



UNCOVERING THE PREVALENCE OF DAMAGED MATTRESSES

By Brenda Marks, BN, MBA

Preparing for the next admission is an important task in healthcare facilities. Cleaning and disinfecting all patient care areas is essential to preventing healthcare-acquired infections. In addition, all furnishings and equipment should be regularly inspected to ensure they are safe and properly maintained.¹¹ So if all environmental services professionals are doing this, why are damaged mattresses so common?

Studies have shown that 20 percent to 47 percent of patient mattresses in acute care settings have damaged or worn covers.^{1,7} Damaged covers cannot be properly cleaned and may allow bodily fluids and pathogens to penetrate the mattress core.⁶ In 2013, the FDA issued a Safety

Communication warning that damaged mattress covers pose a risk of cross-contamination and patient infection, and recommended regular inspections of patient mattresses for any visible signs of damage such as tears, cuts, punctures, abrasions or staining. Despite this warning, there may be reasons why damaged mattresses continue to circulate in healthcare facilities.

Bed and stretcher mattresses are often a forgotten asset. The CDC Guidelines for Environmental Infection Control were last published in 2003, with subsequent recommendations for isolation precautions in 2007, and disinfection and sterilization in 2008. These guidelines focus on critical versus non-critical surfaces. Bed rails and linens are listed as high-touch surfaces, but mattresses are not — even though

patients spend the majority of time in bed. Published environmental cleaning checklists include bed rails, bed controls, and call-bells but do not include mattresses.⁵

Recent studies reveal that the bed surface is indeed among the four highest-touch surfaces in the patient environment.⁹ Regardless, these studies recommend that efforts to improve room cleaning should be focused on all surfaces, not just high-touch, high-risk objects.¹⁰ The existing 2003 guidelines state that mattress covers must be kept clean, intact, and impermeable to fluids; and should be replaced if there is any visible staining, as wet mattresses can be a substantial environmental source of microorganisms. However, mattress repair is now possible with new product technology. Another point of confusion may be

whether mattresses are defined as furniture or medical equipment. Patient beds are categorized as medical devices. Since nursing, facilities, or biomedical engineering staff are generally responsible for medical equipment, environmental services personnel may presume that repairing or replacing a damaged mattress is not their responsibility.

Early intervention is the key to preventing a damaged mattress from becoming a contamination risk. It makes practical sense that all patient mattresses are inspected for damage during every terminal cleaning, and that any damage is immediately repaired or the mattress replaced. Environmental services professionals would be more likely to make sure this is completed if it were added to the terminal cleaning checklist.

Imagine that a patient comes into the emergency department: He or she is provided with a stretcher and lies down on the freshly laundered linens. After a while, the patient notices a moist sensation and begin to wonder if he or she is incontinent or

bleeding. The patient mentions this to the nurse and, after assessing the situation, it is apparent that the fluid is coming from the mattress itself. There is a tear in the cover and the inner foam core is contaminated with bodily fluids from a previous patient, along with any pathogens that patient may have harbored. This may be the worst-case scenario but it has happened.^{1,8}

We know that cleaning and disinfection of the patient environment is vital to infection prevention. Patients may have a disinfected bathroom and clean bed rails, but this might not help if they are literally lying on the source of contamination.

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