

EPI INVESTIGATOR

Florida Department of Health—Alachua

Spring 2014



“Improving Public Health in Our Community Through Cooperation”

Alachua County
Health Department
(352) 334-7900

To report a disease,
phone or fax the
appropriate office below:

Administrator
Paul Myers, MS
(352) 334-8892

Environmental Health
Director Anthony Dennis
(352) 334-7931

HIV/AIDS
Richard Willis, Surveillance
(352) 334-7968
Fax (352) 334-8867

Martha Buffington, Ryan White
(352) 334-7967

Epidemiology/Hepatitis
Nadia Kovacevich, MPH, CPH
(352) 334-7981
Fax (352) 955-6464
If you would like to receive the
Epi InvestiGator by email or fax,
please contact us at the following
email address:
Nadia.Kovacevich@flhealth.gov,
or phone: (352) 334 - 7981.

Immunizations
Michael Smith, RN
(352) 334-7950
Fax: (352) 334-7943

Sexually Transmitted Disease
George Gibbs
(352) 334-7900 ext 3470
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Tuberculosis
Geneva Saulsberry, RN
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After Hours:
(352)-334-7900

Editor
Sheila Griffis



Florida Preparing for a New Threat

Submitted by: Nadia Kovacevich, MPH
Epidemiologist, Alachua County Health Dept.

A mosquito-borne disease with a challenging name, Chikungunya(CHIKV), has the ability to set up permanent residence in Florida. There are ongoing efforts statewide to prevent this from occurring. Florida has seen reports of the illness in those returning from abroad.

Aedes aegypti and *Aedes albopictus* are the primary mosquito vectors. Chikungunya was first identified in Tanzania/Mozambique and has been blamed for many epidemics throughout Africa, Asia, in some areas of Europe, and now the Caribbean since being identified in 2013. The illness produced is often called “chikungunya fever” due to an acute onset of fever and severe polyarthralgia.

Most people infected with chikungunya virus will develop some symptoms, and the symptoms usually begin 3–7 days after being bitten by an infected mosquito. If you are bitten by a mosquito while the virus is circulating in your blood (usually starting a day before you realize you’re ill), a mosquito can become infected; the infection cycle can continue when the mosquito feeds on another human. Symptoms of chikungunya often include:

- Sudden onset of high fever (>102° F)
- **Severe** joint pain; especially in hands and feet (usually same joints on both sides)
- Headache
- Myalgias (muscle pains)
- Back pain
- Rash (starts about 2-5 days after fever)

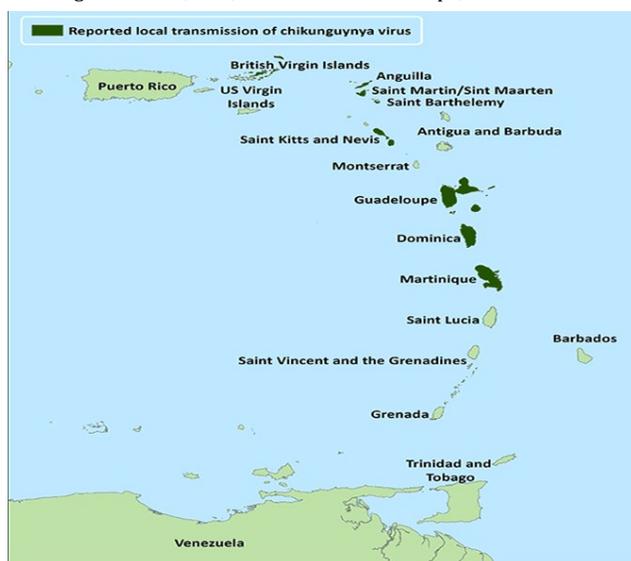
Most people recover after about seven to ten days but can go on to have chronic or long term joint problems and pain. The joint pain and stiffness associated with this illness can be so bad that people appear bent and stooped over; lending the name “chikungunya” from the language of the Makonde ethnic group and loosely translates to “that which bends.”

