

SYNERGY: COMBINING EFFORTS FOR HAI PREVENTION

May 2015

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

Volume 6, Issue 5

Edited by:
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Notes from VDH

It was wonderful to see so many infection preventionists and hospital partners at the VDH Public Health Preparedness Summit and Field Epidemiology Seminar recently!

We also wanted to share a belated *CONGRATULATIONS* to **Sentara Leigh Hospital** and **Sentara Virginia Beach General Hospital** for being the first hospitals in the world to be designated as Centers for Excellence as a result of achieving Managing Infection Risk (MIR)

Certification from DNV GL. This certification's standard draws from three pillars: "a proactive rather than reactive approach to safety; the development of a safety culture that is transparent and accountable; and engagement of all staff towards a systems-driven approach to safety." Well deserved!



Field Epidemiology Seminar Recap

VDH's Field Epidemiology Seminar was held in Richmond on May 20th. The annual event hosted a variety of speakers covering recent outbreak investigations and other topics of interest in disease surveillance and investigation. Topics included foodborne investigations caused by norovirus, *Clostridium perfringens*, and tetrodotoxin, outbreaks of vaccine-preventable diseases (measles and mumps), geospatial analysis of household spread of Ebola virus disease in Sierra Leone, and more.

Highlights included the presentation by Alyssa Parr: "CRE: A Not-So-Cute Problem in a Long-Term Acute Setting." The talk described carbapenem-resistant Enterobacteriaceae in the long-term acute care setting and discussed the challenges associated with investigating a CRE outbreak among patients with multiple healthcare setting exposures.

Dr. Susan Fischer-Davis's presentation on Enterovirus D68 (EV-D68) described the

epidemiologic characteristics of the 2014 outbreak of severe respiratory illness associated with EV-D68 in Virginia and the United States. A patient's powerful story helped exemplify the severity of illness and describe the clinical course and potential complications of this disease.

This year's Grayson B. Miller award went to Dr. Lauren Turner, Lead Scientist of Foodborne Disease at the Division of Consolidated Laboratory Services. Dr. Turner's presentation, "Cutting the Cheese—The Soft Cheese Outbreak Lab Investigation", outlined laboratory sampling and testing methods, as well as product traceback and recall. Extensive communication and collaboration with state and federal agencies was required during this investigation of listeriosis associated with soft cheese. Congratulations, Lauren!

Special appreciation is extended to Jessica Rosner, VDH Foodborne Epidemiologist, for planning such a special, educational day!

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Upcoming Events:

- Jun 10:** Ventilator-associated event webinar (see pg 5)
Jun 14-18: Council of State and Territorial Epidemiologists Annual Conference, Boston, MA
Jun 27-29: APIC 42nd Annual Conference, Nashville, TN

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Emerging Complications with Drugs of Abuse

On May 6, VDH issued a Clinician's Letter notifying relevant Virginia healthcare providers of new information concerning emerging illnesses associated with drugs of abuse.

In April 2015, there was an increase in the number of marijuana-related emergency department and urgent care visits, likely a result of an emerging drug called "synthetic marijuana." While the actual properties of this drug (also known as Spice, K-2, and other names) have yet to be identified, it is believed that the substance could contain chemicals called cannabimimetics, which can cause many severe health effects. VDH requests that cases presenting with signs and symptoms associated with this synthetic marijuana (see link for list of associated characteristics) be reported to your poison center at 1-800-222-1222.

The letter also released an update concerning the March 2015 investigation of atypical presentations after heroin use. It is believed that clenbuterol, a veterinary medication, is being used as a heroin adulterant. In the Richmond area, 13 patients have been reported to have met a confirmed or suspected case definition for clenbuterol-tainted heroin (see link below for characteristic signs and symptoms). VDH asks that if you care for a patient whom you suspect to have been exposed to heroin with clenbuterol, immediately call 911, treat the case as a medical emergency, and contact the local health department to help determine if the risk of exposure to this form of heroin is imminent.

To learn more about the emerging illnesses associated with these drugs, go to:

<http://www.vdh.virginia.gov/clinicians/pdf/IlInnessesAssociatedwithDrugsofAbuse.pdf>

Reducing Antibiotic Reliance Through the Use of Better Diagnostic Tools

In a study published in April 2015 in the *Journal of Infectious Diseases*, Branche et al. used a biomarker called procalcitonin, which is present in higher levels in the serum of patients with bacterial infections, to help reduce the ambiguity in differentiating between viral and bacterial infections. The study hoped to use this method to better diagnose patient infections and promote antibiotic stewardship practices in the hospital.

Three hundred patients were randomly assigned to either a standard care group or a procalcitonin and multiplex PCR pathogen testing group. Of these patients, 42% were diagnosed with a viral infection and 80% had low

procalcitonin levels, but no significant differences in antibiotic use were found between groups. In patients with both a viral infection and low procalcitonin levels, however, physicians were less likely to prescribe antibiotics and more likely to, if prescribed, shorten the duration of antibiotics.

