University of Florida IFAS Extension Brevard County

Joe Walter, Agriculture Agent & Linda Seals, Community Development Agent

FS# MS7104

Chikungunya Virus

Chikungunya (chik-en-gun-ya) is a virus that can be transmitted to humans by mosquitoes. To date, June 2014, no virus has been detected on mainland USA; although, several cases of the disease have been reported in patients that have contracted the virus while visiting other areas of the world.

What are the symptoms?

Symptoms appear two to twelve days after being bitten by a female mosquito that is infected with the Chikungunya virus.

Common symptoms include:

- Chills
- Fever
- Rash
- Headache
- Nausea
- Vomiting
- Severe joint pain with or without swelling are common
- Children might have mild bleeding
- Joint pain may persist for months or years after the other symptoms subside
- The virus rarely results in death

How does it spread?

Chikungunya spreads from mosquito to human back to mosquito. Humans get the virus when an infected female mosquito bites them. The yellow fever mosquito (Figure 1) and the Asian tiger mosquito (Figure 2) are the primary mosquitos that spread the virus. Both species of mosquito like to reproduce in flower pots, bird baths, tree holes, tires, toys, etc.

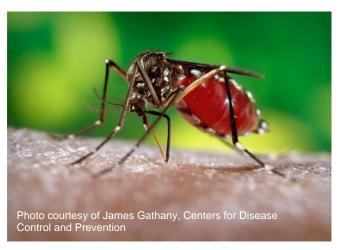


Figure 1. Female Yellow Fever Mosquito (*Aedes aegypti*)



Figure 2. Asian Tiger Mosquito (Aedes albopicta)

Is it curable?

A blood test is required to determine if a person is infected with Chikungunya virus. Like most viruses, there is no vaccination to cure the disease, but treatment can relieve the symptoms.



How can I prevent getting the disease?

- Keep away from people who are infected.
- Reduce the number of mosquitoes in your yard!
 - Remove all container sources that can hold water such as bottles, cans, flower pots with saucer bases, clogged gutters, tires, lawn equipment such as wheel barrows, and items that are covered with tarps.
 - Flush and replace water in bird baths and pet dishes several times a week; cover water collection containers such as rain barrels with netting to prevent female mosquitoes from laying eggs.
 - Start a neighborhood watch program and sponsor container clean-up days to remove or modify water-holding containers in the area.
- Use insect repellant.
- Wear long sleeve shirts and long pants when mosquitoes are present.
- Make sure window and door screens are intact.
- Stay in the air conditioning when mosquitoes are present!

References

CDC. 2012. Chikungunya distribution and global map: http://www.cdc.gov/chikungunya/map/index.html

Grandadam, M., V. Caro, S. Plumet, J-M Thiberge, Y. Souares, A-B Failloux, et al. 2011. Chikungunya virus, southeastern France. Emerging Infectious Diseases. http://www.cdc.gov/EID/content/17/5/910.htm

Josseran, L., C. Paquet, A. Zehgnoun, N. Caillere, A. Le Terte, J. Solet, and M. Ledrans. 2006. Chikungunya disease outbreak, Reunion Island. Emerging Infectious Diseases. 12:1994-1995.

Parola, P., X. deLamballerie., J. Jourdan, C. Rovery, V. Vaillant, P. Minodier, P. Broqui, A. Flahault, D. Raoult, and R. Charrel. 2006. Novel Chikungunya virus variant in travelers returning from Indian Ocean islands. Emerging Infectious Diseases. 12:1493-1499.

C. Roxanne Connelly, Christopher N. Mores, Chelsea T. Smartt, and Walter J. Tabachnick, 2013. Department of Entomology and Nematology, Florida Medical Entomology Laboratory, University of Florida, Vero Beach, FL. ENY-736 (IN696) Mosquito transmitted disease.

How can I learn more?

To learn more about the Chikungunya virus and other mosquito-borne illnesses, visit the sites below or contact Joe Walter at jwalter@ufl.edu or 321.633.1702.

- UF/IFAS Mosquito Information Website:
 - http://mosquito.ifas.ufl.edu/Chikungunya.htm
- UF/IFAS Publication: http://edis.ifas.ufl.edu/in696
- Centers for Disease Control and Prevention: http://www.cdc.gov/