Healthcare-associated Infections
HAI Elimination

Toward Elimination

Newsletter for State Partners in HAI Prevention

Volume 27, September 2014

Fall Edition

Please Save the Date:

- The **International Infection Prevention Week** (IIPW) will be held October 19-25, 2014. IIPW raises awareness of the role infection prevention plays to improve patient safety. Please assist CDC and the Association for Professional in Infection Control and Epidemiology (APIC) in disseminating IIPW messaging in your states. For more information: www.apic.org.

Avoid Outbreaks: New Videos Help Providers Double Check Injection Practices

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 and Only Campaign* (more info here: http://oneandonlycampaign.org/) announces two new videos to help make healthcare safer, one injection at a time.

The two videos can be viewed here:
http://www.oneandonlycampaign.org/content/audio-video

Created by the Safe Injection Practices Coalition, these videos detail critical information to help all providers and facility managers double-check their injection safety knowledge and help keep patients safe from unnecessary harm.

More info on the Safe Injection Practices Coalition can be found here:
http://www.oneandonlycampaign.org/content/coalition

Let us know what you think of these videos on social media:

- *One and Only Campaign* on Facebook: http://ow.ly/yxcSF
- @Injection Safety on Twitter: http://ow.ly/yxcWN

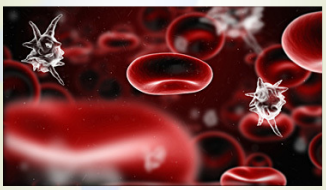
Communication Update

CDC Launches a New Website about Sepsis

CDC recently launched a new Sepsis website 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

Please visit the new CDC sepsis website at http://www.cdc.gov/sepsis.



Sepsis is a consequence of infection that is difficult to predict, diagnose, and treat. Patients who develop sepsis have an increased risk of complications and death and face higher healthcare costs and longer treatment. CDC is working to increase sepsis awareness and improve early recognition, diagnosis, and treatment of patients.

New State HAI Coordinators

Indiana

Nicole Hearon, MPH, is the new HAI Coordinator for the Indiana State Department of Health (ISDH). Nicole serves as the Healthcare Associated Infections (HAI) Epidemiologist for ISDH, Surveillance and Investigation Division. Nicole graduated from the Indiana University School of Public Health (IU SPH) in Bloomington with an Epidemiology MPH in May 2014. While working towards her MPH, Nicole was a graduate research assistant in the Department of Epidemiology and Biostatistics. Prior to working at ISDH, Nicole completed an internship in the Infection Prevention Department of Adventist Hinsdale Hospital in Illinois. Nicole also completed an internship in the Infection Prevention Department of IU Health Bloomington Hospital prior to completion of her BS in Community Health from the IU SPH. Nicole is originally from Illinois and she enjoys traveling, cooking, painting, and playing with her two puppies.

New Jersey

Jason Mehr, MPH, became New Jersey's new Healthcare Associated Infection (HAI) Coordinator in June 2014. Jason completed his undergraduate education at Bucknell University in 2009 and received his Master of Public Health degree from Drexel University in 2012. While at Drexel, he worked at the Philadelphia Department of Public Health investigating foodborne and vector-borne disease outbreaks. After graduation, Jason completed a two-year CDC/CSTE Applied Epidemiology Fellowship with a focus on HAIs at the New Jersey Department of Health's (NJDOH) Communicable Disease Service. During his fellowship, Jason developed a working knowledge of HAI outbreaks, reporting, and prevention strategies. Jason evaluated the NJ specific requirement that dialysis facilities have at least one staff member trained in infection prevention and also must consult with a certified Infection Preventionist as well. Most recently, he led 31 NJ hospitals in a voluntary validation of the *Methicillin-resistant Staphylococcus aureus* (*MRSA*) event data entered into the National Healthcare Safety Network. Jason is excited for the opportunity to communicate and collaborate with HAI stakeholders throughout New Jersey.

Maryland Highlight

On July 17th, 2014, the Maryland Department of Health and Mental Hygiene, in partnership with our QIO, the Delmarva Foundation for Medical Care, hosted a summit "Implementing Antimicrobial Stewardship in Maryland." The lectures and discussions were divided into two parts with the morning's focus on the science and evidence behind stewardship ("why we must"), and the afternoon devoted to ways to practically implement stewardship ("how we can").

