

HOSPITAL LAUNDRY: INFECTION CONTROL MEASURES AND GENERAL PRACTICE PRINCIPLES

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Question

What is the best available evidence regarding infection control measures and general practice principles for the handling, laundering and storage of hospital laundry?

Clinical Bottom Line

In a healthcare facility laundry refers to bed sheets and blankets, towels, personal clothing, patient apparel, uniform, scrubs, gowns and drapes for surgical procedures.¹ Linen can be categorized as clean, used and infectious.² Infectious or contaminated linen can be a source for pathogenic microorganisms and a route of transmission of nosocomial infection.^{1,2} Although the risk of disease transmission is likely to be small, standard precaution measures and measures to remove microbial contaminations of used and worn laundry are important aspects to reduce the risk of disease transmission to patients and staff.^{1,3} The evidence presented in this summary is based on clinical guidelines and expert opinion.

HANDLING

- Hand hygiene must be performed following handling of used linen and before handling clean linen.² (Level 5)
- To avoid cross-contamination, laundry should be handled with minimum agitation and should not be held against clothes, nor placed on the floor.^{1,2} (Level 5)
- Water soluble bags are used for infectious linen.² (Level 5)

LAUNDERING

- Washing process for used linen should include a disinfection cycle.² (Level 5)
- Hot water laundry cycles (above 60 degrees Celsius) are known to inactivate microorganisms however, guidelines differ on the advised temperature and duration; temperature varies between 65-71 degrees Celsius and the duration from 3-25 minutes.^{1,2} (Level 5)
- Cold temperature cycles require the addition of a bleach containing detergent however, this may not be enough to kill all microorganisms.^{2,3} (Level 5)

STORAGE

- Linen should be color coded and clearly labelled to denote the different types of linen (clean, used, heat labile or infectious).² (Level 5)
- Clean linen must be protected from environmental contamination and placed away from dirty laundry.² (Level 5)

Characteristics of the Evidence

This evidence summary is based on a structured search of the literature and selected evidence-based health care databases. The evidence in this summary comes from:

- Practice Guidelines.^{1,2}
- Expert opinion paper.³

Best Practice Recommendations

- Hand hygiene should be performed before handling clean linen and after handling dirty linen. (Grade B)
- All linen should be color coded according to the type of linen and clearly labelled. (Grade B)
- Water soluble bags should be used for infectious linen. (Grade B)
- Washing cycles should include a disinfection cycle. (Grade B)
- Clean and dirty linen should be stored away from each other. (Grade B)

References

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For details on the method for development see Munn Z, Lockwood C, Moola S. The development and use of evidence summaries for point of care information systems: A streamlined rapid review approach. *Worldviews Evid Based Nurs*. 2015;12(3):131-8.

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