Spring 2017

Florida Department of Health
Volusia County

Office of Disease Control
and Health Protection

EPI-LOG

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Rabies Updates and Common Misconceptions

Rabies continues to be a threat to animals in Florida and thus a potential risk for anyone bitten by an animal anywhere in Florida. As of May 1, 2017, 25 animals have tested positive in Florida (18 raccoons, 3 bats, one each: dog, cat, fox, and skunk) compared to 59 all last year. Department of Health (DOH)-Volusia investigates all animal bites reported. An assessment of rabies risk is done and recommendations made as to whether post-exposure prophylaxis (PEP) is necessary.

In the past three years, 3,069 bites have been reported and investigated. Rabies PEP was initiated 174 times. In that same time period, seven animals in Volusia County tested positive for rabies (four raccoons and three cats).

Animal Bites (2014-2016)		
	Total	PEP
Dog	2070	64
Cat	895	54
Raccoon	62	37
Bat	16	12
Other	25	7*
*6/7 Unnecessary		

Common misconceptions about rabies:

1. Squirrel bites should be treated as a potential rabies exposure.

Squirrels can contract rabies. However if a squirrel is bitten by a rabid animal, it will almost always die from the bite alone. This is also true for other small rodents. Squirrels are low-risk animals. In many cases, it was reported that food was associated with the bite.

2. A person will die within 10 days if they are bitten by a rabid animal.

The incubation period for human rabies is typically 1-3 months but can be as short as a week or a year or more. The 10 days refers to the observation period of a domestic animal (cats and dogs), and it is used for determining if rabies was being transmitted at the time of the bite. If the dog/cat remains healthy throughout the 10 day quarantine period, rabies transmission can be ruled out for that bite. For wildlife such as raccoons, bats and foxes, an observation period has not been established. It is never too late to initiate PEP. It has been proven effective when given any time prior to onset of human rabies symptoms.

3. If a dog has a collar, the dog can't have rabies.

Just the fact alone that the dog has a collar on does not mean the dog cannot transmit rabies. A pet dog is much less likely to transmit rabies but with unknown vaccine status and history, it cannot be ruled out. A healthy animal can transmit rabies for a few days prior to symptom onset if they are infected. If the dog with the collar is a stray, DOH-Volusia works with Animal Control to attempt to locate the animal so it can be observed for 10 days.

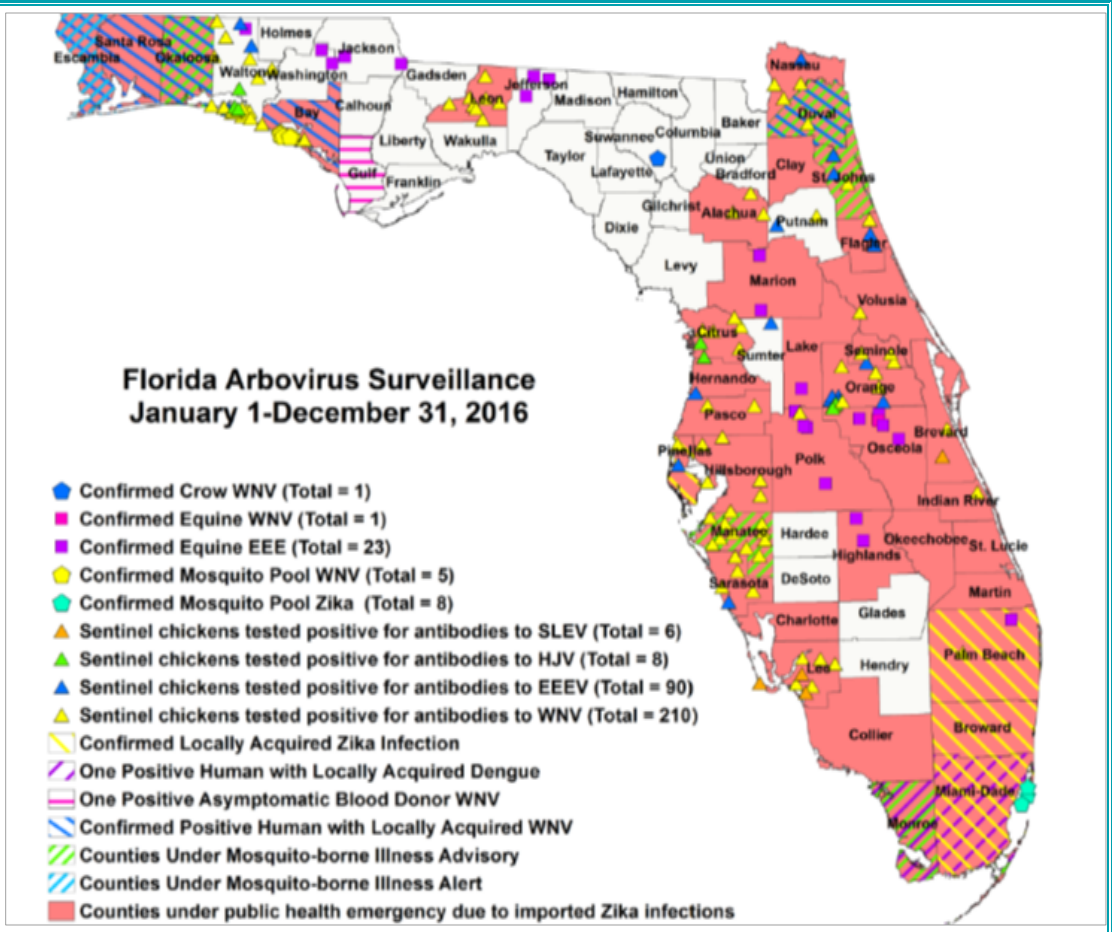
4. Rabies PEP is an emergency.

