

placed for a 12-minute period prior to the resident awakening in the morning. For caregiving, settle plates were placed for the 12-minute period of morning activity shortly after awakening. Twin rest-caregiving measurements were taken on three separate days per *C. auris* carrier. In addition, prior to caregiving, bilateral nares, hands, axilla, groin, and perirectal swabs were taken for *C. auris* and MRSA culture, along with an axilla/groin swab for measuring chlorhexidine concentration (CHG used for routine bathing). Logistic regression with person-level clustering analyzed associations between positive settle plates (“shedding”) and activity (caregiving versus rest), along with other adjusters. **Results:** The study included 23 *C. auris* carriers, 15 of whom carried MRSA. 65% were male, 91% had an indwelling device, 39% had wounds. Mean number of positive body sites was 2.3 for *C. auris* and 1.2 for MRSA. Median CHG concentration was 156 µg/mL (IQR=39-1250). Shedding occurred more frequently during caregiving versus rest for both *C. auris* (8/69 vs 1/69, $P=0.02$) and MRSA (15/69 vs 3/69, $p=0.002$). In multivariable models (Table), caregiving was associated with increased odds of shedding for both *C. auris* (OR: 9.25 (95% CI: 1.07-80.35), $P=0.04$) and MRSA (OR: 6.52 (95% CI: 1.72-24.78), $P=0.01$). Higher CHG concentrations were non-significantly associated with reduced shedding of both pathogens. **Conclusion:** *C. auris* and MRSA shedding increased significantly during caregiving activities, supporting CDC’s current recommendations for enhanced barrier precautions in nursing homes, which involve gown and glove use during high-contact care for carriers of multidrug-resistant organisms. Remarkably, shedding was readily detected within 12 minutes of morning caregiving, highlighting a rapid “plume effect” during resident care.

Antimicrobial Stewardship & Healthcare Epidemiology 2025;5(Suppl. S2):s112-s113
doi:10.1017/ash.2025.351

Table. Multivariable Model of Factors Associated with *C. auris* and MRSA Shedding ^a

Variable ^b	<i>C. auris</i> Shedding		MRSA Shedding	
	Odds Ratio (95% CI)	P-Value	Odds Ratio (95% CI)	P-Value
Caregiving versus Rest	9.25 (1.07-80.35)	0.04	6.52 (1.72-24.78)	0.01
CHG Concentration Level ^c				
Medium vs Low	0.28 (0.03-2.69)	0.29	0.94 (0.20-4.45)	0.93
High vs Low	0.32 (0.06-1.77)		0.78 (0.20-2.97)	
Wound	0.88 (0.19-4.03)	0.86	1.00 (0.30-3.36)	0.99

^a Multivariable models adjusted for clustering by person.
^b Other potential variables were assessed. ‘Number of positive body sites’ was evaluated but was collinear with ‘CHG concentration level’. Not surprisingly, higher CHG concentrations were associated with lower number of positive body sites. ‘CHG concentration level’ was retained because the number of positive body sites is influenced by CHG concentrations. ‘Male gender’ was also assessed and excluded due to collinearity with ‘CHG concentration level’. Males had lower CHG levels, and the small sample size would not tolerate both variables in the model. Due to collinearity between ‘any device’ and ‘wound’ variables, ‘wound’ was retained in the final model.
^c CHG concentration categorized as: ‘Low’ (<156 µg/mL), ‘Medium’ (156 to <625 µg/mL), and ‘High’ (≥625 µg/mL).

Presentation Type:

Poster Presentation

Subject Category: Long Term Care

Current State of Infection Prevention in Missouri Long-Term Care Facilities

Rachael Snyders¹, Brooklyn White², Christopher Blank³, Cassandra Sherman³, Megan Dethloff⁴, Christine Zirges⁴, Laken Chaney³ and Jonas Marschall⁵

¹Washington University School of Medicine; ²Missouri Department of Health and Senior Services; ³BJC HealthCare; ⁴SSM Health and ⁵University of Arizona College of Medicine – Phoenix

