Summer Travel Preparation Should Still Include Zika Virus Prevention

Zika virus is a single-stranded RNA virus of the Flaviviridae family, genus Flavivirus and continues to remain a global public health threat. The virus, which has been discovered in over 60 countries since the detection of the 2015 outbreak in Brazil, has the potential to spread where competent vectors are present. Zika virus is transmitted to humans primarily through the bite of an infected Aedes species mosquito. Ae. aegypti is responsible for the current outbreak in the Americas while Ae. albopictus has been shown to be able to transmit Zika virus in Africa and in laboratory settings. New Jersey does not have an established population of Ae. aegypti, but Ae. albopictus can be found in every county. To date, NJ has not had any cases of local mosquito transmission of Zika, but the virus can also be spread through sex, blood transfusion, laboratory and health care setting exposure, and from a pregnant woman to her fetus. Zika virus infection eight weeks prior to conception and during pregnancy is a cause of microcephaly and other severe birth defects.

Most people infected with Zika virus will not have symptoms or will only have mild symptoms lasting several days to a week. The most common symptoms of Zika include fever, rash, joint pain and conjunctivitis. Other symptoms are muscle pain and headache. In New Jersey, health care providers may contact the local health department in which the patient resides to seek approval for Zika virus testing.

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“B” Aware of Changes

The 2017 Immunization Schedule has revised the language for the universal birth dose of hepatitis B vaccine.

Each year, the Advisory Committee on Immunization Practices (ACIP) approves immunization schedules for persons living in the United States. The immunization schedule for children and adolescents aged 18 years or younger provides a summary of ACIP recommendations on the use of routinely recommended vaccines. In October 2016, ACIP approved the 2017 Immunization Schedule for children and adolescents birth through 18 years, effective February 1, 2017.

The changes to the 2017 Immunization Schedule include a change to the recommendation concerning the universal hepatitis B birth dose. Previous immunization schedules recommended the administration of hepatitis B vaccine to all newborns before hospital discharge. The 2017 Immunization Schedule now recommends that all newborns receive the birth dose of hepatitis B vaccine within 24 hours of birth. The recommendations state:

- Monovalent hepatitis B vaccine should be administered within 24 hours of birth for medically stable infants weighing ≥2,000 grams born to hepatitis B surface antigen (HBsAg)-negative mothers. The recommendations for vaccination of infants <2,000 grams (as well as infants born to HBsAg-positive mothers or mothers whose hepatitis B status is unknown) remain unchanged.
- Preterm infants weighing <2,000 grams born to HBsAg-negative mothers should receive the first dose of vaccine one month after birth or at hospital discharge.
- Additional detail regarding hepatitis B vaccination of infants born to HBsAg-positive mothers or mothers whose hepatitis B status is unknown can be found in the MMWR Recommendations and Reports.

According to data from the 2015 National Immunization Survey, only 63.9% (+7.2) of babies born in New Jersey received the hepatitis B vaccine prior to hospital discharge compared with 72.4% (+1.4) nationally.

All New Jersey birthing hospitals should review and revise their policies and procedures to ensure that neonates receive the birth dose of hepatitis B vaccine within the newly recommended time frame. The “universal birth dose policy” provides a safety net to prevent hepatitis B virus infection for at-risk newborns, including infants not identified because the mother did not receive prenatal care; because of
Zika Awareness for College Students

Zika came, Zika saw, Zika conquered. It captured the world’s attention and fears, but has since taken the media backburner. Unfortunately, Zika doesn’t care when the media jumps onto the next bandwagon, and that means many college students traveling to areas with active Zika transmission may be unaware that it’s still a risk. Angel Weng, an intern with the Communicable Disease Service, is working on a project to create a Zika awareness campaign at Rutgers University and to conduct a pre- and post-survey to determine the campaign’s efficacy. Survey responses from Rowan University will be used as a control.

The survey was created through an electronic survey tool, with knowledge, attitudes and practices questions selected from a Zika resource pack published by the World Health Organization. Respondents had a maximum of 29 questions, with some being skipped depending on how they answered previous questions. All results are anonymous and aggregated.

There are 62 completed responses to the pre-survey. Some interesting results are as follows:

- Although Zika was discovered in 1947 and the first large outbreak occurred in 2007 on the Island of Yap, 66% of respondents first heard about Zika last year. 17 respondents (27%) did hear about Zika many years ago.
- The top three places where respondents have received information about Zika are from 1) the internet (74%), 2) television (66%), and 3) social media (55%). They have received the least information from pharmacies (3%) and private doctors (16%).
- The top three places that respondents trust to give the most accurate information about Zika are 1) private doctors (69%), 2) health workers at the student health center (56%), and 3) government announcements (39%). Only one respondent (1.6%) trusted social media and seven (11%) trusted television, which is in contrast to where most people hear information.
- The top three places where respondents want more information from are 1) private doctors (74%), 2) health workers at the student health center (71%), and 3) government announcements (47%), directly correlated to which sources they trust for information.
- While 98% of respondents knew that Zika is transmitted through mosquito bites, less than half (45%) knew that Zika is also transmissible through sex.

