

### Communicable Disease Service Mission Statement

Our mission is to prevent communicable disease among all citizens of New Jersey, and to promote the knowledge and use of healthy lifestyles to maximize the health and well-being of New Jerseyans.

We will accomplish our mission through our leadership, collaborative partnerships, and advocacy for communicable disease surveillance, research, education, treatment, prevention and control.

Chris Christie, Governor Kim Guadagno, Lt. Governor Mary E. O'Dowd, MPH Commissioner

#### **COMMUNICABLE DISEASE SERVICE**

Christina Tan, MD, MPH State Epidemiologist/ Assistant Commissioner

Gary Ludwig, MS, Director

Suzanne Miro, MPH, MCHES Editor, Research Scientist





### August is National Immunization Awareness Month

hroughout the month of August, the New Jersey Department of Health celebrates National Immunization Awareness Month (NIAM). The purpose of this observance is to highlight the importance of immunizations across the lifespan. Children, adolescents, and adults should all be current with vaccines to protect themselves and their loved ones against serious, and sometimes deadly, diseases.

Vaccines are recommended throughout the lifespan based on age, lifestyle, occupation, locations of travel, medical conditions, and previous vaccines.

- The flu vaccine is recommended for everyone six months of age and older.
- ❖ Childhood vaccines protect against 14 serious diseases including diphtheria, tetanus, pertussis (whooping cough), polio, measles, mumps, rubella, *Haemophilus influenzae* type b (Hib), hepatitis B, pneumococcal disease, and rotavirus.

❖ Preteens and teens should receive vaccines to protect against tetanus, diphtheria, and pertussis (Tdap), human papillomavirus (HPV), meningococcal disease, and the seasonal flu. During this time, health care providers should make sure adolescents are up-to-date with all of the recommended vaccines they might have missed as a child such as varicella (chickenpox) and hepatitis A vaccines.

Continued on page 8







# **Chikungunya Virus: Identification and Testing Information for Healthcare Providers**

hikungunya virus, or CHIKV, is a mosquito-borne illness originally discovered in Africa about 65 years ago. The two species of mosquitoes that normally transmit CHIKV are *Aedes aegypti* and *Aedes albopictus* (the Asian tiger mosquito), which are the same mosquitoes that transmit dengue and are aggressive daytime biters. Humans are the primary reservoir during epidemics; however, there is no direct person-to-person transmission.

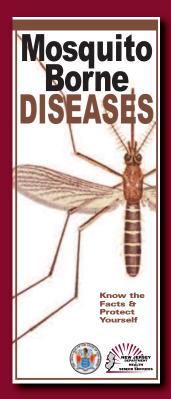
Outbreaks of CHIKV have been documented in Africa, Southern Europe, Southeast Asia, the Indian subcontinent, and islands in the Indian and Pacific Oceans. In late 2013. CHIKV was found for the first time on islands in the Caribbean. Since then, the virus has been found in multiple countries or territories in the Caribbean, Central America, and South America. In July 2014, two confirmed cases of CHIKV were reported in Florida—the first known locally acquired cases in the United States. Many states in the US have competent vectors for CHIKV,

including New Jersey, and identifying infected travelers in a timely manner is important to reduce the likelihood of autochthonous transmission in our region.

The majority of people infected with chikungunya virus become symptomatic. The incubation period is typically 3–7 days (range 1–12 days) following the bite of an infected mosquito. The most common symptoms are acute onset of fever and polyarthralgia. Joint pains are usually bilateral and symmetric, and may be severe and debilitating. Other symptoms may include headache, myalgia, arthritis, conjunctivitis, nausea / vomiting or maculopapular rash.

CHIKV should be considered in patients with acute onset of fever and polyarthralgia who recently returned from the Caribbean or other areas where local transmission has been documented. A list of geographic areas with CHIKV may be found online at <a href="https://www.cdc.gov/chikungunya/geo/index.ht">www.cdc.gov/chikungunya/geo/index.ht</a> ml. The differential diagnosis of

Continued on page 7



The NJDOH Communicable Disease Service includes:

Infectious and Zoonotic Disease Program (IZDP): 609-826-5964

Vaccine Preventable Disease Program (VPDP): 609-826-4860

We're on the Web! www.nj.gov/health/cd

Past issues of the New Jersey Communi-CABLE are available online at: http://nj.gov/health/cd/pub.shtml.





