of an enhanced sanitization process beyond manufacturer recommendations. This highlights the challenges associated with biofilm control in these devices. Standard cleaning practices based on ice machine manufacturer's instructions for use (MIFU) may be insufficient at eliminating contamination. These findings support the need for enhanced mitigation strategies and routine environmental surveillance.

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Poster Presentation
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Infection Control Education Needs and Knowledge Gaps among Environmental Services Staff in a Tertiary-Care Hospital‡

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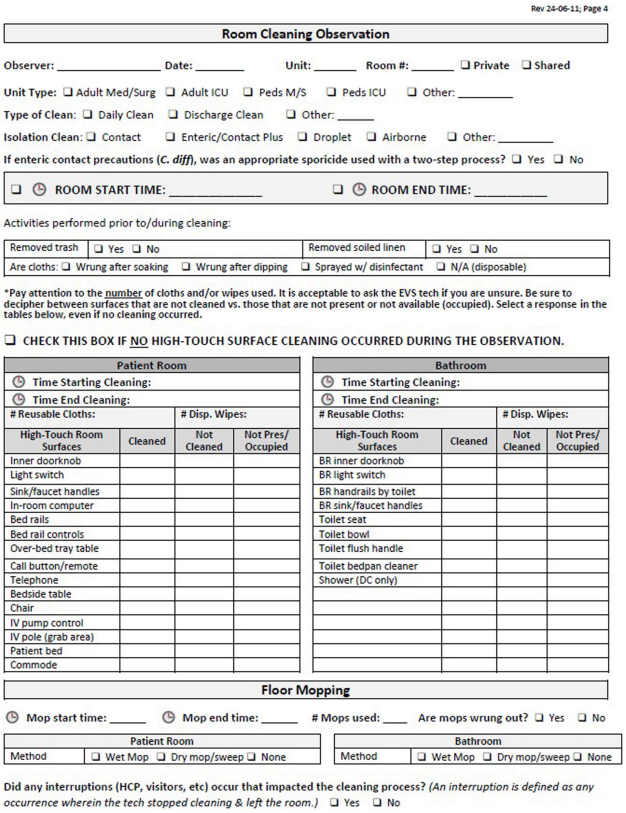
Background: Healthcare environmental services (EVS) staff play a critical role in infection prevention and control (IPC) through environmental cleaning and disinfection. However, EVS staff are often excluded from structured, role-specific IPC education. Insufficient IPC knowledge among EVS staff may compromise environmental hygiene and increase the risk of healthcare associated infection transmission. This study aimed to assess IPC knowledge and education needs among EVS staff to provide an evidence-based foundation for targeted IPC education programs. Methods A descriptive cross-sectional study was conducted among EVS staff at a tertiary-care university hospital in Seoul, Republic of Korea. Participants completed a self-administered questionnaire assessing demographic characteristics, IPC knowledge, and perceived IPC education comprehension (current level) and education need (required level). IPC knowledge was measured using a 20-item instrument developed based on national IPC guidelines. Education needs were analyzed using the Borich's needs assessment model and the Locus for Focus model to identify priority education topics. Descriptive statistics and nonparametric analyses were performed. Results A total of 81 EVS staff participated. The median IPC knowledge score was 17.0 (IQR, 16.0-18.0) out of 20. Notably, despite the high overall score, critical knowledge deficits were identified in high-risk IPC areas, including personal protective equipment (PPE) doffing protocols after cleaning an isolation room (42.0% correct) and management of infectious medical waste (17.3%). Education comprehension scores were lowest for management of suspected infection in staff, blood spill disinfection, and the safe use of disinfectants, whereas education need scores were highest for PPE related to various transmission-based precautions, as well as responses to needlestick injuries. Needs assessment using the Borich and Locus for Focus model identified procedures for managing suspected infection in staff (Borich score, 2.47), PPE for airborne precaution (2.00), and PPE for contact precaution (1.94) as the highest-priority IPC education topics, all of which were located in the high importance–high discrepancy (HH) quadrant; needlestick injury management and blood spill disinfection were also identified as high-priority areas. Conclusions Despite relatively high overall IPC knowledge, EVS staff demonstrated significant knowledge–practice gaps in high–risk IPC practices and expressed a substantial need for clearer guidelines essential for self-protection. The discrepancy between current understanding and perceived educational needs underscores the importance of structured, role–specific IPC education. Targeted IPC education programs focusing on isolation precautions, PPE donning and doffing, and occupational exposure management are crucial to enhancing both staff safety and the integrity of hospital-wide infection prevention.

