EPI Monthly Report

Florida Department of Health in Miami-Dade County

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Zika Virus Transmission: Tackling More Than Mosquitoes

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Inside the Issue

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Zika virus is a flavivirus that is primarily transmitted by the bite of an infected *Aedes* mosquito, mostly the species *Aedes aegypti*. These mosquitoes are found in parts of the United States, and also transmit dengue and chikungunya viruses. As of February 25th, 2016, there have been 35 cases of Zika Virus in Florida, with 13 of those cases in Miami-Dade County. All of these cases were travel-acquired. Zika virus can cause relatively mild illness in the 1 in 5 people who become symptomatic once infected, but there may be an association between Zika virus and severe complications for the babies of women who were infected with Zika while pregnant, including miscarriage. While Zika virus is primarily a vector-borne disease, however, infections have been documented through sexual, intrauterine, intrapartum, and blood transmission.

There is evidence that Zika virus can be sexually transmitted by an infected man to his sex partners. In the known cases of likely sexual transmission, the men developed Zika symptoms. In one of these cases, the virus was spread to the man's partner a few days before the man had become symptomatic. Although it is known that the Zika virus can remain in a person's blood for about a week, it is not known how long the virus can remain in semen, although it is known that the virus is present in semen longer than in blood. One report found the virus in semen at least two weeks after the development of symptoms. Another report found the virus in semen at least sixty-two days after the development of symptoms. The tests to detect Zika virus in semen are not widely available, and there is currently a limited understanding of how to interpret such tests. Because of this, the testing of semen to determine the risk of sexual transmission is not advised at this time. It is currently not known whether a woman can transmit Zika virus to her sexual partner.

If a man is bitten by a Zika-infected mosquito and then has sex with his partner, there is a risk for the sexual transmission of the Zika virus. Sexual transmission of Zika virus also can occur and is of particular concern if the infected man's partner is pregnant. Men who live in or travel to Zika-affected areas should take the necessary precautions to avoid mosquito bites. If a man develops the symptoms of Zika within two weeks after having been in a Zika-affected area, he should see his healthcare provider. If a pregnant woman or a woman who is trying to become pregnant believes that her male partner is or has been infected with Zika virus, she should talk to her healthcare provider about her partner's travel history,

whether or not he took steps to avoid mosquito bites, and whether or not they engaged in unprotected sex since his return. The best way to prevent the sexual transmission of Zika is abstain from sex. If a person does choose to be sexually active, using latex condoms consistently and correctly during vaginal, anal, or oral sex can reduce the risk of sexual transmission of Zika virus.

There is also a possible connection between Zika virus infection and miscarriages. Two women in the United States who contracted Zika virus while travelling out of the country miscarried after returning home. There have also been reports of miscarriages among mothers and their congenitally-infected fetuses in Brazil, the epicenter of the ongoing Zika virus epidemic.

Miscarriage is one of several adverse pregnancy outcomes that are possibly linked to Zika, another being microcephaly, a rare congenital condition in which babies have small heads and brain abnormalities. Until more is known about the relationship between Zika virus and poor pregnancy outcomes, the CDC recommends special precautions for pregnant women, or those trying or planning to become pregnant:

Pregnant Women:

- Consider postponing or cancelling travel to areas where Zika virus transmission is ongoing
- If you must travel to one of these areas, talk to your healthcare provider first and strictly follow steps to prevent mosquito bites during the trip
- If you have a male sex partner who lives in or who has traveled to an area where Zika virus transmission is ongoing, either abstain from sex or engage in consistent and correct condom use for the duration of your pregnancy
- Talk to your healthcare provider about your recent travel to a Zika-affected area, even if you do not feel sick
- See your doctor if you develop any of the Zika illness symptoms (fever, rash, joint pain, or conjunctivitis) within two weeks of traveling to a place where local transmission of Zika virus has been reported

Women trying to become pregnant:

