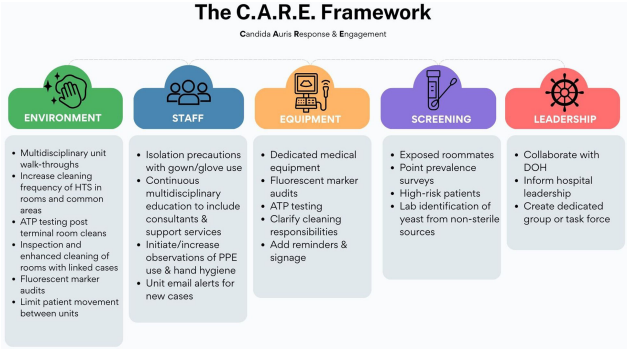
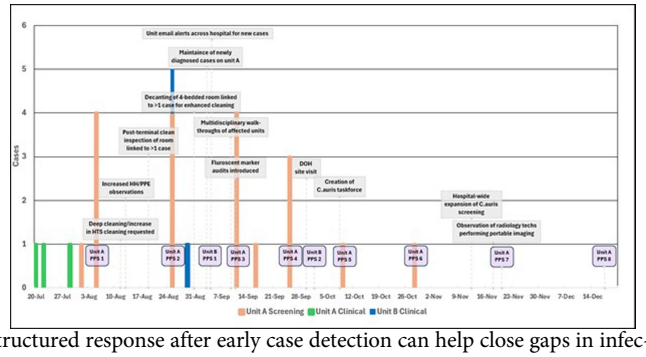




structured response after early case detection can help close gaps in infection prevention that contribute to spread.

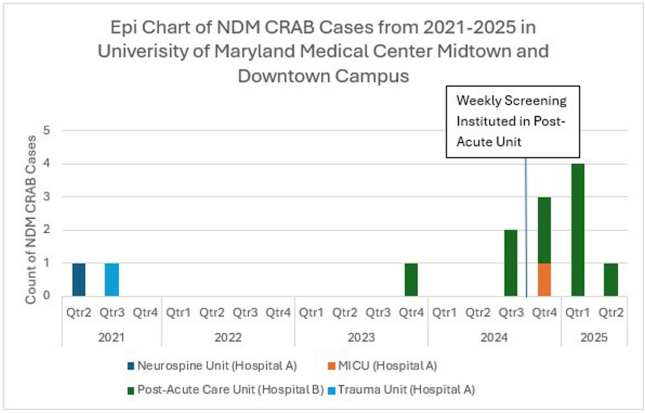
Antimicrobial Stewardship & Healthcare Epidemiology 2026;6(Suppl. S1):s114–s115
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Presentation Type:
Poster Presentation
Subject Category: Emerging Pathogens
Clinical Characteristics and Genomic Analysis of NDM CRAB Isolates in an Academic Medical Center 2021-2025‡

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Introduction: NDM-producing Carbapenem-resistant Acinetobacter baumannii (CRAB) is an emerging concern globally due to extensive antimicrobial resistance and high mortality, although less common in the United States. We describe the epidemiology of this pathogen at our academic medical center over a 5-year period. **Methods:** Observational study and epidemiologic investigation at two campuses (800-bed hospital ("A") including 7 adult ICUs and 144-bed hospital ("B") including 1 ICU and 1 long-term post-acute unit) with patient-sharing. Patients with CRAB in clinical or surveillance cultures from January 2021 to April 2025 were included. Active surveillance was conducted in select units using rectal swabs, and available isolates underwent genomic sequencing. **Results:** We identified 13 unique patients with 61 NDM-CRAB clinical (7 [11%]) or surveillance (54 [89%]) cultures. Two of 10 colonized patients subsequently developed clinical infection. NDM-CRAB constituted 25% of all sequenced CRAB isolates during this time. Among the 13 patients, median age was 62 years, 6 (46%) were female, all had prior healthcare exposure and 10 (77%) had colonization or infection with other multidrug-resistant organisms (MDROs). None reported international travel. Nine patients (69%) had prior exposure to carbapenems, 9 (69%) had

‡The abstract titles in this supplement have been corrected since original publication. A notice detailing the changes has been published at https://doi.org/10.1017/ash.2026.10802.



