SYNERGY: COMBINING EFFORTS FOR HAI PREVENTION

September 2016

News from the Virginia Department of Health's Healthcare-Associated Infections (HAI) Program

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Notes from VDH

Have you registered for the 42nd Annual APIC-VA Educational Conference yet?
Preconference CIC review: October 13
Annual education conference: October 14
Conference website: **www.apic-va.com/Education.html**
Website for registration and agenda: **https://www.regonline.com/apicva2016**
See you in Richmond!

Update on *mcr*-1 gene identified in human isolates

In the September 16th issue of *MMWR*, CDC published two reports describing patients with *Escherichia coli* isolates containing the plasmid-encoded *mcr*-1 gene conferring bacterial resistance to the antibiotic colistin, and the investigations that followed in Pennsylvania and Connecticut.

The *mcr*-1 gene was first identified in China in 2015, and has since been identified in the United States. The U.S. investigations describe the identification of risk factors, contact tracing, and collection of specimens from those with the highest transmission risk. International travel was associated with the Connecticut patient. No bacteria harboring the *mcr-1* gene were detected among the contacts screened.

Tracking the *mcr-1* gene

Human isolates identified in:
- Connecticut
- New Jersey
- New York
- Pennsylvania

Animal isolates identified in:
- Illinois
- South Carolina

Enhanced surveillance is critical to identify reservoirs of this gene and to prevent its spread. Healthcare providers are advised to use standard and contact precautions, as well as thorough environmental cleaning. Any suspected cases of colistin-resistant bacteria or *mcr-1*-carrying isolates should be promptly reported to the local health department. Isolates of suspected cases should be forwarded through the Division of Consolidated Laboratory Services (DCLS) for testing at CDC.

To read the reports, please see:

https://www.cdc.gov/mmwr/volumes/65/wr/mm6536e2.htm?s_cid=mm6536e2_e

https://www.cdc.gov/mmwr/volumes/65/wr/mm6536e3.htm?s_cid=mm6536e3_w

In this issue:

Upcoming Events:

October 5: CDC NHSN Re-baseline Webinar, Session 1

October 7: Virginia Chapter of the Developmental Disabilities Nurses Association Educational Conference (Lynchburg)

October 13-14: APIC-VA Educational Conference and Pre-Conference (Richmond)

October 7-25: Hospital Infection Preventionist preview period for VDH 2015 HAI Annual Report

October 21: Webinar introducing VDH 2015 HAI Annual Report

October 16-22: International Infection Prevention Week

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NHSN Notes

2015 VDH HAI Annual Report — Coming Soon!

- Summary of all NHSN data reportable to VDH in 2015 from hospitals (acute care and critical access)
- Two versions:
  - Healthcare Provider
  - Healthcare Consumer
- Includes hospital-specific data, fact sheets, educational materials

Publication Timeline

October 7-25: Preview period for hospital infection preventionists

October 21, 12:00-1:00pm: Webinar for hospital infection preventionists, district and regional epidemiologists, and partner organizations to introduce and review reports

Don't Miss This!

CDC NHSN Re-Baseline Webinar
Wednesday, October 5, 2:00-3:30pm

Learning Objectives:

- Discuss the history and approach of developing a new national baseline for measuring healthcare-associated infections (HAIs).
- Explain the structure and elements of the new HAI risk models.
- Review the use of the SIRs in relation to Centers for Medicare and Medicaid Services (CMS) programs

Register Today:

https://cc.readytalk.com/r/bukusltexl4t&eom

Break the Chain of Infection! Join your friends, family members, and healthcare professionals in celebrating **International Infection Prevention Week (IIPW)**, October 16-22, 2016. IIPW takes place the third week of October each year, and raises awareness of the role infection prevention plays to improve patient safety. For more information, see: **http://professionals.site.apic.org/iipw/**

What's New for the 2016-2017 Influenza Season

The latest recommendations from the Advisory Committee on Immunization Practices (ACIP) were published in August. Important changes for the upcoming flu season include:

