CDC Travel Watch—Lassa Fever in Nigeria

What is Lassa fever?
Lassa fever is a viral illness that usually causes mild symptoms, including slight fever, weakness, and headache. However, in some people it can cause more serious symptoms, like bleeding gums, eyes, or nose; difficulty breathing; repeated vomiting; facial swelling; pain in the chest, back, and abdomen; shock; and even death.

What is the current situation
The Nigeria Center for Disease Control has reported an ongoing outbreak of Lassa fever in Nigeria that began in early 2018. The outbreak has been confirmed in at least 17 states with over 40 deaths reported. Most cases have been found in Edo and Ondo in southwest Nigeria states.

How is Lassa fever virus spread
Lassa fever is spread primarily by rats. Rats that carry the Lassa fever virus live in homes and areas where food is stored. People usually become ill with Lassa fever after direct contact with rat droppings or urine and through touching objects or eating food contaminated with rat droppings or urine.

Lassa fever may also spread when a person comes into contact with an infected person’s blood, tissue, or body fluids, especially when that person is seriously ill.

What can travelers do to prevent Lassa fever?
Travelers to Nigeria should avoid contact with rats, especially rat urine and feces, and take precautions to keep their accommodations or campsites clean. Travelers should also wash hands often, and avoid contact with people who are sick.

Travelers who develop serious symptoms consistent with Lassa fever should seek immediate medical care OR should contact a doctor right away.

Traveler Information
- Lassa Fever Fact Sheet
- CDC Lassa Fever website

Clinician Information
- Viral Hemorrhagic Fevers in CDC Health Information for International Travel ("Yellow Book")

Source: CDC
What is the current situation?

The Nigeria Centre for Disease Control has reported an ongoing outbreak of yellow fever that began in September 2017. Laboratory-confirmed yellow fever cases have been reported in at least seven states, and a number of people have died.

In response to this outbreak, Nigerian health authorities conducted mass vaccination campaigns in several affected states at the end of 2017. Additional mass vaccination campaigns are planned for other affected states starting in early 2018.

What can travelers do to prevent yellow fever?

CDC recommends anyone 9 months or older who travels to any part of Nigeria should be vaccinated against yellow fever. In addition, Nigerian authorities require proof of yellow fever vaccination from all people one year of age or older who are traveling to Nigeria and are arriving from a country with risk of yellow fever virus transmission.

Because of current limitations in the availability of yellow fever vaccine in the United States, travelers should contact a yellow fever vaccine provider well in advance of travel.

Clinician Information:

- Yellow Fever Vaccine Booster Doses: Recommendations of the Advisory Committee on Immunization Practices, 2015
- Yellow Fever in CDC Health Information for International Travel “Yellow Book” Clinical and Laboratory Guidance
- Diagnostic Testing
- Testing for Vaccine Adverse Events
- Clinical Update Announcement: Temporary Total Depletion of US Licensed Yellow Fever Vaccine

Additional Information:

- FAQs about Yellow Fever
- Yellow Fever Vaccine Information Statement (VIS)
- Authorized US Yellow Fever Vaccine Centers

Source: CDC
Influenza Update

State influenza and influenza-like illness (ILI) activity:

- In week 13, activity levels continued to decrease. Despite this decrease, levels remained above levels observed during previous seasons at this time, indicating this season is not over yet. Data indicate influenza activity peaked during week 5 (ending February 3, 2018).

- One new influenza-associated pediatric death was confirmed. Seven influenza-associated pediatric deaths have been confirmed so far in the 2017-18 influenza season.

- Deaths due to pneumonia and influenza were below expected levels.

- Six outbreaks of influenza or ILI were reported: five with laboratory confirmation of influenza and one ILI. As of week 13 (ending March 31, 2018), 484 outbreaks of influenza and ILI have been reported since the start of the 2017-18 season.

- The Florida Department of Health is conducting enhanced surveillance of intensive-care unit (ICU) patients aged <65 with laboratory-confirmed influenza. In week 13, 13 cases were reported, bringing the total number of cases reported up to 334 since February 1, 2018. Of the 213 cases with known vaccination status, the majority (69%) were unvaccinated individuals. Of the 331 cases with medical histories available, the majority (89%) had underlying medical conditions.

Treatment:

- In severe seasons like this one, the use of antivirals is especially important.


- Clinicians should not wait for laboratory confirmation to administer antivirals to people with suspect influenza.

