Babesiosis on the Increase in NJ

By: Andria Apostolou, CDC Epidemic Intelligence Officer

Babesiosis is an emerging disease caused by microscopic parasites that infect red blood cells and are spread by certain ticks. In the United States, tickborne transmission is most common in particular regions and seasons. Most cases of tickborne babesiosis are diagnosed in summer and early fall. Although not normally transmitted from person to person, it can be occasionally transmitted congenitally and by blood transfusion. Because patients with babesiosis can be asymptomatic and remain infectious for as long as 12 months, Babesia infection has implications for blood safety. Currently, screening of donated blood products for Babesia is not available.

In order to more fully understand the emerging nature of babesiosis in New Jersey, data collected in the Communicable Disease Reporting Surveillance System (CDRSS) during 2006-2009 was analyzed. A substantial increase in cases was identified between 2008 and 2009 with 152 confirmed cases in 2009, in comparison to 49 in 2008. Hunterdon, Burlington and Atlantic counties had the highest cumulative incidence per 100,000 population from 2006-2009 out of New Jersey’s 21 counties. Of note, reporting is based on county of residence so case incidence data might not always reflect where exposures actually occurred.

The median age for confirmed and probable case-patients reported during 2006-2009 was 67 years (range: 1 month - 97 years). Notably, 66% of patients were at least 60 years of age, and 67% were male. Babesiosis can have severe disease manifestations. Forty-five percent of reported cases were admitted to the hospital and 10% were admitted to the ICU. The case-fatality rate in this analysis was 2%.

Text fields in 2006-2009 surveillance data were searched to identify blood transfusion associated babesiosis cases in New Jersey. Nine confirmed cases were potentially transfusion-associated. The median age for these case-patients was 62 years, with a range of 49 to 86 yrs. Identified risk factors included previous surgeries complicated by infection requiring transfusion, a history of multiple transfusions or an immunocompromising condition including history of splenectomy. Out of the nine case-patients, two died.

In order to better monitor this emerging disease, several changes have been made in CDRSS to enhance data quality for babesiosis. Under the “risk factors” tab, drop down menus have been added for dates and check boxes for:

- BLOOD DONATION
- BLOOD TRANSFUSION OR RECIPIENT OF BLOOD PRODUCTS
Preventing Hepatitis and STDs in MSM Communities

By: Laura Taylor, Health Educator

Two workshops were held this spring to address the issue of preventing hepatitis and sexually transmitted diseases (STD) in men who have sex with men (MSM) communities. More than 100 professionals from state, county and local health departments, HIV counseling and testing agencies, STD clinics and other non-profit health care organizations attended the workshop.

The guest speaker, Donald Dyson, PhD, Assistant Professor at Widener University’s Program in Human Sexuality, discussed issues related to identity, orientation and behavior and identified challenges in accessing STD and hepatitis services. Dr. Dyson further explained that some MSM do not identify with being gay, referred to as non-gay identifying MSM (NGIMSM), while other MSM do identify with being gay and the gay culture, referred to as gay-identifying MSM (GIMSM). He noted that the approach to discussing sexual activity and risk behaviors with each group differs and that disclosure may be difficult with NGIMSM. Dr. Dyson also shared with the audience examples of how technology is being used by MSM communities to locate each other, as well as initiatives on the web to increase health and promote preventive services.

Participants came away with a better understanding of working with a community to positively impact their health behavior. Dr. Dyson’s lively style of teaching a potentially uncomfortable subject was enhanced with various interactive activities that helped learners understand how their own attitudes may affect the information disclosed by clients/patients. All participants received a resource CD with hepatitis and STD prevention materials.

Free Health Education Materials!

The Communicable Disease Service has an array of health education materials available to you at no cost. Supplies are limited and will be provided on a first come, first served basis. To order any of the materials listed below, please contact Suzanne Miro, Health Education Coordinator at Suzanne.miro@doh.state.nj.us.

Please include your agency name, mailing address, phone number and quantity requested.

- Pregnancy and Listeria: Keeping Mom and Baby Safe (tri-fold brochure)
- Food Safety for People with Weak Immune Systems (tri-fold brochure)
- E. coli Illness: Protect Yourself (tri-fold brochure)
- Get Smart: Colds or Flu, Antibiotics Don’t Work for You (tri-fold brochure)
- Antibiotics: Good Reasons for Taking Your Pills Correctly (tri-fold brochure)
- A Veces, El Remedio es Peor Que La Enfermedad (Spanish antibiotic resistance, tri-fold brochure)
- MRSA: Preparing Skin Infections in School and Athletic Settings (tri-fold brochure)

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Antibiotic resistance has been identified by the Centers for Disease Control and Prevention (CDC) as one of the key microbial threats to health in the U.S. In response to this problem, the CDC has developed a national awareness campaign entitled “Get Smart: Know When Antibiotics Work,” to bring awareness and understanding of the global problem of antibiotic resistance, as well as the consequences of inappropriate antibiotic use.

As part of this initiative, the UMDNJ Center for Continuing and Outreach Education (CCE) and New Jersey Medical School have sponsored a new interactive program entitled, “Get Smart New Jersey about Antibiotic Resistance.” This online CME activity was developed in collaboration with the New Jersey Department of Health and Senior Services and is intended for primary care clinician audiences.

The program’s goal is to raise awareness and minimize the problem of antibiotic-resistant bacteria in New Jersey, by providing education about the appropriate use of antibiotics in patient diagnosis and treatment. This free CME program includes adult and pediatric versions with interactive case scenarios that illustrate common issues associated with treating respiratory infections. Clinicians are invited to take one or both — credit will be awarded for successful completion of each program individually.