- Before you and/or your male partner travel, talk to your healthcare provider about your plans to become pregnant and the risk of Zika virus infection
- You and your male partner should strictly follow steps to prevent mosquito bites during your trip to a Zika-affected area

In addition to sexual, intrauterine, and intrapartum transmission, Zika virus can also be transmitted by blood. In light of this, the Food & Drug Administration (FDA) has recently released guidelines concerning blood donations made by individuals who have recently returned from Zika -affected areas. While there have been no reports of Zika virus being introduced into the United States blood supply, the risk of transmission still must be considered, especially as 4 out of 5

people infected with Zika virus will not exhibit signs or symptoms of the infection. As such, the FDA has issued guidelines recommending that potential blood donors who are at-risk for Zika virus infection be deferred for 4 weeks. At-risk donors include those who have traveled to areas with active transmission of Zika virus during the past four weeks, those who have had symptoms suggestive of Zika virus infection during the past four weeks, and/or those who have had sexual contact with a person who has traveled to or resided in an area with active Zika virus transmission during the past three months.

In areas that are experiencing ongoing Zika virus transmission, the FDA recommends that Whole Blood and blood components for transfusion be obtained from areas of the United States that do not have locally-acquired transmission. Donor and blood establishments may continue to collect and prepare platelets and plasma if they utilize an FDA-approved pathogen-reduction device. The guidance also recommends that establishments update donor education materials with information regarding Zika virus signs and symptoms, and ask potentially infected donors to refrain from giving blood. Aside from the release of this guidance, the FDA is also prioritizing the development of blood screening and diagnostic tests that could identify the presence of the Zika virus in blood.

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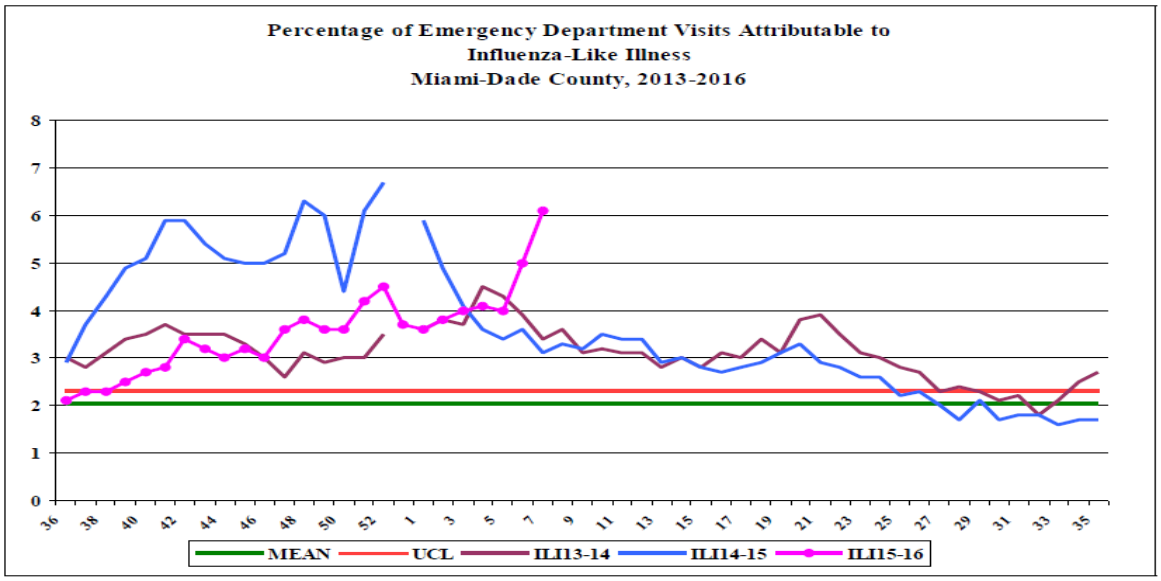
Influenza-Like-Illness, All Age



During this period, there were 28,803 ED visits; among them 1,753 (6.1%) were ILI. At the same week of last year, 3.1% of ED visits were ILI.