central venous catheters, and 7 (54%) required mechanical ventilation. Sites of infection included pneumonia, urinary tract, and wound. Following sporadic cases from 2021-2023, a cluster of 2 cases occurred on the post-acute unit in 2024 followed by a prolonged outbreak (n=10) detected via weekly rectal surveillance cultures (Figure). With the exception of the index case, all other post-acute unit outbreak cases had a prior negative surveillance screen, suggesting transmission among long-stay patients. Observations revealed suboptimal environmental surface-cleaning and deficiencies in use of personal protective equipment. No additional cases were identified on other units including ICUs undergoing routine weekly surveillance. Twenty-five NDM-CRAB isolates underwent genomic sequencing. All belonged to the same A. baumannii multilocus sequencing typing (MLST) lineage (STPas2, STOxf 218/2164). Long-read sequencing of select isolates identified blaNDM-1 and blaOXA-23 integrated in the chromosome. Notably, one isolate additionally acquired blaOXA-72 on a r3-T60 Acinetobacter plasmid, suggesting continuing genetic evolution. **Conclusion:** Over a 5-year period, we found NDM-CRAB transmission in a post-acute care unit within an acute care hospital, among long-stay patients with invasive devices and antibiotic exposure. We did not observe sustained transmission in other parts of the hospital, underscoring the contribution of long-term acute care in MDRO dissemination. Genomic analysis helped distinguish this cluster from other non-NDM CRAB cases, supplementing epidemiologic findings.

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Presentation Type:
Poster Presentation
Subject Category: Emerging Pathogens
Candida auris Surveillance: Developing a Predictive Model to Optimize Early Identification‡

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Background: Candida auris (C. auris) is an emerging pathogen that is often resistant to antifungal treatments and is exceptionally transmissible in the healthcare environment. C. auris colonization confers risk for invasive infections, such as bloodstream infections, surgical site infections and hardware-associated infections. Further, colonization or infection frequently delays or disrupts access to various healthcare venues. Infection prevention (IP) measures including strict contact isolation, specific cleaning and disinfection protocols, and surveillance testing are commonly used strategies to decrease the risk of C. auris transmission. Early identification of patients with C. auris is critical to prevent transmission in the healthcare setting. **Methods:** PCR-based C. auris surveillance testing via surface E-swab of the axillae and inguinal folds was implemented in April 2024 at our large midwestern academic hospital. Testing strategies include Ring Surveillance (targeting patients admitted to adjacent rooms of index patients with C. auris), Travel Screening (i.e., recent hospitalization outside

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the U.S.), and long-term accute care (LTAC) Screening (targeting recent admission to a long-term acute care or inpatient rehabilitation/nursing facility). A retrospective review of adult patients who underwent C. auris surveillance testing between May 1, 2025 – October 31, 2025, was performed. Patient demographics (sex, race, ethnicity, mean age at admission) were analyzed along with admission source, comorbidities, and admission diagnosis. Patients with positive results were compared based on testing indication; specifically, those tested as part of Ring Surveillance and those tested on admission due to Travel or LTAC Screening. **Results:** In the 6-month study period, 4624 patients were tested for C. auris and only 170 (0.6%) had positive results; 118 through ring surveillance and 52 found with an admission testing indication. Positive patients had a mean age was 59 years old and 67% identified as male. 73.5% of positive patients were hospitalized within the last 6 months. **Conclusions:** Prevention of C. auris transmission in the healthcare setting remains an IP challenge. The prevalence of C. auris was low in our cohort of patients who were primarily tested as part of a Ring Surveillance program. Development of a predictive model to optimize early identification of patients colonized with C. auris is important to guide surveillance testing and decrease transmission risk to other patients in the healthcare setting.

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Poster Presentation
Subject Category: Environmental Cleaning
Survey and clinical implications on the isolation of mycobacteria in the waterline of dental units‡

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[1]Division of Infectious Diseases, St. Luke's International Hospital, Tokyo, Japan; [2]St. Luke's International Hospital; [3]Dentistry and Oral Surgery and [4]Dentistry & Oral Surgery