- All vaccines recommended this season are injectable vaccines (flu shots).
  - ◊ Due to concerns of poor or lower effectiveness, the **intranasal live attenuated influenza vaccine (LAIV), commonly known as "FluMist", should not be used** for the upcoming flu season.
  - ◊ This currently applies only to the 2016-2017 season.
- Changes in influenza vaccination of persons with egg allergies:
  - ◊ Recommendation that "*egg-allergic recipients should be observed for 30 minutes post-vaccination for signs and symptoms of an allergic reaction*" **has been changed to** "*providers should consider observing all patients for 15 minutes after vaccination*".
  - ◊ **New recommendation:** Persons with a history of egg allergy can be vaccinated with any licensed flu vaccine in an inpatient or outpatient medical setting under the supervision of a health care provider who is able to manage allergic conditions.
  - ◊ A person who has previously experienced a severe allergic reaction to flu vaccine (e.g., anaphylaxis) **should not** get a flu vaccine again, regardless of the component suspected of being responsible for the reaction.

Note: Where more than one type of vaccine is appropriate and available, VDH and CDC make no preferential recommendation for use of any influenza vaccine product over another.

To view the article, go to: **http://www.cdc.gov/mmwr/volumes/65/rr/rr6505a1.htm?s_cid=rr6505a1_e**

VDH has recently partnered with **Flu Near You**, a free, real-time, ILI surveillance system that engages your patients in flu prevention and gives them the knowledge to stay healthy. Using anonymous, crowd-sourced reporting, Flu Near You can encourage healthy flu prevention behavior and stop the spread of illness. Spread the word and encourage your patients to register: **https://flunearyou.org/**

Epidemiology of Sepsis: Prevalence of Health Care Factors and Opportunities for Prevention

The Centers for Disease Control and Prevention (CDC) published an article about a recent study on the health factors surrounding sepsis and its influence on approaches to prevention and treatment.

CDC conducted the study in partnership with the New York State Department of Health and the Emerging Infections Program to describe clinical characteristics, comorbidities, and ways to prevent infection in patients with sepsis. A retrospective medical record review was performed at four of New York's general acute care hospitals. Patients included in the study were admitted to the hospital during October 1, 2012 – September 30, 2013 [fiscal year (FY) 2013] or October 1, 2014 – September 30, 2015 (FY 2015). The medical records of 246 adults and 79 children (aged birth to 17 years) were reviewed.

In adult patients with sepsis, 238 (97%) had one or more comorbidities, such as diabetes mellitus (87; 35%), cardiovascular disease (79; 32%), and chronic kidney disease (56; 23%). The most common illness leading to sepsis was pneumonia (85; 35%), followed by urinary tract infections (62; 25%), and gastrointestinal infections (28; 11%). Pathogens isolated from blood cultures were most commonly *Staphylococcus* spp., *Escherichia coli*, and *Streptococcus* spp., with no pathogen identified in 76 (31%) patients. Among adults with sepsis, 142 (58%) were classified as healthcare-associated, and 104 (42%) were classified as community-associated.

Of the pediatric sepsis patients, 78% had at least one comorbidity present. The most common illnesses leading to sepsis among pediatric patients were respiratory infections (29%), followed by gastrointestinal infections (24%). Pathogens identified in blood cultures of these patients were most commonly *Enterococcus* spp. and *Klebsiella* spp.

In total, 25% or 82 sepsis patients in this study died, including 65 adults and 17 infants and children. In 2013, sepsis accounted for $23.7 billion of healthcare expenditures. The findings of the study help to address this public health priority by identifying risk factors and infections leading to sepsis, providing an objective measure for tracking trends, and contributing to prevention and treatment.

To read the *MMWR* article, go to: **http://www.cdc.gov/mmwr/volumes/65/wr/mm6533e1.htm**

Increased Risk of Fentanyl-related Overdose and Fatalities

The Centers for Disease Control and Prevention (CDC) recently published a Health Alert to inform public health departments and healthcare professionals about the **increased presence of fentanyl-laced counterfeit pills and toxic fentanyl-related compounds** in the United States. As a result of this influx, more people are at risk of overdoses and fatalities due to illicitly manufactured fentanyl (IMF). These counterfeit pills containing fentanyl and fentanyl-related compounds could potentially be distributed widely across the U.S., impacting regions of the country not previously affected.

In the past, fentanyl and fentanyl analogs have primarily been mixed into heroin, or sold as heroin unknowingly to customers on the illicit drug market in the Midwest, Southeast, and Northeast regions of the country. This has become a more widespread problem with the increase of counterfeit pills containing fentanyl closely resembling drugs such as Xanax, Norco, and oxycodone.