Immunizations and prevention:

- The Florida Department of Health recommends that sick people stay home until fever-free for at least 24 hours (without the use of fever-reducing medication) and that all people use good handwashing practices.

- CDC recommends vaccination now and as long as influenza viruses are circulating. To find a flu shot near you, visit: [www.floridahealth.gov/indaflushot](http://www.floridahealth.gov/findafleshoot). Flu vaccines are also available at your local county health department.

National influenza activity:

- Influenza activity decreased, but remained well above the national baseline.

- As in Florida, influenza A (H3) has been the most common strain of influenza identified, however, influenza B activity has continued to increase in recent weeks.

- This late-season circulation of influenza B is expected.
Florida Arbovirus Surveillance

Arbovirus surveillance in Florida includes endemic mosquito-borne viruses such as West Nile virus (WNV), Eastern equine encephalitis virus (EEEV), and St. Louis encephalitis virus (SLEV), as well as 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. During the period of March 25-31, 2018, the following arboviral activity was recorded in Florida.

WNV activity: No human cases of WNV infection were reported this week. No horses with WNV infection were reported this week. One sentinel chicken tested positive for antibodies to WNV this week in Hillsborough County. In 2018, positive samples from nineteen sentinel chickens have been reported from five counties.

SLEV activity: No human cases of SLEV infection were reported this week. No sentinel chickens tested positive for antibodies to SLEV this week. In 2018, there have been no positive samples reported.

EEEV activity: No human cases of EEEV infection were reported this week. No horses with EEEV infection were reported this week. One sentinel chicken tested positive for antibodies to EEEV this week in Walton County. In 2018, positive samples from eight horses, one emu, one emu flock, and six sentinel chickens have been reported from eleven counties.

International Travel-Associated Dengue Fever Cases: No cases of dengue fever were reported this week in persons that had international travel. In 2018, one travel-associated case has been reported.

Dengue Fever Cases Acquired in Florida: No cases of locally acquired dengue fever were reported this week. In 2018, no cases of locally acquired dengue fever have been reported.

International Travel-Associated Chikungunya Fever Cases: No cases of chikungunya fever were reported this week in persons that had international travel. In 2018, one travel-associated case has been reported.

Chikungunya Fever Cases Acquired in Florida: No cases of locally acquired chikungunya fever were reported this week. In 2018, no cases of locally acquired chikungunya fever have been reported.

International Travel-Associated Zika Fever Cases: One case of Zika fever was reported this week in a person that had international travel. In 2018, 24 cases have been reported.

Zika Fever Cases Acquired in Florida: No cases of locally acquired Zika fever were reported this week. In 2018, no cases of locally acquired Zika fever have been reported.

Advisories/Alerts: Levy County is currently under a mosquito-borne illness alert. No other counties are currently under mosquito-borne illness advisory or alert.

There are no areas of ongoing, active Zika transmission in Florida. For additional information on current CDC recommendations, please visit https://www.cdc.gov/zika/intheus/florida-update.html. For additional information on Zika virus cases from 2016 or 2017, including up-to-date numbers, please visit https://zikafreefl.org/.

There is a Level 2 [Alert] Travel Health Notice from the CDC for multiple countries in the Caribbean, Central and South America, Mexico, Cape Verde, Southeast Asia, and Pacific Islands related to Zika virus transmission and an association with poor pregnancy outcomes. Pregnant women should consider postponing travel to these areas. There is also a Level 2 Travel Health Notice for Brazil and a Level 1 Travel Health Notice in Nigeria related to the transmission of yellow fever virus. There is also a Level 1 Travel Health Notice for Sri Lanka related to the transmission of dengue virus. Additional information on travel health notices can be found at the following link: http://wwwnc.cdc.gov/travel/notices. For a map of arboviral disease activity in the United States, please visit the following link: https://wwwn.cdc.gov/arbonet/maps/ADB_Diseases_Map/index.html.
**Epidemiology Disease Summary**

