery would occur on a weekend or holiday.
- Virus survival is unlikely** if dry swabs are submitted or if submitted more than 48 hours post collection.
- FAHL Submission Form for EHV-1 & non-human exposure Rabies: <http://mda.maryland.gov/animalHealth/Pages/laboratory.aspx>
- MDH Arbovirus Form & Info: <https://health.maryland.gov/laboratories/Pages/Arbovirus-Serology.aspx>
- MDH Human Exposure Rabies Form & Info: <https://health.maryland.gov/laboratories/Pages/Rabies-Animal-DFA-Submission.aspx>

MDA Laboratories: Frederick Animal Health Laboratory - 1840 Rosemont Ave. Frederick, MD 21702 – (301) 600-1548 - **Supplies & TESTING**
Salisbury Animal Health Laboratory - 27722 Nanticoke Rd. Salisbury, MD 21801 – (410) 543-6610 - **Supplies ONLY**

Feb-18