In July of this year, the Drug Enforcement Administration (DEA) issued a nationwide report showing that since 2014, hundreds to thousands of counterfeit pills have entered the U.S. drug market, with some containing deadly amounts of fentanyl and fentanyl analogs. The extremely potent fentanyl analog, Carfentanil, has been detected in at least one state.

CDC urges states to be vigilant of highly toxic fentanyl-related compounds and other synthetic opioid derivatives becoming available on the illicit drug market. The use of **Naloxene is recommended for overdose events**, and the facilitation of a combination of medication with counseling and behavioral therapies called Medication-Assisted Treatment (MAT). Adhering to these recommendations, and others made by CDC, will aid in the prevention of fentanyl-related overdose and fatality.

To read the CDC Health Update, go to: **https://emergency.cdc.gov/han/han00395.asp**

Safe Injection Practices: National Pain Awareness Month

September is National Pain Awareness Month. The One and Only campaign is led by the Centers for Disease Control and Prevention (CDC) and the Safe Injection Practices Coalition (SIPC) to bring awareness to safe injection practices. CDC and SIPC urge healthcare providers and public health professionals to focus on injection education during the month of September. Coinciding with their efforts, the latest APIC webinar held on September 16th highlighted safe injection, infusion and medication vial practices recommended by overseeing bodies.

Outbreaks associated with unsafe injection practices have been on the rise. In the last 15 years, approximately 50 outbreaks of viral hepatitis or bacterial infections have been linked to dangerous injection practices in outpatient settings. The One and Only campaign recommends that providers adhere to the **4 basic standards of care when providing pain relief treatments**: adhering to proper infection control practices, never reusing syringes, use of facemasks when injecting material, and not using single-dose medications for more than one patient.

For more information and educational flyers, visit the One and Only Campaign site:
http://www.oneandonlycampaign.org/

Zika Update

The Zika D's of Prevention:

- DRAIN standing water on your property
- DAWN and DUSK are times to avoid the outdoors
- DRESS in long sleeve shirts and pants when outdoors
- DEFEND yourself by using an insect repellent
- DOOR and window screens should be in good condition
- DISTRICT personnel are here to help

Although most Zika-positive cases in the United States have been associated with travel, local transmission has been reported in Florida. It is possible that other states could see local transmission as well. To date, there have been no reported cases of Zika virus contracted from a mosquito bite in Virginia. Recent **reports have identified new transmission methods and adverse outcomes not previously identified.** According to the CDC, Zika virus has the potential to be spread through mosquitoes, unprotected sexual contact, blood transfusion, and transmission during pregnancy. **Healthcare providers should continue to apply standard precautions while caring for all patients**, including those that might be infected with the Zika virus, and consider testing for those with risk for infection.

The CDC recommends pregnant women avoid travel to Zika-affected areas, which include areas of Florida and countries ranging from Mexico into the Caribbean, Central and South America.

Reminder: Acute Flaccid Myelitis

VDH is asking clinicians to remain vigilant in identifying and reporting suspected cases of **acute flaccid myelitis (AFM)** in all age groups.

- See last month's newsletter for more detailed information:

http://www.vdh.virginia.gov/surveillance-and-investigation/healthcare-associated-infections-hais/communication-and-education/

- Recommendations for clinical management and follow up can be found at:

http://www.cdc.gov/acute-flaccid-myelitis/downloads/acute-flaccid-myelitis.pdf

In the September 16th issue of *MMWR*, the CDC published two Zika-related reports. One report presented an overview of Zika virus disease cases in the United States, and the other presented findings from a Zika-infected individual with no known risk factors. The infected individual cared for a Zika-positive person and was known to have close contact with the index patient (e.g., hugging and kissing) while the index patient's viral load was much higher than typically found in Zika cases.

To read the reports, visit:

https://www.cdc.gov/mmwr/volumes/65/wr/mm6536e5.htm?s_cid=mm6536e5_w

https://www.cdc.gov/mmwr/volumes/65/wr/mm6536e4.htm?s_cid=mm6536e4_w

For more Zika-related information and Virginia-specific case counts, please see: **http://www.vdh.virginia.gov/zika/**