

SYNERGY: COMBINING EFFORTS FOR HAI PREVENTION

June 2014

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

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Notes from VDH

A message from April Achter:

With regret I resigned my position as HAI/Influenza Epidemiologist with the Virginia Department of Health; my last day in the office was June 27th. I have enjoyed the opportunity to work and serve in this capacity. My husband has been transferred

overseas with the Department of Defense, so we will be spending the next three years in Germany! It has been a pleasure to work with each of you. Thank you for sharing your knowledge, your dedication and enthusiasm, and all that you do to protect the health of your patients.

Association for Professionals in Infection Control and Epidemiology Annual Conference Recap

The annual conference of the Association for Professionals in Infection Control and Epidemiology (APIC) was held in Anaheim, CA June 7th-9th. The meeting was a rich educational opportunity, with workshops and talks on topics ranging from healthcare-associated infection surveillance definitions and analysis using the National Healthcare Safety Network (NHSN) to antimicrobial stewardship and prevention of multidrug-resistant infections.

The closing plenary talk discussed federal HAI initiatives. Here are some highlights:

- ◇ The draft National Plan to Prevent HAIs with goals for 2020 should be finalized by the end of July.
 - New baselines for NHSN will be established in 2015.
 - Infection reduction goals will be similar to the current goals for CLABSI, CAUTI, SSI, MRSA labID events, and *C. difficile* labID events.
 - Mucosal barrier injury CLABSIs will not be included in the overall CLABSI goal and Surgical Care Improvement Project

(SCIP) measures will not be part of the action plan.

- Other topics that may be added to the Action Plan goals include injection safety/blood glucose monitoring and antibiotic stewardship.
- ◇ New reports to help facilities target their prevention efforts (called TAP reports) will be built into NHSN in 2015.
- ◇ Focus areas of CDC include antimicrobial resistance and prevention across the healthcare continuum. HAI prevention necessitates regional collaboration and better inter-facility communication.
- A separate talk on antimicrobial stewardship given by Dr. Srinivasan from CDC drew similarities between infection prevention and stewardship programs; to be successful, every provider has to play a role. He also encouraged the use of NHSN's Antibiotic Use and Resistance module.

APIC members can access some of the conference plenary presentations online here: <http://ac2014.site.apic.org/education/online-education/>

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Upcoming Events:

July 10: VHQC HAI Outcomes Congress (webinar) 12-1 PM
Contact Deb Smith (deb.smith@hcqis.org) for details

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Drug Diversion: Raising Awareness About a Patient Safety Issue

Recently, the Centers for Disease Control and Prevention has been raising awareness about the issue of drug diversion, which occurs when a prescription drug is removed from its intended path from the manufacturer to the patient. Diversion by healthcare personnel is underreported and often unidentified, but can occur in facilities across the continuum of care. Drug diversion can include documentation of a medication dose not actually administered to the patient but saved for use by the healthcare professional, theft by saving wasted medication (e.g., removing residual medication from used syringes), or theft by tampering (e.g., removing medication from a syringe and replacing it with saline).

Drug diversion compromises patient safety in several ways. Providers under the influence of drugs can harm patients by providing sub-standard care, denying medications to patients, or exposing patients to tainted substances that can lead to life-threatening infections. A recent publication by authors from CDC found that over a 10-year period beginning in 2004, six outbreaks related to drug diversion were identified in hospital settings. In two of these outbreaks, the drug-diverting healthcare provider tampered with opioids administered via patient-controlled analgesia pumps and resulted in gram-negative bacteremia. The other four outbreaks involved tampering with syringes or vials containing fentanyl and resulted in the transmission of hepatitis C virus. In all, nearly 30,000 patients were potentially exposed to bloodborne pathogens as a result of drug diversion and were targeted for notification advising testing.

Healthcare facilities have an important role to play in establishing strong narcotics security measures and active monitoring systems. If diversion is identified, it is

important to conduct a thorough assessment of harm to patients, consult with public health officials when tampering with injectable medication is suspected, and report promptly to enforcement agencies.

