



Zika Update

May 2016

Zika Virus



Zika Virus is spread primarily through the bite of an infected *Aedes* species mosquito.

- ▶ Common symptoms include fever, rash, joint pain, and conjunctivitis. Symptoms are usually mild.
- ▶ Zika virus infection during pregnancy can cause serious birth defects.
- ▶ Zika virus was first discovered in 1947 and the first human cases were detected in 1952.
- ▶ In May 2015, the Pan American Health Organization (PAHO) issued an alert regarding the first confirmed Zika virus infection in Brazil.
- ▶ In February, 2016, the World Health Organization (WHO) declared Zika virus a Public Health Emergency of International Concern (PHEIC).

Zika-Affected Areas

- Prior to 2015, Zika virus outbreaks in Africa, South Asia, & Pacific Islands
- In May 2015, first confirmed Zika virus infections in Brazil
- No locally transmitted cases in continental U.S., but cases reported in returning travelers
- As of January 22, 2016, local transmission had been identified in at least 20 countries or territories in the Americas, including Puerto Rico



Zika in Louisiana

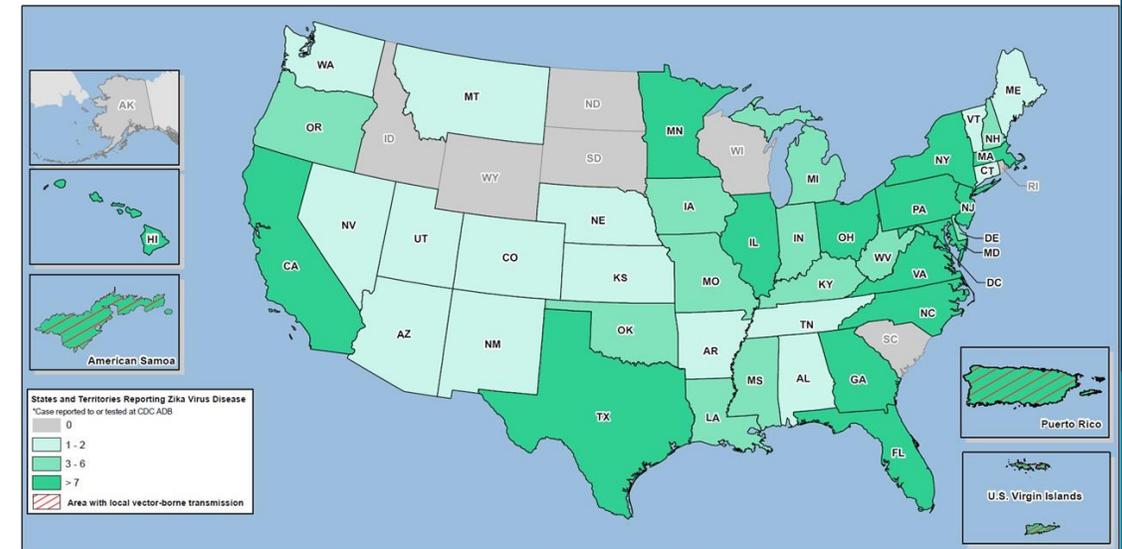
We know Zika is returning in travelers daily/weekly

▶ As of April 27, 2016, there are 544 Zika cases in the United States.

- All of the case are travel-associated
- Pregnant – 157
- Sexually transmitted – 10
- Guillian Barre Syndrome – 1

▶ Louisiana has had 4 laboratory confirmed cases

- All are travel- associated
- Represents 1% of all confirmed Zika cases in the United States



Zika CDC/Louisiana Planning

▶ 5 phases

- Preparation: Vector present or possible in jurisdiction
- Risk Category 1: Mosquito Season
- Risk Category 2: Confirmed Local Transmission
- Risk Category 3: Widespread Local Transmission (multiple locations in jurisdiction)
- Risk Category 4: Local Transmission in Multiple Counties

▶ 6 subgroups

- Communication
- Surveillance
- Laboratory Testing
- Vector Control
- Pregnant Women Outreach
- Blood Safety

Zika Virus: Transmission

- ▶ Transmitted to people through the bite of an infected *Aedes* species mosquito
- ▶ Mosquitoes lay eggs in and near standing water
- ▶ They are aggressive daytime biters. Live near and prefer to bite humans
- ▶ Mosquitoes become infected when they feed on a person already infected with the virus
- ▶ Infected mosquitoes can then spread the virus to other people through bites
- ▶ Spread of the virus through blood transfusion and sexual contact have also been reported

