

Fig. 1

observations were collected using convenience sampling between February and July 2019. Overall stethoscope hygiene compliance increased significantly from a baseline of 38% to 62% ( $P = .0316$ ) (Fig. 1). Physician adherence to stethoscope disinfection increased by 22%. During the study period, hand hygiene compliance remained unchanged at 75%. Also, 74 healthcare providers completed feedback forms; they revealed an increase in awareness of stethoscope hygiene policies and/or recommendations (9% to 41%) and self reports of stethoscope hygiene compliance (28% to 44%). **Conclusions:** The implementation of stethoscope hygiene stations, coupled with an educational initiative, lead to a significant increase in overall stethoscope hygiene compliance among healthcare workers. Future quality improvement initiatives can adapt this strategy to promote disinfection and reduce pathogen burden of other personal and multiuse medical equipment.

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#### Presentation Type:

Poster Presentation

#### Point-Prevalence Survey on Antibiotics Use in Six Regional Hospitals in Sierra Leone

Ralph Williams, Ministry of Health and Sanitation Sierra Leone; Christiana Conteh, Sierra Leone Ministry of Health and Sanitation; Joseph Sam Kanu, Sierra Leone Ministry of Health and Sanitation

**Background:** Antibiotic resistance (AMR) is a safety concern for patients in Sierra Leone. AMR can occur in communities and as well in the process of receiving treatments in healthcare settings, and it can pose a major threat to patient safety. Healthcare-associated infections and AMR result in longer duration of illness, longer treatment, higher mortality, increased costs, and increased burden to health facilities.

**Objective:** The purpose of this study was to generate more reliable estimates of the risk factors for the prevalence of HAI and to investigate patterns of antibiotic prescriptions done. **Methods:** The survey was conducted in 6 regional hospitals in Sierra Leone (Kono, Kambia, BO, Makeni, Moyamba, and Kenema) from June 16 to July 10 2019. The survey targeted inpatients in the pediatric, maternity, medical, and surgical wards. A structured questionnaire adopted from the WHO PPS form was used to collect information from patient medical charts and care notes. **Results:** Data were collected from 156 patients,

of whom 140 patients were on antibiotics, 100 were women, and 40 were men. Patients on 1 antibiotic regimen accounted for 8.6% ( $n = 12$ ) and 91.4% ( $n = 128$ ) on a regimen of 2 or 3 antibiotics. Only 5 patients (3.6%) were on oral antibiotics and 135 (96.4%) were on IV antibiotics. In the maternity ward, 28 of 40 patients (70%) had had a caesarian section and were on 2 or more antibiotics; 18 patients with caesarian sections (64.3%) developed complications and continued on an antibiotic regimen for >1 week. The remaining 12 patients (30%) in the maternity ward were admitted for anemia and hypertension (ie, preeclampsia), and these patients were on 1 antibiotic regimen for which they had no clinical indication. **Conclusions:** The survey results show that every patient admitted to the hospital was covered with antibiotics with or without indications; no laboratory investigations were performed before antibiotics were initiated. These findings further reveal a large number of patients who were exposed to intravenous cannulation, which predisposes catheter-associated bloodstream infections. The survey results justify the need for an antibiotic stewardship program to guide use of antibiotics.

**Funding:** None

**Disclosures:** None

If I am discussing specific healthcare products or services, I will use generic names to extent possible. If I need to use trade names, I will use trade names from several companies when available, and not just trade names from any single company.

Disagree

Christiana Kallon

Doi:[10.1017/ice.2020.1171](https://doi.org/10.1017/ice.2020.1171)

#### Presentation Type:

Poster Presentation

#### Prevalence of Carbapenem-Resistant Enterobacteriaceae (CRE) at a Tertiary-Care Center in the United States

Diane Heipel, Virginia Commonwealth University Health System; Yvette Major; Carli Viola-Luqa, VCU Health System; Michelle Elizabeth Doll, Virginia Commonwealth University; Michael Stevens, Virginia Commonwealth University School of Medicine; Kaila Cooper, Nursing VCU Health; Emily Godbout, Children's Hospital of Richmond at VCUHS; Gonzalo Bearman, Virginia Commonwealth University VCUHS Epidemiology and Infection Control

**Background:** Quantification of the magnitude of CRE both within a facility and regionally poses a challenge to healthcare institutions. Periodic point-prevalence surveys are recommended by the CDC

