

### 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

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### **Infant Botulism**

otulism is a rare, but serious, paralytic illness caused by a neurotoxin that is produced by the bacterium Clostridium *botulinum*. In the United States, there are approximately 100 cases of infant botulism diagnosed annually. New Jersey has about six cases yearly. For the past 10 years, New Jersey has ranked third (after California and Pennsylvania) with the highest number of cases of infant botulism. C. botulinum prefers certain soil types and infant botulism is more common in those areas. While there is no definitive evidence, it is believed that soil ecology plays a large role in determining which states have the highest prevalence of cases.

Infant botulism occurs when babies ingest the spores of botulinum bacteria, which then germinate and produce a toxin in the intestines. An infant can ingest these spores through food (most commonly, honey/corn syrup), soil or contaminated dust. In general, the disease occurs in children less than one year old due to the inability of the immature intestines to move the spores through and out of the body before the toxin forms. Therefore, once an infant ingests the spores, the bacteria germinate, multiply, and produce a toxin which, in turn, can affect the infant's nervous system. The most common symptoms of



The above photo is a depiction of a "floppy baby," a classic clinical sign of infant botulism.

infant botulism are difficulty feeding (diminished sucking reflex), a weak cry, loss of head control ("floppy baby") and poor muscle tone.

Clinicians who have a suspect infant botulism case should contact the California Department of Public Health, Infant Botulism Treatment and Prevention Program (IBTPP) for consultation (510-231-7600, 24/7). If it is determined that the infant does have botulism, the IBTPP will dispense BabyBIG (Botulism Immune Globulin), an antitoxin approved by the FDA in 2003 for the treatment of infant botulism. This drug significantly reduces the severity of symptoms and prevents further progression of the disease. Improvement is usually seen within







Get more information at <u>http://nj.gov/health/cd/ha</u>ndwashing.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! <u>www.nj.gov/health/cd</u>

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## Know the Facts: Vaccine Storage and Handling

Proper vaccine storage and handling practices play a very important role in protecting individuals and communities from vaccine-preventable diseases. Failure to adhere to required protocols for storage and handling can reduce vaccine potency, resulting in inadequate immune responses in patients, as well as inadequate protection against disease.

Vaccine quality is the shared responsibility of everyone, from the time vaccine is manufactured until it is administered. In response to recent scientific studies on equipment used for vaccine storage and a better understanding of best practices for vaccine storage and handling, the following are the most recent Centers for Disease Control and Prevention (CDC) recommendations:

### **Establish Storage and Handling Policies:**

- □ Select a designated primary vaccine coordinator and at least one alternate coordinator to be in charge of vaccine storage and handling.
- Develop a detailed, up-to-date, written policy for general vaccine management and a plan for how vaccines would be relocated in the event of an emergency.
  - The routine vaccine storage plan should include all

aspects of routine vaccine management, from ordering vaccines and managing inventory to storing vaccines and monitoring storage conditions.

The relocation plan would be used in the event of power failures, refrigerator malfunctions, natural disasters, and anytime there is a known threat to the vaccine inventory.

### **Use Proper Storage Equipment:**

- Store vaccines in temperature-monitored, alarm-equipped, stand-alone refrigerators and freezers. If an office only has a household-style combination unit, the CDC recommends using one unit for refrigerated vaccines only and to use a separate stand-alone freezer to store frozen vaccines.
- Use "Do Not Unplug" signs next to electrical outlets for the refrigerator and freezer and a "Do Not Stop Power" warning label by the circuit breaker which powers the refrigerator and freezer.
- Do not store vaccines in a dormitory-style or bar-style refrigerators/freezers (a small combination freezer-refrigerator unit with the freezer compartment inside the refrigerator).
- Do not store food or beverages in a vaccine storage unit.

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### **Injection safety**

s part of New Jersey's ongoing injection safety initiative, *"Keeping the Infection out of the Injection,"* another cadre of safe injection ambassadors were trained on February 26, 2014. Safe injection ambassadors are health professionals (infection preventionists, nurses and epidemiologists) who volunteer to educate healthcare providers about issues surrounding injection safety. The first group of 25 Ambassadors was trained in 2012 and has impressively conducted outreach and education to more than 800 health professionals throughout the state.

The NJ Ambassador program is a model project and has been replicated in North Carolina and Nevada. After recruitment, ambassadors must pass a qualifying exam and agree to present at least two times within one year of being trained. New Jersey Department of Health staff are looking forward to training the next class of safe injection ambassadors!

## **Outbreak Training**

Three regional outbreak trainings were completed in December, 2013 and January 2014. More than 200 public health professionals attended the three sessions. The New Jersey Association of City and County Health Officials (NJACCHO) received a grant for the New Jersey Department of Health (NJDOH) to

conduct the trainings to clarify the outbreak investigation process to ensure that investigations are consistent. Speakers included staff from the NJDOH Communicable Disease Service and local public health professionals. The NJACCHO Communicable Disease subcommittee created a manual for public health professionals to refer to when working on an outbreak disease investigation. Pictured here are the NJDOH speakers at the January 2014 training at Rutgers in New Brunswick: Dr. Alice Shumate, Jason Mehr, Rebecca Greeley and Terrie Whitfield. Special thanks to George Van Orden, PhD, Health Officer from Hanover Township who chaired the subcommittee.



