# Key principles of environmental cleaning in the healthcare setting

**AN UPDATE** 

### Why is environmental cleaning so important?

In Australia, approximately 165,000 healthcareassociated infections occur in health facilities every year, consuming significant healthcare resources and causing great suffering to patients.<sup>1,2</sup> However, most of these infections can be prevented with the implementation of effective infection prevention and control measures, including environmental cleaning.<sup>2</sup>

Environmental cleaning is effective in reducing the risk of healthcare-associated infections by reducing the number of infectious agents that may be present on surfaces and minimising the risk of transfer of micro-organisms from one person/object to another.<sup>3</sup>

Thorough cleaning and disinfection in the healthcare setting inactivates organisms such as coronavirus, Staphylococcus aureus and multidrug-resistant organisms on environmental surfaces.<sup>4</sup>







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## When is disinfection required in addition to cleaning?

Although cleaning can successfully reduce the microbial load on surfaces, there are some circumstances where disinfection is also required.<sup>3</sup>

Surfaces should be physically cleaned with a detergent solution followed or combined with a Therapeutic Goods Administration (TGA)-listed hospital-grade disinfectant with label claims specifying its effectiveness against specific infectious organisms when:<sup>5</sup>



There is uncertainty about the nature of soiling on the surface (blood or body fluids vs routine dust and dirt).



The presence of multi-resistant organisms or other infectious agents requiring Transmission Based Precautions is known or suspected.



There are frequently touched surfaces and items in Extreme Risk areas

The Australian Guidelines for the Prevention and Control of Infection in Healthcare (2020) recommend that the disinfection process must involve either:



### 2-step clean

A 2-step clean involving a physical clean using detergent solution followed by use of a chemical disinfectant



#### 2-in-1 clean

A 2-in-1 clean in which a combined detergent/disinfectant wipe or solution is used and mechanical/manual cleaning action is involved.

### One Wipe to Clean 'n' Disinfect

**HALYARD\* 2n1\* WIPE** 

# Selecting appropriate products for environmental cleaning

In general, all cleaning equipment used in healthcare facilities should be fit for purpose, cleaned and stored dry between use, well maintained and used appropriately.<sup>3</sup>

Importantly, all detergents and disinfectants used for environmental cleaning in the healthcare setting must be approved by the TGA for the cleaning and disinfection of hard surfaces.<sup>6,7</sup>

As a leading innovator in quality products that protect healthcare workers and patients from contamination and infections, HALYARD is proud to introduce new TGA-listed 2n1 Disinfecting Wipes.

**NEW** HALYARD\* 2n1\* WIPE



## Why do current guidelines for the cleaning and disinfection of healthcare facilities recommend wipes over sprays?

Guidelines from government bodies worldwide advise against the use of spray disinfectants in healthcare settings due to concerns that they produce aerosols and may be made up of contaminated solutions. 8-10

According to the US Center for Disease Control and Prevention (CDC) Environmental Infection Control Guidelines, cleaning methods that produce mists or aerosols should be avoided when cleaning and disinfecting environmental surfaces in all patient care areas.<sup>8</sup>

These guidelines also highlight that part of the cleaning strategy is to minimise contamination of cleaning solutions and tools.<sup>8</sup> Disposable cleaning cloths and mop heads are recommended as an option, if costs permit.<sup>8</sup>

In the peri-operative setting, airborne contaminants may settle on the sterile field or in the surgical wound, thereby contributing to the incidence of surgical site infections. As a result, the US Association for periOperative Registered Nurses (AORN)
Perioperative Practice Guidelines advise against the use of spray bottles in the operating room due to the risks associated with aerosols. Furthermore, they state that if a cleaning compound is already contaminated, then spraying it increases the chance of spreading airborne diseases. Aerosols generated may contaminate the surgical wound, sterile supplies or the sterile field. They may also cause acute or chronic respiratory symptoms in staff and patients.

"Disinfectants that are sprayed produce more aerosols than solutions that are poured or readyto-use wipes."<sup>10</sup> These guidelines also highlight that excess lint can be deposited onto surfaces in the perioperative environment where it can be aerosolised and carried to the surgical wound or sterile supplies. <sup>10</sup> Thus, low-linting cleaning materials are recommended. <sup>10</sup>

Closer to home, the Cleaning Standards for South Australian Healthcare Facilities 2021 reiterate that the use of spray bottles or equipment that might generate aerosols during usage should be avoided.<sup>3</sup> Furthermore, chemicals in aerosols may cause irritation to eyes and mucous membranes.<sup>3</sup> These guidelines also highlight that detergent and/or disinfectant-impregnated wipes are useful for decontaminating small items of patient care equipment or high touch surfaces, particularly in clinical outpatient areas, e.g. radiology.<sup>3</sup>

"The use of spray bottles or equipment that might generate aerosols during usage should be avoided."<sup>3</sup>



### Make the switch to a One step Cleaning & **Disinfection** with HALYARD\* 2n1\* WIPE

- Effective and rapid removal of blood and bodily fluids from surfaces11
- Light fabric made from 100% polypropylene to facilitate bactericidal efficacy<sup>12,13</sup>
- Strong and durable wipe14
- Low linting<sup>15</sup>
- Fragrance free<sup>13</sup>
- Suitable for hard surfaces<sup>13</sup>



### Help wipe away risk with HALYARD\*

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^ When used in accordance with the directions for use, using HALYARD\* 2n1\* WIPE reduces the risk of certain pathogens. Halyard Health makes no representation that its products will provide complete protection from exposure to contaminants, fluids or microorganisms or will eliminate the risk of contracting infectious diseases

ALWAYS READ THE LABEL AND FOLLOW THE DIRECTIONS FOR USE

#### References

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