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Presentation Type:
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Is Time on Their Side? Real World Environmental Services Practices and the Contact Time Paradox‡

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Background: Environmental hygiene (EH) plays a critical role in reducing healthcare-associated infection (HAI) risk, yet significant variability persists in hospital patient room cleaning and disinfection. While discharge cleaning compliance is frequently studied, real-world practices during daily occupied patient room cleaning remain poorly characterized. Furthermore, the time to complete Environmental Services (EVS) tasks is rarely reported in published literature, despite being linked to budget, facility throughput, and patient and employee satisfaction. Researchers conducted a multi-hospital, observational study about environmental cleaning processes. **Methods:** Across 3 large (<500 beds) teaching hospitals in 3 distinct US regions, researchers shadowed EVS technicians during daily and discharge patient room cleaning across diverse ward types. Direct practice observations documented total turnover time, time to complete tasks such as cleaning the patient and bathroom room surfaces, floor mopping and non-disinfection tasks using a standardized data collection tool (Figure 1). Cleaning compliance was also measured via visual assessment, defined as wiping a surface with a disinfectant wipe or cloth. **Results:** A total of 638 daily and 91 discharge cleans were evaluated. The average occupied daily room turnover time was 9 minutes. However, square footage, isolation needs, in-room equipment and EVS expectations varied across unit types and individual facilities. For daily occupied room cleaning, on average, more time was spent on non-disinfection tasks like



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Room Cleaning Observation

Observer: _____ Date: _____ Unit: _____ Room #: _____ ❑ Private ❑ Shared

Unit Type: ❑ Adult Med/Surg ❑ Adult ICU ❑ Peds M/S ❑ Peds ICU ❑ Other: _____

Type of Clean: ❑ Daily Clean ❑ Discharge Clean ❑ Other: _____

Isolation Clean: ❑ Contact ❑ Enteric/Contact Plus ❑ Droplet ❑ Airborne ❑ Other: _____

If enteric contact precautions (*C. diff*), was an appropriate sporicide used with a two-step process? ❑ Yes ❑ No

❑ ROOM START TIME: _____ ❑ ROOM END TIME: _____

Activities performed prior to/during cleaning:

Removed trash	❑ Yes ❑ No	Removed soiled linen	❑ Yes ❑ No
Are cloths: ❑ Wrung after soaking ❑ Wrung after dipping ❑ Sprayed w/ disinfectant ❑ N/A (disposable)			

*Pay attention to the number of cloths and/or wipes used. It is acceptable to ask the EVS tech if you are unsure. Be sure to decipher between surfaces that are not cleaned vs. those that are not present or not available (occupied). Select a response in the tables below, even if no cleaning occurred.

❑ CHECK THIS BOX IF NO HIGH-TOUCH SURFACE CLEANING OCCURRED DURING THE OBSERVATION.

