

Environmental cleaning practices in small health service organisations

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Introduction

Many healthcare environmental cleaning resources are developed for acute care services; however, the basic principles of environmental cleaning apply in all health service organisations regardless of size or function. Small health service organisations often provide many different services to the community, such as outpatient or day-only procedural units, rehabilitation, or primary health care services, and are often geographically isolated.^{1,2}

A small health service's environmental cleaning strategy is an essential part of its infection prevention and control (IPC) program and should include the use of risk-based strategies to ensure healthcare environments are clean and hygienic. This reduces the transmission risk of infections to patients and healthcare workers.^{3,4}

Environmental cleaning programs should be based on the [Australian Guidelines for the Prevention and Control of Infections in Healthcare \(AICGs\)](#) and the [National Safety and Quality Health Services \(NSQHS\) Standards](#), tailored to the needs of the health service organisation.

The objectives of an environmental cleaning program should be developed in consultation with staff responsible for environmental cleaning, IPC leads, work health and safety, cleaning, maintenance, and engineering representatives. Not all small health service organisations will have all these services on site and may need to link in with district or regional services for assistance when developing a local cleaning program.

When developing these objectives, each staff member should consider the types of activities or services offered within the small health service organisation and, the associated risk of infection or outbreak of an infectious agents, such as COVID-19.^{1,3,5} Additional environmental cleaning guidance and resources are provided by each state and territory health department to support health service organisations in implementing environmental cleaning programs.

Essential features of an environmental cleaning program

Developing an environmental cleaning program can be a complex process. As a minimum, successful environmental cleaning programs should:

- Identify, assess and respond to relevant environmental risks
- Provide staff responsible for environmental cleaning with training on the basics of IPC
- Develop cleaning schedules that describe the recommended cleaning frequencies, procedures and role responsibilities of all staff
- Routinely evaluate and monitor cleaning processes
- Use suitable environmental cleaning equipment and products for the facility. This includes using products according to manufacturer's instructions for use.^{1,3,4,6}



Risk assessment and identification

Environmental cleaning programs should be reviewed regularly and modified if the risk of infection changes. For example, cleaning frequencies may need to change in response to emerging evidence, outbreaks of infectious diseases, or in response to internal building works.^{3,4}

Environmental conditions such as humidity, temperature, and light levels, may cause some microorganisms to persist on environmental surfaces for extended periods of time. Cleaning methods and frequency should be adjusted to mitigate the increased risk of infection in these circumstances.^{7,8} **Table 1** provides examples of factors small health service organisations should consider when performing an infection risk assessment and developing an environmental cleaning program and schedule.

Staff training

Staff, including contractors, providing environmental cleaning services in small health service organisations should receive initial and ongoing training which includes:

- The basics of IPC
- Understanding IPC signage
- How to clean specific areas and equipment
- The correct use and selection of different cleaning equipment and products
- Handling and storage of cleaning solutions
- The appropriate use of personal protective equipment (PPE).

Details about environmental cleaning and IPC training provided to staff should be recorded. These records should include the frequency of training, how the training was delivered, the training content, who delivered and participated in the training and when the training was undertaken.^{3,4,9}

Cleaning schedule

Cleaning schedules should be specific to the needs of the facility and the types of services provided. Different areas within a facility will need different cleaning schedules, due to different infection risks. For example, the cleaning schedule for a waiting room will be different to that required for a procedural area.

Cleaning schedules should outline the cleaning frequency and, if required, the different cleaning techniques needed in different clinical areas within the facility, including the criteria for high level or terminal cleaning.^{1,4,6} **Table 2** provides two simple examples of environmental cleaning schedules for small health organisations. These schedules have been developed with consideration of the clinical activities that take place in these organisations.¹⁰

Auditing for environmental cleaning

Environmental cleaning programs should include a process to audit the effectiveness of cleaning in the organisation. The frequency of auditing should depend on each organisation's infection risk assessment and the infection risk for each clinical or non-clinical area (see **Table 2** for examples of infection risk levels).^{4,11,12}

For further guidance on environmental cleaning auditing see the [Environmental Cleaning Auditing factsheet](#)

Cleaning equipment and products

Staff should only use cleaning products and equipment supplied by the health service organisation that are in good condition and working order. All cleaning equipment should be used as per the manufacturer's instructions for use. Cleaning equipment including mops, buckets, cleaning cloths and cleaning solutions should be labelled and dedicated specifically for cleaning purposes.

