



STATE OF MARYLAND

DHMH

Maryland Department of Health and Mental Hygiene

Larry Hogan, Governor - Boyd Rutherford, Lt. Governor - Van Mitchell, Secretary

June 7, 2016

Dear Colleagues,

We are once again writing with important updates and reminders about Zika virus, including information on mosquito season and associated counseling recommendations, updated Zika information and resources, updated information about serological testing, and more detailed information about testing of fetal and infant specimens. Please see <http://phpa.dhmh.maryland.gov/pages/zika.aspx> for prior clinician letters and other important Zika-related information.

Mosquito Season and Updated Counseling Recommendations

With the arrival of spring, mosquito season in Maryland has begun, increasing the possibility that local, mosquito-borne transmission of Zika virus could occur. In this setting, we would like to remind you of the importance of counseling all of your patients to avoid mosquito bites and to clean up the environment around their homes to reduce mosquito populations.

Additionally, we wish to make you aware of the following:

- In order to prevent local spread of infection, it is particularly important to counsel patients with possible exposure to Zika virus to avoid mosquito bites. Symptomatic patients in particular should take measures to avoid mosquito bites during the first week of illness. Ill patients are advised to stay indoors when possible and to use air conditioning and screened-in rooms. When outdoors, patients should wear long sleeves and pants and use EPA-registered repellents, which when used as directed are proven safe and effective, even for pregnant and breast-feeding women.
- Identification of *Aedes aegypti* mosquitoes, an increase in the population of *Aedes albopictus* mosquitoes, or identification of viremic patients who have tested positive for Zika virus may prompt joint health department and Maryland Department of Agriculture (MDA) mosquito abatement responses in affected areas. Activities may include spraying of pesticides to reduce adult mosquito populations. Absolutely no personal identifying information will be made public as part of this response.
- Pesticide-related illnesses are reportable in Maryland. The reporting form is available here: <http://phpa.dhmh.maryland.gov/OEHFP/EH/Shared%20Documents/Pesticide%20Reporting%20Form%20v1.pdf>

- Men who test positive for Zika should use condoms during all sexual encounters and should avoid getting anyone pregnant for at least 6 months after symptom onset if symptomatic and for at least 8 weeks after exposure if asymptomatic.
- Women who are not pregnant and who test positive should avoid getting pregnant for at least 8 weeks after symptom onset or exposure.

Updated Zika Resources and Information

In a New England Journal of Medicine perspective piece, published on May 25, 2016, researchers reported on an analysis using data from the Zika outbreaks in Brazil, Yap Island, and French Polynesia, which concluded that the estimated risk for microcephaly due to infection with Zika virus during the first trimester ranges from 1% to 13%. Please see the article for additional information: http://www.nejm.org/doi/full/10.1056/NEJMp1605367?query=featured_zika.

CDC recently published a new document for parents of children who test positive for Zika virus infection, available here: <http://www.cdc.gov/zika/pdfs/testresults-children-fs.pdf>.

As always, the DHMH and CDC websites contain a wealth of information about Zika virus and are continuously updated as new information becomes available. Please refer to them here:

- <http://phpa.dhmd.maryland.gov/pages/zika.aspx>
- <http://www.cdc.gov/zika/>

Updated Guidance on Performance and Interpretation of Serological Testing

The DHMH Laboratories Administration continues to perform serological testing on appropriate specimens to identify IgM antibodies in persons possibly exposed to Zika virus. While this test is ideally used in patients exposed between 2 and 12 weeks prior to specimen collection, it is still not completely understood how long IgM antibodies may persist in humans. Consequently, if you have high suspicion for possible Zika exposure in your patients, particularly in pregnant women or pregnant women with fetal abnormalities, serological testing may be approved outside the ideal 2–12 week window. Please follow the established protocol and contact your local health department for testing approval in these situations.

On May 27, 2016, CDC released a new MMWR report entitled, “Interim Guidance for Interpretation of Zika Virus Antibody Test Results,” available here:

<http://www.cdc.gov/mmwr/volumes/65/wr/pdfs/mm6521e1.pdf>. This document may help in your interpretation of test results that you receive on your patients, and will help clarify recommended follow-up actions in persons with non-negative results.

Submission of Fetal and Infant Tissues for Zika Testing

While many Maryland providers may not need to submit fetal or infant tissue specimens for Zika testing, we are providing this guidance to everyone to increase awareness of the process. All pregnant women who have likely Zika infection during pregnancy, and their infants, are being enrolled into the United States Zika Pregnancy Registry. As part of this effort, the Maryland DHMH

Laboratories Administration is accepting umbilical cord blood and umbilical cord and placental tissue specimens for infants born to women with likely Zika virus infection:

- Prior to accepting fetal/infant specimens, mothers of infants must first be tested for Zika virus; fetal/infant specimens will only be accepted for mothers with positive or non-negative test results, except in special circumstances.
- Testing approval should be obtained from your local health department prior to submission of specimens, **which should be submitted under the name of the infant rather than the mother**. If the name of the infant is unknown, please use “Baby” as the first name and the mother’s surname as the infant’s surname.
- Umbilical cord blood should be submitted in a red-top tube and in most cases will be tested using both PCR (to look for viral RNA) and an ELISA (to look for IgM antibodies). Any positive IgM results will need to undergo confirmatory neutralizing antibody testing.
- Umbilical cord and placental tissues should be processed by your local pathologist prior to submitting to DHMH. Full-thickness sections of tissue approximately 1 cm in length and width should be obtained, including from the umbilical cord, the placental disk, the chorionic membranes, and from any abnormal appearing areas of the placenta.
- Both fresh/frozen and fixed specimens should be submitted. Due to shipping regulations, fixed specimens should be submitted in as small amount of formalin as possible, or if preferred, already processed into paraffin blocks and submitted in accordance with shipment guidelines for formalin fixed tissues.
- If fresh specimens will be submitted <72 hours from collection, they can be stored in a refrigerator until submission and shipped with cold packs; if ≥ 72 hours will pass before submission, fresh specimens should be frozen at -70°C and shipped on dry ice.
- Do not ship fresh/frozen specimens and fixed specimens in the same container.
- Do not submit whole, uncut specimens without explicit directions to do so.
- Do not submit specimens directly to CDC.
- For instructions on processing, collecting, and submitting other types of fetal or infant tissue specimens, please contact the DHMH Zika Team at (410) 767-6700.

Please don't hesitate to contact the DHMH Zika Team at (410) 767-6700 with any questions or concerns.

Sincerely,



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