



EPI WATCH

Monthly Epidemiology and Preparedness Newsletter September 2014

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Disease Reporting**To report diseases and clusters of illness**

(other than TB/STD/HIV/AIDS)

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**For TB, STD or HIV/AIDS Reporting**

Phone: (727) 824-6932

Animal Bite Reporting

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Influenza Season 2014-2015

The week of September 28th marks the start of the 2014-2015 Influenza Season in the United States. While the Centers for Disease Control and Prevention (CDC) isn't able to predict the severity of the upcoming flu season, they use surveillance data collected throughout the year to estimate what strains will likely to have an impact in the winter. This information is used to determine the strains of influenza used in the annual vaccine.

For the 2014-2015 influenza season, the yearly vaccine contains the same strains as the vaccine recommended for the 2013-2014 season. The 2014-2015 trivalent vaccine will protect against the following strains:

- an A/California/7/2009 (H1N1)pdm09-like virus
- an A/Texas/50/2012 (H3N2)-like virus
- a B/Massachusetts/2/2012-like virus

A quadrivalent vaccine is also available that protects against the strains mentioned above as well as a B/Brisbane/60/2008-like virus.

The CDC recommends that people get vaccinated against flu, preferably by October. It takes about two weeks after vaccination for antibodies to develop in the body and provide protection against the flu. As long as flu viruses are circulating, vaccination is recommended throughout the flu season, even in January or later.

Everyone is encouraged to get the yearly flu vaccine, even if they received the vaccine last flu season. Studies reported the CDC have shown that antibodies produced by the body to provide immunity to influenza viruses decline over time, whether they are from vaccination or having been infected with the virus. Some people don't develop antibodies after vaccination, or they decline quickly, so getting vaccinated is not only important for your health but also for those around you.

For current information regarding influenza in Florida, please visit the Florida Department of Health website: <http://www.floridahealth.gov/diseases-and-conditions/influenza/index.html> Additional information about the flu vaccine can be found on the Centers for Disease website: <http://www.cdc.gov/flu/about/season/>

HAN 369: Severe Respiratory Illness Associated with Enterovirus D68 – Multiple States, 2014

Distributed on September 12, 2014

Summary: *The Centers for Disease Control and Prevention (CDC) is working closely with hospitals and local and state health departments to investigate recent increases in hospitalizations of patients with severe respiratory illness. Enterovirus D68 (EV-D68) has been detected in specimens from children with severe illness in Missouri and Illinois. Investigations into suspected clusters in other jurisdictions are ongoing.*

Recommendations**Clinical Care:**

Health care providers should consider EV-D68 as a possible cause of acute, unexplained severe respiratory illness, even in the absence of fever.

Although the findings to date have been in children, EV-D68 may also affect adults.

Laboratory Testing:

Providers should consider laboratory testing of respiratory specimens for enteroviruses when the cause of respiratory infection in severely ill patients is unclear. *Commercial laboratories can perform routine identification of enteroviruses, but not strain typing.*

Confirmation of the presence of EV-D68 requires typing by molecular sequencing.

Providers may contact state or local health departments for further enterovirus typing. CDC is available for consultation.

Testing is available for investigations which include outbreak or cluster investigations or other unusually severe illnesses of potential public health significance as determined by the county health department.

Infection Control:

Routes of transmission for EV-D68 are not fully understood. Infection control guidelines for hospitalized patients with EV-D68 infection should include **standard** precautions, and **contact** precautions in certain situations, as is recommended for all enteroviruses (<http://www.cdc.gov/hicpac/pdf/isolation/Isolation2007.pdf>).

Providers should report suspected clusters of severe respiratory illness to local and state health departments.

