Third Quarter 2013

Florida Department of Health
Volusia County

Office of Disease Control and Health Protection

EPI-LOG

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To Report a Disease or Outbreak:

Phone: 386-274-0634 M-F, 8 a.m.-5 p.m.
Fax: 386-274-0641
After hours: 386-316-5030
P.O. Box 9190, Bin #111
Daytona Beach, FL 32120-9190

RABIES

By Dr. Paul Rehme, DVM, MPH

Rabies is a zoonotic disease that continues to pose a significant risk for our population. Although there has not been a Florida acquired human case in the state since 1948, we continue to see cases in animals at the rate of between one and two hundred every year. By far, the most common animal found with rabies is the raccoon, but it is also seen in foxes, cats, bats; and a few dogs. Volusia County has had three reported raccoon cases and one cat so far this year. Human cases have been prevented by careful follow-up and appropriate case management to include appropriate use of post-exposure prophylaxis (PEP). Because the disease is almost universally fatal once signs/symptoms are seen, this is no time to let down our guard. We must continue to work together to ensure we have no cases of human rabies.

All animal bites should be evaluated to determine the rabies risk. Bites (or any potential for saliva exposure) from raccoons, bats, skunks, and stray domestic animals are considered high risk, while those from unvaccinated dogs, cats, or ferrets kept as pets are considered to be medium risk. Exposures by wild rodents, opossums, mice, livestock, and immunized dogs, cats, or ferrets are considered low-risk for rabies transmissions, and seldom require rabies PEP.

This Issue:

Some bites, especially those that are unprovoked or by high-risk animals, may require immediate PEP. Bites around the head or neck are considered high priority, and should be reported immediately by phone. If there are any questions at all about the rabies risk for your patients call an epidemiologist for consultation.

Providers should report all animal bites to DOH-Volusia via fax by filling out an Animal Bite Report Form and faxing it to 274-0641. The form can be downloaded from : http://www.floridahealth.gov/chd/volusia/

For previously unvaccinated persons, PEP consists of human rabies immunoglobulin (HRIG) and four vaccines given on days 0, 3, 7, and 14. HRIG is administered on day 0 to provide immediate antibodies until the patient responds to vaccination. The recommended dose of HRIG is 20 IU/kg of body weight. If anatomically feasible the full dose of HRIG should be thoroughly infiltrated in the area around and into the wounds. Any remaining volume should be administered intra-muscularly (IM) at an anatomical site distant from vaccine administration. It should not be given in the gluteals. HRIG should not be given to previously vaccinated individuals; give vaccine on days 0 and 3. Vaccine is administered at a recommended dose of 1.0ml IM in the deltoid area.

Got a Rabies Question, but it's After Hours?

An on-call epidemiologist is available 24 hours a day / 7 days a week at 386-316-5030.

Mosquito-borne Illness

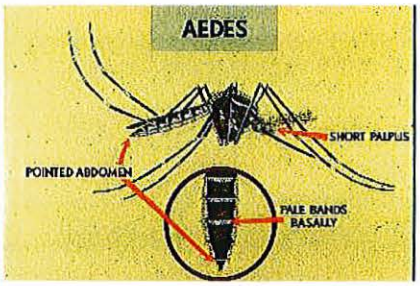
By: David Parfitt, MPH

As we approach the end of the Atlantic Hurricane Season (June 1 to November 30, 2013), increased amounts of rainfall are still expected. Due to this increase, the number of mosquitoes across the county will be on the rise.

Standing water that accumulates after rain are breeding grounds for mosquitoes. The standing water mosquito uses the waters surface and just below surface level to complete the egg, larva and pupa stage of its life cycle. In addition to the standing water mosquito, floodwater mosquitoes are capable of laying their eggs in moist soil. Based on their unique biology, the eggs must first dry and then are cued to hatch, often from water due to storms or hurricanes (edis.ifas.ufl.edu). It is estimated that the number of eggs in a floodwater habitat can reach as high as 0.7 and 1.3 million eggs per acre (edis.ifas.ufl.edu).