Chikungunya virus is most often spread to people by *Aedes aegypti* and *Aedes albopictus* mosquitoes. These are the same mosquitoes that transmit dengue virus. They bite mostly during the daytime. These types of mosquitoes are found throughout much of the world.





### What's New in Tick-borne Diseases?

armer weather has arrived—it's time to guard against ticks. The most common tick-borne diseases in New Jersey are Lyme disease, ehrlichiosis, anaplasmosis, Rocky Mt. spotted fever, and babesiosis. In addition, emerging illnesses such as Powassan virus, Heartland virus, and Bourbon virus are also transmitted by ticks and could potentially pose a threat.

**Powassan Virus:** Powassan virus is one of a group of arthropod-borne viruses (arboviruses) spread by ticks that can cause inflammation of the brain (encephalitis). Approximately 60 cases of Powassan virus disease were reported in the United States over the past decade, including two in New Jersey. Experts claim deer ticks can transmit Powassan in as little as 15 minutes. Many people who become infected do not exhibit symptoms, but signs can include fever, headache, vomiting, weakness, confusion, loss of coordination, speech difficulties, and seizures.

Heartland Virus: Heartland virus belongs to a family of viruses called Phleboviruses. While it is not completely known how people become infected, recent studies suggest that ticks (specifically the Lone Star tick) may transmit the virus. As of March 2014, eight cases of Heartland virus disease have been identified among residents of Missouri and Tennessee. It is currently not known if the virus may be found in other areas of the United States. There have only been a few cases reported, but all patients diagnosed with Heart-

land virus disease became sick during May-September. They all had a fever and felt very tired. Some also complained of headaches, muscle aches, diarrhea, loss of appetite, or nausea.

Bourbon Virus: Bourbon virus belongs to a group of viruses called thogotoviruses. Though it is not entirely known how people become infected, it is likely spread through tick or other insect bites. As of February 12, 2015, only one case of Bourbon virus disease had been reported in eastern Kansas in late spring 2014. In the one person diagnosed with this disease, symptoms included fever, tiredness, rash, headache, body aches, nausea, and vomiting.

There are no vaccines or medications to treat these illnesses, but supportive therapy can be used to manage symptoms. Reducing exposure to ticks is the best way to prevent tick-borne infections. Tick-borne illness may be prevented by avoiding tick habitat (dense woods and brushy areas), using insect repellents containing DEET or permethrin, wearing long pants and socks, performing tick checks and promptly removing ticks after outdoor activity.

diseases, visit the New Jersey Department of Health, Communicable Disease Service website at <a href="http://www.nj.gov/health/cd">http://www.nj.gov/health/cd</a> or the CDC Tick-Borne Diseases website at <a href="http://www.cdc.gov/ticks/diseases.">http://www.cdc.gov/ticks/diseases</a>.

For more information on tick-borne



The NJDOH Communicable Disease Service includes:

Infectious and Zoonotic Disease Program (IZDP): 609-826-5964

Vaccine Preventable Disease Program (VPDP): 609-826-4860

We're on the Web! www.nj.gov/health/cd

Past issues of the New Jersey Communi-CABLE are available online at: http://ni.gov/health/cd/pub.shtml.





afe Injection Practices Coalition



Page 4

## **Drug Diversion Conference a Success!**

ore than 100 health professionals attended the NI Drug Diversion Conference at Rutgers University on June 2, 2015. Participants included physicians, nurses, pharmacists, administrators, risk managers, security advisors and other health professionals representing acute care/hospital settings, ambulatory care, long-term care facilities and public health departments.

