Infectious Disease Epidemiology LA Office of Public Health Spring 2011 Edition

HEALTHCARE ASSOCIATED INFECTIONS INITIATIVE

A Quarterly Newsletter for Infection Preventionists

Humphrey Fellow and Nursing Graduate Student Join Epidemiology HAI Team



Dr. Inbal Salz, Tulane Humphrey Fellow – Israeli Ministry of Health



Liv Dinoso, RN Master's Student, University of South Alabama

Dr. Inbal Salz and Liv Dinoso have become part of the Healthcare-Associated Infections (HAI) program through their graduate school affiliations. Dr. Salz is a Tulane Humphrey Fellow from the Israeli Ministry of Health, and Dinoso is a master's student from the University of South Alabama in the Department of Nursing.

Dr. Salz completed her medical degree at Israel Beer Sheva, and her Master of Public Health in Epidemiology at Hebrew University in Jerusalem. She is also the principal investigator and research leader of several national projects aimed to improve the quality of care for patients by finding the weakest links in the healthcare system. Additional responsibilities of her position include providing policy makers with the tools to improve health services outcomes based on evidence-based facts.

Since becoming a Tulane Humphrey Fellow, Dr. Salz has become affiliated with the Bogalusa Heart Study and the HAI Initiative. She has participated in several conferences, including the CDC HAI Grantees Meeting in October 2010, which was held in Atlanta, GA. Dr. Salz has also presented surgical site infection information for APIC of Greater New Orleans.

Dinoso is a native of Slidell and graduate student at the University of South Alabama for Master of Science in Nursing and Public Health Administration. Dinoso completed her undergraduate studies in 2006 in Biological Sciences at LSU in Baton Rouge. She subsequently obtained a second baccalaureate degree in nursing from the University of South Alabama in 2009.

As part of her graduate program, Dinoso is completing a practicum experience on Catheter-Associated Urinary Tract Infections and *Clostridium difficile* in long-term care settings in Louisiana. In addition to her graduate studies, she is an emergency department nurse at Ochsner West Bank in Terrytown.

2011 HICPAC Guidelines for the Prevention of Intravascular Catheter-Related Infections

The following is an excerpt. Download the complete Guidelines here: www.cdc.gov/hicpac/BSI

In 2009, the Centers for Disease Control and Prevention (CDC) and Healthcare Infection Control Practices Advisory Committee (HICPAC) integrated current advances in guideline production and implementation into its development process. The new methodology enables CDC and HICPAC to improve the validity and usability of its guidelines while also addressing emerging challenges in guideline development in the area of infection prevention and control. However, the Guidelines for the Prevention of Intravascular Catheter-Related Infections were initiated before the methodology was revised. Therefore, this guideline reflects the development methods that were used for guidelines produced prior to 2009. Future revisions will be performed using the updated methodology.

These guidelines have been developed for healthcare personnel who insert intravascular catheters and for persons responsible for surveillance and control of infections in hospital, outpatient, and home healthcare settings. This report was prepared by a working group comprising members from professional organizations representing the disciplines of critical care medicine, infectious diseases, healthcare infection control, surgery, anesthesiology, interventional radiology, pulmonary medicine, pediatric medicine, and nursing.

In the United States, 15 million central vascular catheter (CVC) days (i.e., the total number of days of exposure to CVCs among all patients in the selected population during the selected time period) occur in intensive care units (ICUs) each year [1]. Studies have variously addressed catheter-related bloodstream infections (CRBSI). These infections independently increase hospital costs and length of stay [2-5], but have not generally been shown to independently increase mortality. While 80,000 CRBSIs occur in ICUs each year [1], a total of 250,000 cases of BSIs have been estimated to occur annually, if entire hospitals are assessed [6].

The goal of an effective prevention program should be the elimination of CRBSI from all patient-care areas. Although this is challenging, programs have demonstrated success, but sustained elimination requires continued effort. The goal of the measures discussed in this document is to reduce the rate to as low as feasible given the specific patient population being served, the universal presence of microorganisms in the human environment, and the limitations of current strategies and technologies.





The HAI program allows Louisiana to create a collaborative effort to prevent healthcare associated infections. It includes development of a state plan for preventing healthcare associated infections, development of a monitoring system, and implementation of a prevention program. Visit http://www.infectiousdisease.dhh.louisiana.gov to access our Healthcare-Associated Infections Resource Center.

