**Arbovirus Surveillance**

**Nassau County Arbovirus Activity**

From January 1, 2018 through September 15, 2018, there were four confirmed cases (onset dates 1/29, 4/30, 5/25, 6/2) of Eastern equine encephalitis virus (EEEV) infection in horses in Nassau County and one outbreak of EEEV in an emu flock in Nassau County (onset 7/5 for the first emu). Ten sentinel chickens have tested positive for EEEV in Nassau County (specimen collection dates 5/17, 5/25, 5/31, 6/8, 6/23, 6/28, 7/5, 7/12). One sentinel chicken tested positive for Highlands J Virus (specimen collection date 7/5) and 44 sentinel chickens tested positive for West Nile virus (specimen collection dates 7/12, 7/14, 7/27, 8/2, 8/3, 8/11, 8/18, 8/25, 9/1). Two human cases of West Nile virus (WNV) infection were reported in Nassau County residents. Nassau County is currently under a mosquito-borne illness alert.

**State Arbovirus Activity**

Arbovirus surveillance in Florida includes endemic mosquito-borne viruses such as WNV, EEEV, and St. Louis encephalitis virus (SLEV), and exotic viruses such as dengue virus (DENV), chikungunya virus (CHIKV) and California encephalitis group viruses (CEV). Malaria, a parasitic mosquito-borne disease is also included. Cases of chikungunya fever, dengue fever, Zika fever, and malaria were reported in persons with history of travel to areas where these diseases are circulating (Table 1). No locally acquired cases of chikungunya fever, dengue fever, Zika fever, or malaria have been reported in Florida in 2018. In Florida in 2018 there have been three human cases of EEEV infection and 12 people (10 cases, two asymptomatic blood donors) have tested positive for WNV (Table 1). Thirteen counties are under mosquito-borne illness advisories and four counties are under mosquito-borne illness alerts.


<table>
<thead>
<tr>
<th>Disease</th>
<th>Case Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chikungunya Fever</td>
<td>2</td>
</tr>
<tr>
<td>Dengue Fever</td>
<td>21</td>
</tr>
<tr>
<td>Zika Fever</td>
<td>68</td>
</tr>
<tr>
<td>Malaria</td>
<td>47</td>
</tr>
<tr>
<td>Eastern Equine Encephalitis</td>
<td>3</td>
</tr>
<tr>
<td>West Nile Virus</td>
<td>10</td>
</tr>
</tbody>
</table>

Table 1. Human cases of mosquito-borne disease reported in Florida, Jan. 1–September 15, 2018.
**Disease Spotlight: Tickborne Diseases**

**Tickborne Disease Characteristics**

The most commonly reported tickborne diseases in the United States are anaplasmosis, babesiosis, ehrlichiosis, Lyme disease, spotted fever rickettsiosis and tularemia. Common symptoms of tickborne disease include fever, chills, muscle and joint pain, and rash. In diagnosing tickborne disease, it is important to assess the potential for exposure to a tick habitat, even in the absence of a known tick bite. Tick exposure should be assessed for the 30 days preceding the onset of symptoms. Possible tick exposures can include outdoor occupations, outdoor recreational activities such as hiking, camping, or hunting, and close contact with either domestic or wild animals. For more information on tickborne diseases, visit https://www.cdc.gov/ticks/tickbornediseases/index.html

**Epidemiology & Surveillance**

The distribution of tickborne diseases is dependent on the habitat of the tick vector. Anaplasmosis, babesiosis, and Lyme disease are most commonly reported in the northeastern United States and upper Midwest, while ehrlichiosis and spotted fever rickettsiosis (including Rocky Mountain spotted fever) are most commonly reported in the southeastern and south-central United States. Lyme disease is the most frequently reported tickborne disease in Florida, but only 20.4% of Lyme disease cases in Florida residents were acquired in Florida. Far fewer cases of Rocky Mountain Spotted Fever and ehrlichiosis were reported in Florida residents from 2007-2016, but they were more likely to have been acquired in Florida. (Table 2).