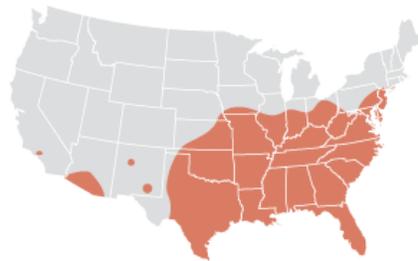
THE MOSQUITOS THAT SPREAD ZIKA VIRUS

Zika virus is primarily transmitted to humans from *Aedes aegypti* mosquitos, but *Aedes albopictus* mosquitos have also been identified as potential carrier. Here's where each might live in the United States.

**Approximate distribution of
Aedes aegypti mosquitos**



**Approximate distribution of
Aedes albopictus mosquitos**



NOTE | Mosquito populations may be detected in areas not shaded on this map, and may not be consistently found in all shaded areas.

SOURCE | Centers for Disease Control and Prevention



Zika Virus: Travel Advisory

As of February 2016, CDC advises:

- ▶ All travelers should take steps to avoid mosquito bites to prevent Zika virus infection and other mosquito-borne diseases
- ▶ Pregnant women should consider postponing travel to any area where Zika transmission is ongoing
- ▶ Healthcare providers are encouraged to report suspect Zika virus cases to Louisiana Office of Public Health at 800-256-2748



Zika Virus: Returned Travelers

Posters at airports, cruise ship terminals, commercial ports

RECENTLY IN THE AMERICAN TROPICS?

MOSQUITOES spread **DENGUE, CHIKUNGUNYA, ZIKA,** and other diseases



2 WEEKS

Sun	Mon	Tue	Wed	Thu	Fri	Sat
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	31	1	2	3	4



Watch for fever with joint, muscle, or eye pain, or a rash in the next 2 weeks.



If you get sick, see a doctor. Tell the doctor where you traveled.

For more information, visit www.cdc.gov/travel.



U.S. Department of Health and Human Services
Centers for Disease Control and Prevention

Zika Virus: Prevention

There is no vaccine or preventive drug available

- ▶ Avoid mosquito bites
- ▶ Use air conditioning or window and door screen indoors
- ▶ Wear long sleeves and pants, and use mosquito repellents when outdoors
- ▶ Clear your yard of any sources of standing water



Preparedness at the Parish Level

Vector Surveillance and Control

Before mosquito season:

- ▶ Conduct public mosquito education campaigns to focus on reducing or eliminating larval habitats
- ▶ Conduct surveys to determine abundance, distribution, and type of containers (large numbers of containers may translate to high risk)
- ▶ Initiate community wide source reduction campaign
- ▶ Cover, dump, modify or treat large water-holding containers with long-lasting larvicide

Preparedness at the Parish Level

Vector Surveillance and Control

Beginning of mosquito season:

- ▶ Continue public education campaigns
- ▶ Develop and distribute mosquito education materials and personal protection measures
- ▶ Initiate community wide surveys to determine presence/absence, estimate relative abundance, determine distribution, develop detailed vector distribution maps
- ▶ Continue community source reduction efforts
- ▶ Initiate preventive control to reduce mosquito populations

Preparedness at the Parish Level

Vector Surveillance and Control

Single or several suspected/confirmed imported/locally acquired cases:

- ▶ Continue public mosquito containment education campaigns
- ▶ Treat with long-lasting larvicide any water-holding containers that cannot be dumped, covered, discarded or otherwise modified
- ▶ Eliminate larval habitats within 100-200 yards/meters around a case's home
- ▶ Educate the public about reported cases of disease and urge them to use insect repellents, window/door screens, and air conditioning

Preparedness at the Parish Level

Vector Surveillance and Control

Outbreak; clusters or suspected or confirmed cases:

- ▶ Divide the outbreak area into operational management areas where control measures can be effectively applied to all buildings and public area within a few days
- ▶ Conduct door-to-door inspections & mosquito control in an area-wide fashion
- ▶ Identify and treat, modify, or remove mosquito-producing containers
- ▶ Organize area/community clean-up campaigns targeting disposable containers
- ▶ Combine outdoor spatial or residual spraying with source reduction and larviciding

Zika Update

Conclusion

- ▶ DHH will continue to monitor the situation and provide updates
- ▶ We continue to educate and train the medical community on how to identify and reduce Zika transmission, including in Pregnant women
- ▶ We are working with the Parishes on mosquito control and education