A potential reason for why college students are not hearing information about Zika from trusted sources is that they are generally a healthy population or are not currently pregnant or planning on becoming pregnant. However, the survey results exhibit the need to discuss the role of television and social media in communicating accurate and trusted Zika information to young adults.
Summer Travel, continued from page 1

Only health care providers may obtain approvals and Zika testing requires a prescription. There is no specific medicine or vaccine for Zika virus, but symptoms are treated with rest, hydration, and acetaminophen for pain. Non-steroidal anti-inflammatory drugs (NSAIDS) should not be given until dengue can be ruled out to reduce the risk of bleeding. The best way to prevent Zika virus infection is to reduce the risk of mosquito bites. Travelers should apply Environmental Protection Agency (EPA)-registered insect repellents, always follow product label instructions and reapply insect repellent as directed. Weather permitting, long sleeves and pants should be worn and air conditioning should be utilized whenever possible. Window and door screens should be in good repair and a bed net may be used if necessary. All travelers returning to the United States from a Zika-affected area should take steps to prevent mosquito bites for three weeks after returning. This helps protect the local mosquito population from potentially becoming infected with Zika virus. Sexual transmission of Zika virus can be reduced by using condoms and other barrier methods against infection from start to finish during each sex act. Sex includes vaginal, anal, and oral sex and the sharing of sex toys. Abstinence eliminates the risk of sexual transmission. Men should consider using condoms or not having sex for at least six months after travel. Women should consider using condoms or not having sex for at least eight weeks after travel. Women who are pregnant in any trimester should not travel to areas with active Zika virus transmission. Couples trying to get pregnant should consider avoiding nonessential travel to areas with active Zika virus transmission. These areas may change over time; however, the Centers for Disease Control and Prevention maintains a current list at: https://www.cdc.gov/zika/geo/index.html. Travelers to areas with active Zika virus transmission should pack EPA-registered insect repellent, long sleeves and pants, condoms, and a bed net if necessary. Anyone who develops symptoms of Zika during or after travel should contact a health care provider and mention travel. For more information and resources, visit http://www.nj.gov/health/cd/zika or call the 24/7 Zika call center staffed by the New Jersey Poison Information and Education System at 1-800-962-1253.
CDS Welcomes New Staff!

Bernice Carr – Bernice has joined the CDS for a temporary position to assist with hepatitis C surveillance. She earned a Master of Public Health degree from George Washington University, and has a Master of Science degree in food science from Rutgers University.

Angel Weng – Angel is a student intern at Rutgers University, graduating in May 2017 with a Bachelor of Arts degree in Neuroscience and a Bachelor of Science degree in Public Health. Angel is interested in infectious diseases and public health. She is working on a Zika awareness campaign for college students.

Assunta Carey – Assunta is a student intern from The College of New Jersey, graduating in May 2017 with a public health major and a sociology minor. Assunta is looking to expand her experience in public health and will be working on injection safety initiatives.

Christina Montagano – Tina joins the CDS as the Vaccines for Children Agency Services Representative. She is a nationally certified medical assistant and has 18 years of health care experience.

Infectious Disease Fact

The deadliest animal in the world is.....

The mosquito, accounting for approximately 750,000 human deaths per year, ranks as the deadliest animal on Earth. Malaria, just one disease spread by mosquitoes, is responsible for 600,000 deaths per year. By comparison, sharks kill an average of six people, elephant attacks approximately 500 people, and snakes slither in with about 100,000 deaths per year.

Source: gatesnotes, 4/25/2014
**CDS Welcomes new Vector-borne Disease Coordinator**

Kim Cervantes joined the zoonotic disease team as the new vector-borne disease coordinator in January 2017. She may be a familiar face to many of you from her previous position as manager of the Regional Epidemiology Program, also located within the Communicable Disease Service, which she held since 2014. Prior to joining CDS, she was an epidemiologist for Cape May County, where she worked closely with the county’s Department of Mosquito Control and health educators to coordinate prevention, surveillance, and response activities related to West Nile virus and other arboviral diseases. She was also involved in surveillance and educational efforts related to tick-borne diseases. Kim’s work on mosquito-borne illnesses stretches back further to when she worked for USAID-funded projects to promote malaria prevention, early detection, and treatment in several countries in Africa. Kim earned a Master of Public Health degree in Epidemiology and Biostatistics from George Washington University. She is certified in infection control and prevention and is a NJ licensed health officer. She looks forward to continued collaboration with state and local public health partners in her new role.

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**“B” Aware of Changes, continued from page 1**

errors made by health care professionals in ordering, recording, or communicating lab test results to determine a mother’s hepatitis B status; or because of exposure to chronically infected members of the household (many people do not know they are infected).