**Prevention**

Avoiding tick bites is the best way to prevent tick-borne disease. Take the following precautions to help prevent tick bites:

- Apply repellent to help prevent ticks from biting. Read label directions carefully when applying repellent. Apply permethrin to clothing and gear. Using insect repellent can also help prevent mosquito bites.
- Dress so your skin is covered in white or light-colored clothing when ticks might be present so you can see if any ticks are crawling on your clothes. Tuck your pant legs into your socks so that ticks cannot crawl up the inside of your pants.
- Walk in the center of the trail or path to avoid touching tall grasses and other plants in tick-infested areas.
- Perform regular tick checks on yourself, your family, and your pets.
- Shower soon after being in a tick habitat.
- Use veterinarian recommended products to keep ticks off your pets.
- Keep grass, shrubs, and trees close to your residence trimmed to control ticks around the home.

**Training Opportunity**

A recorded webinar on the changing distribution of ticks and tick-borne infections is available at https://emergency.cdc.gov/coca/. Free continuing education credits for this webinar are available until January 9, 2020.

<table>
<thead>
<tr>
<th>Disease/condition</th>
<th>Disease Total Number of Confirmed and Probable Cases 2007-2016</th>
<th>Percent Acquired in Florida</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anaplasmosis</td>
<td>47</td>
<td>29.8%</td>
</tr>
<tr>
<td>Babesiosis</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Ehrlichiosis</td>
<td>183</td>
<td>79.8%</td>
</tr>
<tr>
<td>Lyme Disease</td>
<td>1220</td>
<td>20.4%</td>
</tr>
<tr>
<td>Rocky Mountain Spotted Fever (RMSF)</td>
<td>191</td>
<td>64.4%</td>
</tr>
<tr>
<td>Tularemia</td>
<td>3</td>
<td>0.0%</td>
</tr>
</tbody>
</table>

Table 2. Confirmed and probable cases of tickborne diseases reported in Florida, 2007-2016. Note: babesiosis was made reportable in Florida in October 2016 so the first year with complete data will be 2017.

Disease/condition counts for 2017 and before are final. Disease/condition counts for 2018 are preliminary and will change.
EMERGENCY PREPAREDNESS

Hurricane season ends November 30th, and there are several actions you can take now to ensure that your patients, staff, and families are prepared for future storms.

Get a plan and build a kit: Everyone should have a plan in place for their home and business for what to do during an emergency. This is especially important for people with special needs. Disaster supply kits should include a minimum of one gallon of water per day for 3-7 days per person for drinking, cooking, and sanitation purposes, and enough non-perishable food for 3-7 days, including foods for individuals with dietary restrictions such as infants and the elderly. Pet care items such as immunization records, food and water, a carrier or cage, and medications should be included as well. Visit https://www.floridadisaster.org/ for more information.

Medication requirements: It is recommended that patients have a minimum two week supply of all prescription medications in the event of a disaster. According to Florida law, patients can obtain a 30-day refill of a prescription medication—even if they have just refilled it—if they reside in a county that is under a hurricane warning issued by the National Weather Service, is under a state of emergency executive order declared by the Governor, or has activated its emergency operations center/emergency management plan. Under these specific circumstances, any health insurer, managed care organization, or other entities licensed by the Office of Insurance Regulation must waive the “refill too soon” restrictions on prescriptions.

Special needs registration: The Florida Department of Emergency Management maintains a special needs registry for individuals with medical needs (particularly those who are dependent on electricity for medical equipment, such as an oxygen concentrator) and/or those who will need assistance with transportation to a public shelter in an emergency. Please encourage your patients with special needs to register as soon as possible before the next disaster strikes. Individuals can self-register, be enrolled by a health care provider, or have a relative register for them. Enrollment in the special needs registry can be completed online: https://snr.floridadisaster.org/Signin?client=nassau. For assistance or more information contact the Nassau County Emergency Operations Center at (904) 548-0900.

Prevent carbon monoxide poisoning: Ask patients ahead of time about their plans during a storm, particularly those who have special medical needs. Carbon monoxide poisoning due to generator use can be prevented through planning and education. For patients who plan to shelter in place during a storm with a generator for power, have a discussion with them about generator safety and ensure they know how to prevent CO poisoning. If they are on oxygen, make sure they have enough tubing to be far enough away from the generator to avoid inhaling exhaust. For more information about carbon monoxide, visit http://www.floridahealth.gov/environmental-health/carbon-monoxide/index.html.