Patient Room

Time Starting Cleaning:
Time End Cleaning:
Reusable Cloths: # Disp. Wipes:

High-Touch Room Surfaces	Cleaned	Not Cleaned	Not Pres/ Occupied
Inner doorknob			
Light switch			
Sink/faucet handles			
In-room computer			
Bed rails			
Bed rail controls			
Over-bed tray table			
Call button/remote			
Telephone			
Bedside table			
Chair			
IV pump control			
IV pole (grab area)			
Patient bed			
Commode			

Bathroom

Time Starting Cleaning:
Time End Cleaning:
Reusable Cloths: # Disp. Wipes:

High-Touch Room Surfaces	Cleaned	Not Cleaned	Not Pres/ Occupied
BR inner doorknob			
BR light switch			
BR handrails by toilet			
BR sink/faucet handles			
Toilet seat			
Toilet bowl			
Toilet flush handle			
Toilet bedpan cleaner			
Shower (DC only)			

Floor Mopping

Mop start time: _____ Mop end time: _____ # Mops used: ____ Are mops wrung out? ❑ Yes ❑ No

Patient Room		Bathroom	
Method	❑ Wet Mop ❑ Dry mop/sweep ❑ None	Method	❑ Wet Mop ❑ Dry mop/sweep ❑ None

Did any interruptions (HCP, visitors, etc) occur that impacted the cleaning process? *(An interruption is defined as any occurrence wherein the tech stopped cleaning & left the room.)* ❑ Yes ❑ No

‡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.

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Table 1

Daily Occupied Patient Room						
Study Site	Number of Daily Cleans Observed	Average Total Duration to Complete Daily Occupied Turnover (in mins, secs)	Average Duration Spent on HTS Cleaning in Patient Room and Bathroom (in mins, secs)	Average Duration Spent Mopping Patient and Bathroom Floors (in mins, secs)	Average Duration Spent doing Non-Disinfection Tasks (in mins, secs)	Daily High-Touch Surface Cleaning Compliance
Site X	369	7:19	02:26	01:36	03:16	41.20%
Site Y	169	8:39	02:31	02:56	03:13	38.10%
Site Z	100	15:42	06:43	03:07	05:53	48.50%
Overall	638	8:59	03:08	02:11	03:40	NC

Table 2

Discharge Patient Room						
Study Site	Number of Discharge Cleans Observed	Average Total Duration to Complete Discharge (in mins, secs)	Average Duration Spent on HTS Cleaning in Patient Room and Bathroom (in mins, secs)	Average Duration Spent Mopping Patient and Bathroom Floors (in mins, secs)	Average Duration Spent doing Non-Disinfection Tasks (in mins, secs)	Discharge High-Touch Surface Cleaning Compliance
Site X	46	40:43	23:34	05:35	11:34	90.0%
Site Y	34	45:00	25:37	06:26	12:56	87.0%
Site Z	11	47:22	29:18	05:12	09:42	92.1%
Overall	91	43:07	24:42	05:48	12:37	NC

removing waste, refilling consumables and patient engagement (see Table 1). High-touch surface (HTS) cleaning compliance during daily cleans was low (38–48%), whereas floor mopping occurred in <90% of rooms. Site Z spent approximately twice the average time performing a daily room clean compared to Sites X and Y, however, did not achieve greater than 50% HTS cleaning compliance. Discharge cleaning demonstrated markedly higher HTS compliance (87–92%) and longer average duration (Table 2). **Conclusion:** To date, EH research has been focused on cleaning compliance measured by fluorescent marking, ATP swabbing and/or environmental culturing. Less research, however, is available regarding daily occupied patient room cleaning and the time and resources needed to do it successfully. Our research revealed that EVS technicians across 3 large hospitals spent an average of 9 minutes on daily room cleaning and only a third of that time spent using a disinfectant. Many healthcare disinfectants used by EVS have a contact time of 5 minutes or more. Healthcare leadership should have realistic expectations of what can be accomplished in budgeted cleaning time and the impact of time on disinfectant efficacy, regulatory compliance and infection prevention.