More than just a nuisance, mosquitoes can transmit a variety of diseases to both humans and animals including eastern equine encephalitis virus (EEEV), Saint Louis encephalitis virus (SLEV), West Nile virus (WNV), dengue and malaria among others. In 2013 there has been 2 human cases of Florida acquired EEEV, 4 human cases of WNV and 23 cases of dengue. Back in August, the Florida Department of Health Martin County issued a health alert for mosquito-borne illness due to the local dengue cases. Many of those infected with a mosquito-borne disease may show no symptoms or sometimes delayed and non-specific symptoms such as fever, headache and/or fatigue with illness confirmed through laboratory testing.

In addition to the efforts of Volusia County Mosquito Control, with its use of Integrated Pest Management (IPM), the Florida Department of Health recommends personal mosquito protection efforts should be a priority especially during the rainy seasons. It is important to inspect your surroundings at home and work, and to drain or remove all sources of standing water potentially found in garbage cans, toys, flower pots, tires and clogged gutters. Also, be sure to wear protective clothing and thoroughly apply approved insect repellants particularly in the evening.



For further information on mosquito-borne diseases please contact the Florida Department of Health Volusia County at 386-274-0651 or please visit the DOH website at http://www.doh.state.fl.us/Environment/medicine/arboviral/index.html.

For assistance with appropriate mosquito repellants please visit: http://cfpub.epa.gov/oppref/insect/#searchform

HIV/AIDS Surveillance

By: MaryAnne Andersen

Surveillance is the discipline of continuously gathering, analyzing and interpreting data about a disease and disseminating the conclusions of the analyses to relevant organizations.

The purpose is to assess the magnitude of the problem, monitor implementations of health programs, understand local epidemiology of the problem, assess changes in the trend of the disease or its distribution, identify specific groups at risk and assess the impact of prevention programs for control of the disease.

HIV/AIDS surveillance in the USA is one of the most exhaustive systems of disease surveillance in history, with over thirty years of accumulated, detailed data available.

The Florida Department of Health has developed one of the most comprehensive HIV/AIDS surveillance in the nation to include HIV Incidence Surveillance. This type of surveillance not only provides the information needed to estimate the number of new HIV infections, both diagnosed and undiagnosed but rates of new infections in various sub-populations. To focus public health interventions, it is important to know the difference between a newly infected individual versus a person HIV positive for years but who had never been tested.

Florida Law (s.384.25, F. S.) requires that cases of AIDS are to be reported by anyone who diagnoses or treats a person with AIDS. A person who tests positive for the Human Immunodeficiency Virus (HIV) on or after July 1, 1997 is reportable. To report a case of HIV/AIDS: Phone 386-274-0664 M-F, 8 a.m.-5 p.m. or FAX to 386-274-0641.