Background: A survey was conducted to understand the current state of infection prevention (IP) in Missouri (MO) long-term care facilities (LTCF) following the COVID-19 pandemic. The survey focused on staffing, training and education, and program elements. **Method:** The survey was developed and managed in Qualtrics™. It was distributed via email to 1468 individual email addresses for 1122 unique LTCF across Missouri in partnership with the Missouri Department of Health and Senior Services. The survey was available from July 29, 2024 through August 16, 2024. Survey results were anonymized; participants had the option to provide facility or contact information if desired for follow up. **Results:** The survey

response rate was 11.1%, with 164 responses collected. Participants worked in LTCF categorized as long-term care, assisted living, memory care, short-term skilled nursing, short-term rehabilitation, residential, and behavioral health. The size of LTCF varied in numbers of residents and employees. Most respondents (82%) reported having a dedicated IP professional for their facilities, but only 2% stated they were allocated full-time to IP responsibilities. Job titles also varied widely. Over 50% of respondents stated their IP professionals had less than five years of IP experience, but 80% stated the person received specific training for the IP role. Most respondents reported having policies for monitoring and improving hand hygiene, managing communicable illnesses, and screening for infectious diseases (ID). Nearly all respondents (99%) reported that policies remain for managing residents, employees, and visitors with COVID-19. However, most programs lack a dedicated budget for IP initiatives and a defined relationship with an ID clinician or healthcare epidemiologist. **Conclusions:** This is, to our knowledge, the first statewide survey of infection prevention in Missouri long-term care facilities. One limitation of this study is the small response rate, and another is a response bias in which facilities with robust IP programs are more likely to respond. There are employees and programs dedicated to preventing infections in residents of MO LTCF. The workforce varies in IP experience, though considerable IP-specific training is occurring which fosters competency advancement. Lack of full-time allocation to IP responsibilities and variation in job titles may indicate role overlap of IP with other specialties. Limited funding and partnerships with ID clinicians may affect the scale and scope of IP programs. This survey demonstrated that IP resources are available in MO LTCF, and there may be opportunities to enhance their impact through increased staffing, funding, and professional collaborations.

Antimicrobial Stewardship & Healthcare Epidemiology 2025;5(Suppl. S2):s113
doi:10.1017/ash.2025.352

Presentation Type:

Poster Presentation

Subject Category: Long Term Care

Staphylococci Culprits: Uncovering Microbial Contamination in Long-Term Care Shower Facilities

Caitlin Crews-Stowe¹, Henry Spratt², David Levine³ and Abigail Nelson⁴

¹University of Tennessee at Chattanooga; ²Dept. Biol., Geol., & Env. Sci., Univ. Tennessee at Chattanooga; ³University of Tennessee/Erlanger Health System and ⁴Deva Rea, AdventHealth

Background: Patient bathing plays a vital role in patient care and cleanliness, as well as in the prevention of infections, assisting in the removal of transient skin flora, which are predominately gram-positive organisms, particularly Staphylococci. However, there are inherent risks that come with the use of water in healthcare facilities, particularly the potential for acquisition of pathogenic bacteria from surfaces by residents. Current cleaning and disinfection protocols encourage the disinfection of the shower facilities in between each patient, but adherence to this practice can be a challenge with the staffing shortages seen in environmental services linked to long-term care facilities. The purpose of this point-prevalence study was to identify Staphylococci contamination in shower facilities at a long-term care and rehabilitation center **Methods:** Five shower room facilities in a long-term care and rehabilitation center were cultured on one day in July 2024. Five surfaces in the shower facility/room were cultured: the shower bench, the faucet, the floor drain, the grab bar, and the shower curtain. A total of 25 cultures were obtained using sterile transport swabs with liquid Stuart’s medium (Fisherbrand, Fisher Scientific, Suwanee, GA) and immediately placed in ice for transport to a microbiology lab. At the lab, the swabs were plated onto two different agars: CHROM MRSA agar and mannitol salt agar (MSA) and incubated for 48 hours. Plates were then read and assigned a qualitative “Yes/No” value if at least 1 colony forming unit of interest was seen. **Results:** Of the five surfaces cultured in the shower facilities, the bench shower seats were the most heavily contaminated. All of the bench shower seats tested positive for coagulase-negative Staphylococcus (CoNS) and Staphylococcus aureus