



# 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:  
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## Notes from VDH

This month, the VDH HAI Program welcomes a new member to our team! April Achter, MPH, CHES was been hired as the HAI/Influenza Epidemiologist and will be your primary contact for surveillance/data questions and National Healthcare Safety Network technical assistance. Many in the infection

prevention community may know April from her previous positions as district epidemiologist in Rappahannock/Rapidan and regional epidemiologist in the Northwest Region. You can reach her via e-mail at [April.Achter@vdh.virginia.gov](mailto:April.Achter@vdh.virginia.gov).

## Carbapenem-resistant Enterobacteriaceae: CDC Health Advisory February 2013

On February 14, 2013, the Centers for Disease Control and Prevention (CDC) issued a Health Advisory notice (<http://emergency.cdc.gov/HAN/han00341.asp>), informing clinicians and public health officials that new carbapenem-resistant Enterobacteriaceae (CRE)—untreatable or difficult-to-treat multidrug-resistant organisms—warrant additional action by healthcare providers.

*Klebsiella* species and *Escherichia coli* are examples of Enterobacteriaceae, a family of bacteria that normally live in water, soil, and the human gut. When these bacteria develop resistance to carbapenems, they are known as CRE. CRE infections most commonly occur among patients who are receiving antibiotics and significant medical treatment for other conditions. Some forms of CRE are more unusual and include those that produce New Delhi Metallo- $\beta$ -lactamase (NDM-1) and Verona Integron-mediated Metallo- $\beta$ -lactamase (VIM). The majority of these unusual organisms have been isolated from patients who received overnight medical treatment outside the United States.

In 2012, CDC updated its guidance for preventing the spread of CRE in healthcare settings ([www.cdc.gov/hai/organisms/cre/cre-toolkit/index.html](http://www.cdc.gov/hai/organisms/cre/cre-toolkit/index.html)). The

prevention recommendations outlined in this toolkit were previously described in the June 2012 edition of this newsletter. The Health Advisory builds upon that guidance. CDC now also recommends the following:

- ◇ When a CRE infection or colonization is identified in a patient with a history of an overnight stay in a healthcare facility (within the last 6 months) outside the U.S., send the isolate to a reference laboratory for confirmatory susceptibility testing and test to determine the carbapenem resistance mechanism; at minimum, this should include evaluation for KPC (*Klebsiella pneumoniae* carbapenemase) and NDM carbapenemase.
- ◇ For patients admitted to healthcare facilities in the United States after recently being hospitalized (within the last 6 months) in countries outside the U.S., consider:
  - Performing rectal screening cultures to detect CRE colonization.
  - Placing patients on [Contact Precautions](#) while awaiting the results of these screening cultures.

VDH is evaluating the approach to reporting and investigating cases of CRE in Virginia. Stay tuned for more information on surveillance, prevention, and reporting.

## In this issue:

Notes from VDH	1
CRE: CDC Health Advisory Feb 2013	1
NHSN News and Updates	2
Antibiotic-Resistant HAIs in the US, 2009-2010	2
Recent Publications, Guidance, and Educational Materials	3
New Bleach Concentration on the Market	3
Save the Dates: Upcoming Events	4

## Upcoming Events:

### March 3-9:

Patient Safety Awareness Week

### March 13, 12 PM:

Webinar on NHSN surveillance changes for 2013

### March 20, 2:30-3:30 PM:

*C. difficile* CME webinar for physicians

### April 30:

VDH Field Epidemiology Seminar—Richmond

## Contact:

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## NHSN News and Updates

### **New version of NHSN!**

NHSN version 7.0 was released on February 16th. The modules have been updated to include the new surveillance definitions for 2013. Note that VDH will be holding a webinar to highlight some of these surveillance changes and new functionality on March 13th at 12 PM. See page 4 of this newsletter for information on how to register.

### **New website!**

CDC unveiled its redesigned NHSN website in February. The new NHSN site offers users and visitors:

- ◇ Clear enrollment instructions
- ◇ One-stop information pages for each facility type (e.g., acute care page has links to all protocols, trainings, manual chapters, analysis tools, etc.)
- ◇ Easy access to user updates/newsletter and Centers for Medicare and Medicaid Services rule information
- ◇ Direct links to the NHSN application log-in page
- ◇ A new “About NHSN” page

If you have any comments about the site, you can submit them to [nhsn@cdc.gov](mailto:nhsn@cdc.gov). Please use “website feedback” in the subject line.

