



# Practical recommendations for routine cleaning and disinfection in healthcare institutions

## A narrative review

### WHAT WAS INVESTIGATED?

- Review of literature for environmental cleaning and disinfection resulting in:
  - Review of essential basics of routine environmental cleaning and disinfection
  - Recommendations for normal wards, not risk areas
- Based on current guidelines (KRINKO, CDC, NHS)
- Focus on practical recommendations

### WHAT WAS THE RESULT?

- Risk assessment forms the **basis** of effective cleaning and disinfection procedures in healthcare institutions
- The summary concentrates on the following key areas
  - Clinical Risk Assessment
  - Choice of appropriate disinfectants & equipment
  - Definition of standardised cleaning processes
  - Relevance of structured training
  - Management of clinically relevant pathogens
- Expert guidance for healthcare workers on clinically relevant pathogens and outbreak situations

To prevent transmission of pathogens in a hospital aiming in a reduction of healthcare associated infections comprehensive approaches are necessary. Hand hygiene and also environmental cleaning and disinfection are important measures in infection prevention.





## BACKGROUND

Environmental surfaces in hospitals play an important role in the transmission of HAIs (healthcare-associated infections). Microorganisms can persist for long periods on surfaces and spread to patients following direct or indirect contact. Enhanced environmental cleaning and disinfection protocols as part of multimodal bundle have positive impact on HAIs and/or the reduction of colonization rates.

## GOAL

The aim of the review was to provide practical recommendations for routine environmental cleaning and disinfection on general wards, as well as expert guidance for clinically relevant pathogens and outbreak situations.

## CONCLUSION

Healthcare hygiene should be considered as a comprehensive approach in which various strategies are intertwined to reduce healthcare-associated infections in the hospital environment.

## RESULTS

- The basis of any risk analysis is an overall assessment consisting of three essential factors (fig. 1)

- Patient risk profile: vulnerability of patients to infections or colonization
- Surface risk profile: probability of contamination with pathogens and potential for exposure and/or indirect transmission, and frequency of hand contacts
- Pathogen risk profile: persistence, antibiotic resistance and primary mode of transmission

- Identification of the general principles for effective cleaning and disinfection

- Adequate staffing ratio and remuneration
- Appropriate equipment
- Training of personnel
- Supervision
- Team communication

- Clear summary of the advantages and disadvantages of common active ingredients

- Practical recommendations for the management of clinically relevant pathogens

- Comprehensive list of clinically relevant bacteria, fungi and viruses together with the required spectrum of activity as well as practical recommendations for cleaning and disinfection

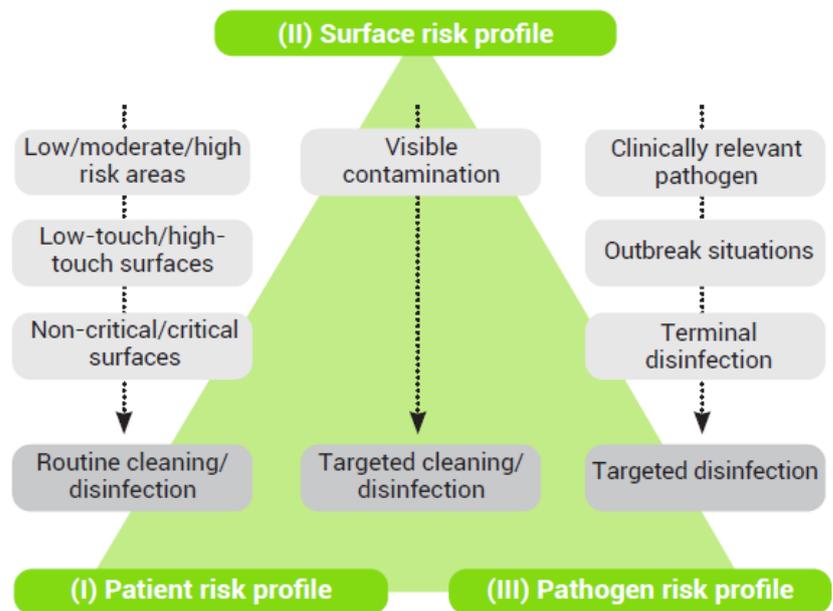


Figure 1: Comprehensive overview of the fundamental principle of a risk analysis (modified from Assadian et al., 2021)