Dr. Sara Cosgrove, director of Johns Hopkins Hospital's Antimicrobial Stewardship Program, gave an overview of antimicrobial stewardship and presented on implementation science and its application to stewardship. Dr. Lucy Wilson, Chief of the Center for Surveillance, Infection Prevention, and Outbreak Response within DHMH, discussed stewardship from the state health department's perspective, describing current surveillance data on *Clostridium difficile* and antimicrobial resistance in Maryland, other stewardship-related efforts currently underway in Maryland, and outlining efforts in other states. Our featured speaker was Dr. Elizabeth Dodds Ashley, the Associate Director for Clinical Pharmacy Services at the University of Rochester Medical Center, who discussed the pivotal role of the hospital pharmacist in implementing an antimicrobial stewardship program, as well as how to implement stewardship programs in facilities with limited resources.

The day concluded with an interactive session on "Getting to How," where participants were assigned to groups based on facility size and type (academic, community, etc.). Each group discussed their ideal antimicrobial stewardship team, interventions they currently have in place and others they would like to implement, and how to measure the effectiveness of their programs. The meeting was a success, attracting 113 participants including infection preventionists, pharmacy directors, and infectious disease physicians representing over two-thirds of Maryland acute care hospitals in addition to other healthcare facilities across the state of Maryland.

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Hawaii Highlight

On July 31st, the Hawaii Department of Health (HDOH) partnered with the Hawaii chapter of the Association for Professionals in Infection Control and Epidemiology (APIC) to host an educational conference, "Bug Off! Prevention is Game On!" This conference had sessions that provided information on infectious diseases, outbreaks in Hawaii, *Clostridium difficile* and antibiotic stewardship. There were nearly 200 attendees, which included nurses, pharmacists, physicians and students. Three presenters came to Hawaii from the state of Illinois including Gail Itokazuan, an infectious disease (ID) pharmacist, Becca Peglow, an ID physician, and Erica Runningdeer, the HAI Prevention Coordinator from the Illinois Department of Public Health. Erica provided a great synopsis of the importance for ASPs and their work in Illinois. Zeshan Chisty, HDOH HAI Collaborative Coordinator provided a summary of an assessment of antibiotic stewardship programs (ASPs) in Hawaii healthcare facilities. Additionally, Roy Goo, assistant professor from the University Of Hawaii Daniel K. Inouye School Of Pharmacy, moderated a panel of local facilities sharing their experiences regarding ASPs.

The conference concluded with an afternoon concurrent ASP Workshop facilitated by our ASP presenters. There was representation from nearly all acute care facilities in the state. During the workshop, the possibility of creating a statewide collaborative was discussed. Participants provided great feedback that will be used to help shape a possible state ASP collaborative. For more information on this conference or the possible ASP collaborative, please contact Zeshan Chisty (Zeshan.Chisty@doh.hawaii.gov).

Local Panel Members

ASP Workshop in Action

Hawaii HAI Coordinator and Illinois Presenters

Also in July, HDOH released their second HAI annual public report since the Hawaii legislature passed legislation in 2011 requiring HAI public reporting. The report contains data reported during calendar year 2013 for central line-associated bloodstream infections (CLABSI) and catheter-associated urinary tract infections (CAUTI) in intensive care units (ICU). It also presents all inpatient surgical site infections (SSI) for abdominal hysterectomies (HYST) and colon surgeries (COLO). The 2013 report also includes methicillin-resistant Staphylococcus aureus (MRSA) bacteremia, Clostridium difficile infections (CDI), and healthcare personnel influenza vaccination rates. For each condition contained in the report compared with the nationally expected levels, Hawaii saw reductions in CLABSI (77%); CAUTI (41%); HYST SSI (100%); CDI (33%); and MRSA Bacteremia events (43%). There was a small increase in COLO SSI (2%). The report can be found at this link: http://go.usa.gov/NPR9.

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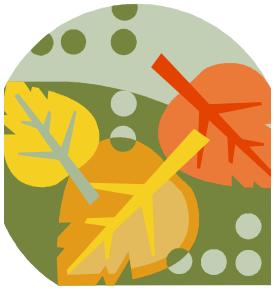
Alabama Highlight

The responsibilities of infection preventionists have never been more formidable. In addition to targeting interventions to safeguard patients from HAIs, public reporting with its financial impact has been added. In Alabama, HAI prevention resources vary greatly from region-to-region, as well as hospital-to-hospital within the same region. Some hospitals have longstanding infection prevention programs, while others need support for the basic program's infrastructure, laboratory capacity, surveillance methods and NHSN reporting. In many small rural hospitals, the lone infection preventionist (IP) not only manages the Infection Prevention Program but also doubles as the Employee Health Coordinator. Many infection preventionists say "staying up-to-date with NHSN reporting" is a challenge considering their limited time and resources. NHSN training was also identified as a need by Alabama Department of Public Health (ADPH) while performing hospital validations in 2012. ADPH concluded from meetings with IPs during site visits and consults with the NHSN help desk that most of the incorrectly identified HAIs were related to misinterpretation of components of NHSN definitions. ADPH believes that continual NHSN training would improve completeness and accuracy of reported data and would ensure that public reporting data is valid.