### **New Patient Safety Component Annual Facility Survey for 2012!**

The annual facility survey for the Patient Safety Component has been updated. The new survey form and instructions can be found on the NHSN website ([www.cdc.gov/nhsn/forms/Patient-Safety-forms.html](http://www.cdc.gov/nhsn/forms/Patient-Safety-forms.html)). Please note that facilities will not be able to add monthly reporting plans for March 2013 and beyond until they enter their 2012 facility survey.

### **New surveillance report!**

In February, CDC released the 2011 National and State Healthcare-associated Infections Standardized Infection Ratio (SIR) Report ([www.cdc.gov/hai/national-annual-sir/index.html](http://www.cdc.gov/hai/national-annual-sir/index.html)). This report includes national data on progress toward reducing central line-associated bloodstream infections (CLABSIs), catheter-associated urinary tract infections, and surgical site infections, as well as state-specific information on CLABSIs in several types of inpatient units. Nationally, there has been a large reduction (41%) in CLABSIs compared to predictions, with more modest reductions seen for CAUTI (7%) and SSI (17%). Prevention success improved in 2011 compared to 2010 for CLABSI nationally. In Virginia, prevention efforts were sustained and there was no significant difference between the years.

## **Antibiotic-Resistant Healthcare-Associated Infections, United States, 2009-2010**

A recent publication in *Infection Control and Hospital Epidemiology* describes antimicrobial resistance patterns for healthcare-associated infections (HAIs) reported to the National Healthcare Safety Network (NHSN) during 2009-2010.

Eight pathogen groups accounted for about 80% of reported pathogens: *Staphylococcus aureus* (16%), *Enterococcus* spp. (14%), *Escherichia coli* (12%), coagulase-negative staphylococci (11%), *Candida* spp. (9%), *Klebsiella pneumoniae* and *Klebsiella oxytoca* (8%), *Pseudomonas aeruginosa* (8%), and *Enterobacter* spp. (5%). The percentage of resistance was similar to that reported in the previous 2-year period, with a slight

decrease in the percentage of *S. aureus* resistant to oxacillins (MRSA). Nearly 20% of pathogens reported from all HAIs were the following multidrug-resistant phenotypes: MRSA (8.5%); vancomycin-resistant *Enterococcus* (3%); extended-spectrum cephalosporin-resistant *K. pneumoniae* and *K. oxytoca* (2%), *E. coli* (2%), and *Enterobacter* spp. (2%); and carbapenem-resistant *P. aeruginosa* (2%), *K. pneumoniae/K. oxytoca* (<1%), *E. coli* (<1%), and *Enterobacter* spp. (<1%). Among facilities reporting HAIs with one of the above gram-negative bacteria, 20%-40% reported at least one with the resistant phenotype.

To access the entire article, go to: [www.jstor.org/stable/10.1086/668770](http://www.jstor.org/stable/10.1086/668770)

## Recent Publications, Guidance, and Educational Materials

### Central Line-Associated Bloodstream Infection Prevention

The Agency for Healthcare Research and Quality (AHRQ) recently published *Tools for Reducing Central Line-Associated Bloodstream Infections (CLABSIs)*. These resources are meant to help hospitals implement evidence-based practices and eliminate CLABSIs within the unit. The tools complement the Comprehensive Unit-based Safety Program (CUSP) Toolkit.

[www.ahrq.gov/qual/clabsitools/clabsitools.htm](http://www.ahrq.gov/qual/clabsitools/clabsitools.htm)

### Fall Prevention

AHRQ also recently published an online toolkit entitled "Preventing Falls in Hospitals: A Toolkit for Improving Quality of Care." This resource focuses on reducing falls that occur during a patient's hospital stay.

The Toolkit is organized under six major areas that address hospital readiness, program management, choosing fall prevention practices, implementation, measurement, and sustainability. Fall prevention programs require an interdisciplinary approach to care in order to manage a patient's underlying fall risk factors, such as problems with walking and transfers, medication side effects, confusion, and frequent toileting needs.

[www.ahrq.gov/research/ltc/fallpxtoolkit/index.html](http://www.ahrq.gov/research/ltc/fallpxtoolkit/index.html)

## New Bleach Concentration on the Market

Please be aware that there is a new concentrated bleach solution on the market that will affect the bleach dilutions that are created for cleaning and disinfecting in healthcare facilities and other settings.

