



August 30, 2010

From: MDCH Bureau of Laboratories

Re: Arbovirus Testing

As we have entered the arbovirus transmission season, clinical laboratories are starting to detect arbovirus cases. Specimens from suspect cases who are hospitalized with meningitis and/or encephalitis can be forwarded to MDCH laboratory for confirmation. As a reminder, please note that we accept only cerebral spinal fluid (CSF) specimens for arbovirus testing. A cautionary note for laboratories using IFA testing for arboviruses - false negative tests have been reported due to lower sensitivity; we, therefore, advise laboratories that are using IFA, to submit specimens to MDCH for arboviruses testing on clinically suspect cases. CSF samples will be tested for IgM antibodies to the four arboviruses most likely to be found in Michigan, West Nile Virus (WNV), St. Louis encephalitis virus (SLE), Eastern Equine encephalitis virus (EEE), and California Group virus (CGV), which includes LaCrosse virus. For suspect hospitalized cases where CSF is not available, contact MDCH Communicable Disease Division at 517-335-8165 to discuss other testing options.

Viral encephalitis is one of the most dangerous mosquito-borne diseases caused by arbovirus infection. The Michigan Department of Community Health has already confirmed three human cases of Eastern Equine Encephalitis (EEE) in the state of Michigan. The Michigan Department of Agriculture has reported that 23 horses have tested positive for EEE with more than 62 suspect cases. EEE can cause neurologic illness in both horses and humans with case fatality rates close to 90% in horses and 30% in humans. Physicians treating patients with neurologic symptoms should consider testing for EEE and other mosquito-borne viruses and report suspect cases to their local health department. Additional information on arbovirus activity in Michigan can be found on the Emerging Infectious Diseases web page at www.michigan.gov/emergingdiseases.

People are reminded to take precautions to avoid mosquito bites, including staying indoors at dusk and dawn when mosquitoes are most active, wearing long sleeved shirts and pants when weather permits, using mosquito repellent according to label directions if you must be outdoors, keeping window screens and doors in good repair and eliminating standing water that can breed mosquitoes around your home. For information about EEE in humans, visit the Centers for Disease Control and Prevention's EEE website at <http://www.cdc.gov/easternequineencephalitis/>.

For questions regarding testing, please contact Dr. Anthony Muyombwe at 517-335-8099 or MuyombweA@michigan.gov.