Dr. Alice Shumate, Jason Mehr, Rebecca Greeley, and Terrie Whitfield served as speakers for the training.





Love them. Protect them.

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### **Hepatitis**

aura Taylor, Adult Viral Hepatitis Prevention Coordinator and Amelia Hamarman, STD Educator, provided a training in January to HIV grantees and other public health partners. The training, "Birds of a Feather: Integrating Hepatitis into Existing HIV and STD Prevention Messages," is a full-day training designed to help HIV and STD professionals (counselors, educators, outreach workers, health care workers, etc.) to integrate hepatitis prevention messages into their existing prevention activities. Rates of co-infection with hepatitis and HIV, or other STDs, continue to rise due to common transmission routes of these infections. Given the overlap of risk factors and behaviors, especially in at-risk populations, it is logical to

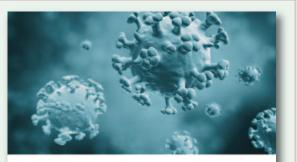
incorporate information and messages about all of these infections. The training is designed to help participants to gain basic knowledge about hepatitis and to help them generate realistic strategies for integrating hepatitis prevention into the services their agencies already provide.

This training is a collaborative effort between the Communicable Disease Service and the Division of HIV, STD and TB Services.



### COMMUNICABLE DISEASE OUTBREAK MANUAL

This manual is available on-line and includes appendices and other usable templates. Go to: <u>http://njlmn2.rutgers.edu/sites/default/files/</u><u>NJACCH0%20Outbreak%20Investigation%2</u> <u>OManual\_0.pdf</u>



COMMUNICABLE DISEASE OUTBREAK MANUAL New Jersey's Public Health Response









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## **CDS Service Project**

n December, CDS staff Jose Cortes, Alice Shumate and Laura Taylor delivered boxes of personal care items donated by New Jersey Department of Health employees to three organizations: Project HOPE in Camden, The Vet



Alice Shumate and Jose Cortes deliver donated items.

Center in Ewing and Salvation Army in Trenton. More than 20 boxes of personal care items and flu prevention kits (tissues, hand sanitizer and hand wipes), were distributed to these three organizations that serve NJ residents.



Alice Shumate and Jose Cortes pictured with a Vet Center staff member.

### **Training for County Public Health Officials**

uzanne Miro, a health educator for the Communicable Disease Service, delivered a focus group skills training for county public health officials on January 30, 2014. The counties represented at the training are receiving funding through the Superstorm Sandy Block Grant to assist local residents in their ongoing efforts to recover from the storm. Part of the grant requires the officials to conduct focus groups among their constituents to learn more about their ongoing struggles and to target resources to assist in this matter. This training was a collaborative effort

between the Public Health Infrastructure, Laboratory and Emergency Preparedness division and the Communicable Disease Service.



Carl Michaels, Suzanne Miro and Luis Torrens at the training for county public health officials on January 30.





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### Vaccine Storage, continued from page 2

Remove all vegetable and deli bins from the storage unit, and do not

store vaccines in these empty areas.

- Use a National Institute of Standards and Technology (NIST) certified, calibrated thermometer in both the refrigerator and freezer. Note the calibration expiration date and recalibrate or replace the thermometer as needed.
- Use a biosafe glycol-encased thermometer probe or a similar temperature buffered probe. Place the thermometer probe in the center of the
- MMRV Varicella (chickenpox) Zoster (shingles) REFRIGERATE 35-46 ° F (2-8° C): DTaP/DT/Tdap/TT/Td Hepatitis A & B • нів HPV Influenza (TIV/LAIV) • IPV Meningococcal • MMR Pneumococcal Rotavirus **VACCINE STORAGE TIPS!** Store vaccines in the center of the Store vaccines with the earliest expiration date up front. compartment. Make sure the correct vaccine Log temperatures twice a day using storage temperature range is maintained. a NIST certified thermometer IMMEDIATELY take corrective action to OUT OF RANGE temperatures.

Please contact the Vaccines for Children (VFC) Program at 609-826-4862 or VFC@doh.state.nj.us for more information. refrigerator away from the walls.

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Use digital data loggers with detachable probes that record and store temperature information at frequent programmable intervals for 24 hour temperature monitoring rather than non-continuous temperature monitoring. and aim for  $40^{\circ}$  F ( $5^{\circ}$  C).

