SYNERGY: COMBINING EFFORTS FOR HAI PREVENTION

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

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Edited by: Andrea Alvarez

Notes from VDH

HAI Reporting Crosswalk Available!

An updated document has been posted to the APIC-VA website (**http://www.apic-va.com/VDH_HAI.html**) that details HAI reporting requirements for hospitals by pathogen and by agency. It covers reporting requirements for VDH, VHHA, and VHQC and CMS. The document is meant to be helpful for new (and current) IPs who are trying to ensure they are reporting correctly; it should also resolve confusion about each organizations' initiatives.

National Public Health Week

April 4-10 is National Public Health Week! This year's theme is "Healthiest Nation 2030". To learn more about education and health, building safe communities, social justice and health, climate change, healthy food choices, strengthening the public health infrastructure, and much more, go to **www.nphw.org.** Look out for opportunities in your community to get involved.

In this issue:

CDC National and State HAI Progress Report, 2014

The Centers for Disease Control and Prevention (CDC) recently published its annual National and State Healthcare-Associated Infections (HAI) Progress Report, The HAI Progress Report consists of national and state-by-state summaries of HAIs. Infection data in this report include central line-associated bloodstream infections (CLABSI), catheter-associated urinary tract infections (CAUTI), select surgical site infections (SSI), hospital-onset *Clostridium difficile* (*C. difficile*) laboratory-identified (LabID) events, and hospital-onset methicillin -resistant *Staphylococcus aureus* (MRSA) bacteremia LabID events.

For all infection types but *C. difficile*, Virginia performed better than the nation in 2014. For CLABSI, Virginia hospitals had an SIR that was 21% lower than the nation and 61% lower than the national baseline (2006-2008); both results were statistically significant. Hospital-onset MRSA bacteremia LabID events in Virginia also decreased significantly (16%) from the baseline period (2011). No other infection type experienced a significant change from the national baseline, although most (all but SSI following colon surgery) experienced a decrease. In 2014, Virginia hospitals performed significantly worse than the nation for hospital-onset *C. difficile* LabID events.

For five types of infection events and settings (CLABSI in neonatal intensive care units, inpatient wards, and all critical care units and inpatient wards; SSI following abdominal hysterectomy surgery; and SSI following colon surgery), no Virginia hospitals performed worse than the national SIR in 2014.

Numerous infection prevention, quality improvement, and patient safety initiatives are underway in hospitals around our state to continue to work toward reducing HAIs and saving patient lives.

Access the national data and supporting materials here: **http://www.cdc.gov/hai/surveillance/progress-report/index.html**

The Virginia-specific two-page report is available here: **http://www.cdc.gov/hai/pdfs/stateplans/factsheets/va.pdf**

Upcoming Events:

April 4-10: National Public Health Week

April 8, 12-1 PM: VDH/ VHQC/APIC-VA webinar sharing surveillance strategies from recent NHSN training at CDC

May 19: VDH Field Epi Seminar in Portsmouth, VA

Contact:
Andrea Alvarez,
HAI Program Coordinator
with questions / comments:
804-864-8097

NHSN Notes

NHSN Webinar for Virginia and Maryland Infection Preventionists: April 8th

VDH, VHQC, and APIC-VA will be sponsoring another NHSN online training on April 8th from 12-1PM, focusing on the analysis updates from the 2016 NHSN training in Atlanta. This is the third webinar in a three-part series entitled "Surveillance Strategies for Success". Parts 1 and 2 covered NHSN 2016 surveillance updates and how to produce and use TAP (Targeted Assessment for Prevention) reports. Slides and recordings will be available for each webinar. Registration information was shared by VDH on March 23rd and by APIC-VA and VHQC as well.

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CMS Inpatient Psychiatric Facility Quality Reporting (IPFQR) Program

The Centers for Medicare and Medicaid Services IPFQR Program requires healthcare personnel flu vaccination reporting for the 2015/2016 flu season, with a reporting deadline of May 15, 2016. For inpatient psychiatric facilities (IPFs) that need to be mapped as a location within an affiliated NHSN acute care hospital, see: **www.cdc.gov/nhsn/pdfs/mrsa-cdi/ipf-locations.pdf**. The direct link to the NHSN webpage for IPF reporting is: **http://www.cdc.gov/nhsn/ipfs/vaccination/index.html.**

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Establishing New Baseline for SIRs