There are no vaccines that can prevent this illness and no specific treatments to make you better any faster. PREVENTION of mosquito bites is KEY.

**Chikungunya virus testing is performed at our state laboratory. Clinicians, please call 352-334-7981 for more information and to facilitate testing.

Reference:

Centers for Disease Control and Prevention. (2014, March 26). Chikungunya virus. Retrieved from <http://www.cdc.gov/chikungunya/>
Florida Department of Health resources: <http://www.floridahealth.gov/diseases-and-conditions/mosquito-borne-diseases/chikungunya.html>



Think Pertussis

By: Nadia Kovacevich, MPH
Epidemiologist, ACHD

The Florida Department of Health continues to report cases of pertussis (whooping cough) in vaccinated and unvaccinated individuals. Delays in recognition of pertussis can contribute to adverse clinical outcomes, which can increase the risk of fatal illness and continued disease transmission within the community. Consider pertussis in your differential diagnoses for persistent cough illnesses. As a result of waning immunity, a history of immunization does not preclude the possibility of pertussis. Pertussis starts with mild cold-like upper respiratory symptoms. **There** is typically a progression to a persistent cough that has the potential to persist for weeks. Coughing paroxysms may be followed by an inspiratory whoop or post-tussive vomiting. Fever is absent or minimal and cough is non-productive. The diagnosis of those less than six months of age is often delayed because of a brief period of mild symptoms. In infants, gagging, cyanosis, apnea, or seizures may be more apparent rather than cough or an inspiratory whoop.

TEST FOR PERTUSSIS: A nasopharyngeal aspirate or swab should be obtained prior to treatment for *Bordetella pertussis* polymerase chain reaction (PCR) and/or culture through a commercial laboratory. Please call our Epidemiology Program at 352-334-7981 to facilitate testing if preferred.

TREAT FOR PERTUSSIS: Those suspected for pertussis infection should be placed on appropriate antibiotic therapy and should isolate themselves at home until completion.

PREVENT PERTUSSIS: Routine pertussis vaccination should be recommended for children, adolescents, pregnant women, close contacts, and healthcare providers as detailed by the Advisory Committee on Immunization Practices.

REPORT PERTUSSIS: Please report all suspect pertussis cases immediately to the ACHD Epidemiology Program at 352-334-7981 or after hours at 352-334-7900.

Pertussis Resources: <http://www.cdc.gov/pertussis/vaccines.html>
<http://www.cdc.gov/pertussis/clinical/index.html>

Mosquito Season May Be Starting Earlier This Year

By: Anthony Dennis
Environmental Health Director,
ACHD

Due to a very wet winter and spring we are expecting an increase in mosquito activity that usually does not occur until the wet summer months arrive. Below is a summary of the 2013 mosquito season. Mosquito trap data was not collected until mid-June but as rainfall amounts increased so did mosquito activity. This year mosquito trap data will start being collected in early May and we are expecting big numbers if breeding sites do not dry out.

Therefore I would like to take this opportunity to once again emphasize the importance of protecting ourselves against mosquito-borne disease.

To humans and domestic animals, mosquitoes are a nuisance and a health hazard, capable of transmitting a variety of diseases called arbovirus. The main diseases we are concerned about in this area are EEE and West Nile virus. Most people that become ill will have mild symptoms including headache, fever, dizziness, and fatigue, but severe neurological symptoms are also possible. Although mosquito diseases can cause serious illnesses and even death in people of any age, children and those over 50 are at greatest risk for severe disease. If you are experiencing any of these symptoms you should contact your physician immediately. DOH laboratories provide testing services for physicians treating patients with clinical signs of mosquito-borne diseases. Remember, avoiding mosquito bites is the best way to prevent disease.

To prevent mosquito-borne diseases, the Florida Department of Health recommends practicing **Drain and Cover**:

DRAIN and COVER

DRAIN standing water to stop mosquitoes from multiplying.