Speakers included:

- Jaime Pena, Asst. US Attorney, US State's Attorney's Office-Colorado
- Mitch Sobel, Director of Pharmacy Services, St. Joseph's Healthcare System
- ❖ Bindi Merchant, Deputy Attorney General, NJ Law & Public Safety-Division of Law

Stefanie Mozgai, Division Director, NI Department of Health, Health Facilities, Evaluation & Licensing

Ed Lifshitz, Medical Director, NJ Department of Health, Communicable Disease Service

The drug diversion conference

was planned as a part of New Jersey's on going commitment to safe injection practices, in conjunction with the Rutgers University School of Public Health-Office of Public Health Practice. New Jersey is one of seven partner states who are a part of the national coalition led by the Centers for Disease Control and Prevention (CDC). The CDC coalition, Safe Injection Practices Coalition (SIPC), provides recommendations, guidance and offers free materials and other resources as part of the campaign. New Jersey has been an SIPC partner since 2009.

For more information about the SIPC campaign, visit the website: www.oneandonlycampaign.org

To see NJ's safe injection practice initiatives, visit: www.oneandonlycampaign.org/partner/new-jersey 🔝



New Jersey Drug Diversion Conference at Rutgers University.

Communi-CABLE are available online at: http://ni.gov/health/cd/pub.shtml.

The NJDOH Communicable

**Disease Service includes:** 

**Infectious and Zoonotic Disease** 

Program (IZDP): 609-826-5964

**Vaccine Preventable Disease** Program (VPDP): 609-826-4860

We're on the Web!

www.nj.gov/health/cd

**Past issues of the New Jersey** 







# **Community Education Making** an Impact!

ntibiotic resistance continues to be a public health threat and has garnered greater attention at the national level over the past year. A multi-faceted problem, antibiotic resistance does not have one single approach that will reduce resistance. Both health care providers and patients need to know the role they play in misuse and how they can take steps to preserve the power of these life-saving drugs.

The New Jersey Department of Health (NJDOH), Communicable Disease Service (CDS) has been receiving grant funding through the Centers for Disease Control and Prevention – Get Smart About Antibiotics program over the past several years to address the issue. For the 2014-2015 grant year, one of the educational initiatives has focused on public education. In October 2014, Suzanne Miro, Sr. Health Communication Specialist, CDS, conducted a webinar to train health educators and public health workers to present the basics of antibiotic resistance. Participants received a toolkit of materials to help them deliver their presentations. "Teaching Communities About Antibiotic Resistance" is a classroom-style presentation that includes a PowerPoint slide set, brochures, and a pre/post-test. Trainees are asked to deliver this presentation to at least two different groups within their communities in order to reach as many people as possible across the state.

Although the program is still in the early stages of implementation with a total of 12 presentations and approximately 150 participants, analysis of the pre/post-test data reveals that the program is having a positive effect on changes in knowledge of those who participate in the program. Approximately 68% of the pre-tests were completed correctly by participants and that number increased to 96% on post-test demonstrating an overall 28% average increase in knowledge after receiving the education. These results are encouraging and will hopefully continue as additional programs are presented statewide.

Thank you to all of the professionals who are out in the community giving presentations. Those who have received the training last fall are encouraged to reach out to groups in the community and give presentations if they have not yet done so. Please contact Suzanne Miro if you have questions about the program or implementing the presentations (609-826-5964 or suzanne.miro@doh.state.nj.us).



The NJDOH Communicable Disease Service includes:

Infectious and Zoonotic Disease Program (IZDP): 609-826-5964

Vaccine Preventable Disease Program (VPDP): 609-826-4860

We're on the Web! www.nj.gov/health/cd

Past issues of the New Jersey Communi-CABLE are available online at: http://ni.gov/health/cd/pub.shtml.







# **Ebola Community Education Hits the Mark!**

he Ebola outbreak in West Africa, while at its height last year, created a lot of concern and misunderstanding among the public here in New Jersey. The "Garden State" being home to one of the few airports in the nation where

> flights from West Africa arrive, residents worried about potential risk of becoming infected by sick travelers. Despite rigorous airport health screening and public health monitoring protocols to control the situation, people continued to be afraid of

this foreign disease. Suzanne Miro, Sr. Health Communication Specialist said "It was clear that there was a lot of confusion, concern, and incorrect information among the public. Social media, and comments left on various news websites, were helpful to us in identifying the misinformation and common questions that people had at the time."