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An Ethnographic Exploration of Healthcare Professionals' Interactions with Sinks and Water During Patient Care in Intensive Care Units‡

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Background: Recent research has investigated the role of sinks (including sink taps, filters, water traps, etc.) in the spread of multidrug-resistant organisms (MDROs) and other pathogens. As part of a larger study on hand hygiene (HH) and personal protective equipment (PPE) adherence, we explored healthcare professionals' (HCP's) interactions with water and wet surfaces during patient care processes in intensive care units (ICUs). **Methods:** We conducted ethnographic observations of HCP's patient care processes in the medical and surgical ICUs of a large academic hospital, and we conducted mini-interviews (~ 3-7 minutes) with a subset of these HCP. Observations focused on HH and PPE adherence during contaminating tasks. We also captured additional relevant data (e.g., room layouts, care activities, fomite/device interactions). We documented observations and interview responses in fieldnotes that we imported into MAXQDA qualitative software and coded activities using a combined deductive-inductive approach. We conducted data collection and analyses iteratively, with early analysis informing later data collection. HCP interactions with water emerged inductively as a topic of interest during this process. **Results:** Between 3/2022-5/2023, we observed 104 HCP engaged in patient care and conducted 31 mini-interviews. Interactions with sinks and sink-adjacent counters were common. We observed HCP placing pillows and other items on wet counters, water remaining in sinks after use, HCP contacting water droplets on sink walls and counters, and HCP setting items (e.g., IV bags, used towels) in the sink that they later carried to trash or laundry bins. HCP also leaned against surfaces, including sink-adjacent counters and patient-adjacent areas (e.g., beds, bed rails). Such activities could transfer contaminated water droplets to HCP's clothing, floors, or other surfaces. We also observed water splashing due to sink design or the water pressure when HCP did activities like filling drinking cups or rinsing containers. During mini-interviews, HCP discussed their preference for soap-and-water handwashing (versus hand sanitizer) in specific situations, which they often performed at the same in-room sinks they used during patient care activities as outlined above. Splash back from sink drains could spread pathogens to HCP's hands. **Conclusion:** Our study focused on HH and PPE adherence, therefore, we did not systematically collect observations on water in ICUs. Nonetheless, we observed HCP interacting with sinks, water, and wet surfaces in ways that highlight the potential for water-borne pathogen transmission. Infection prevention programs and hospitals should consider these interactions when developing infection prevention guidelines and designing construction and renovation projects.

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Occurrence of Acinetobacter, Pseudomonas, and Klebsiella in patient room sinks and drains of a new hospital‡

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Background: Sinks in hospital patient rooms are potential reservoirs of hospital acquired infections (HAI) pathogens and outbreaks; sink colonization can occur in new buildings soon after patient occupancy and persist. To control this source, it is important to understand how occurrence and concentrations of organisms in sinks and drains change over time. This study longitudinally measures the occurrence and concentration of Acinetobacter, Pseudomonas aeruginosa, and Klebsiella pneumoniae in sinks and drains of new inpatient hospital rooms after patient occupancy. Methods Three inpatient units of a newly constructed cancer hospital were studied. Ten randomly selected rooms per unit were sampled biweekly for seven months for Acinetobacter, Pseudomonas aeruginosa, and Klebsiella pneumoniae. Surface samples were swabbed from a 4x4 cm section of the sink basin around the drain. Water was sampled from the p-trap via the drain. Results Approximately 400 sink and drain samples were taken. Acinetobacter was the most commonly detected organism, and Klebsiella the least. Based on the unit, 90-100% of sink and 50-90% of drain samples by the end of the study period had detectable Acinetobacter, 90-100% of sink and 50-80% of drain had Pseudomonas, and 0-10% of sink and 0-30% of drain had Klebsiella. In samples with detectable organisms, Acinetobacter concentrations ranged from 1.3-8 logCFU in sinks and 1.6-6.7 log CFU/mL in drains. Pseudomonas aeruginosa ranged from 2.8-7.4 log CFU in sinks and 2.2-6.1 log CFU/mL in drains, and Klebsiella from 2.6-4.5 logCFU in sinks and 1.6-4.9 logCFU/mL in drains. There was low to no correlation between occurrence of detectable bacteria in sink basin and

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