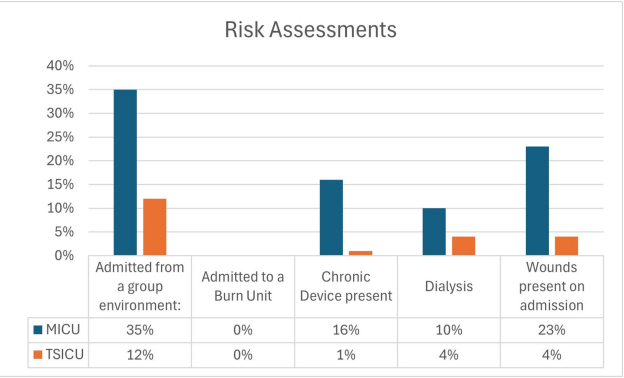
Background: Mycobacteria are widely distributed in the environment, and colonization of medical devices using water poses a risk in healthcare settings. Hospital outbreaks linked to ventilators and extracorporeal systems have been reported. At our hospital, dental unit water is routinely cultured every three months. In January 2024, unexpected mycobacterial detection prompted an investigation of dental unit waterlines, tanks, and water sources. Objective: To investigate the presence of mycobacteria in dental unit waterlines and evaluate clinical implications. **Methods:** Water samples (300ml) from six dental unit waterlines were tested by culture before and after changes in flushing frequency, heater use, and filter replacement. Additional samples from the hospital annex water tanks, main building tank, and nearby parks sharing the same water source were analyzed. **Results:** Mycobacteria were isolated from all six dental unit waterlines, including M. frederiksbergense, M. chelonae complex, M. mageritense, and M. mucogenicum/phocaicum, with concentrations up to 25 CFU/mL. Increasing flushing from weekly to daily and discontinuing heater use did not eliminate contamination. However, quantitative cultures after filter replacement showed marked reduction, with most lines becoming negative or <0.5 CFU/mL. Mycobacteria were also detected in external water sources: annex water tank (10 CFU/mL), main building tank (<2.5 CFU/mL), and nearby parks (<5 CFU/mL). These findings suggest mycobacteria are not unique to dental units but are ubiquitously present in tap water. Discussion: Detection in both dental units and external water sources indicates widespread colonization rather than isolated contamination. Filtration proved effective in significantly reducing mycobacterial load, emphasizing its role in infection control. Given the pathogenic potential of environmental mycobacteria, especially in immunocompromised patients such as those with neutropenia or hematopoietic cell transplantation, exposure via dental unit water may carry clinical risks. For these patients, use of sterile water instead of tap water during dental treatment is strongly considered. **Conclusion:** Mycobacteria are present in tap water and dental unit waterlines. Filter replacement effectively reduces contamination. Strict precautions, including sterile water use, are warranted to protect vulnerable patients from opportunistic mycobacterial infections.

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Presentation Type:
Poster Presentation
Subject Category: Environmental Cleaning
Effect of Dry Hydrogen Peroxide on Candida auris in ICU Settings‡

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[1]Sunrise Hospital & Medical Center; [2]Sunrise Hospital and Medical Center and [3]HCA Far West Division

Background: Candida auris (C. auris) is a pathogen that causes high morbidity in patients due to its resistance to antimicrobials. Endemic patient colonization poses an infection risk that may be mitigated by no touch disinfection systems through interruption of the infection chain reservoir step. We evaluated the efficacy of continuous dry hydrogen peroxide (DHP) exposure on C. auris hospital onset colonization to evaluate the interruption of the transmission post hospital admission. **Methods:** The study was conducted in two intensive care units within a large tertiary-care center from October 2024 to January 2025. DHP-emitting systems were installed in the Medical Intensive Care Unit (MICU) HVAC system. Trauma Surgical Intensive Care Unit (TSICU) had no DHP installed. Admission and post admission testing was completed on all patients present in both units. All non-positive patients were tested twice per week and removed from testing if positive. Presence of C. auris was determined by polymerase chain reaction (PCR) from composite swabs from axillae and groins. Patients were screened for C. auris risk factors according to a standard risk assessment (Figure 1). The study goal was to determine if there was a statistically significant difference (PC. auris days to critical care days for TSICU and MICU patients with hospital-onset C. auris using the N-1 Chi-squared test (proportion comparison). **Results:** Risk assessments for MICU (268) and TSICU (297) were evaluated. The MICU population showed a higher risk for C. auris in each category compared to TSICU (Figure 1). MICU had double the dialysis, triple the admissions from group environment, and 5 times more wounds present on admission. The length of stay in TSICU was about 2.3 days less than MICU. There is a statistically significant difference (PC. auris days to critical care days for TSICU and MICU. No adverse effects were reported by patients, visitors, or personnel associated with the DHP systems. **Conclusion:** This study demonstrates that DHP was effective in reducing the proportion of hospital-onset C. auris colonization when comparing the MICU (DHP installed) to the TSICU (without DHP). This effect was observed despite the MICU having a longer average length of stay and a higher percentage of patients with known risk factors for C. auris. The findings support DHP as a



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