The New Jersey Department of Health (NJDOH), Communicable Disease Service (CDS), in an effort to address public concerns, developed a community education program specifically designed to increase knowledge about the disease, to decrease anxiety of perceived risk of infection, and to help people to understand how the public health system in New Jersey is working to control the situation. A webinar was held in fall 2015 to train health educators and other public health professionals in using the community presentation materials.

The CDS has received post-tests for 31 presentations and approximately 400 participants. Analysis of the pre/post-test data demonstrates that the program is having a positive effect on changes in knowledge among those who participate in the program (95% answered "strongly agree" or "agree" which are the desired responses). Programs have been delivered statewide since October and have reduced in frequency during the past few months as the number of Ebola cases in West Africa continue to decrease. 🚣



## The NJDOH Communicable Disease Service includes:

Infectious and Zoonotic Disease Program (IZDP): 609-826-5964

Vaccine Preventable Disease Program (VPDP): 609-826-4860

We're on the Web! www.nj.gov/health/cd

Past issues of the New Jersey Communi-CABLE are available online at: http://nj.gov/health/cd/pub.shtml.



# Coming soon - Revised Antibiotic Prescribing CME Modules!!!

The New Jersey Department of Health, in conjunction with Rutgers, is in the process of revising and updating two modules for appropriate antibiotic prescribing to bring them in line with current prescribing guidelines. The online, self-study modules are a quick and easy way for clinicians to freshen their skills and receive continuing medical education credit. More information to come in the fall!

### Mosquitos, continued from page 2

CHIKV varies based on travel history and exposure. Dengue virus frequently co-circulates in areas where CHIKV is present, and may cause similar symptoms; as such, laboratory diagnosis is strongly encouraged. Patients with suspected CHIKV should be managed as dengue until dengue has been ruled out. Proper clinical management of dengue reduces the risk of medical complications and death. Aspirin and other NSAIDs should be avoided until dengue has been ruled out as these analgesics can increase the risk of hemorrhage in patients with dengue.

Laboratory diagnosis is generally accomplished by testing serum to detect virus, viral nucleic acid, or virus-specific immunoglobulin M (IgM) and neutralizing antibodies. During the first eight days of illness, chikungunya viral RNA can be identified in serum; virus antibodies typically develop toward the end of the first week of illness. CHIKV testing is performed at the CDC, two state health departments (California and New York) and one commercial laboratory (Focus Diagnostics). Healthcare providers are strongly urged to consider testing suspect cases by sending serum to Focus Diagnostics or contacting the New Jersey Department of Health Vectorborne Disease Program at (609) 826-5964 to facilitate testing at the CDC.

CHIKV is a reportable condition in NJ, under the N.J.A.C. 8:57 category "Arboviral diseases." Confirmed cases must be reported within 24 hours of diagnosis to the local health

department (LHD) where the person resides. Cases should be reported using the New Jersey Department of Health online, secure Communicable Disease Reporting and Surveillance System (CDRSS); health care providers without access to CDRSS should report cases directly to the appropriate local health department. Contact information for LHDs can be found at <a href="https://www.localhealth.nj.gov">www.localhealth.nj.gov</a>.

No vaccine or preventive drug is available. The best way to prevent becoming infected with CHIKV is to avoid mosquito bites. It is also imperative that newly infected patients avoid mosquito bites for one week following symptom onset to reduce the chances of transmitting the virus to local mosquito populations. Air conditioning or screens should be used when indoors. Standing water should be emptied from containers such as flowerpots and water in pet dishes and bird baths should be changed regularly. Insect repellent should be used and, weather permitting, long sleeves and pants should be worn when outdoors. Repellents containing DEET, picaridin IR3535 and oil of lemon eucalyptus PMD provide long-lasting protection against mosquitoes that may transmit CHIKV. People at increased risk for severe disease should consider not traveling to areas with ongoing CHIKV outbreaks.

Additional general information on CHIKV can be found at <a href="http://www.cdc.gov/chikungunya">http://www.cdc.gov/chikungunya</a> and information for providers can be found at <a href="http://www.cdc.gov/chikungunya/pdfs/CHIKV">http://www.cdc.gov/chikungunya/pdfs/CHIKV</a> Clinicians.pdf.



