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NJ Communi-CABLE

JULY, 2006

New Vaccine Recommendations Revisited

The Centers for Disease Control and Prevention (CDC) and its Advisory Committee on Immunization Practices (ACIP) have released new recommendations regarding present and recently approved vaccines for children and adolescents. These recommendations, aimed at providing the public with the best possible protection from these vaccine preventable diseases, now becomes the standard of practice for clinicians, hospitals and health agencies.

Tetanus/Diphtheria/Pertussis

Tetanus toxoid, reduced diphtheria toxoid, acellular pertussis vaccine (Tdap) may now be substituted for any Td dose in children over 7 years of age for either primary or catch-up doses. Tdap is also now on the recommended schedule for all adolescents aged 11 to 12 years who have completed their childhood series and have not received a subsequent Td dose. This new use of pertussis containing vaccine among adolescents and young adults is anticipated to be a major step forward in preventing pertussis outbreaks, namely among school-age children. Recent studies have revealed a remarkable level of pertussis disease among adolescents 10 to 19 years of age. They may transmit the disease to infants and young children who are not yet fully immunized and who suffer the greatest burden of morbidity and mortality.

Hepatitis B

All newborn infants are now

universally recommended to receive a birth dose of hepatitis B vaccine before leaving the hospital. Hepatitis B, a preventable disease, results in the greatest morbidity and mortality when acquired at the youngest age, including chronic hepatitis B disease and hepatic cancer.

Meningococcal Disease

The CDC now recommends meningococcal conjugate vaccine (Menactra) as the preferred vaccine for children 11 to 12 years of age, unvaccinated adolescents entering high school and college freshman living in dormitories. The older, polysaccharide product (Menomune) continues to be recommended for children 2 to 10 years of age with specific immune compromised status and remains an acceptable alternative for entering college freshman if Menactra is unavailable.

Hepatitis A

Hepatitis A vaccine is universally recommended for all children at age 1 year (12 to 23 months). Proper immunization requires two doses, spaced at least six months apart. Although great strides have been made in reducing the incidence of this disease in the United States, children under 18 years of age continue to account for more than half the cases.

Influenza

Routine influenza vaccination is now recommended for children 6 months through five years of age, as well as for household contacts (anyone who spends a significant amount of time in the home) and out-of-home caregivers of children 24-59 months old.

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2005 Syphilis Survey

In 2005, the New Jersey Department of Health & Senior Services, Sexually Transmitted Disease Program (STDP) received a total of 136 reports of primary and secondary (P&S) syphilis cases. Of these, 119 (88%) were males and 17 (13%) were females, a male to female ratio of 7:1. According to STDP survey data (data gathered by in-person interviews), of the 136 reported P&S cases, 70 (52% of total, 59% of males) cases admitted to men who have sex with men (MSM) behaviors. Upon further analysis, 44 (63%) of the reported MSM cases gave a history of out of jurisdictional (OOJ) activity*. Breakdowns of the OOJ areas are as follows:

- New York City (NYC) 64%
- Philadelphia (PH) 16%
- California (CA) 5%
- Other 16%.

	Total	MSM	MSM OOJ Activity	MSM OOJ Areas
Region I	40	14 (35%)	6 (43%)	NYC=5, PH=1
Region II	69	41 (59%)	29 (71%)	NYC=22, CA-2, Other=5
Region III	27	15 (56%)	9 (60%)	PH=6, NYC=1, Other=2
	136	70 (52%)	44 (63%)	

Region I: Essex County
Region II: Bergen, Hudson, Hunterdon, Morris, Passaic, Somerset, Sussex, Union and Warren Counties
Region III: Atlantic, Burlington, Camden, Cape May, Cumberland, Gloucester, Mercer, Middlesex, Monmouth, Ocean and Salem Counties

The above table describes both MSM and OOJ activity among three New Jersey regions:

The high proportion of males to females infected with P&S syphilis (7:1) suggests the amount of these diseases attributed to MSM (52%) might be low. In light of these facts, the STDP has enhanced communication and collaboration among adjoining areas to begin preventive measures among the high-risk MSM population.

*OOJ activity is defined as out of state employment, social activity/travel, medical care and/or sexual partners.