- **DRAIN:** water from garbage cans, house gutters, pool covers, coolers, toys, flower pots or any other containers where sprinkler or rain water has collected.
- **DISCARD:** Old tires, drums, bottles, cans, pots and pans, broken appliances and other items that aren't being used.
- **EMPTY and CLEAN:** Birdbaths and pet's water bowls at least once or twice a week.
- **PROTECT:** Boats and vehicles from rain with tarps that don't accumulate water.
- **MAINTAIN:** The water balance (pool chemistry) of swimming pools. Empty plastic swimming pools when not in use.

COVER your skin with clothing and use mosquito repellent.

- **CLOTHING:** If you must be outside when mosquitoes are active, cover up. Wear shoes, socks, long pants, and long sleeves.
- **REPELLENT:** Apply mosquito repellent to bare skin and clothing. Always use repellents according to the label. Repellents with DEET, picaridin, oil of lemon eucalyptus, and IR3535 are effective. Use mosquito netting to protect children younger than 2 months.

COVER doors and windows with screens to keep mosquitoes out.

Keep mosquitoes out of your house. Repair broken screens on windows, doors, porches, and patios.

Other Prevention Measures

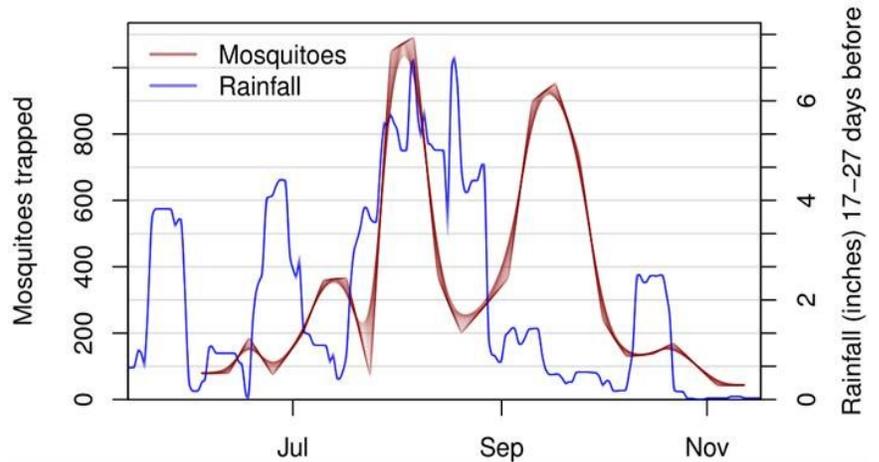
The best way to prevent mosquito-borne disease is to avoid mosquito bites. By following the mosquito hygiene checklist and the 'Drain and Cover' prevention, you can help protect yourself and your family from mosquito-borne disease.

Rid the wrigglers: lose the larvae.

Mosquitoes lay their eggs where there is moisture. It takes only a few days for an egg to grow into an adult mosquito, which can live for several weeks. During that time, an adult female mosquito can lay many eggs. In order to produce eggs, the adult female seeks a host (such as a bird, a horse, or a human) to provide a blood meal. Some species of adult mosquitoes can fly two miles from their breeding sites (even further if blown by the wind). Elimination of mosquito breeding sites is one of the keys to prevention.

Repellent Information:

- Always read label directions carefully for the approved usage before applying a repellent to skin. Some repellents are not suitable for children.
- Products with concentrations of up to 30 percent DEET are generally recommended. Other EPA-approved repellents contain picaridin, oil of lemon eucalyptus, or IR3535. These products are generally available at local pharmacies. Look for active ingredients to be listed on the product label.
- Apply insect repellent to exposed skin or onto clothing, but not under clothing.
- In protecting children, read label instructions to be sure the repellent is age-appropriate. According to the CDC, mosquito repellents containing oil of lemon eucalyptus should not be used on children under the age of 3 years. DEET is not recommended on children younger than 2 months old.
- Infants should be kept indoors or mosquito netting should be used over carriers when mosquitoes are present.
- If additional protection is necessary, apply a permethrin repellent directly to your clothing. Again, always follow the manufacturer's directions.



