Oct 2015-Dec 2015

Epi Times



Department of Health Pasco County

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Epidemiology: (352) 521-1450,

Option 2

Confidential fax: (352) 521-1435

TB: (727) 861-5260 ext. 0253

Confidential fax: (727) 861-4844

Environmental: (813) 558-5173

Animal Control

(report animal bites): (727) 834-3216 Fax: (813) 929-1218

STD/HIV: (727) 619-0260 (W. Pasco) or (352) 834-6150 (E. Pasco)

HIV (testing); (727) 861-5250 ext. 0260 (W. Pasco) or (352) 834-6146 (E. Pasco)

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Zika virus

Background

Zika virus is a mosquito-borne flavivirus closely related to dengue virus. It was first isolated from a rhesus monkey in Zika forest, Uganda in 1947, in mosquitoes (*Aedes africanus*) in the same forest in 1948 and in humans in Nigeria in 1954. Zika virus is endemic in parts of Africa and Asia and was first identified in the South Pacific after an outbreak on Yap Island in the Federated States of Micronesia in 2007.



Transmission

Zika virus is primarily transmitted to humans through bites from *Aedes* mosquitos, which often live around buildings in urban areas and are usually active during daylight hours (peak biting activity occurs in early mornings and late afternoons).

Some evidence suggests Zika virus can also be transmitted to humans through blood transfusion, perinatal transmission and sexual transmission. However, these modes are very rare.

The incubation period is typically between 2 and 7 days.

Signs and symptoms

Zika virus infection is characterized by low grade fever (less than 38.5 °C) frequently accompanied by a maculopapular rash. Other common symptoms include muscle pain, joint pain with possible swelling (notably of the small joints of the hands and feet), headache, pain behind the eyes and conjunctivitis. As symptoms are often mild, infection may go unrecognized or be misdiagnosed as dengue.

A high rate of asymptomatic infection with Zika virus is expected, similar to other flaviviruses, such as dengue virus and West Nile virus. Most people fully recover without severe complications, and hospitalization rates are low. To date, there have been no reported deaths associated with Zika virus.

Diagnosis

Several methods can be used for diagnosis, such as viral nucleic acid detection, virus isolation and serological testing. Nucleic acid detection by reverse transcriptase-polymerase chain reaction targeting the non-structural protein 5 genomic region is the primary means of diagnosis, while virus isolation is largely for research purposes. Saliva or urine samples collected during the first 3 to 5 days after symptom onset, or serum collected in the first 1 to 3 days, are suitable for detection of Zika virus by these methods. Serological tests, including immunofluorescence assays and enzyme-linked immunosorbent assays may indicate the presence of anti-Zika virus IgM and IgG antibodies. Caution should be taken with serological results as IgM cross reactivity with other flaviviruses has been reported in both primary infected patients and those with a probable history of prior flavivirus infection.

Treatment

There is no commercial vaccine or specific antiviral drug treatment for Zika virus infection. Treatment is directed primarily at relieving symptoms using anti-pyretics and analgesics.

Sources: WHO

For further information on Zika Virus, go to www.cdc.gov/zika or call the Florida Department of Health Pasco County, (352) 521-1450 ext. 6144.

Volume 4, Issue 4 Page 2

CDC issues interim travel guidance related to Zika virus for 14 Countries and Territories in Central and South America and the Caribbean

Out of an abundance of caution, pregnant women advised to consider postponing travel to areas where Zika virus transmission is ongoing

For Immediate Release: Friday, January 15, 2016

Contact: Media Relations, (404) 639-3286

CDC has issued a <u>travel alert (Level 2-Practice Enhanced Precautions)</u> for people traveling to regions and certain countries where Zika virus transmission is ongoing: Brazil, Colombia, El Salvador, French Guiana, Guatemala, Haiti, Honduras, Martinique, Mexico, Panama, Paraguay, Suriname, Venezuela, and the Commonwealth of Puerto Rico.

This alert follows reports in Brazil of <u>microcephaly</u> and other poor pregnancy outcomes in babies of mothers who were infected with Zika virus while pregnant. However, additional studies are needed to further characterize this relationship. More studies are planned to learn more about the risks of Zika virus infection during pregnancy.

Until more is known, and out of an abundance of caution, CDC recommends special precautions for pregnant women and women trying to become pregnant:

- Pregnant women in any trimester should consider postponing travel to the areas where Zika virus transmission
 is ongoing. Pregnant women who must travel to one of these areas should talk to their doctor or other
 healthcare provider first and strictly follow steps to avoid mosquito bites during the trip.
- Women trying to become pregnant who are thinking about becoming pregnant should consult with their
 healthcare provider before traveling to these areas and strictly follow steps to prevent mosquito bites during
 the trip.

