

Healthcare Environmental Hygiene (HEH):

KEY FACTS and FIGURES

Infection prevention and control



Burden of healthcare-associated infections (HAIs) and antimicrobial resistance (AMR)

- HAIs are among the most common adverse events in healthcare settings, causing harm to patients, visitors, and staff, and imposing a heavy burden on health systems, including increased costs¹
- In acute-care hospitals, 7% of patients in high-income countries and 15% in low- and middle-income countries acquire at least one HAI during their hospital stay¹
- The impact of HAIs and AMR on individuals is immense, with over 24% of patients with healthcare-associated sepsis and more than half of those in intensive care dying each year
- Patient death rates increase 2 to 3-fold when infections are resistant to antimicrobials¹

HEH and IPC: The Problem

- HEH comprises several technical domains as well as human factors
- HEH technical domains include surfaces, air control, water control, device reprocessing and sterilization, laundry, and waste management
- HEH is an often-neglected field, with insufficient investment from healthcare facilities
- There is currently no international consensus on HEH best practices
- The healthcare environment within the patient zone is often contaminated with microbial pathogens, including multidrug-resistant organisms (MDROs)^{3,4}
- Strong evidence suggests that the healthcare environment plays a major role in the transmission of HAIs, both through fomite transmission and as a source of hand contamination⁶⁻¹⁰
- Pathogens such as MRSA, VRE, norovirus, *C. difficile*, *Candida auris*, and *Acinetobacter* spp. are often transmitted through the healthcare environment¹²

- If a hospital room's previous occupant was colonized by an MDRO, the next patient is 1.5 to 4 times more likely to become colonized or infected with that MDRO¹¹

HEH and IPC: The Solution

- Effective infection prevention and control (IPC) measures can prevent up to 70% of HAIs¹
- Improvements in HEH has been shown to reduce colonization and HAIs⁸ with successful interventions often being multimodal and involving at least one of the 6 HEH technical domains
- IPC interventions generally offer a high return on investment, with programs yielding a 7 to 16-fold return on every \$1 invested¹

Insights from a pilot survey of 51 hospitals across 35 countries⁵

- 98% of facilities across all resource levels reported significant issues with their HEH programs
- An overwhelming majority of environmental services staff did not receive comprehensive formal training
- Rope mops and buckets were still commonly used for floor cleaning in most healthcare facilities, and were often not changed between rooms
- 12% of healthcare facilities did not separate normal waste from medical or hazardous waste
- 22% of healthcare facilities reported having an open dump site nearby
- In nearly half of the healthcare facilities, environmental services managers were on-site less than once per week or not at all
- 16% of respondents reported that environmental services staff and nursing staff faced communication barriers because they did not speak the same language
- Upward communication with direct superiors was possible in only one in four healthcare facilities