A note on cleaning solutions:

Action 3.13 (Clean and safe environment) of the NSQHS Standards requires health service organisations to use **disinfectant** products listed on the Australian Register of Therapeutic Goods (ARTG). ARTG testing methods ensure that listed products meet the manufacturer’s claims for antimicrobial action against infectious agents.

Neutral detergents used in small health service organisation, unless used for the cleaning of medical devices, are not regulated by the Therapeutic Goods Administration (TGA).

Table 1: Factors for consideration when undertaking a risk assessment when developing a cleaning schedule

Organisational Considerations	Sample questions for consideration	Actions
<p>Organisational structure, governance, roles, and responsibilities</p>	<p>Is the organisation a standalone facility or part of a larger organisation?</p> <p>Who has overarching responsibility for environmental and equipment cleaning?</p> <p>Is there a current environmental cleaning program that includes equipment cleaning, staff roles and responsibilities?</p>	<p>Consider the organisation’s existing environmental cleaning program and whether this program includes details about who has overall accountability for environmental cleaning within the organisation and at a facility level.</p> <p>Ensure that the environmental cleaning program is updated regularly to reflect changes to roles, service provision and infection risk for the organisation.</p>
<p>Legal requirements, policies, and protocols</p>	<p>Are there legal, or regulatory requirements or changes that may impact service provision?</p> <p>What policies, protocols and procedures are currently in place to manage and support environmental and equipment cleaning?</p> <p>Do these policies, protocols and procedures describe the frequency of cleaning required for the services offered in the facility?</p>	<p>Ensure that the existing environmental cleaning program complies with current recommendations and requirements for work health and safety regulations, Therapeutic Goods Administrations (TGA) advice, Australasian Health Facility Guidelines, and local, jurisdictional, or national requirements and guidelines for infection prevention and control, and environmental cleaning.</p> <p>Ensure that any policies, protocols, or procedures that support the organisation’s cleaning program describes the following:</p> <ul style="list-style-type: none"> • Frequency of cleaning in clinical and non-clinical settings based on a risk assessment for the risk of infection to staff and patients • Cleaning techniques to be used in clinical and non-clinical settings including products and equipment

Organisational Considerations	Sample questions for consideration	Actions
<p>Legal requirements, policies, and protocols (cont)</p>		<ul style="list-style-type: none"> • Roles and responsibilities of all staff in relation to environmental and equipment cleaning. <p>Ensure that these policies, protocols, and procedures are updated regularly and in response to changes in roles, service provision and infection risk for the organisation.</p>
<p>The types of services provided by this organisation</p>	<p>What types of health services are provided by this organisation/ facility? e.g., Invasive medical procedures such as surgery or non-invasive treatments such as physiotherapy.</p> <p>Is there a high risk of environmental contamination to staff and or patients associated with the services provided by this organisation?</p>	<p>Ensure that the environmental cleaning program reflects the requirements for cleaning according to the services offered and the potential infection risk.</p>
<p>Human resources</p>	<p>What are the roles and responsibilities of staff in relation to environmental and equipment cleaning?</p> <p>Does the organisation have staff dedicated to providing cleaning services? Are these staff employed in-house or does the organisation use contractors, or a mix of both?</p> <p>Are the staff trained in how to work within the work health and safety framework of the organisation?</p>	<p>Consider whether staff have cleaning responsibilities in addition to clinical or non-clinical duties and what processes are in place to manage these responsibilities.</p> <p>Consider what IPC and environmental cleaning education and training staff may require, including handling of chemicals and PPE use.</p> <p>Consider how contracted cleaning staff are orientated to the organisation, what type of training and education has been provided by their employer and if they require additional training to meet the cleaning requirements for this organisation.</p>
<p>Cleaning resources</p>	<p>What products and equipment are readily available for staff to use for environmental and equipment cleaning?</p>	<p>Consider how staff access and use cleaning equipment and products.</p>

