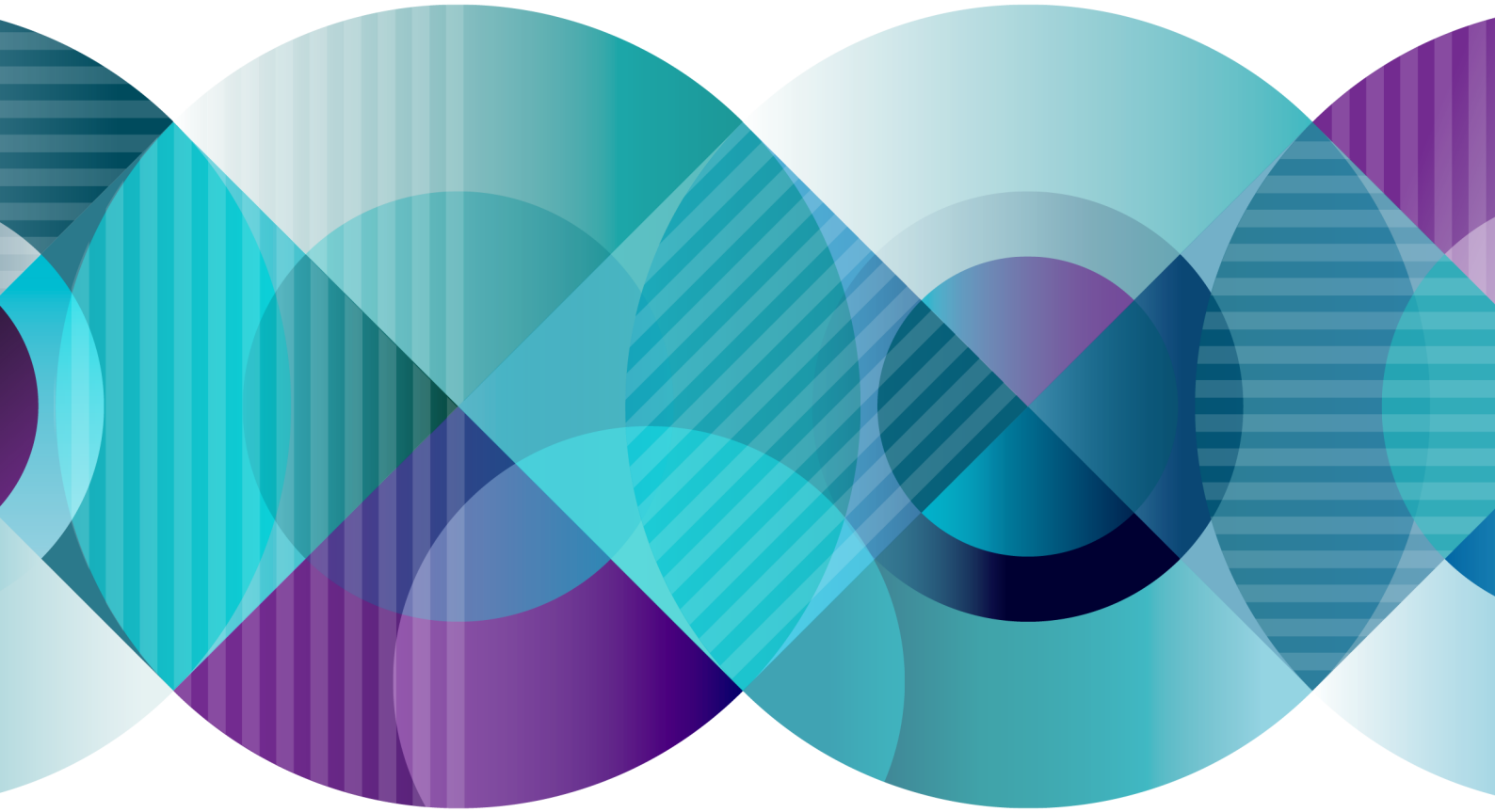
AUSTRALIAN COMMISSION
ON SAFETY AND QUALITY IN HEALTH CARE



The Aged Care Infection Prevention and Control Guide

A supplementary resource for the **Australian Guidelines for the Prevention and Control of Infection in Healthcare** for aged care settings

Chapter 6

AUSTRALIAN COMMISSION ON SAFETY AND QUALITY IN HEALTH CARE

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Chapter 6: Clean, safe and hygienic environments