Summary Table of Surgical Site Infections Core Measures for IPPS 2012 Discharges

7 Specific Surgical Procedures:	Corresponding NHSN Procedure Code:
Coronary Artery Bypass Graft	CBGB, CBGC
Other Cardiac Surgery	CARD
Hip Arthroplasty	HPRO
Knee Arthroplasty	KPRO
Colon Surgery	COLO
Hysterectomy	HYST, VHYS
Vascular Surgery	VSHN, PVBY, CEA, AVSD, AAA

^{*}The information in this table was not compiled by the Centers for Disease Control and Prevention. Official information will be disseminated upon release.

Upcoming Learnlinc Webinars!

April 15: Surgical Site Infections

April 19: Long-term Care Facilities

May 27: Infection Control Reports

*Registrations for April 15th and April 19th are now open. Contact rosemarie.robertson@la.gov

Update on NHSN Pneumonia Surveillance Definitions

Surveillance for ventilator-associated pneumonia (VAP) using current NHSN pneumonia (PNEU) definitions is often regarded as being more burdensome than surveillance for other healthcare-associated infections (HAIs). Problems with the PNEU definitions that are frequently cited by users are that the definitions are too complex, too subjective, or too time-consuming. In particular, users have identified difficulties with the requirement for radiographic evidence of pneumonia. Infection preventionists may find it necessary to seek input from critical care physicians or radiologists to interpret chest radiograph findings, and physicians' interpretations and the language used to report chest radiograph findings may vary widely within and between facilities. In an era where public reporting and benchmarking of HAI rates is becoming more common, definitional elements that introduce variability in how HAI events are detected in different healthcare facilities are potentially problematic.

The Division of Healthcare Quality Promotion (DHQP) at CDC has been engaged in efforts to clarify the burden and sources of confusion associated with the PNEU definitions, particularly related to VAP, and identify potential areas for simplification. During the past year, DHQP epidemiologists and NHSN team members have worked with partners, including the CDC Prevention Epicenters, on projects exploring a streamlined draft surveillance definition of ventilator-associated lower respiratory infection that incorporated criteria based on readily available, objective data elements. Elements included in the draft definition were measures of worsening oxygenation and objective signs of inflammation/infection; chest radiograph findings were not included in the first draft of this definition. The draft definition also required that criteria be met after ≥4 calendar days of mechanical ventilation. Results of preliminary assessments of the draft definition will be presented at the March 2011 annual meeting of the Society for Healthcare Epidemiology of America.

The draft definition criteria and preliminary results were shared with experts during two September 2010 meetings: a Department of Health and Human Services (HHS)-sponsored experts meeting held in Atlanta on September 2, 2010, and a HHS meeting on "Progress Toward Eliminating Healthcare-Associated Infections," held from September 23-24, 2010 in Arlington, VA. Meeting participants recognized the need for a definition with greater reliability than the current PNEU definitions, but also emphasized the importance of developing a clinically credible definition and demonstrating that the events detected by the new definition are preventable. As efforts to modify and evaluate the draft definition continue at CDC, additional input from the critical care community will be needed, and specific modifications for pediatric and neonatal patients will be considered. Stay tuned for future updates in the NHSN e-News on the progress of these efforts.

Important Reminder: Wear Facemasks During Spinal Injection

Procedures

Amit Chitnis, MD, MPH April 1, 2011 The following is an excerpt. View online at http://bit.ly/eOozSM

Today, CDC is <u>reminding clinicians to use facemasks</u> when injecting medicine or inserting catheters into epidural or subdural spaces of the spine. This includes "epidurals" during childbirth labor and injection of contrast dye during imaging procedures. We are concerned that despite <u>2007 recommendations</u> aimed at preventing these infections, outbreaks of infections continue to occur among patients undergoing spinal injection procedures.

First, ask who is at risk? Second, ask why are these outbreaks occurring?

Today, we are emphasizing that anyone performing a spinal injection procedure should adhere to CDC recommendations to ensure that they are not placing their patients at risk for life-threatening infections such as bacterial meningitis. Facemasks should always be used when injecting material or inserting a catheter into the epidural or subdural space. Aseptic technique and other safe injection practices (e.g., using a single-dose vial of medication or contrast solution for only one patient) should always be followed for all spinal injection procedures.

These recommendations apply not only to acute care settings such as hospitals, but in any setting where spinal injection procedures are performed including outpatient imaging facilities, ambulatory surgery centers, and pain management clinics. Together, we can ensure that patients are protected. For more information, please see our website.