Because specific areas where Zika virus transmission is ongoing are difficult to determine and likely to change over time, CDC will update this travel notice as information becomes available. Check the CDC travel website frequently for the most up-to-date recommendations.

Currently, there is no vaccine to prevent or medicine to treat Zika. Four in five people who acquire Zika infection may have no symptoms. Illness from Zika is usually mild and does not require hospitalization. Travelers are strongly urged to protect themselves by <u>preventing mosquito bites</u>:

- Wear long-sleeved shirts and long pants
- Use EPA-registered insect repellents containing DEET, picaridin, oil of lemon eucalyptus (OLE), or IR3535.
 Always use as directed.
 - Insect repellents containing DEET, picaridin, and IR3535 are safe for pregnant and nursing women and children older than 2 months when used according to the product label. Oil of lemon eucalyptus products should not be used on children under 3 years of age.
- Use <u>permethrin-treated</u> clothing and gear (such as boots, pants, socks, and tents).
- Stay and sleep in screened-in or air-conditioned rooms.

In addition to the steps announced today, CDC is working with public health experts across the U.S. Department of Health and Human Services (HHS) to take additional steps related to Zika. CDC is developing interim guidance for pregnant women as well as sharing additional information about Zika with public health officials, clinicians and the public. In addition, efforts are underway across HHS to develop vaccines, improved diagnostics and other countermeasures for Zika.

Volume 4, Issue 4 Page 3

CDC issues interim travel guidance related to Zika virus ... Continued

Background:

CDC scientists tested samples provided by Brazilian health authorities from two pregnancies that ended in miscarriage and from two infants with diagnosed microcephaly who died shortly after birth. For the two full-term infants, tests showed that Zika virus was present in the brain. Genetic sequence analysis showed that the virus in the four cases was the same as the Zika virus strain currently circulating in Brazil. All four mothers reported having experienced a fever and rash illness consistent with Zika virus disease (Zika) during their pregnancies. Locally acquired Zika was reported for the first time in Brazil in May 2015, and the virus has since been reported in 14 countries and territories in Latin America and the Caribbean: Brazil, Colombia, El Salvador, French Guiana, Guatemala, Haiti, Honduras, Martinique, Mexico, Panama, Paraguay, Suriname, Venezuela, and Commonwealth of Puerto Rico.

According to Brazilian health authorities, more than 3,500 microcephaly cases were reported in Brazil between October 2015 and January 2016. Some of the affected infants have had a severe type of microcephaly and some have died. The full spectrum of outcomes that might be associated with infection during pregnancy and the factors that might increase risk to the fetus are not yet fully understood. Health authorities in Brazil, with assistance from the Pan American Health Organization, CDC, and other agencies, have been investigating the possible association between Zika virus infection and microcephaly in infants. However, additional studies are needed to further characterize this relationship. More studies are planned to learn more about the risks of Zika virus infection during pregnancy.

In the past, outbreaks of Zika virus infection have occurred in Africa, Southeast Asia, and the Pacific Islands. Zika virus is transmitted to people primarily through the bite of an infected *Aedes* species mosquito. About one in five people infected with Zika virus will develop symptoms, which include fever, rash, joint pain, and conjunctivitis (pink eye). Other commonly reported symptoms include myalgia, headache, and pain behind the eyes. The illness is usually mild with symptoms lasting from several days to a week. Severe disease requiring hospitalization is uncommon and case fatality is low. Guillain-Barré syndrome (GBS) has been reported in patients with probable Zika virus infection in French Polynesia and Brazil. Research efforts will also examine the link between Zika and GBS.

For more information about Zika:

- CDC Zika website
- Brazilian Ministry of Health

Information about microcephaly

Information for travelers:

- CDC Travel Notices
- Avoid Bug Bites
- Insect Repellent Use and Safety

Information for health care providers:

- Zika: Information for Health Care Providers
- Protection against Mosquitoes, Ticks, & Other Insects & Arthropods

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Page 4 Epi Times

PASCO HIV/AIDS/TB 4th Quarter Summary

	2015	2015	<u>2014</u>
<u>Disease</u>	Oct - Dec	YTD (Dec)	YTD (Dec)
HIV*	12	53*	37*
AIDS	5	36	33
TB**	1	7	5

^{*}Current HIV Infection data by year of report reflects any case meeting the CDC definition of 'HIV infection' which includes all newly reported HIV cases and newly reported AIDS cases with no previous report of HIV in Florida. If a case is later identified as being previously diagnosed and reported from another state, the case will no longer be reflected as a Florida case and the data will be adjusted accordingly. Data from the most recent calendar year (2015) are considered provisional and therefore should not be used to confirm or rule out an increase in newly reported cases in Florida. The final year-end numbers are generated in July of the following year, after duplicate cases are removed from the dataset, as is customary of HIV surveillance in the US.



