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WHO: Zika virus now a cause for concern worldwide

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Spring is just around the corner and the warmer temperatures are likely to bring an increase in mosquito activity. Mosquitoes have long caused concern among World Health Organization (WHO) officials, as the insects spread many illnesses. For decades, countries have battled diseases such as malaria, yellow fever, encephalitis (various), chikungunya, dengue fever, and now the Zika virus.

Although the Zika virus was first discovered in 1947 in Uganda, only sporadic cases in Africa and Southern Asia were recorded until 2007. That year, the first documented case occurred in the Pacific. From 2007 until 2013, the Zika virus began to spread from Africa to Asia to South America.

Zika virus is suspected to be a factor, but a link has yet to be established in the occurrence of microcephaly, a fetal deformation in which infants are born with smaller

than usual brains. Brazil has been especially burdened with microcephaly cases. In 2014, Brazil reported 150 cases of microcephaly. In May 2015 the country reported its first locally transmitted case of Zika. By October 2015, Brazil reported 2,700 suspected cases microcephaly and cases increased to more than 3,800 by January 2016.

Symptoms for Zika virus infection include mild fever, skin rash, muscle and joint pain, headache and conjunctivitis with symptoms lasting for 2-7 days. There is no vaccine to prevent Zika disease and no specific treatment, just general supportive care. The incubation time from exposure to symptoms is not clear, but it is likely to be a few days.

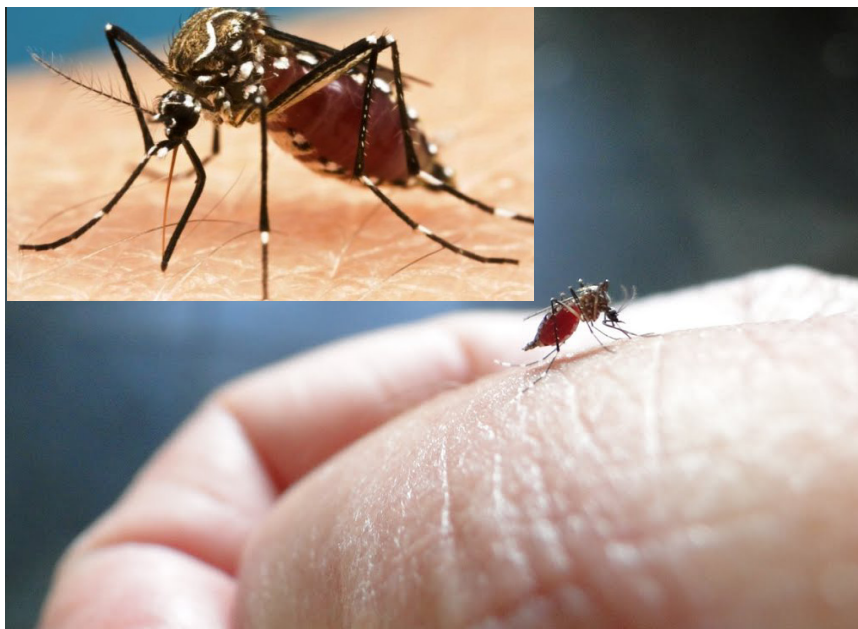
The U.S. has reported travel-related cases of Zika virus, but to date there has not been any documented local transmission of the illness. Still, health officials remind us to be vigilant and take precautions to limit exposure to mosquito bites.

For decades, Georgians have been exposed to mosquitos infected with Eastern Equine Encephalitis (EEE), LaCrosse Encephalitis (LACV), St. Louis Encephalitis (SLE), and since 2001, West Nile Virus. The recent threat of illnesses like dengue fever, chikungunya, and now Zika, have health officials stepping up surveillance efforts. In February 2016, Georgia reported its first Zika case - a travel-related case whereby the person visited an affected country and became infected there.

The normal route to exposure for mosquito borne viruses is for a mosquito to bite an infected person. The mosquito can then become infected with the virus, bacteria, or parasite present in the infected person's blood. The infected mosquito then bites another person, which can potentially transfer the illness to that person.

It is important to remember that only female mosquitoes bite humans. This is

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The *aedes* genus mosquito is the vector for Zika virus and other illnesses including dengue, yellow fever, and chikungunya. This small mosquito bites during the daytime and is especially active during hours of dawn and dusk. It is present on all continents except Antarctica.



WHO: Zika virus now a cause for concern around the world

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because they need protein for their eggs when reproducing. Male mosquitoes feed on nectar from flowers, as do female mosquitoes when not breeding.

Avoiding mosquito bites is the best protection for humans against mosquito illnesses. Use insect repellent containing DEET or oil of lemon eucalyptus on skin and repellents that contain permethrin for clothing. Limit time spent outdoors during dawn and dusk. Wear light-colored clothing including long-sleeved shirts, long pants, and socks.

