



# SHARPPS Newsletter

Surveillance for Healthcare-Associated and Resistant Pathogens Patient Safety  
(SHARPPS) Program

## NC SHARPPS PROGRAM WELCOMES NEW MEDICAL DIRECTOR



Shilpa Bhardwaj, MD MPH, FACP

The NC Division of Public Health (NC DPH) SHARPPS Program is pleased to welcome Shilpa Bhardwaj, MD, MPH, FACP, as our new Medical Director. Dr. Bhardwaj graduated from the University College of Medical Sciences in Delhi in 2005. While in India, she specialized in Community Medicine and experienced prevailing public health challenges in the country with regards to poliomyelitis, tuberculosis and healthcare delivery. Also in 2005, Shilpa came to the United States to pursue her Master's in Public Health at Johns Hopkins School of Public Health. After obtaining her degree, she worked with the Baltimore City Health Department as an epidemiologist for the

Bureau of STD/HIV Prevention and assisted in the implementation of the Expanded and Integrated HIV Testing Program in Baltimore City. She continued her educational pursuits and graduated from the Griffin-Yale Combined Internal and Preventive Medicine Residency in 2013. Since her graduation, Dr. Bhardwaj has worked as an Assistant Professor at the Internal Medicine residency program at Moses H. Cone Memorial Hospital in Greensboro. Her goal as the Medical Director is to be an integral part of the SHARPPS Program and assure its continued success in collaboration with its many partners.

## DRUG DIVERSION TABLE TOP EXERCISE

This year, the NC One & Only Campaign will implement a table top exercise highlighting drug diversion—the act of illegally obtaining or using prescription medications—in healthcare settings. The table top exercise is adapted from one created by the New Jersey Department of Health. The North Carolina drug diversion table top exercise will be piloted on February 15, 2017 at the Southern Atlantic Healthcare Alliance's (SAHA) Drug Diversion Education Program. Full implementation will occur in July 2017. Visit SAHA's [website](#) to register for the upcoming drug diversion session.

## MAKING DIALYSIS SAFER COALITION

The SHARPPS Program has partnered with CDC's [Making Dialysis Safer Coalition](#), an alliance of diverse healthcare organizations and patient advocacy groups, to prevent bloodstream infections in hemodialysis patients through education and awareness. The Coalition also aims to increase adherence to CDC's best practices for dialysis treatment. The SHARPPS Program looks forward to promoting the use of CDC's core interventions and sharing available resources. Stay tuned for more details.



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## GET SMART KIDS' ARTWORK COMPETITION



The NC Get Smart Campaign celebrated Get Smart Week 2016 (November 14-20) by hosting a children's artwork competition. Get Smart Week is a national, annual observance intended to engage healthcare providers, educational systems, and the general public about antibiotic stewardship in the outpatient, inpatient, and animal health settings. Children who participated in the artwork competition created drawings and comic strips to address healthy living and appropriate antibiotic use. Out of 80 submissions from children in pre-kindergarten to 8<sup>th</sup> grade, 6 winners were selected, and their submissions were used to create official posters for the NC Get Smart Campaign. The posters may be displayed in doctor's offices, urgent cares, and school health offices across the state and may also be viewed on our campaign [webpage](#). To order posters, email [Kristin Pridgen](mailto:Kristin.Pridgen), NC Get Smart Campaign Coordinator.

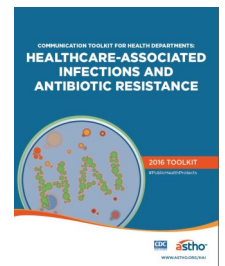
*The next [Safe Injection Connection training](#) is scheduled for March 23, 2017 in Raleigh. This free, half-day training provides education on safe injection practices. Continuing education is available. To register, email [nchai@dhhs.nc.gov](mailto:nchai@dhhs.nc.gov).*

## JANUARY IS NATIONAL BLOOD DONOR MONTH

Since 1970, January has been declared National Volunteer Blood Donor Month. In January, blood banks face many challenges with recruiting blood donors: winter weather, holidays, and an increase in respiratory illnesses. Additionally, greater demand for blood donations occur during this time, as adverse weather conditions can lead to an increase in traffic accidents and traumatic injuries that require blood transfusions. As with other injections, blood donations require safe injection practices to prevent the spread of bloodborne pathogens. According to the [World Health Organization](#), "a safe injection does not harm the recipient, does not expose the provider to any avoidable risks and does not result in waste that is dangerous for the community." Blood donations assist many people in need but are truly beneficial when the health and safety of the donor, medical professional, and recipient are upheld. The One & Only Campaign identifies [safe injection practices](#) and offers [bloodborne pathogen training](#).

## NEW TOOLKIT FOR PREVENTING HEALTHCARE ASSOCIATED INFECTIONS AND ANTIBIOTIC RESISTANCE

The Association of State and Territorial Health Officials (ASTHO) and CDC have collaborated to create communication resources regarding healthcare-associated infections (HAIs). The Healthcare-Associated Infections and Antibiotic Resistance 2016 Toolkit is designed to assist health departments prevent HAIs. The toolkit includes key messages and talking points regarding HAIs and antibiotic resistance, a social media guide and samples, and guidance on communicating with the media. To access the toolkit along with infographics and a video, visit the [ASTHO website](#).



## EVALUATION OF CRE SENTINEL SURVEILLANCE SYSTEM IN NORTH CAROLINA

Carbapenem-resistant Enterobacteriaceae (CRE) cause approximately 9,300 healthcare-associated infections annually and are resistant to nearly all antibiotics. Mortality rates up to 50% have been reported. During March 1, 2015, to September 1, 2016, NC DPH implemented CRE sentinel site surveillance to assess the burden of CRE. Public health epidemiologists (PHEs) at the state's seven largest hospital systems conducted CRE surveillance by reviewing laboratory results, submitting case report forms (CRFs), and coordinating the submission of isolates for molecular phenotyping. Clinical laboratorians at surveillance sites were responsible for identifying possible CRE cases and shipping isolates to the State Laboratory of Public Health.