Regular household bleach typically contains between 5% and 6% sodium hypochlorite, most often 5.25% sodium hypochlorite. Some manufacturers are now producing a *concentrated* bleach, which is 8.25% sodium hypochlorite (one example is Clorox® Concentrated Regular-Bleach). According to one manufacturer of both the regular and concentrated bleach solutions, they will continue to produce both solutions, but stores or suppliers may choose to carry only the concentrated bleach solution because of limited space.

### Immunization Recommendations

The Advisory Committee on Immunization Practices (ACIP) of the CDC issued the 2013 adult immunization schedule in January. The updated guidelines were published online in the *Annals of Internal Medicine* and are also available on the CDC website ([www.cdc.gov/vaccines/schedules/hcp/adult.html](http://www.cdc.gov/vaccines/schedules/hcp/adult.html)). The guidelines include recommendations to increase adult vaccination rates, as well as changes to the tetanus, diphtheria, and acellular pertussis (Tdap), pneumococcal, and influenza vaccine schedules.

### Patient Safety

AHRQ has released a new Patient Safety Education and Training Catalog consisting of 333 patient safety programs currently available in the United States. The catalog offers an easily navigable database of patient safety education and training programs consisting of a robust collection of information each tagged for easy searching and browsing. The new database identifies a number of characteristics of the programs, including clinical area, program and learning objectives, evaluation measures, and cost.

<http://psnet.ahrq.gov/pset/psetContent.aspx?id=163>



If a concentrated bleach solution is used in your facility, Environmental Services should be taking steps to assure that dilutions are modified appropriately to reflect the new product. For example, if disinfecting for norovirus (~5,000 ppm) using *regular* household bleach, 1 part bleach to 9 parts water, or ~1  $\frac{3}{4}$  cups of bleach per gallon of water should be used. For *concentrated* bleach, the dilution is 1 part bleach to 15 parts water, or ~1 cup bleach per gallon of water.

If disinfecting food surfaces, a much lower concentration is required to assure that the surfaces are not toxic [1 tsp *concentrated* bleach to 1 gallon of water for a 111 ppm disinfecting solution or 1.8 tsp (0.3 fl. oz) *concentrated* bleach to 1 gallon of water for the maximum 200 ppm disinfecting solution].

Please also remember that for all sanitizing and disinfecting activities, *unscented* bleach should be used.

## SAVE THE DATES: Upcoming Trainings/Events

### NHSN Surveillance Changes for 2013—**March 13th, 12-1PM** (webinar)

- ◇ Objectives:
  - Review NHSN surveillance definition changes for 2013
  - Demonstrate some of the new functionality of the latest version of NHSN (ex. built-in data quality checks, reports)
  - Answer *your* surveillance questions!
- ◇ To REGISTER on TRAIN Virginia:
  - Go to: <https://va.train.org>
  - Login to your TRAIN account (or create one if you don't have one already – it's free)
  - On the right side of the page, find the webinar by putting the Course ID (**1042420**) in the “Search by Course ID” box or search by course title by going to the top of the home page and clicking “Course Search”, selecting the “Search” button, and entering in the course title (**VDH: NHSN Surveillance Changes for 2013**).
- ◇ After registering in TRAIN and being directed to AnyMeeting.com (the webinar provider), you will receive follow-up information about how to access the webinar on March 13<sup>th</sup>.
- ◇ The webinar will be recorded and archived for those unable to listen on 3/13.
- ◇ Featuring presenters Andrea Alvarez, MPH and Carol Jamerson, RN, BSN, CIC, both with the VDH HAI Program
- ◇ Audience: Facility or group users of NHSN—emphasis on users of the Patient Safety Component



### *Clostridium difficile* Update and Review—**March 20th, 2:30-3:30PM** (webinar with CMEs available)

- ◇ Sponsored by the New River Valley Cross-Setting Council, VDH, and VHQC
- ◇ Featuring presenters Thomas Kerkering, MD (Chief of Infectious Disease, Carilion Clinic) and Molly O'Dell, MD (Medical Director, New River Valley Health District)
- ◇ Audience: Medical Directors, Attending Physicians and Nurse Practitioners in hospitals and long term facilities, practicing physicians, Quality Improvement personnel and infection preventionists.

### VHQC QualitySync Conference—**April 9-10** (Richmond)

### North Carolina-Virginia Hospital Engagement Network (NoCVA HEN)

### CUSP Boot Camp—**April 16** (Richmond)

- ◇ Register here: <https://www.ncha.org/education/register-for-a-meeting>
- ◇ Free for facilities participating in the NoCVA HEN hospitals, \$150 for others



### Virginia Department of Health Field Epidemiology Seminar—**April 30** (Richmond)