Remove standing water in old tires, buckets, garbage cans or any other containers.

Clean out gutters. Check flat roofs that may have poor drainage.

Cover barrels and trash containers tightly with a lid or with a fine mesh screening material.

Empty plastic wading pools at least once a week. Store them indoors when not in use.

Change the water in bird baths and pets' water bowls at least once a week.

Empty the water in plant pots at least once a week.

Turn over or remove empty plastic pots.

Remove old tires or drill holes in those used in playgrounds to drain.

Level the ground around your home so water can run off.

Fill in holes or depressions near your home that collect water.

Pick up all beverage containers and cups.

Store boats covered or upside down.

Check tarps on boats or other equipment that may collect water.

Pump out bilges on boats.

Treat standing water with products that kill mosquito larvae. These are available at home improvement stores and garden centers.

Fill in tree holes and hollow stumps that hold water.

Stock your water garden with mosquito-eating fish like minnows, gumbusia, goldfish or guppies.

Remove vegetation or blockages in drainage ditches so that water can flow through.

Repair screening on windows, doors, porches and patios.

FLORIDA REPORTABLE DISEASES *Alachua County 2 year activity*

Disease Activity	2014	2013	2013	Disease Activity	Con'td.	2014	2013	2013
	Jan-Mar	Jan-Mar	Jan-Dec			Jan-Mar	Jan-Mar	Jan-Dec
AIDS	8	13	35					
Animal Bites to Humans (07101)	20	15	61	Listeriosis (02700)		1	0	0
Anthrax	0	0	0	Lyme Disease (06959)		0	0	0
Arsenic Poisoning (98080)	0	0	0	Lymphogranuloma Venereum		0	0	0
Botulism	0	0	0	Malaria (08460)		0	1	2
Brucellosis	0	0	0	Measles (05590)		0	0	0
Campylobacteriosis (03840)	12	3	28	Meningitis, Group B Strep (32040)		0	0	0
Carbon Monoxide Poisoning (98600)	0	0	0	Meningitis other (32090)		0	0	1
<i>Chlamydia trachomatis</i>	433	434	1850	Meningitis Strep Pneumoniae (32020)		0	0	0
Cholera	0	0	0	Meningococcal (<i>Neisseria Meningitidis</i>)03630		0	0	1
Ciguatera	0	0	0	Mercury Poisoning		0	0	0
Creutzfeldt-Jakob Disease (CJD)	0	0	0	Monkey Bite (07103)		0	0	0
Cryptosporidiosis (13680)	0	2	5	Mumps		0	0	0
Cyclosporiasis (00720)	0	0	4	Neurotoxic Shellfish Poisoning		0	0	0
Dengue (06100)	1	0	2	Pertussis (03390)		3	0	4
Diphtheria	0	0	0	Pesticide-Related Illness or Injury		0	0	0
Encephalitis	0	0	0	Plague		0	0	0
Eastern Equine	0	0	0	Psittacosis		0	0	0
Non-arboviral	0	0	0	Q fever		0	0	0
Other arboviral	0	0	0	Rabies Animal (07102)		0	2	6
St. Louis	0	0	0	Ricin Toxin		0	0	3
West Nile	0	0	0	Rocky Mountain Spotted Fever (08200)		0	0	2
Western Equine	0	0	0	Rubella		0	0	0
<i>E.coli</i> 0157:H7 (41601)	0	0	0	SARS		0	0	0
<i>Ehrlichiosis/anaplasmosis,HGA, (Anaplasma phagocytophilum)</i> (08381)	0	0	0	Salmonellosis (00300)		11	5	80
<i>Ehrlichiosis/anaplasmosis,hme HER chaff. 08382</i>	0	0	0	Saxitoxin poisoning psp		0	0	0
<i>Escherichia Coli, Shiga Toxin Producing 00800</i>	0	0	4	Shigellosis (00490)		3	1	6
<i>E.coli, Other (41603)</i>	0	0	0	Smallpox		0	0	0
Giardiasis (acute) (00710)	2	2	18	<i>Staphylococcus aureus, VRSA</i>		0		0
Gonorrhea	70	167	651	<i>Staphylococcus enterotoxin B</i>			0	6
H. Influenzae Pneumonia (48220)	0	0	0	Streptococcal Disease grp A inva (03400)		5	0	9
<i>Haemophilus influenzae, inv disease(03841)</i>	4	0	2	<i>Strep pneumoniae</i> invasive Disease, Drug resistant (04823)		1	2	7
Hansen's Disease (Leprosy)	0	0	0	<i>Strep pneumoniae</i> invasive Disease, susceptible (04830)		2	6	14
Hantavirus infection	0	0	0	Syphilis		11	6	32
Hemolytic Uremic Syndrome 42000	0	0	0	Syphilis in pregnant women & neonates		0	0	0
Hepatitis A	0	0	0	Tetanus		0	0	0
Hepatitis B (+HBsAG in preg women or child < 24 months) (07039)	1	2	10	Toxoplasmosis (13090)		0	0	1
Hepatitis B Perinatal (07744)	0	0	0	Trichinosis		0	0	0
Hepatitis B Acute (07030)	0	0	1	Tuberculosis		2	1	6
Hepatitis B Chronic (07032)	10	19	58	Typhoid Fever		0	0	0
Hepatitis C Acute (07051)	0	0	0	Typhus Fever		0	0	0
Hepatitis C Chronic (07054)	58	50	240	Vaccinia Disease		0	0	0
Hepatitis E (07053)	0	0	0	Varicella (05290)		1	6	13
Herpes Simplex Virus in < 6mo of age	0	0	0	<i>Vibrio Parahaemolyticus (00540)</i>		0	0	1
HIV	22	20	51	<i>V. cholerae</i> Serogroup 01/ non 01		0	0	1
Human Papillomavirus (HPV) <12 yrs	0	0	0	Vibriosis (<i>Vibrio mimicus</i>) 00197		0	1	1
Influenza A, Novel or Pandemic Strains	0	0	0	Vibriosis (<i>Vibrio vulnificus</i>) 00199		0	0	0
Lead Poisoning (94890)	1	2	5	West Nile Virus Neuroinvasive Dis. 06630		0	0	1
Legionellosis (48280)	0	0	0					

