



# Livingston County

## Department of Public Health

# Communicable Disease Update

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## WEST NILE VIRUS AND EASTERN EQUINE ENCEPHALITIS ACTIVITY IN MICHIGAN

The Michigan Departments of Agriculture and Rural Development (MDARD) and Health and Human Services (MDHHS) are reminding residents to protect themselves from mosquito bites, even with autumn officially beginning this week. Health officials have identified 22 confirmed and probable West Nile virus (WNV) human cases and five blood donors to date, 17 corvids, 25 other avian species, and two deer have tested positive for WNV from 25 Michigan counties in both the Upper and Lower Peninsula. Positive mosquito pools have been detected from seven Michigan counties (Bay, Kent, Macomb, Oakland, Saginaw, Tuscola, Wayne).

Most people who become infected with WNV will not develop any symptoms of illness. However, some become sick three to 15 days after exposure. About one-in-five infected persons will have mild illness with fever, and about one in 150 infected people will become severely ill. Mild illness may include headache, fever, body aches, joint pain, vomiting diarrhea, or rash. Severe symptoms of WNV are associated with encephalitis or meningitis, and may include: include stiff neck, stupor, disorientation, coma, tremors, muscle weakness, convulsions and paralysis. People 50 and older are more susceptible to severe WNV disease symptoms.

MDHHS has also confirmed a human case of Eastern Equine Encephalitis (EEE) in an out of state resident who was likely exposed in southwest Michigan. The individual was hospitalized, has since been released and is recovering. Eastern Equine Encephalitis is a serious zoonotic viral disease transmitted by mosquitoes. The virus mainly causes disease in horses but can also cause serious illness in people, poultry, and other animals such as deer and even dogs. As of September 20, MDARD has identified two cases of EEE in horses. One was a four-month-old Standardbred filly in Clare County. The second case was a 12-year-old quarter horse from Menominee County. Neither horse, nor the filly's mother were vaccinated against EEE. Both affected horses have died. People can be infected with EEE from the bite of a mosquito carrying the virus. The disease is not spread by horse-to-horse or horse-to-human contact. In humans, signs of EEE include the sudden onset of fever, chills, body and joint aches. EEE infection can develop into severe encephalitis, resulting in headache, disorientation, tremors, seizures and paralysis. Permanent brain damage, coma and death may also occur in some cases.

## UNPASTEURIZED MILK CAUSING ENTERIC ILLNESS

The Michigan Department of Health and Human Services, along with three local health departments in our area, are reporting recent E. Coli O157:H7 infections in persons who consumed unpasteurized or raw milk prior to their illnesses. One child was hospitalized but has since been released. The investigation to date indicates that the raw milk was obtained from an unlicensed cow-share program. While raw milk is not

available for sale in retail stores in Michigan, members of cow-share programs (which are not inspected or regulated under Michigan dairy laws) own a portion of a cow and in return are able to receive raw milk. Providers are reminded to test patients presenting with enteric illness, ask if they had consumed raw milk or other products made from raw milk, and report any cases to their local health department.

## ZIKA VIRUS UPDATE

Zika virus is an emerging infection that is transmitted by Aedes mosquitoes, the same vectors as Dengue Fever and Chikungunya, and generally causes only mild illness in infected individuals who develop symptoms. The most common symptoms are fever, rash, joint pain, and red eyes that range in duration from days to one week. However, the Centers for Disease Control and Prevention (CDC) concluded in April 2016 that Zika virus can cause microcephaly and other severe fetal brain defects when the mother is infected during pregnancy.

As of September 14, 53 confirmed and probable cases of Zika virus infection have been identified in Michigan residents, all travel-related. Among the 34 females identified, none are pregnant. Testing for Zika virus among Michigan residents is being performed at the MDHHS Bureau of Laboratories (BOL) and all testing should first be approved by the local health department before sending specimens to the BOL.

In the United States, 3,176 cases of Zika virus have been reported from 48 of the 50 states and Washington D.C. The majority (65%) of these individuals had recently traveled to the Caribbean. There is currently active, local Zika virus transmission in a 4.5-square-mile area of Miami Beach. The Florida Department of Health (FL DOH) has determined that active Zika virus transmission is no longer ongoing in the one square mile area of Wynwood, and therefore, as of September 19, 2016, the CDC no longer recommends pregnant women and their partners avoid travel to the Wynwood area. However, pregnant women and partners of pregnant women who are concerned about potential Zika virus exposure may consider postponing nonessential travel to all parts of Miami-Dade County, including areas without identified active transmission. Additional information about Zika virus and testing can be found on the Michigan Zika website at: [www.michigan.gov/zika](http://www.michigan.gov/zika)

## INFLUENZA UPDATE

According to the Center for Disease Control (CDC), seasonal flu causes an **estimated 200,000 hospitalizations** and between 3,000 and 49,000 deaths each year in the U.S. Studies show that flu vaccination can reduce flu illnesses, doctors' visits, missed work and school due to flu, as well as prevent flu-related hospitalizations and deaths. In November of 2015, only 2 out of every 5 persons 6 months and older in the United States had received a flu vaccine, leaving most persons without the protection afforded by flu vaccination. (<http://www.cdc.gov/flu/fluview/nifs-estimates-nov2015.htm>). **Flu vaccination is the best way to prevent the flu and potentially serious flu-related complications.** Studies have repeatedly shown that a health care provider's recommendation plays a critical role in a patient's decision to get a seasonal flu vaccine.

## BECOME A MICHIGAN INFLUENZA SENTINEL PROVIDER

Medical providers of any specialty (e.g. family medicine, internal medicine, pediatrics, infectious disease) in nearly any setting (e.g. private practice, urgent care center, emergency department, university student health center) who are likely to see patients with influenza-like illness can be sentinel providers. For information about becoming a sentinel provider please contact MDHHS at (517) 335-3385.

Call LCDPH at (517) 546-9850 to report or consult about a communicable disease. We are available 24/7. If it is after business hours, call 911 and they will contact the appropriate staff.