Get more information at <a href="http://nj.gov/health/cd/ha">http://nj.gov/health/cd/ha</a> <a href="ndwashing.shtml">ndwashing.shtml</a>.

The NJDOH Communicable Disease Service includes:

Infectious and Zoonotic Disease Program (IZDP): 609-826-5964

Vaccine Preventable Disease Program (VPDP): 609-826-4860

We're on the Web! www.nj.gov/health/cd

Past issues of the New Jersey Communi-CABLE are available online at: http://ni.gov/health/cd/pub.shtml.





Love them. Protect them

Immunize them.



Page 8

#### NIAM, continued from page 1

- ❖ Vaccines are recommended for adults to prevent diseases such as shingles, pneumococcal disease, hepatitis, and whooping cough. Occasionally recommendations for vaccines are readjusted to a new age or risk group and may include booster doses or even new vaccines.
- \* Every adult should get the Tdap vaccine once. Women should receive the vaccine each time they are pregnant to protect their babies against whooping cough. Adults should receive a Td booster shot every 10 years. Tdap may be given as one of these boosters if the individual has not already gotten a dose.

❖ Health care providers should ask patients if they are considering traveling abroad in the near future, especially if they are visiting areas where certain vaccine-preventable diseases are endemic. Ideally, necessary vaccinations should be given at least 4-6 weeks before travel in order to give the body time to build up immunity.

In celebration of NIAM, consider conducting grand rounds, providing after-hour and weekend immunization services, or promoting educational resources on your web page or social media networks. For more information about NIAM, visit <a href="http://www.cdc.gov/vaccines/events/">http://www.cdc.gov/vaccines/events/</a>

http://www.cdc.gov/vaccines/events/

## The NJDOH Communicable Disease Service includes:

Infectious and Zoonotic Disease Program (IZDP): 609-826-5964

Vaccine Preventable Disease Program (VPDP): 609-826-4860

We're on the Web! www.nj.gov/health/cd

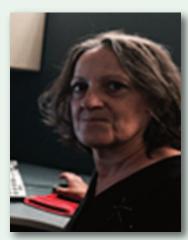
Past issues of the New Jersey Communi-CABLE are available online at: http://nj.gov/health/cd/pub.shtml.



## **CDRSS HelpDesk Coordinator Retires**

arol Barr, the coordinator of the Communicable Disease Reporting and Surveillance System (CDRSS) Helpdesk, retired at the end of June 2015 after 25 years of service with the State of New Jersey. Carol provided support to over 1000 active CDRSS users and also worked closely with acute care hospitals on emergency department surveillance using Hippocrates and EpiCenter. Prior to her work with the Communicable Disease Service, Carol worked for the New Jersey Department of Labor for 15 years.

The Communicable Disease Service and CDRSS Steering Committee would like to take this opportunity to thank Carol for her dedication and wish her the best.



**Carol Barr** 





"The best leader is the one who has sense enough to pick good men to do what he wants done, and the self-restraint to keep from meddling with them while they do it."

**Theodore Roosevelt** 

The NJDOH Communicable Disease Service includes:

Infectious and Zoonotic Disease Program (IZDP): 609-826-5964

Vaccine Preventable Disease Program (VPDP): 609-826-4860

We're on the Web! www.nj.gov/health/cd

Past issues of the New Jersey Communi-CABLE are available online at: http://nj.gov/health/cd/pub.shtml.



### CDS Foodborne Disease Surveillance Coordinator Retires

Foodborne Disease Surveillance
Coordinator since July 2001, retired at
the end of June 2015. Prior to her work with CDS
Michelle worked as a Registered Environmental
Health Specialist with a local health department for
16 years. The Communicable Disease Service would
like to take this opportunity to thank Michelle for
her years of service educating and protecting the

residents of NJ.
While we are
happy that she
will be able to
spend more time
doing the things
she loves, her
unsurpassed
knowledge will
be greatly missed
by all who had
the pleasure to
work with her.



**Michelle Malavet**