

**Summer 2020 Quarterly Newsletter** 

#### **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.

Phil Murphy, Governor Sheila Oliver, Lt. Governor Judith M. Persichilli, RN, BSN, MA Commissioner

#### **COMMUNICABLE DISEASE SERVICE**

Christina Tan, MD, MPH State Epidemiologist/ **Assistant Commissioner** 

**Gary Ludwig, MS, Director** 

Suzanne Miro, MPH, MCHES **Editor. Research Scientist** 



### **Antimicrobial Stewardship Recognition Program Returns for Second Year!**

he New Jersey Department of Health (NIDOH) is continuing the Antimicrobial Stewardship **Recognition Program** in 2020! NJDOH made a few modifications to the application to align with updates to Centers for Disease Control and Prevention's (CDC) Core Elements of Hospital Antibiotic Stewardship Programs,

which were released in

November, 2019. As before, there are seven core elements of hospital antibiotic stewardship programs, however the elements have been updated to reflect both lessons learned and new evidence from the field of antibiotic stewardship. NJDOH made modifications to the applications based on CDC's updates, and the lessons learned after rolling out the first year of the ASRP.

Modeled on the CDC's *Core* Elements of Antibiotic Stewardship, the ASRP offers healthcare facilities an opportunity to submit



Christina Tan, MD, MPH, State Epidemiologist/Assistant Commissioner, spoke at the 2019 program.

and share their current efforts. In 2019, the NJDOH Communicable Disease Service launched the ASRP and the first round of winners were announced at the New Jersey Hospital Association in Princeton, NJ on December 5, 2019. This program invited healthcare facilities from various settings throughout the state to submit materials documenting the breadth and depth of their antimicrobial stewardship efforts in order to reward their good work, develop/enhance

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# Revision of The Legionellosis Surveillance Case Definition<sup>1</sup>

egionellosis is a nationally notifiable disease in which cases are classified as "confirmed" or "suspect" based on the presence of clinically compatible symptoms and diagnostic testing. Increased experience with diagnostic testing, along with increased confidence in the diagnostic performance of nucleic acid amplification testing (i.e., PCR) and its more prevalent utilization, has prompted the Council of State and Territorial Epidemiologists and Centers for Disease Control and Prevention to update the laboratory criteria for the diagnosis of legionellosis. Further, the clinical criteria have been updated to capture extrapulmonary disease, a rare, but important, clinical presentation. The following sections highlight the updated clinical criteria, laboratory criteria, preferred diagnostic methods, and available resources.

#### **Clinical Criteria**

Legionellosis is associated with three clinically and epidemiologically distinct illnesses: Legionnaires' disease, Pontiac fever, or extrapulmonary legionellosis.

• Legionnaires' disease: Legionnaires' disease presents as pneumonia, diagnosed clinically and/or radiographically. Evidence of clinically compatible disease can be determined several ways: a) a clinical or radiographic diagnosis of pneumonia in the medical record OR b) if "pneumonia" is not recorded explicitly, a description of clinical symptoms that are consistent with a diagnosis of pneumonia.<sup>2</sup>



not present as pneumonia. It is less

Pontiac fever is self-limited, meaning

severe than Legionnaires' disease,

rarely requiring hospitalization.

it resolves without antibiotic

treatment.

• \*NEW\* Extrapulmonary legionellosis: Legionella can cause disease at sites outside the lungs (for example, associated with endocarditis, wound infection, joint infection, graft infection). A diagnosis of extrapulmonary legionellosis is made when there is clinical evidence of disease at an extrapulmonary site and diagnostic testing indicates evidence of Legionella at that site.

#### **Laboratory Criteria**

Confirmatory laboratory evidence:

 \*NEW\* PCR: Detection of any Legionella species from lower

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**Vaccine Preventable Disease** 

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**Regional Epidemiology** 

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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>.

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### **Updates in Vaccine Recommendations**

he Advisory Committee on Immunization Practices (ACIP) is a group of medical and public health experts who develop recommendations on the use of vaccines for the United States. These recommendations are routinely reviewed and revised. Listed below are the recently approved updates to the current recommendations. For the complete ACIP vaccine recommendations, please visit: www.cdc.gov/vaccines/hcp/acip-recs.