To address the crucial need for continual NHSN training, AQAF (Alabama's QIO), began conducting annual training around the state for hospital infection preventionists with a goal to ensure timely, appropriate and accurate reporting of HAIs for CMS and state required reporting. More than 190 clinicians representing 93 hospitals, from critical access to major teaching facilities, attended the training in 2013 through June 2014. The agenda focuses on required CMS and state HAI reporting, and content is designed for both beginning and experienced preventionists. The content includes CAUTI, CLABSI, SSI, LabID Events and using the analytical functions. During 2013, content included HCP Influenza surveillance and reporting. For 2014, VAE definitions and using the VAE calculator were added. A combination of didactic training, interactive and case scenarios are used. Time is allotted for participants to share NHSN case scenarios and implementation surveillance practices that have been successful in their hospitals. The training encourages network building and peer-to-peer support for NHSN reporting and infection prevention and control. One participant commented, "I like the open forum & sharing of information between facilities." The NHSN definitions and surveillance methodology is critical, but it is the relationships fostered during the trainings that provide critical support long after the sessions are over. In order to provide continuous support for NHSN users, AQAF hosts a monthly conference call to discuss best practices, upcoming NHSN updates and changes, as well as CMS reporting requirements.



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Targeted Assessment for Prevention (TAP) Initiative

As the recently released Centers for Disease Control and Prevention (CDC) *HAI Progress Report* indicates, the national catheter-associated urinary tract infection (CAUTI) standardized infection ratios (SIRs) are not on target to reach the Department of Health and Human Services' (HHS) 25% reduction goal. To actively address this issue, CDC has developed a Targeted Assessment for Prevention (TAP) strategy as a way to identify facilities/units with the highest excess numbers of infections, so that prevention efforts may be directed towards facilities or units in greatest need of improvement. The Division of Healthcare Quality Promotion (DHQP) collaborated with the Centers for Medicare and Medicaid Services (CMS) on a Quality Improvement Organization (QIO) pilot initiative to help target their prevention efforts toward hospitals with high excess CAUTIs. Using guidance provided by CDC, QIOs evaluated the National Healthcare Safety Network (NHSN) facility-conferred data for identifying specific member facilities to target for further prevention assistance. During the pilot, the QIOs provided feedback to the CDC on newly created CAUTI facility assessment and implementation tools.

Future plans include expanding this TAP approach to additional partners (e.g., QIOs participating in the 11th Scope of Work, state health departments, Partnership for Patients Hospital Engagement Networks) and building the TAP report function into the NHSN application. The TAP report function will allow NHSN users to identify facilities (within a conferred rights group) or units with excess numbers of infections compared to a predicted number based on the HHS SIR targets (0.75 for CAUTI). CDC plans to continue the development of assessment and implementation tools for CAUTI, *Clostridium difficile* infection (CDI), and central line-associated bloodstream infection (CLABSI) to assist in these prevention efforts.

Platform to Build a State HAI Website

In 2010, the U.S. Department of Health and Human Services (HHS) provided funds to develop a Region VI Healthcare-associated Infection (HAI) website project. The Office of the Regional Health Administrator (ORHA) used the funds from the HAI Initiative to develop a Region VI partnership workgroup with HAI coordinators in the five Region VI states: Arkansas, Louisiana, New Mexico, Oklahoma, and Texas. The workgroup was later expanded to include consumer representatives as well as representation from other agencies involved with HAI work including CDC, CMS, AHRQ, HRSA, and members of the HAI Initiative team. The state HAI Coordinators were very involved in developing the respective state HAI surveillance plans. They had identified the need to explore what consumers knew about HAIs, and wanted to determine how this information could be used to develop a consumer-friendly HAI website. The next steps involved developing consumer questions and conducting regional consumer focus groups. As the workgroup reviewed the consumer data, they noticed that relatively little guidance and few resources existed for state agencies to develop effective consumer-friendly websites. In 2011, to address this gap and to strengthen public reporting of healthcare data, the workgroup decided to create and pilot a platform (also known as the HAI Website Toolkit) to help state agencies with developing a user-friendly website. During this time, the workgroup further expanded to include an additional consumer representative as well as the state HAI Coordinators in Illinois and Maryland, who were both experienced in working to incorporate consumer-friendly information into their own respective state websites.