Department of Health - Pasco County offers FREE RAPID HIV TESTING.

Get tested today and receive results in 20 minutes!

For more information please visit http://pasco.floridahealth.gov/programs-and-services/infectious-disease-services/aids/index.html or call (727) 619-0260 or (352) 834-6146

^{**}Bureau of TB & Refugee Health

Page 5 Epi Times



4th Quarter 2015 Disease Summary

Pasco County	2015	2015	2014	2014
Disease/Condition*	Oct - Dec	YTD	Oct - Dec	YTD
CAMPYLOBACTERIOSIS	29	106	13	62
CARBON MONOXIDE POISONING	4	6	0	3
CHIKUNGUNYA FEVER	0	0	0	3
CHOLERA (VIBRIO CHOLERAE TYPE O1)	0	0	0	1
CREUTZFELDT-JAKOB DISEASE (CJD)	0	1	0	1
CRYPTOSPORIDIOSIS	2	26	32	142
EHRLICHIOSIS/ANAPLASMOSIS	0	2	0	0
ESCHERICHIA COLI, SHIGA TOXIN-PRODUCING (STEC)	2	10	1	13
GIARDIASIS, ACUTE	9	24	5	34
HAEMOPHILUS INFLUENZAE INVASIVE DISEASE	1	2	2	3
HEMOLYTIC UREMIC SYNDROME (HUS)	0	1	0	0
HEPATITIS A	0	4	0	7
HEPATITIS B, ACUTE	10	64	11	53
HEPATITIS B, CHRONIC	27	106	20	76
HEPATITIS B, SURFACE ANTIGEN IN PREGNANT WOMEN	0	8	2	9
HEPATITIS C, ACUTE	1	5	0	7
HEPATITIS C, CHRONIC	227	1023	151	671
HEPATITIS E	1	1	0	0
INFLUENZA-RELATED PEDIATRIC MORTALITY	0	0	1	1
LEAD POISONING	16	43	28	50
LEGIONELLOSIS	0	6	4	8
LISTERIOSIS	1	2	2	3
LYME DISEASE	2	13	2	6
MALARIA	0	0	0	1
MENINGITIS, BACTERIAL OR MYCOTIC	1	7	0	0
MENINGOCOCCAL DISEASE	0	0	1	2
MERCURY POISONING	1	1	0	1
MUMPS	0	1	0	2
PERTUSSIS	6	19	3	19
RABIES, ANIMAL	2	3	1	6
RABIES, POSSIBLE EXPOSURE	47	193	35	189
ROCKY MOUNTAIN SPOTTED FEVER	0	0	0	1
SALMONELLOSIS	52	149	32	129
SHIGELLOSIS	18	30	1	7
STREP PNEUMONIAE INVASIVE DISEASE, DRUG-RESISTANT	0	1	2	7
STREP PNEUMONIAE INVASIVE DISEASE, DRUG-SUSCEPTIBLE	2	6	2	11
TYPHOID FEVER	0	0	1	1
VARICELLA (CHICKENPOX)	6	27	0	14
VIBRIOSIS (VIBRIO ALGINOLYTICUS)	0	1	1	2
VIBRIOSIS (VIBRIO CHOLERAE TYPE NON-O1)	0	0	0	2
VIBRIOSIS (VIBRIO FLUVIALIS)	0	0	0	1
VIBRIOSIS (VIBRIO VULNIFICUS)	0	1	1	1
WEST NILE VIRUS NEUROINVASIVE DISEASE	0	0	0	1
TOTAL	467	1892	354	1550

Volume 4, Issue 4 Page 6

2015 Year in Review

Jail Linkage

Males

HIV: 387 tests performed, 0 positive (0%)

Hepatitis A, B, and C: 384 tests performed, 123 positive (32%)

RPR: 228 tests performed, 4 positive (2%)

Chlamydia/Gonorrhea: 45 tests performed, 8 positive (18%)

Females

HIV: 165 tests performed, 2 positive (1%)

Hepatitis A, B, and C: 161 tests performed, 69 positive (43%)

RPR: 97 tests performed, 5 positive (5%)

Chlamydia/Gonorrhea: 33 tests performed, 3 positive (9%)

STD/HIV

Chlamydia: 748

Gonorrhea: 204

Syphilis: 39

HIV: 22

Tuberculosis

7 cases of Tuberculosis

Incidence rate 1.40 per 100,000

Reportable Diseases/Conditions in Florida

Practitioner List (Laboratory Requirements Differ)

Effective June 4, 2014



Did you know that you are required* to report certain diseases to your local county health department?