Health Awareness Months

August:

National Immunization Awareness Month

September:

National Food Safety Education Month

CDS Staff Receive Awards

On May 1, 2006 four members of the Communicable Disease Service were presented with awards as part of New Jersey Public Service Recognition Week. The New Jersey State Public Service Awards Ceremony, held at the War Memorial in Trenton, is a time set to honor and recognize outstanding public service.

Suzanne Miro, Christine Armenti and Sandy Van Sant received Teamwork/Partnership Achievement Awards for their work on an educational video, created in conjunction with the NJ Department of Corrections, for prison inmates on preventing MRSA-related skin infections.

Geraldine Caparotta and Christine Armenti received Community Service Awards for their participation in coordinating the RAVE Walk on behalf of the Zonta Club.

Local Snapshot—Rotavirus in Morris County

By: Namitha Narayan, MD, MPH, Public Health Epidemiologist, Office of Health Management, Morris County

Rotavirus is the most common cause of severe diarrhea among children, resulting in the hospitalization of approximately 55,000 children each year in the United States. The primary mode of transmission is fecal-oral, although some have reported low titers of virus in respiratory tract secretions and other body fluids. Because the virus is stable in the environment, transmission can occur through ingestion of contaminated water or food and contact with contaminated surfaces.

In April 2006, the Morris County Epidemiologist received a report from the Infection Control Professional at a local hospital regarding an increase in rotavirus admissions at the facility from January 5 to April 5, 2006. During this time period, there were a total of 68 cases admitted, all of which were confirmed by STAT Rotavirus test by Meridian, as compared to 30 admissions for rotavirus in the same period the previous year.
The cases ranged in age from 26 days to 10 years. The admitting diagnosis was predominantly acute gastroenteritis and dehydration. None of the case-patients had received the rotavirus vaccine.

Since rotavirus is not reportable, identification of clusters and outbreaks was done retrospectively by local health departments by contacting childcare centers and school nurses within their jurisdiction for any gastrointestinal / rotavirus clusters at their facilities in the past three months. The admitted cases did not appear to have any commonality with respect to childcare centers/ schools. No outbreaks at childcare centers/schools were identified and no other hospitals in Morris County reported an increase in rotavirus admissions.

The New Jersey Department of Health and Senior Services (NJDHSS) was alerted of this cluster and subsequent follow-up with hospitals in surrounding counties did not show any increase in rotavirus admissions.

Changes in laboratory testing procedures and commonality with admitting physicians/ physician groups were ruled out as a potential cause of the increase in rotavirus cases.

With consultation from the NJDHSS, stool samples were sent to Centers for Disease Control and Prevention (CDC) to identify the strain of rotavirus causing the infections. Per the CDC, the predominant circulating strain in the United States since 1996 has been G1P8. Uncommon strains of rotavirus can cause more severe infections due to lack of immunity to the strain. Fortunately, CDC testing identified the Morris County samples to be G2P4, which is one of the more common strains.

The current focus is to identify associations between any new cases and schools/daycares and to deliver appropriate education focusing prevention in daycare centers and schools.

NJ Anticipates HPV Vaccine

The New Jersey Department of Health and Senior Services sponsored a full-day conference on May 24, 2006 to discuss issues related to the highly anticipated human papilloma virus (HPV) vaccine to prevent cervical cancer. Speakers addressed issues related to the epidemiology of cervical cancer and HPV in New Jersey, the HPV vaccine efficacy, implementation issues, ethical considerations, regulatory and insurance issues, public education and parental concerns. Plenary speakers included Dr. Eddy Bresnitz, Deputy Commissioner/State Epidemiologist, Dr. Eileen Dunne, Medical Epidemiologist from the Centers for Disease Control and Prevention, Dr. Charles Scott, Pediatrician and Immediate Past-President of the American Academy of Pediatrics-New Jersey Chapter and Dr. T. Patrick Hill, Ethicist.

More than 275 healthcare and public health professionals attended the conference. "This was a timely and relevant discussion about a preventive measure that can save lives. I am glad the state health department is being pro-active and helping to educate providers about the incidence of HPV and the vaccine," said one conference attendee. "This was the perfect opportunity to learn why the HPV vaccine is necessary and understand the issues surrounding implementation," exclaimed another conference participant.

