

Larry Hogan, Governor · Boyd K. Rutherford, Lt. Governor · Robert R. Neall, Secretary

July 30, 2019

## Dear Maryland Veterinarian:

Arboviral surveillance season began on July 1, and we are writing to provide updated guidelines for equine arboviral surveillance in Maryland in 2019. We also want to remind you that equine neurologic syndromes and any of the equine encephalitides, including West Nile virus (WNV), are reportable to the Maryland Department of Agriculture (MDA) Animal Health Program. The Maryland Department of Health (MDH) offers laboratory testing of equine specimens for WNV and other arboviruses, and we encourage you to make use of this service.

Arboviral disease continues to affect both human and animal populations in Maryland. Since the emergence of West Nile virus in the state in 1999, there have been 386 human WNV cases, 295 WNV equine cases, and 520 WNV-positive mosquito pools reported in Maryland. Reported equine WNV cases increased from 30 in 2002 to 234 in the peak year of 2003. They have declined considerably since that time, with only seven WNV-positive horses in Maryland in 2018. Eastern equine encephalitis (EEE) virus has been periodically detected in equine populations in Maryland as well, most recently in a horse in Worcester County in 2013.

As in previous years, the Maryland Department of Health (MDH) will work with the Maryland Department of Agriculture (MDA) to conduct surveillance for arboviral diseases in horses. From July 1, 2019 – October 31, 2019, the Maryland Public Health Laboratory will accept serum, brain, and/or CSF samples from horses exhibiting clinical signs consistent with arboviral disease for testing.

The lab offers the following tests free of charge:

- WNV and EEE polymerase chain reaction (PCR) on brain tissue, and/or CSF, and
- WNV IgM capture ELISA on CSF and/or serum samples

## Please note the following guidelines:

- For serological testing, the Serological Testing Form (MDH Form 4677) should be completed. The submitter should fill out all required information in the blue section and note any clinical signs under the Arbovirus/West Nile Virus Panel section.
- For culture and viral isolation, the Infectious Agents: Culture/Detection Form (MDH Form 4676) should be used. The submitter should fill out all pertinent information in the yellow section and place the appropriate specimen code in the box next to Arbovirus Panel.
- For both of the above forms, write "EQUINE" across the top of the form.
- Any veterinarian or other individual submitting equine specimens for arboviral testing should complete one or both of the above forms, along with the Equine Arboviral Testing Form available at <a href="https://phpa.health.maryland.gov/OIDEOR/CZVBD/Shared%20Documents/equine\_arbolab\_form46">https://phpa.health.maryland.gov/OIDEOR/CZVBD/Shared%20Documents/equine\_arbolab\_form46</a>
   19.pdf . A separate form must accompany each specimen.
- Complete contact information must be provided on all of the above forms, including the owner's address and phone number and the address where the horse is stabled. The specimen will not be tested without this information.
- Each form should be completed legibly, preferably using block letters.
- Only specimens from horses exhibiting neurologic signs consistent with arboviral infection will be
  accepted for testing; the laboratory will not test samples from asymptomatic animals or to determine
  response to vaccination.
- The Maryland Public Health Laboratory will not accept specimens from horses that are stabled outside of Maryland.

- To request the above laboratory testing forms, please contact the Maryland Public Health Laboratory at (443) 681-3800. Also, the laboratory testing forms can be downloaded from the Laboratory website at <a href="https://health.maryland.gov/laboratories/Pages/Home.aspx">https://health.maryland.gov/laboratories/Pages/Home.aspx</a>.
- For questions regarding equine laboratory testing at the MDH Public Health Laboratory, please call (443) 681-3800.
- The Maryland Public Health Laboratory has moved to a new location. Please visit the website at <a href="https://health.maryland.gov/laboratories/Pages/Home.aspx">https://health.maryland.gov/laboratories/Pages/Home.aspx</a> for the address, maps, and directions to the new facility.

In addition to the testing services offered by the Maryland Public Health Laboratory, equine necropsies are also available for a fee at the MDA Frederick Animal Health Diagnostic Laboratory. The Frederick Laboratory can be contacted at (301) 600-1548.

As always, regular vaccination of equines against WNV is encouraged. It is also recommended that horses be vaccinated annually against rabies and EEE.

To speak with MDA Animal Health staff or to report neurologic disease in horses, please call (410) 841-5810. To report a neurologic horse after normal business hours, please call (410) 841-5971.

Information about arboviral and other infectious diseases in equines is available on the MDA website at <a href="http://mda.maryland.gov/AnimalHealth/Pages/default.aspx">http://mda.maryland.gov/AnimalHealth/Pages/default.aspx</a>. General information on WNV and other arboviruses is available on the Maryland West Nile Virus web page at <a href="https://phpa.health.maryland.gov/OIDEOR/CZVBD/Pages/west-nile-virus.aspx">https://phpa.health.maryland.gov/OIDEOR/CZVBD/Pages/west-nile-virus.aspx</a> and from the Centers for Disease Control and Prevention at <a href="http://www.cdc.gov/westnile/">http://www.cdc.gov/westnile/</a>.

If you have any other questions or concerns, or if you would like general information about WNV, please contact the MDH Center for Zoonotic and Vector-borne Diseases at (410) 767-5649.

Sincerely,

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cc

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