Around your property, reduce the number of containers that trap or hold water. If you have birdbaths, water bowls for pets, or other similar containers, empty them every couple of days, wash, and replenish with clean water. Make sure that gutters are clean and free-flowing. And ensure that windows and doors are properly sealed and that screens are in good working order. For more information about the Zika virus, visit: <http://dph.georgia.gov/zika-virus> or <http://www.cdc.gov/zika/index.html> or <http://www.who.int/csr/disease/zika/en/>

Georgia MRC Coordinators meeting offers opportunity to share and learn

Medical Reserve Corps (MRC) unit leaders and coordinators from throughout the state met at Unicoi State Park to learn from a wide range of speakers and share best practices concerning the recruitment, retention, and deployment of volunteers in response to a public health emergency in the state of Georgia. MRC volunteers will be needed to assist public health staff during a response to an emergency or disaster.



Buy Local, Safe, and Green Expo an opportunity to share preparedness information with community



Members of the District 2 Public Health Emergency Preparedness Staff, Northeast Georgia Mountains Medical Reserve Corps, and the Flowery Branch High School HOSA program took part in the Buy Local, Safe, and Green Expo sponsored by the Hall County Chamber of Commerce. Members answered questions on individual, family, and workplace preparedness planning, and handed out materials and emergency kit checklists for those that visited the booth. Fire safety information was provided by the Flowery Branch HOSA in a partnership project with the Northeast Georgia Mountains Medical Reserve Corps.



Information about mosquito borne illnesses

<u>Illness</u>	<u>Affected Area(s)</u>	<u>Route to Infection</u>	<u>Primary Vector</u>
<u>Eastern Equine Encephalitis</u> Symptoms: none to mild flu-like illness; severe in some cases	Atlantic and Gulf Coast States in N. America, Central and South America, Caribbean	Infected birds to mosquito to humans, horses, and other mammals (No vaccine)	Several <i>Culex</i> species and <i>Culiseta melanura</i>
<u>St. Louis Encephalitis</u> Symptoms: none to mild flu-like illness; severe in some cases	Throughout the U.S. Most often along gulf coast, especially Florida	Infected birds to mosquito to humans and other mammals (No Vaccine)	Several <i>Culex</i> species
<u>LaCrosse Encephalitis</u> Symptoms: none to mild flu-like, infrequent fatalities in children >16	All 13 states east of the Mississippi - particularly Appalachian area	Infected small mammals to mosquito to humans (No Vaccine)	<i>Aedes triseriatus</i> (tree-hole mosquito)
<u>West Nile Virus</u> Symptoms: none to mild flu-like illness; severe in some cases	Africa, Europe, Middle East, Asia, North America	Infected birds to mosquito to humans, horses, and other mammals (No Vaccine)	<i>Culex pipiens</i> (aka house mosquito)
<u>Chikungunya</u> Sudden fever, joint pain, headache, muscle pain, rarely fatal	Caribbean, Puerto Rico, U.S. Virgin Islands, Florida (travel-related cases in 35 states)	Infected humans to mosquito to other humans (No Vaccine)	<i>Aedes albopictus</i> and <i>Aedes aegypti</i>
<u>Dengue Fever</u> Severe fever, headache, pain behind the eyes; joint, muscle and bone pain	Americas, Asia and Africa	Infected humans to mosquito to other humans (No Vaccine)	<i>Aedes albopictus</i> and <i>Aedes aegypti</i>
<u>Yellow Fever</u> Most have no or mild illness; fever, chills, headache, body pain. About 15% develop severe illness.	Tropical areas of Africa and South America	Infected mosquitoes to humans (Vaccine available)	<i>Aedes</i> or <i>Haemagogus</i> species
<u>Malaria</u> Symptoms: fever, chills, flu-like illness; left untreated many may die	sub-Saharan Africa and South Asia (U.S. - travelers)	Infected human to mosquito to humans (treatment available)	<i>Anopheles</i> species (30-40 of the anopheles species transmit malaria)
<u>Zika Virus</u> About 1 in 5 infected people get sick - mild symptoms - concerns: infants/ pregnant women	Africa, Southeast Asia, Pacific Islands, Brazil	Infected human to mosquito to human; pregnant mother to infant; sex (no vaccine)	<i>Aedes albopictus</i> and <i>Aedes aegypti</i>



MRC reaches out to faith organizations and other partners



Members of the Atlanta Interfaith Council discussed with volunteer leadership the importance of respecting diverse cultures and beliefs during a disaster or emergency. Medical Reserve Corps leaders learned many keen insights which will enable them to better train their volunteers to conduct a whole community response.



Kelly Nadeau, Director of the Healthcare Community Preparedness program for the state of Georgia, stresses the importance of volunteer organizations such as the Medical Reserve Corps in responding to disasters and emergencies in the local healthcare communities.

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