The complete Health Advisory Notice 369 can be found on the CDC website: <http://www.bt.cdc.gov/han/han00369.asp> For additional information, please consult the CDC enterovirus D68 website: <http://www.cdc.gov/non-polio-enterovirus/about/EV-D68.html> Additional details about these EV-D68 clusters can be found in the September 8, 2014, MMWR Early Release: http://www.cdc.gov/mmwr/preview/mmwrhtml/mm63e0908a1.htm?s_cid=mm63e0908a1_e

Arbovirus Surveillance: Sentinel Chickens

BY SAMANTHA SPOTO, MSPH

Arthropod-borne viruses, arboviruses, are viruses that are maintained in nature through transmission between susceptible animal hosts by blood-feeding arthropods (e.g., mosquitoes and ticks). A variety of arboviral diseases are endemic to Florida including West Nile Virus (WNV), Eastern Equine Encephalitis (EEE) and Saint Louis Encephalitis (SLE). These viruses naturally occur and are regularly transmitted by mosquitos among a non-human host population, such as birds. When there is an increase in the disease among the natural host populations, or when people enter a habitat where natural transmission occurs, spread of these viruses to humans can occur. In an effort to avoid disease outbreaks, various state agencies work together to conduct active surveillance activities to measure the current levels of disease in an area.

One method of active surveillance used by many counties in Florida is upkeep and monitoring of sentinel chicken flocks in different habitat areas throughout the county. In Pinellas County, eight sentinel chicken flocks are monitored and maintained by the Pinellas County Mosquito Control. A flock of sentinel chickens includes at least 6 chickens that are housed in a cage with adequate protection from sun, weather and predators. These chickens are bitten by mosquitos and can develop antibodies to the viruses, but are not good hosts for the diseases and represent a low risk for transmission to humans or other mosquitos.

Each week blood samples are taken from the chickens to test for antibodies to WNV, EEE and SLE. Once a chicken has developed antibodies for one of the viruses it is replaced with a non-infected chicken. This testing allows the county to monitor what diseases may be present or increasing in the area before any humans are infected and is used to guide mosquito control efforts.



In 2014, 22 chickens have tested positive for SLE antibodies in Pinellas County as of September 2. Furthermore, Pinellas hasn't seen any confirmed human infections of SLE this year and no human cases of SLE in Florida since 2003. Additional data and surveillance information is available in statewide weekly arboviral reports distributed by the Florida Department of Health, available on the state website: <http://www.floridahealth.gov/diseases-and-conditions/mosquito-borne-diseases/surveillance.html>. The report also includes information on EEV confirmed in deer or horses, as well as cases of locally acquired mosquito borne infections such as chikungunya or dengue.

The county Mosquito Control program works to keep mosquito populations under control, but the best way to limit mosquitos around your own home is to drain any standing water around your house or yard (even a small amount like in a flower pot or ash tray). To avoid mosquitos inside your home, check for holes in the screens of windows, doors and porches that may be letting bugs inside. Covering skin with long sleeves and pants while outdoors and using mosquito repellent provides great protection from bites.

For current information regarding Pinellas County Mosquito Control, please visit: http://www.pinellascounty.org/resident/mosquito_control.htm

Ebola Virus Disease: 2014 Ebola Outbreak in West Africa Updates

The current Ebola outbreak continues to affect multiple countries in West Africa (see picture). A small number of cases in Nigeria have been associated with a man from Liberia who traveled to Lagos and died from Ebola, but the virus does not appear to have been widely spread. **The outbreak does not pose a significant risk to the United States.**

In addition to working the World Health Organization (WHO), and other domestic and international partners, the CDC has activated its Emergency Operations Center to help coordinate technical assistance and control activities. CDC has also deployed teams of public health experts to West Africa and will continue to send experts to the affected countries. Up to date control measures and case counts can be found on the CDC website: <http://www.cdc.gov/vhf/ebola/outbreaks/guinea/index.html>

CDC has issued a Warning, Level 3 travel notice for United States citizens to avoid all nonessential travel to Guinea, Liberia, and Sierra Leone. CDC has also issued an Alert, Level 2 travel notice for travelers to Nigeria urging them to protect themselves by avoiding contact with the blood and body fluids of people who are sick with Ebola. You can find more information on these travel notices at <http://wwwnc.cdc.gov/travel/notices>.

On the remote possibility that an ill traveler arrives in the U.S., CDC has protocols in place to protect against further spread of disease. Travelers returning from the outbreak area should monitor their health for 21 days. Early recognition of Ebola is important for providing appropriate patient care and preventing further spread. Healthcare providers should be alert for and evaluate any patients who may have Ebola. Any U.S. hospital that is following CDC's infection control recommendations and can isolate a patient in their own room with a private bathroom is capable of safely managing a patient with Ebola. Complete guidance for healthcare providers can be found on the CDC website: <http://www.cdc.gov/vhf/ebola/hcp/index.html>

In late August, The Democratic Republic of the Congo (DRC) reported cases of Ebola. Follow up investigation determined that the cases identified in the DRC are not related to the ongoing outbreak of Ebola in West Africa.



