



Epi Watch

A Monthly Epidemiology Newsletter



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Epi Watch is a monthly newsletter from the Pinellas County Health Department. For more information, or to add your e-mail address to the distribution list, please contact the Editor.

Seasonal Influenza A (H3N2)
 The Centers for Disease Control and Prevention recently issued a **Health Advisory** regarding Seasonal Influenza A (H3N2) infections.

Influenza A (H3N2) virus infections have been recently detected in people in a number of states across the U.S., including two small localized outbreaks.

For more information, please visit:
www.cdc.gov/flu

"The reason for collecting, analyzing and disseminating information on a disease is to control that disease. Collection and analysis should not be allowed to consume resources if action does not follow."

Foegen, W.H. et al. (1976). Int. J of Epidemiology, 5:29-37.

To report diseases by phone call:
(727) 824-6932

To report diseases by fax (other than HIV/AIDS) use:
(727) 820-4270

Arboviral Activity in Florida, Summer 2010

Arboviruses are viruses that are transmitted to susceptible vertebrates by arthropod vectors, such as mosquitoes. The majority of arboviral cases are seen during the months of June through September, when mosquitoes are most active. Recent Florida surveillance activities have identified an increasing trend of arbovirus transmission, in particular Dengue and Eastern Equine Encephalitis (EEE).

Dengue

Dengue is a mosquito-borne disease with four different serotypes. The viruses are transmitted to humans by the bite of an infected *Aedes aegypti* mosquito. Dengue is no longer endemic in Florida; however, in July 2009, an outbreak of dengue was identified in Key West. A total of 27 cases were identified in Florida in 2009. From January 1 – July 31, 2010, there have been 24 locally acquired cases in Key West. Pinellas County has had one case of Dengue (acquired in Key West).

Symptoms of Dengue infection usually begin within 3-14 days. Symptoms include an onset of fever, severe headache, eye pain, muscle and joint pain, and bleeding. In some cases, gastrointestinal illness may also be present. Although there is no treatment, early clinical recognition of dengue infection can save lives. Individuals that have become infected can infect other mosquitoes. The mosquito remains infectious for the remainder of its life and can transmit the disease to other humans.

Eastern Equine Encephalitis (EEE)

EEE virus is a member of the genus Alphavirus. It cycles between *Culiseta melanura* mosquitoes and birds in marshy, swampy areas. Birds, horses and humans are at risk of infection; although horses and humans are considered "dead-end" hosts. Typically one or two human cases are reported each year in Florida (range 0-5). In 2010, four human cases have been reported in Florida. To date, we have not seen any human infections in Pinellas County; however, Hillsborough County has had two deaths attributed to EEE in 2010.

EEE symptoms develop 3-10 days after the bite of an infected mosquito. Symptoms include a sudden onset of fever, general muscle pains, and a headache of increasing severity. Over 1-2 weeks after infection, individuals will either recover or show onset of encephalitis. These cases often suffer from coma, paralysis, or death. Approximately one-third of people with encephalitis caused by EEE will die from the disease. Currently, there is no treatment or human vaccine for EEE.

Arboviruses can be prevented. It's important to practice the 5 D's of mosquito-borne disease prevention:

- Use repellent containing **DEET** or another EPA approved ingredient
- To protect against bites, **DRESS** so your skin is covered by clothing
- Stay inside at **DUSK** and **DAWN**
- **DRAIN** standing water where mosquitoes lay their eggs

All Dengue and EEE disease cases should be promptly reported to the local health department. Reporting can assist with facilitating rapid specialized laboratory testing at the State labs, identifying outbreaks, and the institution of control measures to prevent further spread.

For more information on arboviruses, please visit the Centers for Disease Control and Prevention website at www.cdc.gov and the Florida Department of Health website at www.doh.state.fl.us.

For the Florida DOH Arbovirus Weekly Surveillance Report, <http://www.doh.state.fl.us/Environment/medicine/arboviral/surveillance.htm>

Selected Reportable Diseases in Pinellas County

Disease	2010 July	2010 Year to date	2009 Year to date	2009 Total
AIDS	8*	73*	101	155
Animal Rabies			1	1
Arboviral Illness (Human):				
Dengue	1	2		
EEE				
SLE				
WNV				
CA/LaCrosse				
Campylobacteriosis	5	22	17	30
Chlamydia	330	2261	2326	3974
Creutzfeldt-Jakob Disease (CJD)			1	1
Cryptosporidiosis	3	16	6	23
Cyclosporiasis	3	3	1	2
<i>E. coli</i> O157:H7				
<i>E. coli</i> Shiga Toxin (+)				
Giardiasis	2	17	21	34
Gonorrhea	105	738	922	1509
<i>H. influenzae</i> : Invasive Disease	2	10	6	8
Hansen's Disease		1		1
Hemolytic Uremic Syndrome (HUS)				
Hepatitis, Acute Viral:				
A			3	6
B	1	4	16	28
C	2	5	2	3
Hepatitis B: Pregnant Woman +HBsAg	2	20	18	24
Hepatitis, Chronic Viral				
B	19	155	111	186
C	133	898	813	1382
HIV	9*	109*	117	184
Lead Poisoning: Children < 6 years:				
Legionellosis		6	4	10
Listeriosis				
Lyme Disease	2	3		6
Malaria	1	1	2	3
Meningitis: Bacterial, Cryptococcal, Mycotic	1	7	6	7
Meningococcal Disease		4	1	3
Mercury Poisoning				
Mumps			1	2
Pertussis	2	6		4
Rabies, possible exposure	17	50	43	74
Salmonellosis	37	104	108	284
Shigellosis	1	3	1	5
Streptococcal Disease, Inv. Group A		3	9	14
<i>S. pneumoniae</i> , Inv. Disease (DR)	1	11	21	35
<i>S. pneumoniae</i> , Inv. Disease (Suscept)		10	23	28
Syphilis: Total	10	56	116	183
Infectious (P and S)	6	21	46	68
Early Latent		18	48	81
Congenital				
Late Syphilis (Late Latent; Neurosyphilis)	4	17	22	34
Tuberculosis	6	24	13	18
<i>Vibrio</i> Infections		5	3	8

Provisional cases reported by the Pinellas County Health Department. Blank cells indicate no cases reported. For a complete list of reportable diseases and guidelines for reporting, please visit: http://www.doh.state.fl.us/disease_ctrl/epi/index.html

* Some HIV and AIDS data for July were not entered into the eHARS system due to technical problems. The remaining July cases will be entered as August cases so YTD data cannot be compared (for the month of July) to 2009.