### Human Papillomavirus (HPV) Vaccination

- ACIP recommends catch-up HPV vaccination for all persons through age 26 years.
- ACIP does not routinely recommend catch-up vaccination for all adults aged 27 through 45 years, but recognized that some persons who are not adequately vaccinated might be at risk for new HPV infection and might benefit from vaccination in this age range; therefore, ACIP recommends shared clinical decision-making regarding potential HPV vaccination for these persons.

#### **Pneumococcal Vaccination**

ACIP recommends
 pneumococcal conjugate
 vaccine (PCV13) based on
 shared clinical
 decision-making for adults 65
 years or older who do not have
 an immunocompromising
 condition and who have not
 previously received PCV13. All

adults 65 years or older should receive a dose of pneumococcal polysaccharide vaccine (PPSV23).

#### **Hepatitis A Vaccination**

- ACIP recommends that all children and adolescents aged 2 through 18 years who have not previously received hepatitis A vaccine be vaccinated routinely at any age (i.e., children and adolescents are recommended for catch-up vaccination).
- ACIP recommends all persons with HIV ≥ 1 year be vaccinated.

### Serogroup B Meningococcal (MenB) Vaccination\*

- For persons aged ≥10 years with complement deficiency, complement inhibitor use, asplenia, or who are microbiologists:
  - o ACIP recommends a MenB booster dose 1 year following completion of a MenB primary series followed by MenB booster doses every 2-3 years

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# Tabletop Exercise Prepares Health Educators for 2021

n February 5, 2020, the New Jersey Department of Health (NIDOH) conducted an anthrax tabletop exercise for Local Information Network Communications System (LINCS) agencies in preparation for a full-scale exercise planned for 2021. This tabletop was mainly for health educators/risk communicators (HERCs) and focused on communications surrounding a public health emergency. HERCs and their back-ups attended the exercise and brought their agencies' risk communication plans. The tabletop scenario was based on an anthrax release at a large concert venue that included college bands from across the state.

Attendees found the exercise helpful for clarifying Access and Functional Needs (AFN), activation of the risk communication plan, and the role of the HERC during a public health emergency, as the HERC typically has many roles within their agencies. Discussion of internal and external communications and staffing during an event that lasts for weeks or months were also discussed. The exercise was led by the Training and Exercise Team from the NJDOH Division of Public Health Infrastructure, Laboratories and Emergency Preparedness. **DCDS** 

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A member of the NJDOH Training and Exercise Team leads the tabletop exercise.









thereafter, for as long as increased risk remains.

- For persons aged ≥10 years determined by public health officials to be at increased risk during an outbreak:
  - o ACIP recommends a one-time booster dose if it has been ≥1 year since completion of a MenB primary series.
  - o A booster dose interval of ≥6 months may be considered by public health officials depending on the specific outbreak, vaccination strategy, and projected duration of elevated risk.

### Tetanus diphtheria (Td) and Tetanus diphtheria and pertussis (Tdap) Vaccination

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- ACIP recommendations have been updated to allow Tdap to be substituted for Td in the regular vaccination schedule. This means either Td or Tdap vaccine can be used for the ten-year booster, tetanus prophylaxis for wound management, and for additional required doses in the catch-up immunization schedule.
- \* On June 27, 2019, the Advisory Committee on Immunization Practices (ACIP) voted to approve this recommendation for serogroup B meningococcal (MenB) vaccine. This recommendation will be considered "official" when it is approved by the CDC Director and published in Morbidity and Mortality Weekly Report (MMWR).

### **CDS Welcomes New Staff!**

**Bernice Carr** – Bernice joins the CDS and Viral Hepatitis Team as the hepatitis C epidemiologist, working on the surveillance, guidance, technical consultation and dissemination of hepatitis C data. Bernice has been working at CDS as an epidemiologist since 2016. She comes to this position with several years of experience and earned her Master of Public Health degree from The George Washington University of Washington D.C. She also holds a Master of Science degree in Food Science from Rutgers University.

**Aaron Rosenbaum** – Aaron joins the CDS as a statistical analyst in the Vaccine Preventable Disease Program. He began working at CDS in 2019 as an intern with the Vector-borne Disease Team to

develop a risk index to measure human transmission risk of West Nile virus disease in NJ counties. Aaron earned a Ph.D. in psychology from Penn State and worked in marketing research as a project director and data analyst prior to joining CDS.