Volusia County Disease Activity*	3rd Quarter 2013	3rd Quarter 2012	YTD 2013	Full Year 2012
Vaccine Preventable				
Pertussis	3	4	16	8
Varicella	1	1	14	18
CNS Diseases and Bacteremias				
Creutzfeldt-Jakob disease (CJD)	0	0	1	1
Encephalitis (non-arboviral)	0	0	0	0
Haemophilus influenzae (invasive)	1	3	4	6
Meningitis (bacterial, cryptococcal, mycotic)	0	1	2	5
Meningococcal disease	0	0	1	0
Staphylococcus aureus community associated mortality	1	0	3	0
Staphylococcus aureus (GISA/VISA)	0	0	0	0
Streptococcal disease, group A, invasive	6	3	10	9
Streptococcus pneumoniae (invasive disease)	3	7	29	0
Drug resistant	0	6	14	24
Drug susceptible	3	1	15	17
Enteric Infections				
Campylobacteriosis	27	27	63	76
Cryptosporidiosis	1	2	6	7
Cyclosporiasis	1	3	1	3
Escherichia coli, shiga-toxin producing (STEC)	5	6	6	14
Giardiasis	4	2	14	16
Listeriosis	0	0	0	0
Salmonellosis	58	61	101	177
Shigellosis	1	3	2	46
Typhoid Fever	0	0	0	0
Viral Hepatitis				
Hepatitis A	2	2	2	3
Hepatitis B, acute	2	4	7	10
Hepatitis B, chronic	16	15	56	62
Hepatitis C, acute	5	4	12	10
Hepatitis C, chronic	285	248	650	830
Hepatitis E	0	0	0	0
Hepatitis +HBsAg in pregnant women	0	0	5	2
Vector Borne, Zoonoses				
Ehrlichiosis/Anaplasmosis	2	0	2	0
Dengue Fever	2	1	2	2
Lyme disease	6	2	6	6
Malaria	0	1	0	2
Monkey bite	0	0	0	0
Q Fever, acute	0	0	0	0
Rabies, animal	1	0	2	2
Rabies (possible exposure)	45	29	124	109
Rocky Mountain spotted fever	1	0	1	0
West Nile virus, neuroinvasive	0	1	0	1
HIV/AIDS†47				
HIV	25	18	76	81
AIDS	21	14	47	48
STDs†				
Chlamydia	411	350	1137	1298
Gonorrhea	160	70	391	292
Syphilis				
Infectious (Primary and Secondary)	8	6	14	11
Early latent (Infection for <1 year)	3	1	8	7
Late latent (Tertiary)	3	1	15	12
Latent, unknown duration	0	0	0	2
Others				
Carbon monoxide poisoning	3	3	3	3
Hansen's Disease (leprosy)	0	0	0	0
Influenza due to novel or pandemic strains	0	0	0	0
Influenza-associated pediatric mortality	0	0	0	0
Lead poisoning	1	1	1	4
Legionellosis	0	0	1	3
Tuberculosis			12	9
Vibriosis	2	1	3	2
Pesticide related illness or injury	0	0	3	2

*Includes reported confirmed/probable cases. Data is provisional and subject to change.
† Numbers are for Area 12 (Volusia/Flagler)

Influenza Season Update

By: David Parfitt, MPH

The 2013-2014 flu season is currently underway. The season characteristically begins in the fall and winter with the peak of activity occurring in January or February. According to the Centers for Disease Control and Prevention (CDC) seasonal flu activity can begin as early as October and can last until next May.

The CDC's recommendation is for everyone 6 months of age and older to receive the annual flu vaccine to offer the best protection against the three main flu viruses throughout the year (influenza A (H1N1), influenza A (H3N2) and influenza B). Additional consideration should be given for those at high risk of complications from the flu including those with chronic conditions, pregnant women, adults 65 and older and children younger than 5. Additional prevention methods include frequent hand washing, avoiding contact with others who are symptomatic, keeping hands away from your eyes, nose and mouth, and getting plenty of rest and exercise (flu.gov).

Approximately 135 to 139 million doses of the influenza vaccine are expected to be manufactured for the 2013-2014 season with 30 to 32 million being quadrivalent (containing a second influenza B virus) (cdc.gov). Health care providers should be sure to maintain an adequate supply.

Currently, per the Florida Flu Review, statewide emergency department and urgent care center visits have increased for influenza-like illness. Between November 3 and November 9, 2013 eight of 17 specimens sent to the state lab for testing were positive for influenza. Three were positive for influenza A (2009 H1N1) and five were positive for influenza A unspecified. There have been no cases of H3N2 infection reported in the state. Although Influenza-like illness activity for Volusia County was mild early in this flu season we have seen a recent spike in emergency care visits mirroring the recent statewide trend.

ILINet Sentinel Providers:

Thanks to each of our providers:

- April Ferguson, DO
- Daniel Warner, MD
- Family Practice of West Volusia
- Lana Medical Care
- Long Leaf Pediatrics
- Pablo Garcia, Jr, MD
- Florida Department of Health in Volusia County's Women's Health Services

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