



Question 13. Do you have standardized processes for daily and discharge environmental cleaning/disinfection of patient rooms that includes monitoring of cleaning/disinfection quality?

You indicated that you do not have a standardized process for daily and terminal environmental cleaning of patient rooms, or that the process you do have does not work well. Transmission of MRSA is similar to that of other pathogens spread by contact; microorganisms can contaminate the patient or their environment and then be passed on to other patients via health care personnel or shared equipment, or to the next occupant of the patient room. A key aspect of preventing MRSA and other MDRO infections lies in preventing transmission. Hospitals and units need to ensure environmental cleaning and disinfection is effectively decontaminating patient rooms and equipment.

A. Environmental Cleaning and Disinfecting Essentials for Preventing MRSA and other MDRO Transmission

MRSA and other MDROs can survive on hospital surfaces and equipment for days, weeks or even months. Transmission of MRSA is similar to other pathogens spread by contact; the patient or patient's environment can become contaminated, making it easy to spread MRSA to other patients if the environment and equipment is not properly cleaned and disinfected.

- When selecting products for cleaning and disinfection the following factors should be considered before implementing new products:
 - Level of disinfection required and the most appropriate agent or solution for the job
 - Ease of use (contact time, mixing requirements, stability, method of delivery, etc.)
 - Safety (toxicity, flammability, etc.)
 - Surface compatibility, persistent activity and odor
 - Accompanying products needed (mops, cloth, etc.)
 - Cost
 - Training and education
 - Potential barriers (product availability, staffing, workflow, etc.)
- Cleaning and disinfecting protocols should place particular emphasis on high-touch surfaces, such as the bed rails, over-bed tables, call buttons, TV controls, phones, door handles, and encourage staff to follow a predetermined logical cleaning pattern, moving from cleanest to

* Note. While this guide focuses on MRSA prevention, these strategies can be applied to the prevention of other multidrug-resistant organisms (MDROs)

dirtiest. Checklists are useful to ensure all items are included in the cleaning and disinfection process and everyone is on the same page about what is “cleanest to dirtiest.”

- Patients colonized or infected with MDROs should have dedicated medical equipment whenever possible (e.g., stethoscopes, blood pressure cuffs). If dedicated medical equipment is not available, all equipment needs to be thoroughly cleaned and disinfected before using it on another patient.
- For shared patient equipment, a plan for cleaning and disinfection that includes who is to clean the equipment, when and how should be developed, posted and monitored.
- Identify and address barriers to effective cleaning and disinfection (e.g., clutter in the patient room, lack of assigned responsibility for cleaning certain items).
- Include mechanisms for monitoring compliance and thoroughness of cleaning.

B. Strategies for Environmental Cleaning Success

- Consider environmental services staff key members of the MRSA infection prevention team. Emphasizing their important role in infection prevention will help create buy-in and may help highlight alternative approaches for decreasing MRSA transmission.
- Recruit an environmental services champion. The environmental services champion can help integrate MRSA initiatives into the existing workflow and help coordinate environmental services and infection prevention efforts.
- Consider using a responsibility framework to assign cleaning responsibilities for particular patient care equipment and noncritical items. A responsibility framework provides clear details on who is responsible for cleaning and disinfecting specific pieces of shared patient equipment. It should also include by what means and how frequently shared equipment will be cleaned. When developing such a framework it’s important to include all necessary stakeholders (Environmental Services, Nursing, Patient Transport, etc.). Interdepartmental collaboration will help to streamline processes across departments, prevent rework and enhance communication.
- Ensure materials for environmental services staff are assessed for potential language and reading level barriers. At a minimum, include the following materials and assessments: educational materials, instructions/checklists, cleaning equipment, cleaning solutions/bottles, and Safety Data Sheets required by OSHA.
- Use audits as an opportunity for improvement, not for punishment, i.e. as a “ladder,” not a “hammer.” Use a frequent and consistent approach to audits to provide valuable information that can identify opportunities for improvement and track progress over time.

- Provide feedback to staff on environmental cleaning and disinfecting practices in a timely, clear and consistent manner, focusing on improvement rather than punishment.
- Encourage a team atmosphere when providing feedback by using “we” statements (e.g., how can “WE” work together to improve MRSA cleaning and disinfection?). Spend time listening to staff concerns and refrain from placing blame.
- Verify environmental services staff receive feedback about MDRO rates, too. As they engage and learn how critical their work is for patient safety, it is important for them to know they are making a difference. Include them in unit staff meetings where infection data are shared and patient stories are told. They are a critical part of the infection prevention team.

Tools, Resources and Further Reading

- STRIVE Content:
 - [Competency-Based Training, Audits and Feedback](#) (CBT101, CBT102, CBT103)
 - [Environmental Cleaning](#) (EC101, EC102, EC103, EC104)
 - [MRSA Tier 1](#) (MRSA101, MRSA102)
- [CDC Environmental Checklist for Monitoring Terminal Cleaning](#)
- [CDC Environmental Cleaning & Disinfecting for MRSA](#)
- [CDC Options for Evaluating Environmental Cleaning](#)
- Association for the Healthcare Environment (AHE). Quality Assurance (Section 11) & Environmental Monitoring Technologies (Section 12). Practice Guidance for Healthcare Environmental Cleaning, 2nd ed. Chicago, IL: AHE. (2012). Pgs. 173-195.
- Dancer SJ. Dos and don'ts for hospital cleaning. *Curr Opin Infect Dis*. 2016; 29(4):415-23.
- Mitchell BG, Dancer SJ, Anderson M, Dehn E. Risk of organism acquisition from prior room occupants: a systematic review and meta-analysis. *J Hosp Infect*. 2015; 91(3):211-7.