Click here to launch activity!

Learning from the H1N1 Vaccine Response

By: Sylvia Bookbinder, Health Educator

On April 27, 2010, the Communicable Disease Service launched an electronic survey to evaluate the online H1N1 Vaccine System. A link to the anonymous survey was emailed to registered users of the system. As of the closing date (May 24) a total of 730 responses were received (33% response rate).

Highlights from the survey results:

- 33% of respondents had used NJIIS prior to H1N1
- 58% were ship-to sites; 42% were vaccinator-only sites
- 89% would participate in another public health event that required vaccinating the public
- 76% would be likely to use the NJIIS in the future
- 99% have Internet access at the worksite
- 88% are skilled at using a computer
- 45% were from private medical practices
- 79% of pediatric practice respondents participate in the Vaccines for Children program; 45% of family practice respondents participate in the Vaccines for Children program

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As part of ongoing efforts to bridge the gap between HIV and STD services, in April, the New Jersey Department of Health and Senior Services (NJDHSS) Sexually Transmitted Disease (STD) Program and the Division of HIV/AIDS Services provided the latest in a series of trainings for HIV service providers and educators entitled “STD Basics: An Introduction to Sexually Transmitted Diseases for HIV Educators and Counselors.” The purpose of the training is for participants to learn how to integrate STD prevention messages into their existing HIV services.

Although HIV and STD services have historically existed separately due to differing priorities of different funding sources, these diseases are inherently linked. Not only are STDs and HIV both transmitted through sexual intercourse (oral, anal and vaginal) but infection with an STD increases a person’s susceptibility to HIV and, conversely, having HIV increases a person’s risk for contracting another STD. Additionally, co-infection with both HIV and another STD increases a person’s infectiousness due to possible increases in bodily secretions. Thus, co-infection increases the chance of passing one or both infections during sexual activity. Rates of these diseases continue to be problematic—CDC estimates 19 million new cases of STDs and 40,000 new cases of HIV in the United States each year. Indeed more STDs are reported than any other infectious disease. Given these facts and figures, it is essential for HIV and STD programs to collaborate on efforts and integrate services in order to reduce these diseases.

NJDHSS has amplified its collaboration of STD and HIV services to the public, such as increasing the number of testing clinics and sites that provide both HIV and STD screening services. Helping to ensure that professionals who work in New Jersey communities are communicating information and messages about both HIV and STD prevention is essential to this effort. Over 100 HIV counselors and educators from community agencies have participated in the STD Basics Training which includes interactive discussions and activities to build participants’ knowledge as well as increase their skills in talking to clients about both STD and HIV prevention and testing. This training has been very well-received by participants and additional trainings are planned.

NJDHSS is committed to finding ways to keep our citizens healthy and will continue to increase our collaborative efforts to reduce the burden of STDs and HIV on our local communities. Indeed this is one time when the whole is much greater than the sum of the parts.
Learning from the H1N1 Vaccine Response

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- DID THE PATIENT HAVE A RECENT TICK BITE?
- ORGAN DONOR OR RECIPIENT
- TRANSPLACENTAL/PERINATAL EXPOSURE
- WAS THERE EXPOSURE TO TICK INFESTED AREAS?

CDRSS users are urged to check all appropriate boxes and complete information about the date of exposure as appropriate, particularly when blood transfusion might be implicated. The dates of transfusion are important in order to distinguish between transfusion provided as treatment for babesiosis, or transfusion as a potential risk factor. CDRSS users are asked to inquire about blood or organ donation for all patients testing positive for babesiosis and enter such information accordingly.

Previously these risk factors were only captured through the comments section. Now, usage of the new drop down menus will allow for better information extraction for analysis and follow up. These changes will enable tracing of potentially infectious blood and organ products in a more timely manner.

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- Regarding training on the NJIIS, for routine use, respondents slightly preferred self-paced online modes of training or downloadable training manuals. For rapid trainings during public health emergencies, they preferred live webinars or in-person training.
- In addition to numerical ratings, hundreds of comments were received related to questions about the ease of use of the system and the ease of physical management of vaccines. Responses addressed what worked well and provided suggestions for improvement.

After submitting the survey, respondents were asked if they would consider future participation in a user group to identify providers’ needs and to address the challenges providers face when using the NJIIS. Interest in the user group was high with 198 individuals (27%) providing their contact information. Their input will be invaluable in assisting the NJDHSS to modify the system.

Revisions to the NJIIS, and training on the updated system, are scheduled to be completed during 2011. These improvements will increase response capabilities for future vaccine-related public health emergencies and will be helpful to providers when the New Jersey Administrative Code 8:57-3.16 goes into effect. All health care providers in New Jersey who administer vaccines to children less than seven years of age are required to use the online NJIIS system for reporting vaccinations by December 31, 2011.

For information about the NJIIS and the Vaccines for Children program, go to: www.njiis.nj.gov.
The NJDHSS Communicable Disease Service includes:
Infectious and Zoonotic Disease Program (IZDP)
Vaccine Preventable Disease Program (VPDP)
Sexually Transmitted Disease Program (STDP)
Tuberculosis Control Program (TBCP)

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.

Past issues of the NJ Communi-CABLE are available online at http://www.nj.gov/health/cd/newsletter.htm.

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Large antibiotic awareness posters, suitable for patient care settings (available for pick-up only, too large to mail)
Wash Your Hands (8.5x11 poster)
Mosquito Borne Diseases (tri-fold brochure)
Tick Borne Diseases (tri-fold brochure)
Preventing Meningococcal Disease (tri-fold brochure)
Flu Basics: What you need to know to stay healthy during flu season (tri-fold brochure)