- Report immediately 24/7 by phone upon initial suspicion or laboratory test order
- Report immediately 24/7 by phone
- Report next business day
- Other reporting timeframe

- Outbreaks of any disease, any case, cluster of cases, or exposure to an infectious or non-infectious disease, condition, or agent found in the general community or any defined setting (e.g., hospital, school, other institution) not listed that is of urgent public health significance
- + Acquired immune deficiency syndrome (AIDS)
- **Amebic encephalitis**
- ! Anthrax
- Arsenic poisoning
- Arboviral diseases not otherwise listed
- ! Botulism, foodborne, wound, and unspecified
- Botulism, infant
- ! Brucellosis
- California serogroup virus disease
- Campylobacteriosis
- Cancer, excluding non-melanoma skin cancer and including benign and borderline intracranial and CNS tumors
- Carbon monoxide poisoning
- Chancroid
- Chikungunya fever
- Chikungunya fever, locally acquired
- Chlamydia
- ! Cholera (Vibrio cholerae type O1)
- · Ciguatera fish poisoning
- + Congenital anomalies
- Conjunctivitis in neonates <14 days old
- Creutzfeldt-Jakob disease (CJD)
- Cryptosporidiosis
- Cyclosporiasis
- Dengue fever
- Dengue fever, locally acquired
- ! Diphtheria
- Eastern equine encephalitis
- Ehrlichiosis/anaplasmosis
- Escherichia coli infection, Shiga toxinproducing
- Giardiasis, acute
- ! Glanders
- Gonorrhea

- Granuloma inguinale
- ! Haemophilus influenzae invasive disease in children <5 years old
- Hansen's disease (leprosy)
- Hantavirus infection
- Hemolytic uremic syndrome (HUS)
- Hepatitis A
- Hepatitis B, C, D, E, and G
- Hepatitis B surface antigen in pregnant women or children <2 years old
- Herpes B virus, possible exposure
- Herpes simplex virus (HSV) in infants <60 days old with disseminated infection and liver involvement; encephalitis; and infections limited to skin, eyes, and mouth; anogenital HSV in children <12 years old
- + Human immunodeficiency virus (HIV) infection
- HIV, exposed infants <18 months old born to an HIV-infected woman
- Human papillomavirus (HPV), associated laryngeal papillomas or recurrent respiratory papillomatosis in children <6 years old; anogenital papillomas in children <12 years old
- ! Influenza A, novel or pandemic strains
- Influenza-associated pediatric mortality in children <18 years old</p>
- Lead poisoning
- Legionellosis
- Leptospirosis
- **S** Listeriosis
- Lyme disease
- Lymphogranuloma venereum (LGV)
- Malaria
- ! Measles (rubeola)
- ! Melioidosis
- Meningitis, bacterial or mycotic
- Meningococcal disease
- Mercury poisoning
- Mumps
- + Neonatal abstinence syndrome (NAS)
- Neurotoxic shellfish poisoning
- Pertussis
- Pesticide-related illness and injury, acute

- Plague
- ! Poliomvelitis
- Psittacosis (ornithosis)
- Q Fever
- Rabies, animal or human
- Rabies, possible exposure
- Ricin toxin poisoning
- Rocky Mountain spotted fever and other spotted fever rickettsioses
- Rubella
- St. Louis encephalitis
- Salmonellosis
- Saxitoxin poisoning (paralytic shellfish poisoning)
- ! Severe acute respiratory disease syndrome associated with coronavirus infection
- Shigellosis
- ! Smallpox
- Staphylococcal enterotoxin B poisoning
- Staphylococcus aureus infection, intermediate or full resistance to vancomycin (VISA, VRSA)
- Streptococcus pneumoniae invasive disease in children <6 years old
- Syphilis
- Syphilis in pregnant women and neonates
- Tetanus
- Trichinellosis (trichinosis)
- Tuberculosis (TB)
- Tularemia
- Typhoid fever (Salmonella serotype Typhi)
- ! Typhus fever, epidemic
- ! Vaccinia disease
- Varicella (chickenpox)
- ! Venezuelan equine encephalitis
- Vibriosis (infections of Vibrio species and closely related organisms, excluding Vibrio cholerae type O1)
- ! Viral hemorrhagic fevers
- West Nile virus disease
- ! Yellow fever

*Section 381.0031 (2), Florida Statutes (F.S.), provides that "Any practitioner licensed in this state to practice medicine, osteopathic medicine, chiropractic medicine, naturopathy, or veterinary medicine; any hospital licensed under part I of chapter 395; or any laboratory licensed under chapter 483 that diagnoses or suspects the existence of a disease of public health significance shall immediately report the fact to the Department of Health." Florida's county health departments serve as the Department's representative in this reporting requirement. Furthermore, Section 381.0031 (4), F.S. provides that "The department shall periodically issue a list of infectious or noninfectious diseases determined by it to be a threat to public health and therefore of significance to public health and shall furnish a copy of the list to the practitioners..."