SYNERGY: COMBINING EFFORTS FOR HAI PREVENTION

October 2012

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

Volume 3, Issue 10

Edited by: Andrea Alvarez

Notes from VDH

Infection Prevention Week was October 14-20. The Virginia Department of Health's Healthcare-Associated Infections Program celebrates infection preventionists (IPs) and other members of infection prevention teams in their efforts to keep our Commonwealth's healthcare facilities, patients/residents, and healthcare workers safe and infection-free. We commend IPs for their strong voices that push others in healthcare facilities to adhere to evidence-based infection prevention practices and for their commitment to partnership and collaboration with other organizations and agencies (such as VDH) that are also dedicated to patient safety, quality, and protecting the public's health.

Fungal Meningitis Outbreak

This month, infection preventionists, clinicians, and public health professionals have focused much effort on an outbreak of fungal meningitis among patients who received epidural steroid injections containing preservative-free methylprednisolone acetate from three lots prepared by the New England Compounding Center (NECC). Several patients suffered strokes that are believed to have resulted from their infections. The investigation also includes fungal infections associated with injections in a peripheral joint, such as a knee, shoulder or ankle. The medication was distributed to 23 states and as of October 29, 354 people (including 43 in Virginia) have been confirmed to have fungal meningitis or a peripheral joint infection.

In Virginia, patients were exposed to vials from these three lots at two facilities in the southwest region. Nearly 700 patients were contacted and evaluated for illness; outreach continues and these individuals will be contacted periodically over the next several weeks to assess for new symptoms, as these infections, especially those in peripheral joints, can take a long time to develop. Symptoms of concern are new or worsening headache, fever, localized weakness, falls, difficulty walking, slurred speech or other symptoms that may suggest a stroke.

In addition to the three implicated lots of methylprednisolone acetate, other NECC products may also be contaminated. On October 15th, the Food and Drug Administration (FDA) advised healthcare facilities to follow-up with patients who were administered any NECC injectable product **on or after May 21, 2012,** including an ophthalmic drug that is injectable or used in conjunction with eye surgery, or a cardioplegic solution purchased from or produced by NECC. A list of Virginia facilities that received NECC products during this time period are available on the FDA's fungal meningitis webpage (**www.fda.gov/Drugs/DrugSafety/FungalMeningitis/default.htm**).

The CDC's meningitis outbreak webpage (**www.cdc.gov/hai/outbreaks/meningitis.html**) has the most current case definitions and guidelines on diagnostic testing and treatment.

Please contact your local health department to report suspected cases or if you need additional information.`

In this issue:

Upcoming Events:

November 12—18: Get Smart About Antibiotics Week

Nov 28, 2 PM: VHQC/VDH *C. diff* Infection Prevention Collaborative Webinar on *C. diff* surveillance

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

Clostridium difficile Infection Prevention Webinar Recap

On October 24th, VDH and VHQC hosted a webinar on *Clostridium difficile* to kick off the Virginia *C. diff* infection prevention collaborative. Nearly 100 people from acute care, long-term care, and health department settings attended the hour-long session. Dr. Thomas Kerkering from Carilion Clinic and Virginia Tech Carilion School of Medicine began the webinar with an overview of the epidemiology and burden of *C. difficile* in Virginia, including the pathophysiology, diagnosis, and risk factors.

Andrea Alvarez from VDH then reviewed the purpose, goals, and methods of the VHQC/VDH *C. diff* collaborative, benefits to participation, and the current evidence-based core and supplemental prevention strategies. Jennifer Reece from VHQC reviewed the steps to enroll in the VHQC/VDH *C. diff* collaborative including the commitment forms for hospitals and nursing homes. The prevention collaborative will wrap up in August 2013 and subsequent webinars will focus on topics such as surveillance, antibiotic stewardship, and environmental cleaning.

VHQC's website (**www.vhqc.org/resource.asp**) has copies of the commitment forms and will soon also include a recording of the webinar as well as the slides. If your facility is interested in participating, please contact Amy Lenz (alenz@vaqio.sdps.org) with questions and scan, mail, or fax a completed commitment form by **12/14** to:

VHQC
9830 Mayland Dr., Suite J
Richmond, VA 23233
Attn: Amy Lenz
804.289.5324 (fax)

Update on National Healthcare Safety Network (NHSN) Healthcare Personnel Influenza Vaccination Reporting

Several IPs have asked the VDH HAI Program for clarification on reporting influenza vaccination for healthcare personnel (HCP) in acute care facilities that provide multiple types of care (such as inpatient rehabilitation, long-term care, etc.) within the facility. Recently, we received the information from CDC about this issue. If the following guidance does not answer your question, please e-mail the NHSN help desk (nhsn@cdc.gov) and make sure you reference flu vaccination in the subject of your message. VDH would appreciate if you send along your responses from CDC so that we may share with facilities across the state.