Patricia Zinna – Patricia joins the CDS as a veterinarian working with the Zoonotic Team on a part-time basis focusing on the Veterinary Public Health Program, rabies and other zoonotic disease consultations. She spent the first part of her career in clinical medicine and now focuses on public health. Patricia earned her degree from Cornell University of Veterinary Medicine and last year earned a Master of Science degree in Veterinary Forensic Science.

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ANTIBIOTICS

**GOLD STEWARD** 

#### Antimicrobial, continued from page 1

collaborative relationships, and identify best practices. Facilities were awarded with a gold, silver, or bronze recognition level based upon

whether they perform tasks that tackle the seven core elements: Leadership

Commitment, Accountability, Action, Drug Expertise, Reporting, Tracking, and Education. Due to CDS staff work related to

COVID-19, the 2020 ASRP has been modified to allow returning winners to maintain their 2019 award status via a letter of attestation. Facilities applying for the first time were permitted to do so by August 5, 2020. Awards will be announced in November 2020.

The ASRP enables NJDOH to both promote antimicrobial stewardship best practices to prevent development of drug-resistance and collect more detailed information on antimicrobial stewardship and resistance to guide future initiatives. Outpatient healthcare facilities can be recognized with a general award. In addition to recognizing the achievements of awardees, the program is also intended to encourage facilities to enhance existing programs and influence facilities without robust stewardship programs to develop them. The ASRP ultimately seeks to better preserve the power of antimicrobial drugs and prevent the spread of antimicrobialresistant germs. **OCDS** 

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**CDS** Staff Selected for Minority Leadership Program

Congratulations to Ayiasha Pratt, a public health representative within the Vaccine Preventable Disease Program (VPDP) on being selected to participate in the National Alliance of State and Territorial AIDS Directors' (NASTAD), 2020 Minority Leadership Program (MLP).

The MLP, launched in 2010, is a leadership development and investment program for persons

of color working at various levels in state or Centers for Disease Control and Prevention-funded health department positions in HIV/AIDS or viral hepatitis programs. During this 10-month program, Ayiasha will have the opportunity to enhance her leadership and communication skills, and build productive working relationships. She will be able to use these valuable skills in her role within the VPDP's Perinatal Hepatitis B Prevention Program where she works to reduce the transmission of hepatitis B to infants. Congratulations again to Ayiasha on this wonderful opportunity! DCDS





### **NJDOH Participates in** SEPTEMBER SEPSIS 2020

eptember 2020 will mark the second time the New Jersey Department of Health (NJDOH), Communicable Disease Service will participate in sepsis awareness month. Led by the national Sepsis Alliance, SEPTEMBER SEPSIS, is an awareness campaign dedicated to increasing knowledge among healthcare professionals and the public regarding sepsis and the importance of early detection. The Sepsis Alliance is the leading sepsis organization in the United States working in all 50 states to save lives and reduce suffering from sepsis.

Sepsis is the body's overwhelming and life-threatening response to infection that can lead to tissue damage, organ failure, and death. Some people are at higher risk of developing sepsis because they are at higher risk of contracting an infection. These include the very young, the very old, those with chronic illnesses, and those with a weakened or impaired immune system. Approximately 30% of patients diagnosed with severe sepsis do not survive and up to 50% of survivors suffer from post-sepsis syndrome. Early detection and treatment are essential to increase chances of survival and to minimize disability for those who survive.

In recognition of **SEPTEMBER SEPSIS** 2020 NJDOH will obtain a signed Governor's proclamation declaring the month of September to be Sepsis Awareness Month. **MCDS** 

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When it comes to sepsis, remember IT'S ABOUT TIME". Watch for:

**TEMPERATURE** higher or lower than normal

INFECTION may have signs and symptoms of an infection

MENTAL DECLINE confused, sleepy, difficult to rouse

**EXTREMELY ILL** "I feel like I might die," severe pain or discomfort

Watch for a combination of these symptoms. If you suspect sepsis, see a doctor urgently, CALL 911 or go to a hospital and say, "I AM CONCERNED ABOUT SEPSIS."