NC DPH evaluated this surveillance system using CDC guidelines to assess performance and inform CRE policy decisions. The surveillance system was moderately simple to operate; surveillance involved 16 key individuals across nine organizations. Data completeness was high; four of 37 (10.8%) key variables had missing values in more than 10% of records. Acceptability was high with six of seven (85.7%) PHEs and four of six (66.7%) clinical laboratorians willing to continue voluntary surveillance. Stability was moderate in terms of personnel and programs; four of seven (57.1%) PHEs and six of six (100%) clinical laboratorians indicated there was another individual at their facility capable of performing CRE surveillance responsibilities.

Overall, the system has been useful in describing the burden of CRE in North Carolina; its flexibility will permit improvements to simplicity, acceptability, data quality, and timeliness. Feedback from key stakeholders emphasized the need for a standardized CRE case definition that incorporates clinical and laboratory components.

The future of CRE surveillance in North Carolina and the United States is under discussion. The Council of State and Territorial Epidemiologists (CSTE) HAI Subcommittee has formed a workgroup to discuss making CRE nationally notifiable and plans to present a position statement at the 2017 CSTE Annual Conference.

*Interested in participating in CRE surveillance?* CDC has funded all state public health laboratories to conduct CRE isolate testing through the Antimicrobial Resistance Laboratory Network (ARLN). Funds are also available to submitters for isolate shipping and shipping supplies. Please contact [Shermalyn Greene](#) at the State Laboratory of Public Health if interested in submitting isolates for this new initiative!

NC DPH thanks the PHEs and laboratorians who participated in the surveillance system and evaluation interviews. The results of the evaluation will be presented at several meetings with stakeholders and has been submitted as an abstract to the 2017 CSTE Annual Conference.

## NC PUBLIC HEALTH ACTION REGARDING SORIN 3T HEATER-COOLER DEVICES

NC DPH continues to work with its partners to coordinate the response to contaminated heater-cooler devices in North Carolina. NC DPH sent a memo to North Carolina healthcare providers on October 13, 2016 in response to CDC's October 13<sup>th</sup> health advisory regarding non-tuberculous mycobacteria (NTM) infections following exposure to contaminated heater-cooler devices used to warm and cool a patient's blood during cardiac bypass procedures. NC DPH recommends that hospitals performing cardiac bypass procedures follow [CDC](#) and [FDA](#) heater-cooler guidance. NC DPH worked with the NC Quality Center to identify facilities that perform cardiac bypass procedures across the state in order to communicate the risk of NTM infections associated with procedures involving the use of these devices. The SHARPPS Program conducted a brief survey among identified facilities to determine if Sorin 3T heater-cooler devices were used during their cardiac bypass procedures and ensured these facilities were aware of all CDC and FDA guidance, providing appropriate measures for infection control, exposure notification and follow up. NC DPH remains available to assist healthcare facilities with further investigation as necessary.

## 2016 INFECTION CONTROL ASSESSMENT AND RESPONSE ACTIVITIES (ICAR)

A CDC grant has allowed NC DPH to partner closely with the North Carolina State Program for Infection Control and Epidemiology (NC SPICE) in infection prevention activities. Through this partnership, three full-time Certified Infection Control (CIC) nurses conduct on-site facility assessments, identify gaps in infection prevention, and provide education to address these gaps in outpatient facilities. Since April 2016, the nurses have conducted on-site assessments in 81 nursing homes, 28 acute care facilities, and 23 outpatient facilities (16 hospital-associated and 7 independent) for a total of 132 year-to-date visits.

The CIC nurses provide experienced infection control education on-site as infection control gaps are identified. Infection control gaps have been identified in four primary areas: safe injection practices, sterilization and disinfection, respiratory hygiene, and overall infection control practices. Infection prevention best practices have also been acknowledged during these visits. Following each on-site visit, a written report is sent outlining best practices, identified gaps, and recommended mitigation strategies. Together, both the identified gaps and best practices are being used to form the foundation for online educational modules targeted at facility staff.

The work to strengthen infection prevention capacity throughout North Carolina has been reinforced by the development of a secured login, user-authenticated web interface. Designated persons at facilities will be able to conduct infection prevention self-assessments. These data will be reviewed and opportunities for on-site assessments and education will be provided.

This work will enable North Carolina to enhance the capability of public health to work in partnership with all facility types to contain existing or emerging infectious disease threats. These activities aim to improve infection control practices within facilities in order to reduce the burden of healthcare-associated infections reported in the state each year. These efforts will also aid in the reduction of communicable disease outbreaks due to prompt reporting, intervention, and educational outreach.

### ***Reminder: AMR/AS Subcommittee***

*The SHARPPS Program is forming an Antimicrobial Resistance/Antibiotic Stewardship (AMR/AS) subcommittee to design and promote statewide Antimicrobial Resistance/Antibiotic Stewardship initiatives across all health sectors. To join the subcommittee, please email [nchai@dhhs.nc.gov](mailto:nchai@dhhs.nc.gov).*

## UPCOMING EVENTS

- [NC Drug Diversion Table Top Exercise](#): February 15, 2017, Cary, NC
- [Safe Injection Connection Training](#): March 23, 2017, NC Division of Public Health (Cardinal Room), Raleigh, NC
- NC Communicable Disease Conference: April 3-5, 2017, New Bern, NC

## NC SHARPPS TEAM

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