"Acute care facilities should count HCP working in all units that are physically considered a part of the inpatient acute care facility site, regardless of the size or type of unit. A helpful rule of thumb to use: If the location is staffed by acute care facility workers, follows the acute care infection control policies, and answers to the acute care administration, then the workers in that location should be included for the acute care influenza vaccination coverage. The decision to include or exclude HCP from the acute care facility's HCP influenza vaccination counts should be based on whether individuals meet the specified NHSN criteria and are physically working in a location/unit that is considered any part of the on-site acute care facility that is being monitored.

For example:

- HCP working in a unit that is mapped as an Inpatient Rehabilitation Ward within an acute care facility [has a "T" or "R" in the 3rd position of the CMS Certification Number (CCN)] *would be* included in the acute care facility's HCP influenza vaccination counts, because the inpatient rehab unit is a location of that acute care facility.
- HCP working in a long-term acute care facility (LTAC) or a free-standing inpatient rehabilitation facility (IRF) that has enrolled as a separate facility within NHSN *would not* be included in the acute care facility's influenza vaccination counts, because they are enrolled as a facility that is separate from the acute care facility.
- HCP working in locations that are off-site, such as separate satellite clinics, *should not* be included in the on-site acute care facility's influenza vaccination counts.
- Long-term care (LTC) facilities (e.g., skilled nursing facilities) that are considered separate entities from the acute care facility should be enrolled in NHSN as a separate LTC facility and therefore *should not* be included in the acute care facility's influenza vaccination counts.

NHSN News

From October 2-4, CDC held a three-day training entitled "Protocols, Analysis, and Reporting: Getting the Most From the National Healthcare Safety Network (NHSN). Attendees across the U.S. were able to watch via webstreaming and we hope that some of you were able to take advantage of that. The recordings are not yet available, but the resource book is online (**www.cdc.gov/nhsn/pdfs/training/Resource-book.pdf**) and the slide sets are also available (**www.cdc.gov/nhsn/pdfs/training/3-day-Training-final.pdf**). We think that you will find the analysis quick reference guides and the locations decision tree in the resource book very helpful. For future reference, NHSN has aggregated all of its analysis resources here: **www.cdc.gov/nhsn/PS-Analysis-resources/index.html**.

COMING SOON! Several NHSN key terms are new or updated for surveillance in January 2013:

A) **Present on Admission (POA)**: An infection is considered POA if it occurs on the day of admission to the hospital or the next day and fully meets a CDC/NHSN site-specific infection criterion.

B) **Healthcare-associated Infection (HAI)**: An infection is considered an HAI if it occurs on or after the 3rd hospital day and meets a CDC/NHSN site-specific infection criterion. The onset of the HAI (e.g. fever) may occur during the initial 2-day period of hospitalization as long as the infection criterion is not fully met during that period.

C) **Device-associated Infection**: An infection is considered device-associated if the device has been in place for > 2 calendar days and meets a CDC/NHSN site-specific infection criterion. The onset of the infection (e.g. fever) may occur during the initial 2-day period of device placement as long as the infection criterion is not fully met during that period. Infections occurring on Day 1 or 2 following device discontinuation, with day of discontinuation = Day 1, are device-associated infections.

D) **Transfer Rule**: If an HAI develops ≤ 2 calendar days of transfer from one inpatient location to another in the same facility, it is attributed to the transferring location (i.e., it occurs on the day of transfer or the next day). Likewise, if an HAI develops ≤ 2 calendar days of transfer from one inpatient facility to another, it is attributed to the transferring facility. Receiving facilities should share information about such HAIs with the transferring facility to enable reporting. Day of transfer = Day 1.

Other surveillance changes for January 2013, such as those for surgical site infection (SSI) surveillance, will be summarized in next month's newsletter.

Preparedness Starts at Home

Many infection preventionists in hospitals, long-term care facilities, and other healthcare settings are also involved in emergency preparedness at work, including writing plans, conducting drills and tabletop exercises, and coordinating with public health and emergency management colleagues during actual disasters and events. Hurricane Sandy is just one recent reminder of the importance of having emergency preparedness programs in place in healthcare settings. However, we also need to remember to be prepared at home, as we never know when disaster may strike or what the magnitude of a weather event may actually be.