For a comprehensive summary of the childhood and adolescent recommended immunizations, please visit the [2017 ACIP Recommended Schedule](http://www.cdc.gov/vaccines/schedules/downloads/acip.pdf). Immunization coverage data can be accessed at [National Immunization Surveys](http://www.cdc.gov/vaccines).
NEW Hepatitis Action Plan Available

The National Viral Hepatitis Action Plan for 2017-2020 is now available. The updated plan outlines strategies to achieve four goals to eliminate hepatitis B and hepatitis C by 2020. This action plan is streamlined and provides action-oriented tasks to address hepatitis B and hepatitis issues surrounding prevention, testing, treatment, stigma and discrimination, and access to care. The action plan was developed with state and federal partners and stakeholders across the country.

The four goals of the action plan include:

Goal 1: Prevent new viral hepatitis infections
Goal 2: Reduce deaths and improve the health of people living with viral hepatitis
Goal 3: Reduce viral hepatitis health disparities
Goal 4: Coordinate, monitor, and report on implementation of viral hepatitis activities

Check out the new action plan and read the plan to eliminate hepatitis in the United States.

https://www.cdc.gov/hepatitis/hhs-actionplan.htm

Ambassador Training Continues in NJ

The Safe Injection Ambassador Train-the-Trainer Program trained 45 health care professionals across the state on March 10, 2017. Representatives from acute care, ambulatory surgery centers, dialysis, long term care, and public health participated in the training. As safe injection ambassadors, these individuals will provide presentations to colleagues and other health professionals and educate providers about safe injection practices in health care settings.

The ambassador training is a day-long interactive training that covers various aspects of injection safety, including: infection control breaches involving injections and their impact on the health care system, state and national public health investigations and outbreaks associated with poor injection practices, and more.

The Safe Injection Ambassador program is recognized as a model program by the Centers for Disease Control & Prevention and has been replicated multiple times by other safe injection partners across the country. Since 2012, New Jersey has trained approximately 65 ambassadors. Safe injection ambassadors have provided more than 115 presentations reaching nearly 2,000 New Jersey health professionals.
Hepatitis C Testing for Baby Boomers

Did you know that the Centers for Disease Control & Prevention (CDC) recommends one-time testing for people born 1945-1965 (Baby Boomers)? According to the CDC, of the 3.2 million people chronically infected with hepatitis C in the United States, approximately 75% were born during 1945-1965. National data shows that people born during these years are five times more likely than other adults to be infected with hepatitis C. Adults born during 1945-1965 should receive one-time testing for the hepatitis C virus. Getting tested for hepatitis C is the best way to determine if you may be infected.

Posters with the CDC one-time testing recommendation are also available at the CDC Info website. Order your materials today!!

BABY BOOMERS HAVE THE HIGHEST RATES OF HEPATITIS C.

Talk to your doctor about getting tested. Early detection can save lives.
FREE Hepatitis Education Materials

Did you know that you can order FREE hepatitis posters and materials? CDC Info is a clearinghouse for education materials, including brochures and posters. Check out the many materials for the “kNOw Hepatitis B” campaign. Materials are available in multiple languages, such as Chinese, Vietnamese, and Korean, and can be ordered online at: https://www.cdc.gov/cdc-info/

Krista Reale presents a poster detailing 2016 CDS Zika virus communication and outreach activities at the 104th Annual Meeting of the New Jersey Mosquito Control Association.
Injection Safety

Myths surrounding safe injection practices exist among health care providers. Check out the graphic and see if you can separate the myths from the truths about injection safety! Injection safety is every provider’s responsibility.

DANGEROUS MISPERCEPTIONS

Here are some examples of dangerous misperceptions about safe injection practices.

**Myth**

- Changing the needle makes a syringe safe for reuse.
- Syringes can be reused as long as an injection is administered through IV tubing.
- If you don’t see blood in the IV tubing or syringe, it means that those supplies are safe for reuse.
- It’s okay to use leftover medicine from use single-dose or single-use vials for more than one patient.

**Truth**

- Once they are used, both the needle and syringe are contaminated and must be discarded. A new sterile needle and a new sterile syringe should be used for each injection and each entry into a medication vial.
- Syringes and needles should never be reused. The IV tubing, syringe, and other components represent a single, interconnected unit. Distance from the patient, gravity, or infusion pressure do not ensure that small amounts of blood won’t contaminate the syringe once it has been connected to the unit.
- Germs such as hepatitis C virus and staph or MRSA are invisible to the naked eye, but can easily infect patients even when present in microscopic quantities. Do not reuse syringes, needles, or IV tubing.
- Single-dose or single-use vials should not be used for more than one patient regardless of how much medicine is remaining.

Injection Safety is Every Provider’s Responsibility!

The One & Only Campaign is a public health effort to eliminate unsafe medical injections. To learn more about safe injection practices, please visit OneandOnlyCampaign.org.

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