The essential elements of a healthcare facility diversion program include:

- Policies to prevent, detect, and properly report diversion,
- A method of observing processes and auditing drug transaction data for diversion,
- Prompt attention to suspicious audit results,
- A collaborative relationship with public health and regulatory officials, and
- Diversion education for all staff.

To read the article on outbreaks associated with drug-diverting healthcare professionals in *Mayo Clinic Proceedings*, go to: [http://www.mayoclinicproceedings.org/article/S0025-6196\(14\)00342-5/fulltext](http://www.mayoclinicproceedings.org/article/S0025-6196(14)00342-5/fulltext)

To read about the perspective of a drug diversion investigator on CDC's Safe Healthcare blog, go to: <http://blogs.cdc.gov/safehealthcare/2014/06/03/drug-diversion-defined-a-patient-safety-threat/>

For more information about drug diversion including prevention resources and journal articles, please visit CDC's new drug diversion website: <http://www.cdc.gov/injectionsafety/drugdiversion/index.html>

Safe Injection Practices: Two New Videos for Healthcare Providers and Managers

CDC continues to investigate outbreaks as a result of unsafe injection practices. These mistakes and knowledge gaps put healthcare providers and patients at risk. CDC's *One & Only Campaign* created two short videos to help make healthcare safer, one injection at a time.

[Check Your Steps! Make Every Injection Safe](#) - For Healthcare Providers, 3:45 minutes

[Managing Patient Safety. One Injection at a Time](#) – For Healthcare Managers, 2:33 minutes

To view these videos as well as others produced by the *One & Only Campaign*, go to: <http://www.oneandonlycampaign.org/content/audio-video>.

Compendium of Strategies to Prevent Healthcare-Associated Infections in Acute Care Hospitals: 2014 Update

During May and June, several more healthcare-associated infection prevention guidelines for acute care hospitals were published in *Infection Control and Hospital Epidemiology* in collaboration between the Society for Healthcare Epidemiology of America (SHEA), the Infectious Disease Society of America (IDSA), the American Hospital Association (AHA), the Association for Professionals in Infection Control and Epidemiology (APIC), and the Joint Commission. These documents update the 2008 *Compendium of Strategies to Prevent Healthcare-Associated Infections in Acute Care Hospitals* publications. The previously published guidelines addressed recommendations for prevention and detection of HAIs. The 2014 updates are focused to support efforts to implement, prioritize, and sustain effective prevention strategies. Improvements in hospital infection rates will intensify the quality of healthcare for patients as well as help lower healthcare costs.

The most recently released updates highlight prevention of surgical site infections (SSI), *Clostridium difficile* infections (CDI), central line-associated bloodstream infections (CLABSI), and methicillin-resistant *Staphylococcus aureus* (MRSA) transmission and infection in acute care hospitals.

The publications include recommendations in a helpful format to assist hospitals in their prevention efforts. Sections address: the rationale and statements of concern; strategies to detect and prevent specific infections such as SSIs, CDI, CLABSI, and MRSA; indications for prioritization of efforts; performance measures; examples of implementation strategies; and an extensive reference list.

Recommendations for other infection types will be published over the course of the summer. For more information and to access the *Compendium of Strategies* for all infection types please go to: www.shea-online.org/PriorityTopics/CompendiumofStrategiestoPreventHAIs.aspx

The Joint Commission Sentinel Event Alert: Misuse of Vials

The Joint Commission issued a *Sentinel Event Alert*, June 16, entitled “Preventing Infection from the Misuse of Vials” describing the risks associated with the improper use of injectable medications and strategies to eliminate the problem.

According to the CDC, since 2001, at least 49 outbreaks have occurred related to the mishandling of injectable medical products. Twenty-one of the outbreaks involved transmission of hepatitis B or hepatitis C virus and the remaining twenty-eight were related to bacterial infections, primarily bloodstream infections. Adverse events caused by improper practices have occurred in both inpatient and outpatient settings.

The Joint Commission cites the lack of adherence to safe infection control practices and aseptic techniques as a significant contributing factor. The misuse of vials primarily involves the reuse of single-use vials that often lack preservatives, making these vials more at risk for bacterial contamination when used in an improper manner.