CRE tool kit as a facility-level prevention strategy. A 2016 point-prevalence survey of 2 high-risk units at a tertiary-care center in the United States for CRE colonization found that all patients surveyed were negative for CRE. The infection prevention (IP) team repeated the study in 2019 to reassess the prevalence of CRE in the healthcare facility. **Methods:** A point-prevalence survey was performed in November 2019 on the same 2 high-risk units surveyed in 2016. A perirectal flocked swab was collected from all patients unless a patient refused and/or a contraindication to rectal swab was present. Swabs were inoculated onto HardyChrom™ CRE agar for incubation in ambient air at 35°C for 24 hours. Organism identification was performed using MALDI-TOF mass spectrometry on a MBT Smart by Bruker. **Results:** None of the patients on either high-risk unit was known to be colonized or infected with CRE at the time of the point-prevalence survey. Of 41 perirectal swabs collected, 4 (9.8%) were positive for CRE. None (0 of 20) were surgical ICU patients and 4 of 21 (19%) were medical ICU patients. All positive swabs revealed different organisms identified as follows: *Escherichia coli*, *Enterobacter cloacae*, *Enterobacter kobai*, and *Enterobacter aerogenes*. All 4 positive patients had had recent contact with multiple acute-care hospitals. Also, 2 had been transferred for liver transplant evaluation. None of these patients had received a carbapenem during their admission to the facility. **Conclusion:** CRE are increasingly identified in healthcare centers in the United States. Centers previously classified as low prevalence will need to maintain preventive strategies to limit transmission risks as colonized patients arrive in the facility for care. Adoption of a robust horizontal infection prevention program may be an effective strategy to avoid the spread of CRE.

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#### Presentation Type:

Poster Presentation

#### Racial Differences in Incidence of *Staphylococcus aureus* Joint Infections in Metropolitan Atlanta, 2016–2018

Rahsaan Overton; Samantha Sefton, Georgia Emerging Infections Program/Foundation for Atlanta Veterans' Education and Research/ Atlanta VA Medical Center; Stepy Thomas, Emory University School of Medicine; Georgia Emerging Infections Program; Scott Fridkin, Emory Healthcare and Emory

University; Andrew Webster, Emory University; Susan Ray, Emory Univ Sch of Med and Grady Health System

**Background:** *Staphylococcus aureus* is the leading cause of joint infections. These infections may arise in native or prosthetic joints. Previous analysis of population-based surveillance has documented racial differences in incidence of invasive *S. aureus* bloodstream infections. We hypothesized that racial differences in incidence would not persist among of *S. aureus* joint infections. **Methods:** We utilized data from the Georgia Emerging Infections Program (GA EIP), which conducts CDC-funded active, population-based surveillance for iSA within the 8-county area of Atlanta. Cases were defined as residents of the surveillance area with *S. aureus* isolated during 2016–2018 from joint fluid or tissue, and cultures within a 30-day period after the initial culture date were considered a single case. Age- and race-specific incidence were calculated using US census data; incidence rate ratios (RR) and adjusted rate ratios (aRR) were calculated using the Mantel-Hanzel method. **Results:** Between 2016 and 2018, 500 iSA joint infections were identified (iMRSA, 28.2% and iMSSA, 71.8%); 34.4% occurred in black patients and 65.6% occurred in white patients. Also, 90 cases (18%) had a bloodstream infection (BSI) within 30 days of the joint infection. Incidence of iSA joint infections dropped 22% from 9.4 per 100,000 in 2016 to 7.5 per 100,000 in 2018 (RR, 0.79; 95% CI, 0.7–0.9). Adjusting for year, incidence was 40% lower among blacks than whites (RR, 0.6; 95% CI, 0.5–0.7); this finding was attributed to blacks having 60% lower incidence of iMSSA joint infections compared to whites (aRR, 0.4; 95% CI, 0.3–0.5) but similar MRSA incidence (aRR, 1.2; 95% CI, 0.8–1.6). The highest incidence was observed among whites aged >65 years with iMSSA infections (30.2 per 100,000) (Fig. 1). Among cases with a full chart review (n = 138), surgery in the prior 90 days was uncommon (n = 42, 30.4%), and a preceding major orthopedic procedure was even more rare (n = 13, 9.4%). Antecedent therapeutic injections and arthroscopic procedures are under investigation. **Conclusions:** Unlike *S. aureus* bacteremia, where previous analysis demonstrates higher incidences among blacks predominantly due to MRSA, our data demonstrate that the incidence of *S. aureus* joint infections is higher in whites, predominantly due to MSSA. Investigations in differential practices regarding orthopedic illness and injury should be pursued.

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**Disclosures:** Scott Fridkin reports that his spouse receives consulting fees from the vaccine industry.

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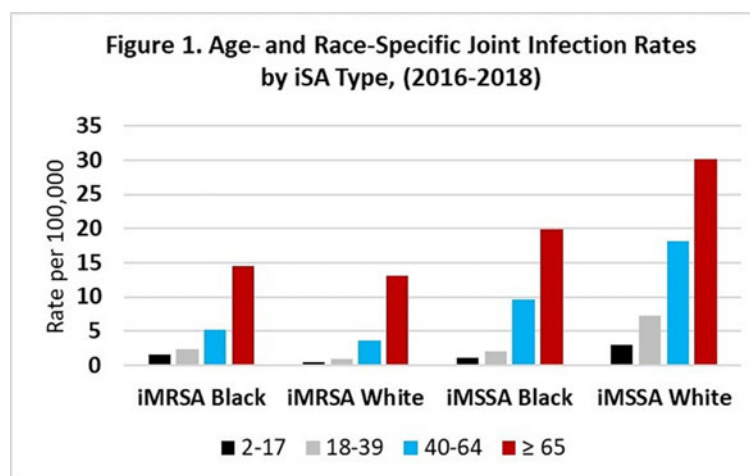


Fig. 1.