Any disease outbreak (e.g., in the community, hospital, or other institution, or foodborne or waterborne) presence of a disease outbreak. All cases suspected and confirmed are included in this report. Any grouping or clustering of patients having similar diseases, symptoms or syndromes that may indicate the

Are You An International Traveler?

Submitted By: Michael Smith, RN

The spring season has finally arrived! Besides spring breaks and spring cleanings, many people also embark on international travel during this time of year. Did you know that aside from booking a flight, hotel, rental car, or making sure you have a passport, there is one very important thing that a lot of travelers forget. Vaccinations! When traveling to continents such as South America and Africa, there are numerous vaccine preventable diseases that can be harmful, if not fatal to the traveler. Before leaving for your destination, it is advisable to seek a Foreign Travel center at least 6 weeks prior and be consulted on where you are going, how long you will be there and what precautions you should take to prevent exposure to diseases specific to that area of travel. The Alachua County Health Department specializes in Foreign Travel and is certified to carry the Yellow Fever vaccine, which is a requirement when traveling to areas of the world where Yellow Fever is at high risk. Other common diseases that are vaccine preventable include: Typhoid, Hepatitis A and B, Meningitis, Measles, Mumps, Rubella, Chicken Pox (Varicella), Polio, Yellow Fever, Tetanus, Diphtheria and Pertussis. A helpful website to research that provides current information on all vaccines regulated by the ACIP and CDC is www.cdc.gov/travel. If you are planning to travel and would like to schedule a Foreign Travel consult, please call the Alachua County Health Department at 325-334-8849.

-Michael Smith

Senior RN Supervisor

Immunizations

Alachua County Health Dept.