The *Sentinel Event Alert* lists recommendations and strategies that can be implemented to help prevent misuse and transmission of infection. In addition to always following safe injection practices, proper hand hygiene, and the one-time-only use of needles and syringes, the alert directs organizations to:

- ◇ Develop and implement effective evidence-based standardized policies and procedures for the prevention of the misuse of vials
- ◇ Train and educate all staff who administer injections, including recognizing and reporting breaches in injection safety and infection control practices with vials
- ◇ Create a culture of safety that emphasizes that all staff are responsible for reporting risks, errors, and adverse events
- ◇ The full text *Sentinel Event Alert* may be found by visiting: www.jointcommission.org/assets/1/6/SEA_52.pdf

Comprehensive resources at the CDC’s injection safety website are available at: www.cdc.gov/injectionsafety/

APIC Catheter-Associated Urinary Tract Infection (CAUTI) Prevention Guide

The Association for Professionals in Infection Control and Epidemiology (APIC) has released a new implementation guide addressing urinary tract infection prevention. The APIC publication, “**Guide to Preventing Catheter-Associated Urinary Tract Infections**”, is designed to share the most recent science based knowledge and best practices to achieve targeted outcomes and improve patient safety.

The guide notes that urinary tract infections (UTIs) are one of the five most common types of healthcare-associated infections (HAIs) and instrumentation of the urinary tract represents the cause of the majority of HAI UTIs. Increased morbidity and mortality is associated with catheter-associated UTIs as well as increased hospital stay and cost.

The resource guide sections highlight:

- ◇ Epidemiology and pathogenesis
- ◇ National CAUTI prevention initiatives
- ◇ CAUTI risk assessment
- ◇ Definitions, surveillance, and reporting
- ◇ Foley catheter prevalence sheet
- ◇ Patient safety
- ◇ Prevention, including resources for the pediatric population
- ◇ Special populations and an appendix for recommendations for spinal cord injured patients

To view the guide please visit: http://apic.org/Resource/EliminationGuideForm/6473ab9b-e75c-457a-8d0f-d57d32bc242b/File/APIC_CAUTI_web_0603.pdf

Prioritizing Healthcare-Associated Infection Prevention Activities: Resource from the Tennessee Department of Health

Thank you to our partners at the Tennessee Department of Health for developing a web-based calculator to help facilities and organizations prioritize HAI activities by examining how a healthcare facility, group of facilities, or state is working toward reaching facility-specific, initiative-specific, or national HAI prevention targets.

The calculator can be used to evaluate progress toward CLABSI, CAUTI, SSI (colon, abdominal hysterectomy, or coronary artery bypass graft procedures), MRSA bacteremia laboratory-identified (LabID) event, or *Clostridium difficile* LabID event goals.

<http://health.state.tn.us/ceds/hai/calculator.shtml>

To use the calculator:

1. Determine a time period (e.g., quarter, calendar year, etc.) and HAI of interest

2. Select HAI from dropdown menu, or choose “custom target” and enter a target SIR
3. Log into CDC’s National Healthcare Safety Network (NHSN) and obtain:
4. Number of infections for time period of interest
5. Number of predicted infections OR Standardized Infection Ratio (SIR) for time period of interest
6. Enter data into form
7. Click “compute” to determine how many HAIs would have needed to have been prevented in order for the target SIR to be reached in the time period of interest

NOTE: For detailed instructions on obtaining your data from NHSN, please view the appropriate documents below:

<http://www.cdc.gov/nhsn/PS-Analysis-resources/reference-guides.html>

- ◇ SIR Table: Device-Associated (for CLABSI or CAUTI)
- ◇ SIR Table: Surgical Site Infections
- ◇ SIR Table: MRSA/CDI LabID Events

CDC Sepsis Website

CDC recently launched a new sepsis website (www.cdc.gov/sepsis) that houses the following information:

- Basic information – questions and answers for patients, fact sheets
- Clinical guidelines and tools – guidelines, bundles, education resources, and tools
- Improving survival – quality improvement efforts by healthcare facilities to improve survival in sepsis
- Medical bibliography – selected sepsis chapters from medical textbooks
- Data reports – recent reports on the incidence of sepsis
- Related links – for additional information about sepsis