While the sooner it is given the better, there is time during the incubation period that can be spent trying to determine the animal's status. However for known and obvious high-risk exposures, there is no reason to delay treatment. One of the most important things that can be done is immediate and thorough cleansing of the wound with soap and water. PEP has been shown to be 100 percent effective at preventing rabies when given appropriately.

To learn more about animal bites or rabies PEP in Volusia County, please contact Jenna Erickson at 386-281-6646 or visit: http://volusia.floridahealth.gov/programs-and-services/environmental-health/rabies-surveillance/index.html

This Issue:

Mosquito-borne Diseases and Prevention



Mosquitoes have the ability to carry and spread disease to humans, horses and other animals. These diseases may be caused by a virus or a parasite that can provoke symptoms ranging from mild to severe. Endemic mosquito-borne diseases in Florida are West Nile virus disease, eastern equine encephalitis and St. Louis encephalitis. All of these diseases are caused by viruses that are transmitted by the bite of an infected mosquito. Mosquito activity is seen year-round in Florida.

Other non-native mosquito-borne diseases occur when people travel to different states or countries and are bitten by infected mosquitoes carrying different diseases. If the infected person returning from travel gets bitten by mosquitoes in Florida, then the disease is transmitted to the mosquitoes. The disease spreads when infected mosquitoes bite healthy individuals. Diseases that spread in this manner include chikungunya fever, malaria, dengue fever, Rift Valley fever, yellow fever, and recently Zika virus. Some mosquitoes have the ability to carry many different diseases. Zika, dengue, chikungunya and yellow fever are all transmitted to humans by the *Aedes* mosquitoes.

Surveillance is an important tool in monitoring mosquito-borne diseases and minimizing the risk of human infection. It is coordinated through interagency cooperation at the state and local levels. To learn more information on arbovirus surveillance, follow this link: http://mosquito.ifas.ufl.edu/Arboviral_Surveillance.htm.

Zika, an emerging mosquito borne disease seen over the recent years, can be carried by infected *Aedes* species mosquitoes. Zika activity has been noted in Central and South America, Mexico and the Caribbean since 2015. A public health emergency was declared by the Governor of Florida on February 3, 2016 after seeing nine imported Zika cases. Local transmission has been reported in Puerto Rico and southern Florida. This year, as of May 11, there have been no cases of imported or locally acquired Zika disease in Volusia County.