TO REPORT ANY DISEASE AND FOR INFORMATION CALL:
Epidemiology, Disease Control & Immunization Services

Childhood Lead Poisoning Prevention Program	305-470-6877
Hepatitis	305-470-5536
Immunizations or outbreaks	305-470-5660
HIV/AIDS Program	305-470-6999
STD Program	305-575-5430
Tuberculosis Program	305- 575-5415
Immunization Service	305-470-5660
To make an appointment	786-845-0550

PARTICIPATE IN INFLUENZA SENTINEL PROVIDER SURVEILLANCE

Florida Department of Health in Miami-Dade County NEEDS Influenza Sentinel Providers!

Sentinel providers are key to the success of the Florida Department of Health's Influenza Surveillance System. Data reported by sentinel providers gives a picture of the influenza virus and ILI activity in the U.S. and Florida which can be used to guide prevention and control activities, vaccine strain selection, and patient care.

- Providers of any specialty, in any type of practice, are eligible to be sentinel providers.
- Most providers report that it takes **less than 30 minutes a week** to compile and report data on the total number of patients seen and the number of patients seen with influenza-like illness.
- Sentinel providers can submit specimens from a subset of patients to the state laboratory for virus isolation **free of charge**.

For more information, please contact

Lakisha Thomas at 305-470-5660.

About the Epi Monthly Report

The Epi Monthly Report is a publication of the Florida Department of Health in Miami-Dade County: Epidemiology, Disease Control & Immunization Services. The publication serves a primary audience of physicians, nurses, and public health professionals. Articles published in the Epi Monthly Report may focus on quantitative research and analysis, program updates, field investigations, or provider education. For more information or to submit an article, please contact Emily Moore at (305) 470-6918.

Miami-Dade County Monthly Report
Select Reportable Disease/Conditions
January 2016

Diseases/Conditions	2016 Current Month	2016 Year to Date	2015 Year to Date	2014 Year to Date
HIV/AIDS				
AIDS*	29	29	25	36
HIV	122	122	107	99
STD				
Infectious Syphilis*	22	22	19	29
Chlamydia*	680	680	562	669
Gonorrhea*	158	158	124	153
TB				
Tuberculosis**	3	3	5	7
Epidemiology, Disease Control & Immunization Services				
Epidemiology				
Campylobacteriosis	19	19	16	19
Chikungunya Fever	0	0	1	0
Ciguatera Poisoning	0	0	0	0
Cryptosporidiosis	1	1	0	3
Cyclosporiasis	0	0	0	0
Dengue Fever	2	2	1	0
Escherichia coli, Shiga Toxin-Producing	1	1	2	0
Encephalitis, West Nile Virus	0	0	0	0
Giardiasis, Acute	8	8	6	11
Influenza Novel Strain	0	0	0	0
Influenza, Pediatric Death	0	0	0	1
Legionellosis	0	0	1	1
Leptospirosis	0	0	0	0
Listeriosis	0	0	0	0
Lyme disease	0	0	0	0
Malaria	0	0	0	0
Meningitis (except aseptic)	0	0	1	2
Meningococcal Disease	0	0	1	0
Salmonella serotype Typhy (Typhoid Fever)	0	0	0	0
Salmonellosis	34	34	32	31
Shigellosis	12	12	6	20
Streptococcus pneumoniae, Drug Resistant	0	0	0	3
Vibriosis	0	0	0	1
West Nile Fever	0	0	0	0
Immunization Preventable Diseases				
Measles	0	0	0	0
Mumps	0	0	0	0
Pertussis	2	2	0	1
Rubella	0	0	0	0
Tetanus	0	0	0	0
Varicella	1	1	0	3
Hepatitis				
Hepatitis A	1	1	0	1
Hepatitis B (Acute)	0	0	0	1
Healthy Homes				
Lead Poisoning	2	2	4	8

*Data is provisional at the county level and is subject to edit checks by state and federal agencies.

** Data on tuberculosis are provisional at the county level.