For all of 2011, our laboratory identified 111 cases of Potomac Horse Fever (PHF) by PCR in Kentucky. For 2012 to date we have identified 80 PHF cases by PCR. This year, the UKVDL has necropsied 6 horses with a confirmed diagnosis of PHF.

**Animals Submitted to UKVDL for necropsy with a diagnosis of PHF:**

**PCR positive specimens submitted to UKVDL 2011/2012 to date:**

**Potomac Horse Fever (PHF) Overview:**

**Epidemiology**—PHF is an acute, sometimes fulminating, disease seen in spring, summer and fall in Kentucky which can cause high fever, anorexia, colic, laminitis, abortion, diarrhea and death in horses of all ages. The disease seems to occur near rivers, streams and irrigated pastures. It is caused by Neorickettsia risticii, a gram negative, intracellular bacterium with a predilection for monocytic cells. This organism is closely related to *N. helminthoeca*, the agent of salmon poisoning in dogs. The vector of *N. risticii* is a fluke which develops in freshwater snails, then released as metacercaria which...
are ingested by aquatic and other insects. A horse is likely infected by inadvertent ingestion of an infected insect or possibly the bite of an insect. No definitive reservoir for maintenance of the agent has been identified.

**Diagnosis**— If detected early in the course, treatment with oxytetracycline is reported to be successful. If you suspect PHF, we recommend that you send 10 ml EDTA blood and 5 g. feces to UKVDL for PCR testing. Results will be available the same day or next day, thereby facilitating the appropriate treatment. The charge is $35 in-state, $52.50 out-of-state + $10 accession fee. Also, please consider submitting horses to UKVDL for a complete necropsy that have died with clinical signs consistent with PHF to obtain a confirmation ($100 + $10 accession fee).

**Prevention**— There are several inactivated vaccines on the market. Vaccination trials have demonstrated protection as high as 78%. Treating low-lying areas inhabited by snails can reduce the impact of the vector. Any and all efforts to reduce insect exposure for horses can also be helpful as a preventative measure.

**General animal disease situational awareness**— Please visit our web site at [http://www.vdl.uky.edu/interativemap.aspx](http://www.vdl.uky.edu/interativemap.aspx) An interactive Kentucky map will appear—place your mouse cursor over counties in your practice area to see a 30-day moving window of diagnoses rendered at UKVDL and the Breathitt Veterinary Center in Hopkinsville. This is a great tool to help you stay abreast of what the laboratories are seeing in cases submitted to the lab. Go to this link and try it out!

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