Organisational Considerations	Sample questions for consideration	Actions
Cleaning resources (cont)	<p>Are cleaning products and equipment provided directly by the organisation? Are staff required to purchase any cleaning products or equipment themselves? (e.g., surface cleaner or disinfectant).</p> <p>What processes are in place to ensure that cleaning products and equipment are appropriate for cleaning in a health service organisation?</p>	<p>Consider who is providing the cleaning equipment and products, including novel cleaning technologies.</p> <p>Consider what processes are in place to ensure that cleaning equipment and products are fit for purpose.</p>
Building design	<p>Is the building purpose built/ designed for the delivery of health care? How old is the building?</p> <p>Is a large amount of maintenance required for the upkeep of the building?</p> <p>What types of fittings and furnishings are used in this building? Is there carpet, soft or porous furnishings or surfaces that are difficult to clean?</p>	<p>Consider if the existing environmental cleaning program accounts for the building design, furnishing and fitting and includes strategies that reduce any infection risks.</p> <p>Consider whether the existing building maintenance program includes strategies to reduce infection risks.</p> <p>These matters would need to be discussed as part of asset maintenance and capital planning processes.</p>
Local epidemiology	<p>Are there current public health warnings or community outbreaks of infectious diseases/ pandemics?</p>	<p>Consider advice from public health units relating to local community outbreaks of infectious diseases or current public health warnings and whether the organisation's environmental cleaning program can implement additional cleaning to respond to meet these needs.</p>
Organisation location	<p>Where is the organisation/ facility located? Is this a remote location?</p> <p>What local and emergency services or resources are available to support this organisation (e.g., is the service reliant on town or tank water, is the area prone to dust storms or local flooding)? Are major building works occurring nearby that may generate dust and fungal spores?</p>	<p>Consider whether the organisation and or local support services can provide a timely response in the event of an emergency (flood/water leaks) or sustain increased environmental cleaning (dust from building works).</p> <p>Consider how environmental cleaning would be undertaken with minimal disruption to health service provision.</p> <p>Consider whether any cleaning equipment requires servicing and maintenance from an external provider, and if this is available at this location.</p>

Table 2: Examples of cleaning schedules for small health service organisation

Example 1: Cleaning schedule for a community health clinic				
Frequency of cleaning	Cleaning solution	Furnishing/ fixture	Examples	Infection risk level*
Daily or weekly	Neutral detergent	Minimally touched surfaces	Floors, walls, administrative areas	Low
Daily or more often	Neutral detergent, Disinfectant for blood, body fluids and MROs†	Frequently touched surfaces	Patient areas and shared clinical equipment, doorknobs, light switches	High
Example 2: Cleaning schedule for day-only endoscopy service				
Frequency of cleaning	Cleaning solution	Area/ Type of activity	Infection risk level*	
Daily or more often	Neutral detergent, Disinfectant for blood, body fluids and MROs	Sterilisation areas	Very high risk/ Extreme	
Daily or more often (e.g., Between patient use)	Neutral detergent, Disinfectant for blood, body fluids and MROs	Treatment/ procedural areas/ bathrooms	High risk	
Daily or weekly	Neutral detergent	Administration	Low risk	
Daily or more often	Neutral detergent	Reception and patient waiting area	Low risk but involve a higher risk where a patient presents with a highly transmissible illness e.g., measles	
Daily	Neutral detergent	Staff room	Low risk	

Table adapted from Infection Control Management Plans for Non-Hospital Healthcare Facilities (Queensland Health, 2019)¹⁰

*When developing a cleaning schedule, the risk level should consider the type of activity and level of activity undertaken in the area, as well as the recommendations in the AICGs for the minimum frequency of routine cleaning for a specific area. For example, a bathroom which is frequently used by many different people would need to be cleaned more frequently than a corridor or office space used by one person. † MRO = multi-resistant organisms

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