UPCOMING EVENTS & TRAININGS

+ DOH-Nassau and the Partnership for a Healthier Nassau will be holding the 2018 Nassau Health Summit on September 26th from 1-5pm at the FSCJ Nassau Red Bean Center. There will be an opportunity for organizations to share their service information, network then hear about the results of the MAPP Community Health Assessments conducted this Spring & Summer. More importantly, there will be a facilitated session to choose the top health issues to be addressed in the upcoming 2019-2021 Nassau Community Health Improvement Plan. For more information on reserving a free table to display at the Health Summit, please contact Mary von Mohr at 904-557-9133 or Mary.vonMohr@flhealth.gov.

+ CDC will host a Clinician Outreach and Communication Activity (COCA) call/webinar on September 27 from 2:00-3:00pm. The call will discuss 2018-2019 recommendations for influenza prevention and treatment in children. Free continuing education is available. For more information, visit https://emergency.cdc.gov/coca/calls/index.asp.
### AUGUST 2018: REPORTED CASES IN NASSAU COUNTY

**Table 3.** Confirmed, probable, and suspect case counts for reportable diseases and conditions in Nassau County and Florida, August 2015 through August 2018.


EpiCom is the Florida Department of Health's disease outbreak communication system. This system is used to communicate essential information regarding public health issues to partners throughout the state. EpiCom is used by DOH staff and public health partners such as hospital infection control practitioners, physicians' offices, and school nurses. To request access please contact EpiCom.Administrator@flhealth.gov.

Disease/condition counts for 2017 and before are final. Disease/condition counts for 2018 are preliminary and will change.
HEALTH BULLETINS, ADVISORIES & ALERTS

Press Releases & Public Information

For additional information regarding press releases visit the DOH-Nassau website or Department of Health Online Newsroom at: http://nassau.floridahealth.gov/ and http://www.floridahealth.gov/newsroom/

- Press Release 08/16/18: Health Officials Continue to Emphasize Precautionary Measures to Prevent Mosquito-borne Illness
- Press Release 08/23/18: Health Officials Reinforce Mosquito-borne Illness Advisory After First Human Case of West Nile Virus Infection
- Press Release 09/07/18: 2018 Nassau Health Summit—Make Your Voice Heard
- Press Release 09/17/18: Health Officials Issue Mosquito-borne Illnesses Alert

National Preparedness Month

National Preparedness Month is recognized each September and serves as a reminder that we all must prepare ourselves and our families now and throughout the year. This Preparedness Month will focus on planning, with an overarching theme: Disasters Happen. Prepare Now. Learn How.

There are many ways you can prepare, and it’s necessary to have an emergency preparedness kit. Some items you may want to include in your kit are:

- Water (at least one gallon a day per person);
- Non-perishable packaged or canned food (enough for at least 3 to 7 days);
- First aid kit;
- Flashlights with extra batteries;
- Any necessary medication (enough for two weeks);
- Written instructions for care and medication (including medication dosages, a list of medical devices you use and a list of your doctors);
- Pet care items (including any pet medications); and
- Other important documents (stored in a waterproof container).

In certain situations, it may be safest for you to evacuate from your house to a more secure location like a shelter. When an evacuation order is given, your best choice is to travel to an area outside of the anticipated impact area. If you have nowhere else to go, emergency public "at-risk" shelters will provide a safe place to "weather the storm." But remember, these shelters can be crowded and uncomfortable, might have no electricity, and have no privacy or secure place to store your things. (Think of a "Life Boat vs. Cruise Ship" analogy).

The Florida Department of Emergency Management maintains a special needs registry for individuals with medical needs (particularly those who are dependent on electricity for medical equipment, such as an oxygen concentrator) and/or those who will need assistance with transportation to a public shelter in an emergency. **If you or a loved one has special needs, register as soon as possible before the next disaster strikes.** Individuals can self-register, be enrolled by a health care provider, or have a relative register for them. Enrollment in the special needs registry can be completed online: https://snr.floridadisaster.org/Signin?client=nassau. For assistance or more information contact the Nassau County Emergency Operations Center at (904) 548-0900.

Visit https://www.floridadisaster.org/ for more resources to help you and your family stay prepared for a disaster.