The Food and Drug Administration (FDA) approved the first HPV vaccine (Gardasil, manufactured by Merck and Co.) for primary prevention of a type of cancer on June 9, 2006. This vaccine protects against four of the most significant strains of HPV and is approved for females ages 9-26.

Worldwide, cervical cancer is the second most common cause of cancer death in women. Nationwide, about 10,000 cervical cancer cases were diagnosed in 2005 and about 3,700 women died. In 2003, New Jersey had 441 cervical cancer cases diagnosed and 136 deaths.

Seasonal, Avian, Pandemic...Making Sense of it All

The New Jersey Department of Health and Senior Services Communicable Disease Service, in conjunction with the Office of Communications, has created a community education program that addresses basic information about influenza. Seasonal, avian, and pandemic influenza are explained in an easy to understand, non-threatening manner. The presentation consists of a PowerPoint slide presentation, complete with talking points, educational handouts for participants, and pre/post tests.

Health Educators/Risk Communicators from the LINCS agencies received training on presenting this program, and many have trained other health educators in their counties in order to increase the reach of the program.

For those of you who have presented this program, please make sure that you send the pre/post tests to Suzanne Miro, Health Education Coordinator, Communicable Disease Service, NJ Dept. of Health and Senior Services, PO Box 369, Trenton, NJ 08625-0369.

Contact Lens-Associated Fungal Keratitis

Fusarium keratitis is a fungal infection of the cornea, preceded usually by trauma to the eye. Beginning in February 2006, clusters of *Fusarium* keratitis were reported among contact lens users in Asia. At that time, Bausch & Lomb voluntarily suspended sales of its ReNu multi-purpose solutions in Singapore and Hong Kong. Approximately one month later, in March 2006, the Centers for Disease Control and Prevention (CDC) and the New Jersey Department of Health and Senior Services (NJDHSS) learned of an ophthalmologist in New Jersey treating three patients with contact lens–associated *Fusarium* keratitis. All three patients had illness onsets within the preceding 3 months. Of note, the New Jersey ophthalmologist had previously encountered only one to two cases of *Fusarium* keratitis during the eight years he has been in practice. Following the New Jersey ophthalmologist's report, a multistate epidemiologic investigation ensued.

As of May 18, 2006, CDC had received reports of 130 confirmed cases of *Fusarium* keratitis infection from 26 states and one territory. Corneal transplantation was required in 37 of 120 (31%) cases. In New Jersey, 5 confirmed cases have been identified; of these, corneal transplantation was required in three (60%). The results of a matched case-control investigation conducted by CDC in April indicate an increased risk for *Fusarium* keratitis associated with use of Bausch & Lomb's ReNu with MoistureLoc. The cause of this association is not clear; however, further studies, including environmental and molecular testing, are ongoing. Although certain patients have reported use of other contact lens solutions, the analysis does not indicate that these products are associated with significantly increased risk for disease.

Given the association between *Fusarium* keratitis and MoistureLoc, Bausch & Lomb announced its decision to voluntarily recall and permanently remove this contact lens solution from the worldwide market on May 15, 2006. Contact lens wearers should immediately discontinue use of this solution and consult an eye-care professional regarding use of an appropriate alternative product for cleaning or disinfecting lenses. Contact lens wearers also should practice good hygiene, including hand washing and drying before handling lenses, avoiding reuse of contact lens

solutions, and following the specific instructions of manufacturers of contact lenses and contact lens solutions.

Clinicians evaluating contact lens wearers with signs or symptoms of keratitis (e.g., unusual redness of the eyes, eye pain, tearing, discharge, or light sensitivity) should consider fungal keratitis and refer the patient to an ophthalmologist if appropriate. Eye-care professionals should continue to be vigilant in the diagnosis and treatment of *Fusarium* keratitis, and should report possible cases involving New Jersey residents to NJDHSS at 609-588-7500. Reports should also be submitted to the FDA via MedWatch at telephone, 800-FDA-1088; fax, 800-FDA-0178; or mail, MedWatch, Food and Drug Administration, 5600 Fishers Lane, Rockville, MD 20857-9787; or online at http://www.fda.gov/medwatch/report.htm.