Here are a few reminders about maintaining an emergency kit and being prepared at home to protect you and your family. For more information, go to **www.readyvirginia.gov.**

- Make sure your disaster supplies kit is ready to go with the following items:
  - Water (1 gal/person/day—at least a 3 day supply)
  - Food that does not need electricity for storage or preparation (3 day supply per person) and a manual can opener, if necessary
  - Battery-operated radio and extra batteries
  - Written emergency plan
  - Other supplies in the kit may include things like sanitation supplies, flashlights, important documents and financial records, and first aid equipment
- During a storm, turn refrigerator and freezer to maximum cold and keep closed.
- Fill the bathtub and other large containers with water for bathing, flushing toilets, and cleaning, but not drinking.
- Secure or bring inside such outdoor items as patio furniture.
- Turn off propane tanks. Shut off other utilities if emergency officials advise you to do so.

HAI Rates, Device Utilization, and Antimicrobial Resistance in Long-Term Acute Care Hospitals, 2010

The October 2012 issue of *Infection Control and Hospital Epidemiology* features an article on healthcare-associated infections, device utilization, and antimicrobial resistance in long-term acute care hospitals (LTACHs) reporting to the National Healthcare Safety Network (NHSN) and concludes that LTACHs are a high-risk setting for device-associated infections and multidrug-resistant organisms.

In 2010, median rates of central line-associated bloodstream infection (CLABSI) (1.25 infections per 1,000 central line days) were comparable to rates in major teaching ICUs and were higher than those in other ICUs. Catheter-associated urinary tract infection (CAUTI) rates (median: 2.61 infections per 1,000 catheter days) were higher and ventilator-associated pneumonia rates (median: 0.0 infections per 1,000 ventilator days) were lower than those in ICUs. Central line utilization in LTACHs was higher than in ICUs while urinary catheter and ventilator utilization was lower. Among *Staphylococcus aureus* CLABSIs, methicillin resistance was higher in LTACHs (83%) than in ICUs (62-65%) and vancomycin resistance was higher among *Enterococcus faecalis* CAUTIs in LTACHs (44%) compared to ICUs (7-13%). To access the entire article, go to: **www.jstor.org/stable/10.1086/667745**.

NHSN Q&A

Q. My question pertains to *C. difficile* LabID event reporting. I have a scenario where a patient was admitted into my hospital specifically for *C. difficile* treatment, but the original positive result came from another facility/laboratory. Five days into the stay at my hospital, a repeat test was done and the person was positive for *C. difficile*. Would this be considered a healthcare-onset *C. difficile* LabID event for my facility?

A. This scenario would be reported as a *C. difficile* LabID event and would indeed be categorized by NHSN as healthcare-onset because the positive specimen was collected >3 days after admission to your facility. Unfortunately, this is one of the limitations of using the LabID event reporting option, which uses proxy infection measures to track *C. difficile* in a less labor-intensive way than infection surveillance reporting. In situations like this, CDC's recommendation is to use the notes section to document if you know the positive lab result was found in another facility prior to transfer/admission to your facility. A positive *C. difficile* lab result is considered an incident (new) case for your facility even if you have access to information that there was another positive *C. difficile* result within the two week period before the positive test at your facility. Duplicate *C. difficile*-positive tests only refer to those tests done in <u>your</u> facility.

Q. I am not sure what to do when I have an asymptomatic bacteremic urinary tract infection (ABUTI) - do I report the bloodstream infection (BSI) as a secondary BSI or a primary one?

A. This issue is clarified in the NHSN surveillance definitions that were published in January 2012 (see page 34): "Report secondary bloodstream infection = 'Yes' for all cases of ABUTI". (**www.cdc.gov/nhsn/PDFs/pscManual/17pscNosInfDef_current.pdf**).

Another resource that can help you determine whether an infection is a primary vs. a secondary BSI is the flowchart on page 10 of the CLABSI event protocol (**www.cdc.gov/nhsn/PDFs/pscManual/4PSC_CLABScurrent.pdf**).

Q. I remember reading something about the attribution of fever in patients who may have more than one HAI but I can't find the documentation—can you help?

A. The NHSN newsletter from March 2012 (**www.cdc.gov/nhsn/PDFs/Newsletters/NHSN-NL-March-2012.pdf**) contains information on determining the source of fever in patients with more than one potential HAI. Fever is a non-specific sign and may be due to more than one infection if both are occurring at the same time. In the situation where it is impossible to determine whether the fever is due to one of the infections or both, the fever *must* be attributed to more than one cause at the same time.