- Data reported to NHSN for calendar year 2015 will be the new baseline for HAI standardized infection ratios. Risk adjustment methods and risk models may vary from original baselines.
- A dedicated "Rebaseline" webpage will be available via CDC this spring (expected April 2016).
- Under consideration: The CDC team is working on possibly lowering the minimum precision criterion to determine eligibility for calculating the SIR.
  - ◊ Currently, SIRs are not calculated when the predicted number of infections is less than 1.
  - ◊ It is possible that the threshold will be lowered, and that SIRs will be calculated if the predicted number of infections is ≥ 0.2.
- SIRs calculated using the old/current baseline will be available through 2016 data.
  - ◊ The new baseline will be available to calculate SIRs for data from 2015, 2016, and forward.
- Rebaseline timeline:
  - ◊ CDC will be working on final analyses this summer, and plans to complete risk-adjustment by July 15, 2016.
  - ◊ On August 15, 2016, the 2016Q1 data will be submitted to CMS using the new baseline created based on 2015 data.
  - ◊ CDC plans to have the new SIRs and risk-adjustment available in the NHSN application by December 2016/January 2017.
- The new baseline will be used for calculation of SIRs for the CMS Value Based Purchasing Program according to the Final Rule published in the Federal Register, August 17, 2015:
  - ◊ Fiscal Year (FY)2017 and FY2018 Program Years will use the original NHSN baselines
  - ◊ FY2019 and forward will use the new NHSN baselines (based on 2015 data)
  - ◊ See: **https://www.gpo.gov/fdsys/pkg/FR-2015-08-17/pdf/2015-19049.pdf**
- Will the rebaselining increase or decrease a hospital's SIR?
  - ◊ SIRs produced under the new 2015 baseline will not be comparable to SIRs calculated under the original baselines.
  - ◊ The 2015 baseline is a new starting/referent point from which to measure future progress. Therefore, CDC expects that hospital SIRs will shift closer to 1, particularly for the 2015 SIRs calculated with the 2015 baseline.

Reminder: Field Epi Seminar Registration Open!

The 2016 VDH Field Epidemiology Seminar will be held on May 19th at the Renaissance Portsmouth-Norfolk Waterfront Hotel. Registration is available on TRAIN Virginia (**https://va.train.org**) using course ID 1060545.

More information about the event is available on the Virginia Public Health and Healthcare Academy blog (**http://virginiapreparednessacademy.blogspot.com/**)

March 2016 CDC *Vital Signs* Report: Protect Patients from Antibiotic Resistance

According to the March 2016 *Vital Signs* report (**www.cdc.gov/vitalsigns/protect-patients/index.html**), antibiotic-resistant (AR) bacteria can make infections impossible to treat. Of 18 AR bacteria identified by CDC as public health threats, six, in addition to *Clostridium difficile*, cause HAIs.

During 2014, the six specific AR bacteria identified by CDC as urgent or serious threats to health accounted for 15% of CAUTIs, CLABSIs, and SSIs in inpatient rehabilitation facilities, short-term acute care hospitals, and long-term acute care hospitals. However, this percentage varied by HAI type and facility type.

- Over one of every four HAIs (28% of CLABSIs and 29% of CAUTIs) reported from long-term acute care hospitals were caused by antibiotic-resistant bacteria.
- In short-term acute care hospitals, 1 in 6 CLABSIs (18%), 1 in 7 SSIs (15%), and 1 in 10 CAUTIs (10%) were caused by urgent or serious antibiotic-resistant threats.
- Overall, 14% of all HAIs in short-term acute care hospitals were caused by one of the six AR threat bacteria.
- 12% of CAUTIs in inpatient rehabilitation facilities were caused by one of these six bacteria.

The six antibiotic-resistant threats examined were:

- **CRE**: In 2014, 3.6% of Enterobacteriaceae HAIs were CRE.
- **MRSA**: In 2014, 47.9% of *Staph aureus* HAIs were MRSA.
- **ESBL-producing Enterobacteriaceae** (extended-spectrum β-lactamases): In 2014, 17.8% of Enterobacteriaceae HAIs were this phenotype.
- **Vancomycin-resistant Enterococcus** (VRE): In 2014, 29.5% of enterococci HAIs were VRE.
- **Multidrug-resistant *Pseudomonas aeruginosa***: In 2014, 15.9% of *P. aeruginosa* HAIs were multidrug-resistant.
- **Multidrug-resistant Acinetobacter**: In 2014, 52.6% of Acinetobacter HAIs were multidrug-resistant.

CDC is calling on doctors, nurses, health care facility administrators, and state and local health departments to continue to do their part to prevent HAIs. The report recommends doctors and nurses combine three critical efforts to accomplish this:

- Prevent the spread of bacteria between patients;
- Prevent infections related to surgery and/or placement of a catheter; and
- Improve antibiotic use through stewardship.