Though the study did not succeed in its primary goal of identifying the impact of testing results on antibiotic use, it did suggest that if hospitals are given access to "more powerful diagnostic tools," physicians will reduce the number of antibiotics they inappropriately prescribe.

To read the full article, visit: <http://jid.oxfordjournals.org/content/early/2015/04/24/infdis.jiv252.full.pdf>

New Wound Analysis Tools

On May 4, the *Washington Post* published an article describing two new apps that are being evaluated for their accuracy and effectiveness in wound treatment. The creators of these apps hope to replace the current subjective method of using rulers and swabs to measure wound depth and size. This will both improve the objectivity and accuracy of wound care, as well as reduce the number of medical trips that a patient must make.

Each app requires the patient or caregiver to use their smartphone or iPad to take a picture of the relevant area, which a computer algorithm then analyzes to

calculate the dimensions of the wound and the status of the tissues. The information is then linked to a website, which doctors and nurses can easily access, including from off-site locations.

These apps are still being evaluated in clinical settings and are expected to be released soon to help guide wound care treatment in the near future.

To read the full article, visit: http://www.washingtonpost.com/national/health-science/a-better-way-to-analyze-how-wounds-are-healing/2015/05/04/d2a288fa-b791-11e4-aa05-1ce812b3fdd2_story.html

National Healthcare Safety Network (NHSN) Notes

Targeted Assessment for Prevention (TAP) Catheter-Associated Urinary Tract Infection (CAUTI) Toolkit Implementation Guide

As mentioned in prior NHSN communications, the TAP strategy is a way to identify facilities or units within a facility with the highest excess numbers of infections so that prevention efforts and resources may be directed towards facilities or units in greatest need of improvement.

Since the January 2015 release, TAP reports are available in the NHSN application to allow users to identify settings with excess numbers of CAUTIs, central line-associated bloodstream infections (CLABSIs), and *Clostridium difficile* laboratory-identified events in acute care hospitals (CAUTI, CLABSI, *C. diff*), inpatient rehabilitation facilities (CAUTI), or long-term acute care hospitals (CAUTI, CLABSI).

Study Establishes Updated Guidelines for Appropriate Catheter Use

A recently published study conducted by Jennifer Meddings et al. applied the RAND/UCLA Appropriateness Method to establish a list of criteria to better guide nurses and clinicians with respect to the use of urinary catheters. Hospitals generally rely on the 2009 *Guideline for Prevention of Catheter-Associated Urinary Tract Infections* from the Healthcare Infection Control Practices Advisory Committee (HICPAC) to assess catheter use. However, implementing appropriate catheter use with this guideline can be challenging for many reasons, including the HICPAC's lack of "common patient characteristics."

In this study, a panel of 15 healthcare specialists rated 299 scenarios of catheter uses as either appropriate,

In May 2015, CDC published the TAP CAUTI Toolkit Implementation Guide (<http://www.cdc.gov/hai/prevent/tap/resources.html>), a compilation of links to prevention tools and resources that can be used as part of the overall TAP strategy (<http://www.cdc.gov/hai/prevent/tap.html>).

NHSN Training Resources

Updated training materials are available on the NHSN training page (<http://www.cdc.gov/nhsn/training/patient-safety-component/index.html>) and include the following.

- Web-streaming from the 2015 annual training
- Slide sets with case studies
- Self-paced interactive computer-based training modules
- Hot topics– quick learn presentations on 2015 NHSN changes

inappropriate, or uncertain (labeled when there was disagreement among raters). Unlike the methodology used by HICPAC, these scenarios included patient-specific information, such as patient incontinence and comfort. Overall, among the 299 scenarios, the panelists rated 88 as appropriate (29.4%), 165 as inappropriate (55.2%), and 46 (15.4%) as uncertain use of a catheter.

The study's findings indicate that the broad guidelines provided by the HICPAC could be revised to allow nurses and clinicians to "feel more comfortable implementing interventions to restrict catheter use because the [updated] criteria address practical challenges."

To read the full article, visit: <http://annals.org/article.aspx?articleid=2280677>

Questionnaire to Aid in CAUTI Prevention

A new tool to help hospitals approach CAUTI prevention more effectively is available through **CatheterOut.org**. The Guide to Patient Safety (GPS) tool is the product of a multi-disciplinary research team funded by the Department of Veterans Affairs (VA), the National Institutes of Health (NIH), and the Agency for Healthcare Research and Quality (AHRQ), and is completed by key informants in healthcare settings. The GPS is designed for facilities that have already initiated

CAUTI intervention programs but have had less success than desired, since these settings will be more aware of the specific challenges to success they face.