- ☐ Maintain the freezer temperature at an average of +5° F (-15° C) or colder, but no colder than -58° F (-50° C).
- ☐ Keep extra containers of water in the refrigerator (e.g., in the door and/or on the floor of the unit where the vegetable bins were located) to help maintain cool

**Continued on page 7** 



Store and maintain vaccines at

temperature at  $35-46^{\circ}$  F (2-8° C),

FREEZE 5° F (-15° C) or colder:

refrigerator)

MMR (may be stored in freezer or

appropriate temperatures:

Maintain refrigerator

THIS REFRIGERATOR/FREEZER IS FOR

**VACCINES ONLY!** 

ALL VACCINES must arrive in an insulated

container and be stored immediately as follows:





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#### Vaccine Storage, continued from page 2

temperatures. Keep ice packs in the freezer to help maintain cold temperatures.

- Store vaccines in the middle of the refrigerator or freezer (away from walls and vents), leaving room for air to circulate around the vaccine.
- Record refrigerator and freezer temperatures at least twice a day (first thing in the morning and right before the facility closes). Document minimum and maximum temperatures once a day, preferably in the morning.
- Review vaccine expiration dates and rotate vaccine stock on a weekly basis. Vaccines with the "earliest" (soonest) expiration date should always go in front and be used first.
- Notify the designated vaccine coordinator whenever you have an out-of-range temperature. Get the vaccines back into the recommended temperature immediately. Contact the vaccine manufacturer to determine if vaccines are still useable.

Improper vaccine storage and handling procedures cost time and money, and jeopardize patient safety. Expired or improperly stored vaccine won't protect patients. The costs associated with loss and replacement of vaccines, as well as the resources necessary to conduct a recall of patients, can be avoided by simply following proper storage and handling



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Never store food or beverages inside the vaccine refrigerator or freezer.



Vaccines exposed to temperatures outside the recommended ranges can have reduced potency and protection.

protocols. Please visit the following resources to help you create a comprehensive plan for your office.

### CDC

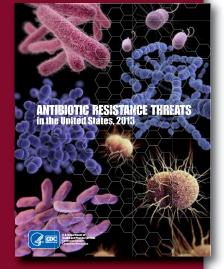
http://www.cdc.gov/VACCINES/ RECS/storage/default.htm

Immunization Action Coalition: <u>http://www.immunize.org/handouts/</u> <u>vaccine-storage-handling.asp</u>









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# Survey:

In The NEWS

Anti-MRSA Drugs Routinely Prescribed for Simple Abscesses Nearly 90% of more than 500 dermatologists surveyed said they would initially prescribe an antibiotic to cover possible methicillin-resistant *Staphylococcus aureus* when incising and draining an uncomplicated cutaneous abscess. Further, 24% reported prescribing antibiotics that are not active against the pathogen, and 82% said they culture simple abscesses in 50% of cases.

The survey findings, while limited by their self-reporting nature, point to the need for clearer guidelines on the best approaches to simple abscesses.

"A comprehensive clinical guideline based on local antimicrobial rates, and increased knowledge of local resistance patterns and microbiologic data could not only improve abscess management and antibacterial stewardship, but could also combat the rising health care costs associated with SSTIs (skin and soft tissue infections] and their complications," wrote Dr. Adam Friedman and his colleagues in the February issue of the Journal of Drugs in Dermatology. (J. Drugs Dermatol. 2014; 13:611-16).

Excerpt from Family Practice News by Heidi Splete: (<u>www.familypracticenews.com</u>)

### Infant Botulism, continued from page 1

the first 24-48 hours after administration. Laboratory testing is not performed to either rule in or rule out the disease, due to the length of time it takes to receive preliminary results (24 hrs. at a minimum). Therefore, treatment should not be delayed. Stool specimen testing is purely confirmatory.



BabyBIG®, Botulism Immune Globulin Intravenous (Human) (BIG-IV), is an orphan drug that consists of human-derived anti-botulism toxin antibodies that is approved by the U.S. Food and Drug Administration for the treatment of infant botulism types A and B.

In the majority of infant botulism cases, the exposure remains unknown. It was concluded, after research that has been conducted over the years, that most infant botulism cases acquired the disease by ingesting microscopic dust particles that carry the spores. The only known prevention measure is to avoid feeding honey to infants 12 months of age and younger. Fortunately, the prognosis for infant botulism patients is a complete recovery. The key to recovery is early diagnosis and treatment.

For more information regarding infant botulism, visit the IBTPP website at http://www.infantbotulism.org/.

Spring 2014

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### **Award Winner**

he New Jersey Department of Health, Vaccine Preventable Disease Program (VPDP) presented an award to one of the winners of the second annual statewide adolescent vaccine education contest, "Protect Me with 3," at West Deptford High School. NJ pre-teens and teens were challenged to create 30-second videos on the importance of getting vaccinated for tetanus, diphtheria, and acellular pertussis (Tdap), meningococcal conjugate (MCV4), and human papillomavirus (HPV). View all the winning videos at <u>www.protectmewith3.com</u>.



Jennifer Smith, Public Health Educator (left), and Vaccine Preventable Disease Program staff members Jenish Sudhakaran, Population Assessment Coordinator, and Tiffany Humbert-Rico, CDC Public Health Prevention Service Fellow, presented Ryan Zuzulock with the Grand Prize of the second annual, "Protect Me with 3," statewide adolescent vaccine education contest.

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