<table>
<thead>
<tr>
<th>Category</th>
<th>March 2018</th>
<th>YTD 2018</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>CNS Diseases and Bacteremias</strong></td>
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</tr>
<tr>
<td>Creutzfeldt-Jacob Disease (CJD)</td>
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<tr>
<td>Haemophilus influenzae</td>
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</tr>
<tr>
<td>Legionellosis</td>
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</tr>
<tr>
<td>Meningitis, Bacterial or Mycotic</td>
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</tr>
<tr>
<td>Meningococcal Disease</td>
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<tr>
<td>S. aureus Infection, Intermediate Resistance to Vancomycin (VISA)</td>
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<tr>
<td>Strep pneumoniae Invasive Disease, Drug-Resistant</td>
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</tr>
<tr>
<td>Strep pneumoniae Invasive Disease, Drug-Susceptible</td>
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<tr>
<td><strong>Enteric Infections</strong></td>
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<tr>
<td>Campylobacteriosis</td>
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<tr>
<td>Cholera (Vibrio cholerae Type O1)</td>
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<tr>
<td>Cryptosporidiosis</td>
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<tr>
<td>Cyclosporidiosis</td>
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<tr>
<td>Escherichia coli Shiga Toxin-Producing (STEC)</td>
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<tr>
<td>Giardiasis</td>
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<tr>
<td>Hemolytic Uremic Syndrome (HUS)</td>
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<tr>
<td>Listeriosis</td>
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<tr>
<td>Salmonellosis</td>
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<tr>
<td>Shigellosis</td>
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<tr>
<td>Typhoid Fever</td>
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<tr>
<td>Vibriosis</td>
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<tr>
<td><strong>Vaccine Preventable Diseases</strong></td>
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<tr>
<td>Measles</td>
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<tr>
<td>Mumps</td>
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<td>Varicella</td>
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<td><strong>Vector Borne, Zoonoses</strong></td>
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<tr>
<td>Brucellosis</td>
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<tr>
<td>Chikungunya Fever</td>
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<tr>
<td>Eastern Equine Encephalitis Neuroinvasive Disease</td>
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<tr>
<td>Ehrlichiosis/Anaplasmosis</td>
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<td>Herpes B Virus, Possible Exposure</td>
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<td>Lyme Disease</td>
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<tr>
<td>Malaria</td>
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<td>Rabies, Animal</td>
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<td>Rabies, Possible Exposure</td>
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<td>Rocky Mountain Spotted Fever and Rickettsiosis</td>
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<td>West Nile Virus Neuroinvasive Disease</td>
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<tr>
<td>Zika Virus Disease and Infection</td>
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<tr>
<td><strong>Viral Hepatitis</strong></td>
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<tr>
<td>Hepatitis A</td>
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<td>Hepatitis B, Acute</td>
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<tr>
<td>Hepatitis B, Chronic</td>
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<tr>
<td>Hepatitis B, Surface Antigen in Pregnant Women</td>
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<tr>
<td>Hepatitis C, Acute</td>
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<tr>
<td>Hepatitis C, Chronic</td>
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<tr>
<td>Hepatitis D</td>
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<tr>
<td><strong>Other</strong></td>
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<tr>
<td>Carbon Monoxide Poisoning</td>
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<tr>
<td>Hansen's Disease (Leprosy)</td>
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<tr>
<td>Influenza-Associated Pediatric Mortality</td>
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<tr>
<td>Lead Poisoning</td>
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<tr>
<td>Mercury Poisoning</td>
<td>-</td>
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<tr>
<td>Pesticide-Related Illness and Injury</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>171</td>
<td>141</td>
</tr>
</tbody>
</table>
STD Morbidity Statistics

- Chlamydia = 124
- Gonorrhea = 44
- Syphilis = 3
- HIV = 8

HIV Outreach Statistics

- 73 individuals were tested for HIV
- 0 individuals were tested for Syphilis
- 47 rapid Hepatitis tests performed

Jail Linkage Statistics

- 61 rapid HIV tests performed (1 – positive)
- 46 Hepatitis tests performed (12 – positive)
- 61 individuals were HIV post-test counseled

Tuberculosis & Refugee Health Statistics

- 4 TB cases
- 1 Suspect cases
- 9 LTBI clients
- 4 new refugees
- 6 Follow up immunization visits
Animal Bites

- Pasco County Animal Services (PCAS) received 166 animal bites in March
- PCAS reported 25 of 166 (15%) cases to PCHD for follow-up
- 27 of 25 (100%) were reported in Merlin after meeting case definition (more were reported in Merlin than were reported to DOH by PCAS due to injured persons reporting directly to DOH)
- DOH – Pasco sent 12 animal specimens for rabies testing (0 positive)

Reported to PCAS = Animal exposures reported to PCAS by community or Epi.
Reported to Epi by PCAS = Exposures that require Epi’s attention due to the severity of bite, type of animal, inability to locate animal, victim and/or owner and need for rabies prophylaxis.
Reported in Merlin = Involves situations where the animal or person could not be located or exposure victim either accepts or declines rabies vaccinations.
Multistate Outbreak of *Salmonella* Enteritidis Infections Linked to Pet Guinea Pigs

