

WHAT'S HIDING behind privacy curtains?

Potential contamination can be overlooked in routine cleaning



Room environment plays a large role in the transmission of healthcare-associated infections (HAIs), and that role is getting some significant attention.

The Centers for Disease Control and Prevention (CDC) identified the most frequently touched or high-touch surfaces in a patient's room. These areas — such as the bedside table, bedrails and remote control — are touched numerous times throughout the day by healthcare workers.

High-touch surfaces are cleaned and disinfected daily as part of the routine cleaning of a patient's room. Yet, there is one high-touch surface that did not make the CDC's list and is not part of patient room routine daily cleaning.

That surface is the privacy curtain.

Contamination risks

The privacy curtain is touched frequently before, during and after patient contact. Oftentimes, the curtain is touched after hand hygiene and before contact with the patient, potentially putting the patient at risk for cross contamination.¹

What's more, curtains may be made of a material that is not easily cleaned. Fabric content is an important consideration: Microorganisms have been found to bind with certain fabrics more than others.

One study indicates that *S. aureus* and *Pseudomonas aeruginosa* can bind to acrylic, polyester and wool at very high ratios.² Other studies have shown that staphylococci, enterococci and fungus can survive on fabric for days or weeks, and have a tendency to survive longer on polyester than on cotton.^{3,4} This is an alarming fact, especially considering that most cubicle curtain fabrics today are made from polyester due to its longevity, shape retention and resistance to fading with repeated washings.

A number of studies have found that privacy curtains are often contaminated with Vancomycin-resistant enterococcus (VRE) and methicillin-resistant *Staphylococcus aureus* (MRSA).^{5, 6} Despite this information, the CDC and other regulatory and professional organizations are not very specific regarding when and how often the curtains should be cleaned.

Cleaning recommendations

According to The American Society for Healthcare Environmental Services of the American Hospital Association, privacy curtains should be cleaned any time there is visible dust or soil and as a part of the terminal cleaning process whenever an area has been occupied by a patient who has been on contact or droplet precautions.^{7,8} To prevent cross-contamination, the privacy curtains should be taken down immediately after an area has been occupied by a patient who has been on isolation precautions, and clean curtains should be hung before the next patient occupies the area. Because there are no clear-cut recommendations for how frequently the curtains should be cleaned, protocols may vary greatly from institution to institution.

So what is the solution? There are a number of things to consider.

- Recommended best practice is to record and complete laundering schedules on a quarterly basis, except in cases of isolation patients where a terminal clean is needed. Proper protocol includes using an industrial laundry or in-house laundry versus dry cleaning to ensure curtains are terminally cleaned.
- Choose easy-to-clean cubicle curtain systems, such as snap panels, that are less labor intensive and allow cleaning staff to easily remove and hang curtains.
- Consider adding a plastic pull wand or clean edge that can direct a person where to grab the curtain. These can easily be wiped during daily cleaning.
- Disposable privacy curtains may also be a viable option for your facility. Cubicle curtains are soft-surface touch points that can often be overlooked in facility cleaning protocols. These curtains also present a traditionally burdensome process for correct and consistent cleaning.

Be sure to implement protocols for proper management to ensure these products are appropriately maintained on a regular basis. System improvements can include:

- Implementing curtain solutions to make the laundering process less labor intensive
- Developing a cleaning schedule for consistent maintenance

- Including programs such as Medline's Cube Track, an RFID tracking program to monitor cubicle curtains throughout your facility
 - Partnering with local industrial laundries to ensure terminal clean
 - Implementing disposable cubicle curtains for high-traffic areas
- Removing and laundering large, bulky curtains may be a lot of work, but it is the right work for your facility, for you and for your patients' safety. ■

1 Bhalla A, Pultz NJ, Gries DM, Ray AJ, Eckstein EC, Aron DC, et al. Acquisition of nosocomial pathogens on hands after contact with environmental surfaces near hospitalized patients. *Infect Control Hosp Epidemiol* 2004;25:164-7.

2 Takashima M, Shirai F, Sageshima M, Ikeda N, Okamoto Y, Dohi Y. Distinctive bacteria-binding property of cloth materials. *Am J Infect Control*. 2004;32(1):27-30.

3 Neely AN, Orloff MM. Survival of some medically important fungi on hospital fabrics and plastics. *J Clin Microbiol*. 2001;39(9):3360-3361.

4 Neely AN, Maley MP. Survival of enterococci and staphylococci on hospital fabrics and plastic. *J Clin Microbiol*. 2000;38(2):724-726.

5 Klakus J, Vaughan NL, Boswell TC. Methicillin-resistant *Staphylococcus aureus* contamination of hospital curtains. *J Hosp Infect* 2008;68:189-90.

6 Trillis F III, Eckstein EC, Budavich R, Pultz MJ, Donskey CJ. Contamination of hospital curtains with healthcare-associated pathogens. *Infect Control Hosp Epidemiol* 2008;29:1074-6.

7 FAQ section: how often should privacy curtains be cleaned?. American Society for Healthcare Environmental Services of the American Hospital Association. http://www.ashes.org/ashes_app/learn/in_focus/faqs/privacy_curtains_1.jsp. Accessed May 23, 2016.

8 Sehulster L, Chinn RY, Arduino MJ, et al. Guidelines for Environmental Infection Control in Health-Care Facilities: Recommendations of CDC and the Healthcare Infection Control Practices Advisory Committee (HICPAC). Chicago IL: American Society for Healthcare Engineering/American Hospital Association; 2004; http://cdc.gov/ncidod/dhqp/pdf/guidelines/Enviro_guide_03.pdf. Accessed May 23, 2016.



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