

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

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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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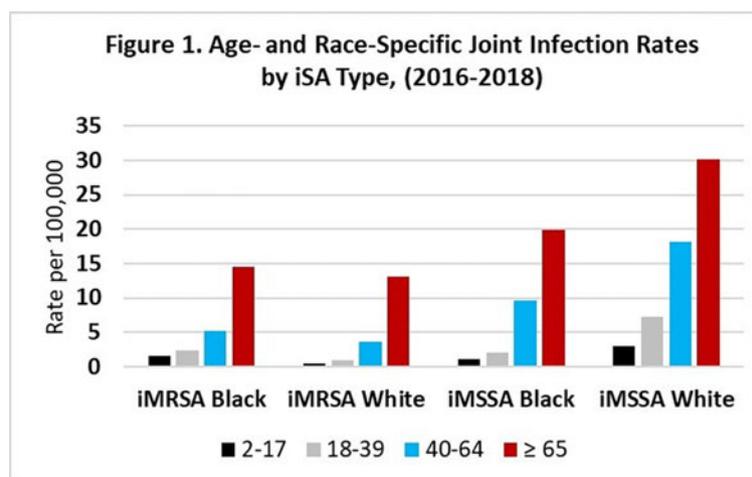


Fig. 1.