Please contact your local health department with any questions regarding healthcare management of suspected patients infected with Ebola virus. All of the information provided above can be found on the Centers for Disease Control and Prevention, Ebola Hemorrhagic Fever webpage: <http://www.cdc.gov/vhf/ebola/>

Selected Reportable Diseases in Pinellas County

Disease	Pinellas	Year-to-Date		Pinellas County Annual Totals		
	August 2014	Pinellas 2014	Florida 2014	2013	2012	2011
A. Vaccine Preventable						
Measles						
Mumps						
Pertussis		16	524	17	10	10
Varicella		11	347	19	16	21
B. CNS Diseases & Bacteremias						
Creutzfeldt-Jakob Disease (CJD)			15		2	3
Meningitis (Bacterial, Cryptococcal, Mycotic)		1	82	5	6	7
Meningococcal Disease			28	1		
<i>S. Pneumoniae</i> , Invasive Disease, Drug Resistant		11	322	24	16	22
<i>S. Pneumoniae</i> , Invasive Disease, Susceptible		11	326	11	25	11
C. Enteric Infections						
Campylobacteriosis	7	73	1341	63	59	83
Cryptosporidiosis	100	160	412	19	29	19
Cyclosporiasis			22	5	1	2
<i>E. coli Shiga Toxin (+)</i>		4	68	7	8	2
Giardiasis	6	25	634	34	32	27
Hemolytic Uremic Syndrome (HUS)			4	1		
Listeriosis			20		5	3
Salmonellosis	27	121	2717	203	203	225
Shigellosis	1	15	1554	5	18	93
D. Viral Hepatitis						
Hepatitis A		2	71	6	4	5
Hepatitis B: Pregnant Woman +HBsAg	1	19	316	17	16	29
Hepatitis B, Acute	3	19	236	39	16	10
Hepatitis C, Acute		13	118	17	5	13
E. Vector Borne, Zoonoses						
Animal Rabies			49			2
Rabies, possible exposure	26	135	1587	193	201	217
Chikungunya Fever	1	4	119			
Dengue		1	46	2	3	1
Eastern Equine Encephalitis			1			
Lyme Disease	1	3	49	8	6	9
Malaria		2	30	1	2	1
St. Louis Encephalitis						
West Nile Virus						
F. Others						
AIDS**	15	100	n/a	118	130	123
HIV**	34	180	n/a	191	177	189
Chlamydia	293	2567	n/a	4141	3812	3863
Gonorrhea	100	824	n/a	1424	1029	1034
Hansen's Disease			3			
Lead Poisoning: Children < 6 years:		5	83	4	2	4
Legionellosis	1	8	115	10	13	13
Mercury Poisoning		2	5			2
Syphilis, Total	18	130	n/a	114	141	132
Syphilis, Infectious (Primary and Secondary)	9	46	n/a	52	61	66
Syphilis, Early Latent	4	44	n/a	37	47	35
Syphilis, Congenital			n/a			1
Syphilis, Late Syphilis (Late Latent; Neurosyphilis)	5	39	n/a	25	33	30
Tuberculosis	5	14	n/a	30	17	9
<i>Vibrio Infections</i>	1	6	78	11	10	11

n/a = not available at this time. Blank cells indicate no cases reported. Reportable diseases include confirmed and probable cases only. All case counts are provisional. Data is collected from the Merlin Reportable Disease database, surveillance systems maintained at the Florida Department of Health in Pinellas County, and Florida CHARTS <http://www.floridacharts.com/charts/default.aspx>.

*STD data in PRISM is continually updated. Please note, data from the previous month takes up to an additional month or more to be correctly updated.

**Current HIV Infection data reflects any case meeting the CDC definition of "HIV infection" which includes all newly reported HIV cases and newly reported AIDS cases with no previous report of HIV. Newly reported HIV Infection cases do not imply they are all newly diagnosed cases. For a more detailed explanation on changes in reporting and changes in trends, please contact the Bureau of HIV/AIDS, Data Analysis Section.