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### **Improving Vaccine Acceptance**



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

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he Centers for Disease Control and Prevention has developed a new continuing education program entitled "How Nurses and Medical Assistants Can Foster Support for Vaccination in Pediatric and Family Practices." Research shows that healthcare professionals are the most trusted source of information for parents when it comes to vaccines for their child. Nurses and medical assistants have a key role to play in improving vaccine acceptance and fostering a culture of immunization in the practice as they are in contact with parents throughout the office visit. The continuing education activity features practical

strategies to improve vaccination rates in the practice, including how to deliver clear and concise vaccine recommendations and address parents' frequently asked questions. All practice staff, including non-clinical staff, have a key role to play in improving



vaccine acceptance. This module is available at

https://www2.cdc.gov/vaccines/ed/imz practice/ce.asp. Continuing education credit will be available through December 4, 2021.







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#### Legionellis, continued from page 2

respiratory secretions, lung tissue, pleural fluid, or extrapulmonary site by a validated nucleic acid amplification test (PCR)

- Culture: Isolation of any Legionella organism from lower respiratory secretions, lung tissue, pleural fluid, or extrapulmonary site
- **Urine:** Detection of *Legionella* pneumophila serogroup 1 antigen in **urine using validated reagents**
- **Serum:** Fourfold or greater rise in specific serum antibody titer to *Legionella pneumophila* serogroup 1 using validated reagents

#### **Preferred Diagnostic Tests**

Presently the majority (>95%) of legionellosis cases are diagnosed by urinary antigen testing, which is specific for Legionella pneumophila serogroup 1 (Lp1) and may not detect other Legionella pneumophila serogroups or Legionella species that also may cause illness. Therefore, it is strongly encouraged that a culture on lower respiratory secretions be performed in concert to allow for detection of non-Lp1 Legionella. However, culture for Legionella is a lengthy process, requires specialized media, has decreased sensitivity when collected after antibiotic treatment has begun, and must be performed by laboratorians trained in the technique. As a supplement to culture, PCR can also detect non-Lp1 Legionella, can be performed in far less time by most laboratorians, does not require specialized reagents, and is less affected by antibiotic use. Clinically compatible cases with detection of Legionella species by a validated nucleic acid assay (PCR) will now be classified as confirmed cases.

During outbreak investigations, local health departments may need to request respiratory specimens to be forwarded to a public health laboratory for further characterization, such as *Legionella* culture and whole genome sequencing. Culture is useful for generating isolates that can be further compared to environmental isolates to confirm an outbreak source. The urinary antigen test and PCR test alone do not allow for molecular comparison of clinical to environmental isolates.

#### Resources

For more information regarding the legionellosis case definition, please refer to the Council of State and Territorial Legionellosis Position Statement accessible at: <a href="https://cdn.ymaws.com/www.cste.org/resource/resmgr/2019ps/final/19-ID-04">https://cdn.ymaws.com/www.cste.org/resource/resmgr/2019ps/final/19-ID-04</a> Legionellosis final.pdf

For additional resources regarding legionellosis, please visit the New Jersey Department of Health's Legionellosis Webpage accessible at: <a href="https://www.nj.gov/health/cd/topics/legion.shtml">https://www.nj.gov/health/cd/topics/legion.shtml</a>

For any other questions or concerns regarding legionellosis, please contact Kathleen Ross (Kathleen.ross@doh.nj.gov) or Rebecca Greeley (Rebecca.greeley@doh.nj.gov) from the Communicable Disease Service.

- 1. A surveillance case definition is a set of uniform criteria used to define a disease for public health surveillance. Surveillance case definitions enable public health officials to classify and count cases consistently across reporting jurisdictions. Surveillance case definitions are not intended to be used by healthcare providers for making a clinical diagnosis or determining how to meet an individual patient's health needs.
- Clinical symptoms of pneumonia may vary but must include acute onset of lower respiratory illness with fever and/or cough. Additional symptoms could include myalgia, shortness of breath, headache, malaise, chest discomfort, confusion, nausea, diarrhea, or abdominal pain.

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## 2019 OUTBREAKS AT A GLANCE



540

### TOTAL # OF OUTBREAKS

There were a total of 540 outbreaks recorded in CDRSS for calendar year 2019. This ranks as the second most outbreaks in any given year coming in just behind 2018's 557 outbreaks.

#### **INFLUENZA**

Influenza accounted for 195 of the outbreaks in 2019 followed closely by 162 outbreaks of gastroenteritis.





### METHOD OF TRANSMISSION

Person-to-person contact was the top method of spreading the outbreak-causing

### EXPOSURE SETTINGS

Long-term care and assisted-living facilities are by far the most common settings for outbreak exposures (306) followed by day care facilities (71).





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