To read the companion *MMWR* article: **http://www.cdc.gov/mmwr/volumes/65/wr/mm6509e1er.htm**

CDC Antibiotic Resistance Patient Safety Atlas

CDC's Antibiotic Resistance (AR) Patient Safety Atlas was released in March 2016. This tool provides open and interactive data about HAIs caused by antibiotic resistant bacteria that are reported to CDC through the NHSN.

The Atlas shows percent resistance for many urgent and serious resistance threats identified by CDC in the Antibiotic Resistance Threat Report, including MRSA, carbapenem-resistant Enterobacteriaceae (CRE), and multidrug-resistant (MDR) *Pseudomonas aeruginosa.*

The AR Patient Safety Atlas includes data from 2011 to 2014 reported to NHSN from more than 4,000 healthcare facilities. Hospital types include general acute care, long-term acute care, and inpatient rehabilitation. Resistance data for 31 bug-drug profiles or phenotypes, pathogen-antibiotic combinations that are used to describe the bacteria's resistance to a specific drug(s) are included in the Atlas.

Bacteria gathered after a CAUTI, CLABSI, or SSI infection were tested for susceptibility to specific antibiotics (if an antibiotic could limit growth or kill them). Bacteria from these infections that were not slowed or killed by the antibiotic were reported resistant. Percent resistance was calculated by dividing the number of resistant pathogens reported by the total number of pathogens tested.

National and state percent resistance are displayed in the Atlas. Of note, Virginia's percent resistance is not substantially higher than the national percent resistance for any specific phenotype. Virginia is significantly lower for several, including carbapenem-resistant *Klebsiella*, MDR-Acinetobacter, and MDR-*Pseudomonas aeruginosa*.

To access the Atlas, go to: **www.cdc.gov/hai/surveillance/ar-patient-safety-atlas.html**

Patient Safety Awareness Week 2016

March 13-19 was the annual Patient Safety Awareness Week organized by the National Patient Safety Foundation (NPSF). The annual education campaign brings awareness to the issue of patient engagement and emphasizes the importance of the relationship between providers, patients and their families. An effort is made each year to support this event by sharing resources and bulletins about patient safety.

This year's theme was "United for Patient Safety". NFSW promoted this year's theme by asking all healthcare professionals to recognize the patient in themselves by donning patient gowns during the week-long event because "We are all patients, after all".

The United for Patient Safety campaign is asking both healthcare professionals and consumers to take a pledge to stand united in striving to reduce harm in patient care. To take the pledge, visit: **www.unitedforpatientsafety.org/take_the_pledge**

For more information about the patient safety campaign, visit the website at **http:// www.unitedforpatientsafety.org/**

Free Infection Prevention Resources for Consumers

The Association for Professionals in Infection Control and Epidemiology (APIC) has recently shared several infection prevention tools for healthcare consumers that provide helpful tips to stop transmission of infections. The educational brochures are free for download and highlight consumer-related infection topics.

Health materials featured in March include:

Is strep causing that sore throat?

A consumer-friendly guide of frequently asked questions features what you need to know about strep throat including treatment and prevention. Additional resources from the CDC are included for further reference.

To download the document, visit:

http://www.apic.org/Resource_/ TinyMceFileManager/for_consumers/ IPandYou_Bulletin_Strep_throat.pdf

Norovirus—a.k.a. the vomiting bug

This consumer-friendly guide shares tips for norovirus prevention and ways to stop the spread of illness. Additional resources for further reading and review are included in the guide.

Download a printable version by visiting:

http://www.apic.org/Resource_/ TinyMceFileManager/for_consumers/ IPandYou_Bulletin_Norovirus_2016.pdf

Investigational Drug Available for Treatment of Free-Living Amoeba Infections

The CDC has released an investigational drug called miltefosine, available for treatment of free-living amoeba (FLA) infections caused by *Naegleria fowleri, Balamuthia mandrillasris* and *Acanthamoeba* species. If you have a patient with suspected FLA infection, please contact the CDC Emergency Operations Center at (770) 488-7100 to consult with a CDC expert regarding the use of the drug. Additionally, notify your local health department regarding the suspected infection. These organisms are typically found in the environment, including water and soil.

Specifically, *Naegleria fowleri,* commonly found in warm freshwater sources (lakes, rivers and hot springs), can cause a rare and devastating infection of the brain called primary amebic meningoencephalitis (PAM), which is often fatal (130/133 patients subsequently expired). In Virginia, the last PAM infection was reported in 2011. In the summer of 2013, two children with *Naegleria fowleri* infection in other states survived. Both children were treated with miltefosine soon after the onset of their illness.