Sources:

CDC. *Fusarium* keratitis---multiple states, 2006. MMWR 2006;55:400–1.

CDC. Update: *Fusarium* Keratitis --- United States, 2005--2006. MMWR 2006;55 (Dispatch);1–2.

Golden Anniversary for the NJ State Mosquito Control Commission

New Jersey mosquitoes beware: on July 19, 2006, the New Jersey State Mosquito Control Commission (SMCC) will celebrate fifty years of monitoring and supporting New Jersey vector surveillance and mosquito abatement. That's half a century of helping to protect New Jersey residents from mosquito nuisance and vector-borne diseases like St. Louis encephalitis (SLE), Eastern Equine encephalitis (EEE) and, more recently, West Nile virus (WNV). Congratulations!

Established by state law in 1956, the SMCC is responsible for monitoring mosquito control activities in New Jersey and providing advice and counsel to state agencies for all areas of mosquito control. The commission is multi-faceted in both strategy and membership, encouraging complementary pest control methods (called Integrated Pest Management, or IPM) and fostering partnerships in entomology and public health.

The SMCC consists of six governor-appointed public members and four state officials including the commissioners, secretaries and directors from the New Jersey Department of Health and Senior Services, the New Jersey Department of Environmental Protection, the New Jersey Department of Agriculture and the New Jersey Agricultural Experiment Station at Rutgers. These members meet as a quorum on a monthly basis to provide oversight and guidance to county mosquito control agencies in New Jersey.

Following the ecological approach of IPM, the commission provides financial support for numerous mosquito control projects, including a vector surveillance program housed at Rutgers; a pesticide resistance research initiative, also conducted at Rutgers; the state air spray program; a biologic control program where select ponds in New Jersey are stocked with mosquito eating fish; open marsh water management programs; equipment leasing programs; state-of-the-art mosquito pathogen testing systems; and public education campaigns. In 2005, in an effort to increase public awareness and disseminate more information about ways to protect against mosquito-borne disease, the SMCC established a toll-free hotline for New Jersey residents to obtain local mosquito agency contact information: 1-888-NO NJ WNV. Pass the word!

New Jersey hails as one of the leading states in mosquito abatement, IPM and public health partnerships. Mosquito control programs and associations have been active for over one hundred years in New Jersey.

There is a mosquito control agency at the local level in all twenty one counties in New Jersey, and the SMCC works in cooperation with each and every program. Recently, the Association of State and Territorial Health Officials named New Jersey as a model program in mosquito control and the fight against arboviruses such as WNV.

In celebration of the 50th anniversary of the SMCC, and the success of the varied collaborative mosquito control projects in New Jersey, we are asking our public health partners to continue encouraging prevention messages about arboviruses such as WNV and EEE. Eliminate standing water, check and / or install screens in homes, use a mosquito repellant containing DEET or other EPA-approved ingredients: these are a few of the messages you can help to disseminate. Together we can continue our efforts to prevent these diseases and honor the efforts of a successful statewide commission.

For more information:
http://www.state.nj.us/health/cd/westnile/enceph.htm
http://www.state.nj.us/dep/mosquito/
http://www-rci.rutgers.edu/~insects/njmos.htm
http://www.cdc.gov/ncidod/dvbid/westnile/index.htm

A special thanks to the following individuals for providing support and assistance with this article: Tadhgh Rainey, Hunterdon County Department of Health Mosquito and Vector Control Program; Ary Farajollahi, Mercer County Mosquito Control; and Robert Kent, DEP Office of Mosquito Control Coordination.

CDRSS Corner

A New Helpdesk for User Support

In addition to the Office of Information and Technology Services (OITS) help desk that provides technical support for all OITS supported systems, a new help desk specifically for the CDRSS was implemented Monday, January 9. Requests from users calling into the CDRSS help desk are assigned a ticket and tracked until the issues are resolved.