- CDC, several states, and the U.S. Department of Agriculture Animal and Plant Health Inspection Service are investigating a multistate outbreak of *Salmonella* Enteritidis infections.
  - CDC began investigating in December 2017 when CDC PulseNet identified a cluster of three *Salmonella* Enteritidis infections that whole genome sequencing showed were closely related genetically.
  - A review of the PulseNet database identified six more closely related illnesses dating back to 2015. These illnesses were added to the outbreak case count.
- Nine people infected with the outbreak strain of *Salmonella* Enteritidis have been reported from eight states.
  - Illnesses started on dates ranging from July 17, 2015 to December 15, 2017.
  - One person was hospitalized, and no deaths were reported.
- Epidemiologic and laboratory evidence indicates that contact with pet guinea pigs is the likely source of this multistate outbreak.
  - Four of the seven people interviewed reported contact with a guinea pig or its habitat in the week before getting sick.
  - The outbreak strain of *Salmonella* was identified in a sample collected from an ill person’s pet guinea pig in Vermont.
  - Whole genome sequencing showed that *Salmonella* bacteria isolated from sick people and the guinea pig were closely related genetically. This result provides more evidence that people in this outbreak got sick from contact with pet guinea pigs.
- Whole genome sequencing did not identify predicted antibiotic resistance in 11 of 13 isolates analyzed (9 ill people and 4 guinea pigs). One isolate from a sick person and one isolate from a guinea pig contained genes for resistance to streptomycin, sulfisoxazole, and trimethoprim-sulfamethoxazole. Testing of outbreak isolates using standard antibiotic susceptibility testing by CDC’s National Antimicrobial Resistance Monitoring System laboratory confirmed these results.
- This outbreak is a reminder that pet rodents such as guinea pigs, regardless of where they are purchased or adopted, can carry *Salmonella* bacteria even when they look healthy and clean. Follow CDC’s tips to keep you and your pet safe and healthy.
  - Pick the right pet. Pet rodents are not recommended as pets for children younger than 5 years, and should not be kept in childcare centers.
  - Always wash your hands after touching, feeding, or caring for pet rodents or cleaning their habitats.
  - Read more tips in the Advice to Pet Owners.

Source: CDC
Florida Health Alert Network

Everbridge is a public health notification system that allows us to disseminate pertinent public health information regarding outbreaks or disease trends more efficiently. Everbridge provides users with a wide range of methods to receive information on a variety of communication devices. To register, please visit https://www.surveymonkey.com/r/SD3R5QN

Hepatitis C Consultation Service

The Clinician Consultation Center (CCC) provides no-cost, up-to-date, expert clinical advice to support clinicians managing patients with hepatitis C (HCV) and co-morbidities such as HIV co-infection or substance use disorder. Advice provided is based on federal treatment guidelines, current medical literature, and clinical best practices. Consultation topics include: HCV transmission & prevention, HCV screening & diagnostic testing, HCV staging & monitoring, regimen selection & dosing, drug interactions, HIV/HCV management strategies, prior HCV treatment failure, ESRD/chronic kidney disease, HCV in pregnancy, and management of clinical problems— including cirrhosis and anemia.

Call for a Phone Consultation

(844) HEP-INFO or (844) 437-4636
Monday-Friday, 9 a.m.—8 p.m. EST

Submit a Case for Consultation Online

nccc.ucsf.edu

Staff News and Upcoming Events

Free Test Fridays

The Florida Department of Health-Pasco County is offering Free Test Fridays. For more information, contact Rob at 727-619-0260.

1st Friday – Little Road Health Department 9 am to 3 pm
2nd Friday – Dade City Health Department 10 am to 3 pm
3rd Friday – Wesley Chapel Health Department 10 am to 3 pm
4th Friday – Main Street Health Department 12 noon to 4 pm

Pasco Public Defender Mobile Medical Unit

The Florida Department of Health-Pasco County is partnering with the Pasco Public Defender Mobile Medical Unit to provide free rapid HIV and Hepatitis C testing. The Mobile Medical Unit offers free basic medical care for uninsured, free health screenings for all ages, and free flu shots. No appointment is needed. For more information, please call 352-521-1450, option 1 or visit their website, where you can also find a calendar with all of their stops for the month.

Resources

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