This toolkit is also intended to provide a platform for the stakeholders within a multi-disciplinary group to collaborate more effectively in the process of creating or evaluating an HAI-related website. The State HAI Toolkit is a one-stop source with tools for web designers and state agencies to utilize as a guide for designing and developing a website that is both usable and practical for consumers. The HAI toolkit (developed throughout 2012-2013) is placed on the CDC HAI Website to help reach the largest possible audience. You can access the HAI website toolkit by going to: http://www.cdc.gov/hai/HHS-HAI-Toolkit/index.html.

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Policies to Promote Antimicrobial Stewardship Programs

CDC's 2013 report, *Antibiotic Resistance Threats in the United States* indicated that antibiotic resistance has become one of the most serious and growing threats to public health and is responsible for over two million illnesses and 23,000 deaths annually in the United States. One of the four core actions to combat antimicrobial resistance described in CDC's AR threat report is antibiotic stewardship, or improving the use of today's antibiotics. Antibiotic stewardship programs are designed to improve the efficiency of treatment for infections and reduce adverse events associated with antibiotic use, improving individual patient outcomes, preventing death from resistant infections, slowing antibiotic resistance, and reducing healthcare costs. CDC's 2014 Vital Signs report, *Improving Antibiotic Use among Hospitalized Patients*, encourages all hospitals to implement such programs and provides clear guidance on the core components that each program is recommended to include. However, widespread adoption of stewardship programs in the U.S. does not currently exist. Health and healthcare organizations are sounding the alarm on the increasing threat of antimicrobial resistance and are recognizing the need to collaborate on aggressive strategies to address this important issue. In fact, the American Hospital Association's Physician Leadership Forum identified antimicrobial stewardship as one of five areas where hospitals, in partnership with their clinical staff and patients, should look to improve quality of care. The Association of State and Territorial Health Official's (ASTHO) position statement on antibiotic resistance (http://www.astho.org/Policy-and-Position-Statements/Position-Statement-on-Antimicrobial-Resistance/), shows ASTHO's support for solid surveillance methods, effective education among healthcare, and the public and appropriate use of antibiotics for addressing this growing problem. To highlight the role of the state health department in promoting antibiotic stewardship programs, the Council of State and Territorial Epidemiologists developed a position statement on antibiotic stewardship (http://c.ymcdn.com/sites/www.cste.org/resource/resmgr/2014PS/14_ID_01upd.pdf) that recommends all health departments incorporate antibiotic stewardship into their overall HAI program activities.

CDC and ASTHO continue to collaborate to assess policy interventions that promote HAI prevention and address antibiotic resistance and stewardship. In 2013, ASTHO conducted a survey of HAI Coordinators from the states, DC, and Puerto Rico, to better understand the current landscape of states' work on antibiotic resistance and stewardship. CDC also partnered with ASTHO and state teams to assess policy barriers in implementing state HAI prevention programs and to develop action steps for addressing those barriers that other states can use. Teams from Vermont, Georgia, and Illinois set out to specifically identify policies, practices, and activities that promote antimicrobial stewardship programs in their states. Illinois' efforts focused on assessing stewardship capacity and activities in skilled nursing facilities; Georgia examined stewardship activities in acute care settings and the usefulness of specific components of the IHI Antibiotic Stewardship Driver Diagram; and Vermont assessed antibiotic prescribing attitudes and practices among emergency department physicians and the efficacy of CDC's Get Smart for Healthcare campaign (http://www.cdc.gov/getsmart/healthcare/learn-from-others/resources). Additionally, in an effort to identify practical tools for states, CDC and ASTHO partnered with subject matter experts to gather existing stewardship resources that can be shared with state agencies as guidance for educating facilities, partners, and policymakers on the critical need for stewardship programs.

Later this year, ASTHO and CDC will release a report, *Combating Antibiotic Resistance: Polices to Promote Antimicrobial Stewardship Programs* which will summarize the outcomes of the three ASTHO and CDC efforts described above. This report will provide health agencies with options to consider for a stewardship platform to allow states and their partners to build, enhance, and implement antimicrobial stewardship programs across all healthcare sectors. State health agencies play an important role in addressing HAIs and antimicrobial resistance because they serve as a link between healthcare organizations and the community and can shepherd critical collaborations among various partners and entities. It is crucial that HAI programs are comprehensive and able to contribute to state health agencies' capacity to address antimicrobial resistance, including preventing infections and protecting patients across the healthcare system, tracking resistance, and improving antimicrobial prescribing and use.

For more information about the report, *Combating Antibiotic Resistance: Polices to Promote Antimicrobial Stewardship Programs,* please contact Virginia Dolen, vdolen@astho.org.