Help desk queries can be business or technical in nature. Users call the help desk with business questions about entering specific data into the CDRSS; requesting help remembering their passwords and accessing the system, changing addresses and case and report statuses; requesting guidance regarding different functionalities such as merging people and cases, and running various reports. Technical support is also provided to help users such as trouble shooting error messages, identifying access difficulties (at the State or the local site), correcting detected bugs, and providing backup for business knowledge and behind the scenes algorithms regarding system capabilities. Questions and suggestions that are addressed to the CDRSADMIN e-mail address are also tracked by the CDRSS help desk, making it a central clearing house for user feedback on this system.

Quality Feedback Provides a Quality System

In addition to maintaining the CDRSS help desk, a process was developed for evaluating, prioritizing, documenting and processing requests for system enhancements and changes. This process enables the Communicable Disease Service (CDS) to incorporate feedback from internal and external users when developing the criteria for future iterations of the CDRSS, thus ensuring user-focused improvements in accordance with state and federal compliance criteria.

New Functions

One of the new functions of the CDRSS is the capability of reporting information on an "unknown" disease until the specific disease is identified. The ability to add diseases, symptoms, and risk factors on the fly gives CDS personnel the flexibility to respond instantly to the developing reporting needs of emergent pathogens – and immediately broadcast that information statewide. Once the unknown disease is identified, the correct disease name can be added immediately to the CDRSS, which allows future cases to be captured under the appropriate name while the existing unknown cases can be reassigned to the new disease.

A second function is the mapping capability of the CDRSS. Communicable disease incidence can be mapped and displayed instantly in the CDRSS providing a visual presentation of the spread or path a disease takes. Contact mapping can provide visual representation of up to five tiers of contact tracing. These maps, in addition to the visual presentation, provide background information on each case, as well as information on the geographical location, including local health department jurisdiction, local health officer contact information, as well as municipal, county and state demographics.

In a time of bioterrorism threats, the ability to provide quick response times to update communicable disease reporting capabilities in order to incorporate whatever new threat has been identified – and mapping the extent and path of that threat - is a powerful public health protection tool.

Training Available

Any communicable disease reporting personnel in a local or county health department, acute care hospital, or laboratory not currently trained on the new CDRSS can register for a training session at 3635 Quakerbridge Road, Mercerville, by contacting cdrsadmin@doh.state.nj.us. Immediate access to electronic reporting in the CDRSS production site will be granted upon completion of the training.

CDRSS Help Desk Number and Contact Us E-mail Address

Phone: 609-631-4744

E-mail: cdrsadmin@doh.state.nj.us

NJ Department of Health and Senior Services
PO Box 369
Trenton, NJ 08625-0369
609-588-7500

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)

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

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.

New Vaccine Recommendations Revisited

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Rotavirus

Two new vaccines are likely to be incorporated into the recommended schedule in the coming year. Two manufacturers have completed the last stages of the FDA approval process for new rotavirus vaccines. These have been shown to be safe and effective in some of the largest clinical trials ever conducted. Rotavirus continues to be a devastating disease among infants and children throughout the world with over 500,000 annual deaths attributed to it. In the United States, rotavirus infection is estimated to result in about 20-60 deaths, over 50,000 hospitalizations, over 500,000 emergency department or outpatient visits, and leads to approximately one billion dollars of health care and lost-productivity costs each year.

Human Papilloma Virus

The human papilloma virus (HPV) vaccine has been approved and is being shipped by the end of June 2006. The vaccine has been widely demonstrated to be safe and extremely effective in the prevention of HPV infection, the causative agent of nearly all invasive cervical carcinoma cases. This will be the first vaccine which is specifically approved for primary prevention of cancer.

For more information, please contact the New Jersey Department of Health and Senior Services Vaccine Preventable Disease Program at (609) 588-7512.

NJ CAUSE Receives Funding

The New Jersey Careful Antibiotic Use Strategies and Education (NJ CAUSE) Task Force has received funding from the Centers for Disease Control and Prevention (CDC) to promote activities designed to curb antimicrobial resistance. Two CDC Programs, "Get Smart: Know When Antibiotics Work" and "Community –Associated Methicillin-Resistant *Staphylococcus aureus* Educational Efforts" provided funding. This represents the first time a state has received new funding from both funding sources at the same time. CDC is very excited to "officially" welcome NJ into their national efforts.