To learn more about the GPS, visit: <http://catheterout.org/?q=gps>

To take the GPS and learn more about successful CAUTI prevention strategies for your hospital, visit: <http://catheterout.org/questions.html>

FDA Proposed Rule to Assess Antiseptic Hand Cleaners in Healthcare Settings

On April 30, the U.S. Food and Drug Administration (FDA) released a proposed rule requesting that companies submit data regarding the safety and effectiveness of certain active ingredients in antiseptic products used in healthcare settings. Though these antiseptic hand cleaners are important in eliminating bacteria that could lead to an infection, the FDA is concerned with potential hormonal effects and emerging bacterial resistance.

In the past few years, healthcare providers have increased their use of antiseptics, in an attempt to prevent HAIs. The FDA is looking for additional data on these antiseptics to ensure that the products remain on the skin and are not systemically absorbed, since

absorption could disrupt hormonal levels in the body. The FDA is also concerned with bacterial resistance and hopes to reduce the number of drug-resistant bacteria that emerge through this reevaluation.

Though still requesting more scientific data, the FDA encourages healthcare providers to continue to use antiseptics to prevent infections.

To read the full FDA announcement, visit: <http://www.fda.gov/NewsEvents/Newsroom/PressAnnouncements/ucm445002.htm>

To read a statement issued by APIC/SHEA, visit: <http://www.apic.org/For-Media/Announcements/Article?id=8a5c49b2-69f1-49c9-b1c0-6148260520ca>

2015 Hospital Safety Scores Released

The Leapfrog Group, a non-profit organization dedicated to improving American healthcare, released the 2015 Hospital Safety Score data on their website on April 29.

Hospitals throughout the nation are assigned either an A, B, C, D, or F grade, based on a number of safety characteristics such as the ability to prevent infection or the quality of measures used to avoid errors. The score is not only intended to make it easier for patients to evaluate hospitals in their area, but also provide an incentive for hospitals to improve their standards or maintain effective existing measures. This year, Leapfrog has also added a new function to the website, in which a hospital's current score can be compared with its scores from the previous three years.

Though individual hospital rankings can be viewed, Leapfrog also combines each state's data to create a ranking of states with the safest hospitals. With 48.4% (or 30 hospitals) receiving "A" grades this year, Virginia came in 3rd in the state rankings. Congratulations, Virginia! Ahead of VA, Maine received the number one ranking for the third time in a row, and Massachusetts claimed the second spot.

To learn more about the Hospital Safety Scores, visit <http://www.hospitalsafetyscore.org/about-us/newsroom/display/46972>

To view the state rankings, go to: <http://www.hospitalsafetyscore.org/your-hospitals-safety-score/state-rankings>

AHRQ YouTube Channel: Videos to Enhance Communication and Teamwork Skills

The Agency for Healthcare Research and Quality (AHRQ) recently created a YouTube channel with videos that highlight two training programs that employ enhanced communication and teamwork skills to improve healthcare quality. The channel features videos on the Comprehensive Unit-based Safety Program Toolkit (CUSP), which addresses the need for working together to reduce the number of HAIs, as well as TeamSTEPPS (Team Strategies and Tools to Enhance

Performance and Patient Safety), another teamwork system that intends to increase patient safety. The AHRQ channel incorporates about 50 videos for each training program, and each of the programs can be applied to specific training needs of healthcare providers.

To access the YouTube channel and videos, go to: <https://www.youtube.com/user/ahrqpatientsafety>

Join the **Quality Innovation Network
National Coordinating Center (QIN NCC)**
as we host **Centers for Disease Control
(CDC)** for a

Ventilator-Associated Events (VAE) Educational Webinar

**JUNE 10, 2015
3-4 PM ET**

WHO SHOULD ATTEND?

- QIN-QIO Healthcare-Associated Infections (C.1) team members
- Hospital team members interested in VAE reporting

SPEAKER

Cindy Gross

Infection Preventionist
Centers for Disease Control
Division of Healthcare Quality Promotion (DHQP)
Surveillance Branch (SB)

OBJECTIVES

- Review Ventilator Associated Events (VAE) definitions and surveillance methods
- Describe important changes made to VAE surveillance and PNEU/VAP in 2015
- Review the use of the VAE Calculator
- Describe how to correctly enter VAE into NHSN

HOW TO REGISTER...

This event requires registration!

Register for the event here:

<https://qualitynet.webex.com>

Call-In number: 855-339-4595

Passcode: 46025199

1. Locate the VAE Educational Webinar on June 10th
2. Click Register on the right hand side of the event
3. Enter the requested information
4. Click Submit
5. Once registration is complete, you will receive a notice with confirmation details.

NOTES

We encourage you to attend this event with your team as seats for the event may reach maximum capacity. The event will be recorded and available for later viewing. CMS will provide further guidance on satisfying the LANVAE requirement for C.1.6.4a.

This material was prepared by Telligen, the Quality Innovation Network National Coordinating Center, under contract with the Centers for Medicare & Medicaid Services (CMS), an agency of the U.S. Department of Health and Human Services. The contents presented do not necessarily reflect CMS policy. 11GOW-QINNOO-00289-05/28/15