Zika in Florida - 2016	Count
Travel-related infections	1,122
Locally acquired infections	285
Undetermined source	49
Pregnant women	299

As we move into summer and see increasing travel to different countries, it is important to learn about country-specific travel advice that can be accessed from https:wwwnc.cdc.gov/travel. Mosquito bites can be prevented by using an EPA registered repellent, wearing long-sleeved shirts and pants, choosing hotel or lodging with air conditioning or screens on windows and doors, or sleeping under a mosquito bed net if windows are not screened. Please follow this link with more mosquito prevention tips at home: http://www.floridahealth.gov/diseases-and-conditions/mosquito-borne-diseases/prevention.html

Volusia County Disease Activity*	1st Quarter 2017	1st Quarter 2016	Full Year 2016
Vaccine Preventable			
Mumps	0	0	0
Pertussis	0	0	3
Varicella	2	0	0
CNS Diseases and Bacteremias			
Creutzfeldt-Jakob disease (CJD)	0	0	0
Haemophilus influenzae (invasive)‡	0	2	25
Meningitis (bacterial, cryptococcal, mycotic)	0	0	1
Meningococcal disease	0	1	1
Staphylococcus aureus (VRSA/VISA)	0	0	0
Streptococcus pneumoniae (invasive disease)‡	13	8	35
Enteric Infections			
Campylobacteriosis	30	19	76
Cryptosporidiosis	1	5	20
Cyclosporiasis	0	0	1
Escherichia coli, shiga-toxin producing (STEC)	2	4	13
Giardiasis	5	5	25
Listeriosis	0	0	1
Salmonellosis	24	20	129
Shigellosis	2	8	18
Typhoid Fever	0	0	0
Viral Hepatitis			
Hepatitis A	0	0	0
Hepatitis B, acute	5	3	18
Hepatitis B, chronic	18	20	91
Hepatitis C, acute	1	6	9
Hepatitis C, chronic	321	191	978
Hepatitis E	0	0	0
Hepatitis +HBsAg in pregnant women	1	1	4
Vector Borne, Zoonoses			
Brucellosis	0	0	0
Chikungunya	0	0	0
Dengue Fever	0	0	1
Ehrlichiosis/Anaplasmosis	0	0	4
Lyme disease	3	2	7
Malaria	0	0	2
Q Fever, acute	0	0	0
Rabies, animal	0	1	1
Rabies (possible exposure)	48	37	139
Rocky Mountain spotted fever/Spotted Fever Ricikettsiosis	0	1	1
West Nile virus, neuroinvasive	0	0	0
Zika virus disease	0	0	12
HIV/AIDS			
HIV	26	34	118
AIDS	11	7	29
STDs†			
Chlamydia	510	606	1844
Gonorrhea	206	190	682
Syphilis			
Infectious (Primary and Secondary)	18	7	30
Late latent (Tertiary)	30	18	85
Congenital	0	0	1
Others			
Carbon monoxide poisoning	5	9	49
Ciguatera Fish Poisoning	0	0	5
Hansen's Disease (leprosy)	2	2	2
Hemolytic Uremic Syndrome	0	0	0
Influenza due to novel or pandemic strains	0	0	0
Influenza-associated pediatric mortality	0	0	0
Lead poisoning	1	3	20
Legionellosis	1	2	5
Pesticide related illness or injury	0	0	0
Tuberculosis	0	3	5
Vibriosis	0	0	6

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

Influenza 2016-2017 Influenza Season Wrap-Up

According to the Centers for Disease Control and Prevention (CDC), flu activity during this past season was moderate with the influenza A (H3N2) virus being predominant. Most of the flu viruses analyzed this season have remained like the vaccine viruses recommended for production. For the current season, influenza-like illness (ILI) in the U.S. went above baseline in December and peaked during March.

In Florida, the influenza season is coming to an end with influenza and ILI activity levels returning to pre-season baselines. Statewide influenza activity peaked in late February. Since the beginning of the 2016-2017 flu season, the most common influenza subtype detected by the Bureau of Public Health Laboratories (BPHL) was influenza A (H3). Although avian influenza A (H7N9) was identified in poultry in other states, no avian influenza was identified in Florida birds or humans in 2017. Locally in Volusia County, flu activity was relatively mild this season with few reported outbreaks and activity levels that mimicked the state.

The U.S. flu vaccine will be updated annually to correspond with circulating flu viruses. For the 2017-2018 season, the three–component vaccines will contain an influenza A (H1N1) like virus, an influenza A (H3N2) like virus and an influenza B (Victoria lineage) virus. The four-component vaccine will contain an additional influenza B (Yamagata lineage) virus. The CDC continues to recommend the yearly flu vaccine during active circulation for everyone six months of age and older. In addition, preventive measures including hand washing and limiting social contact while sick are encouraged.

For more information regarding the current or upcoming flu season, please contact the Florida Department of Health in Volusia County at 386-274-0651.

References: www.cdc.gov www.floridahealth.gov

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