Key points

- **Environmental cleaning is a basic part of standard precautions and is an essential part of any infection prevention and control (IPC) program.**
- **Cleaning involves the use of neutral detergent, water and physical scrubbing to remove microorganisms from surfaces.**
- **Disinfection is the process of using a disinfectant, a chemical that rapidly kills most microorganisms and that is usually only effective in the absence of organic material.**
- **Reprocessing of reusable equipment in aged care primarily includes cleaning and disinfection of reusable equipment such as commodes, blood pressure machines and nail clippers.**
- **Cleaning schedules should be tailored to the risk of transmission of infection within a specific setting. All organisations should have a documented cleaning schedule that clearly outlines the responsibilities of all aged care workers, a roster of duties, frequency of cleaning required and the products that should be used to clean specific areas.**
- **Regular auditing of environmental and equipment cleaning supports aged care workers to maintain a clean and hygienic care environment and reduce the spread of infections.**
- **Prompt removal of spots and spills of blood and body fluids followed by cleaning and disinfection of a contaminated area is a sound infection control practice and meets work health and safety requirements.**
- **Staff, including contractors, who provide cleaning services in aged care settings should receive initial and ongoing training, including information on the basic principles of IPC, IPC signage, specific cleaning and equipment processes, correct selection of cleaning products, handling and storage of cleaning solutions.**
- **The risk of infection depends on the type of service and the settings where care is provided; therefore, risk assessment is essential to support an effective cleaning program.**
- **If there are safety concerns arising from an environmental risk assessment, it is important to discuss these concerns with the older person, their family or carers when possible. This discussion should outline key concerns about the environment, whether for the worker entering the home or the older person living in the home, and include possible risk-reduction strategies to eliminate, reduce, replace, isolate or control the risk.**

The basics of maintaining a clean, safe and hygienic environment

Environmental cleaning is a **fundamental** part of standard precautions and is an essential part of any IPC system to ensure a clean and safe environment for older people, visitors and aged care workers. To ensure all aged care workers are equipped to deliver cleaning services effectively, aged care organisations should maintain a cleaning program as part of a larger IPC system.

Environmental cleaning programs are developed using a risk assessment approach to identify frequently touched surfaces and the associated risk of infection. Cleaning strategies and schedules are developed to manage these risks. The methods, thoroughness and frequency of cleaning and the products used for different surfaces should be determined by risk assessment and should be reflected in each organisation's policy and processes. The basic elements of an environmental cleaning program include:

- Routine cleaning and disinfection of surfaces and the environment
- Reprocessing of reusable equipment
- Cleaning schedules and frequencies
- Auditing
- Spill management
- Workforce training and education.

Home and community aged care

In addition to the elements outlined above, aged care organisations that provide care in home and community settings should also consider that local processes address:

- **Environmental hazard assessments:** More information can be found under Risk assessment and cleaning later in this chapter
- **Access to appropriate equipment:** More information on an IPC kit for community and home care organisations can be found in **Chapter 4**
- **Waste and linen management:** More information on waste and linen management can be found in **Chapter 4**.

It is important that older people receiving aged care services in the community are assisted to maintain a clean and safe home environment, as far as practicable, to prevent infections. Each aged care worker responsible for coordinating home care services should be able to use a risk-based approach to develop an individualised plan to provide a cleaning service. This approach should be documented and accessible to the older person and other aged care worker(s) providing the cleaning (for example, in a care plan). More information can be found under Cleaning schedules later in this chapter.

Resources

More information on environmental cleaning and IPC can be obtained from the Australian Commission on Safety and Quality in Health Care.

For more detailed recommendations on cleaning and disinfection requirements in healthcare- and office-based settings, aged care organisations should refer to the Australian Standard AS/NZS AS5369:2023 *Reprocessing of reusable medical devices and other devices in health and non-health related facilities*.

Australian Standards can be purchased from Standards Australia.

Routine cleaning

The routine cleaning process

The process of routine cleaning for hard surfaces involves three important elements:

1. **Using neutral detergent and water**

   A neutral detergent is a solution that contains a surfactant. A surfactant is a chemical that facilitates the removal of dirt and organic matter. Most hard surfaces can be adequately cleaned with warm water and a neutral detergent as per the manufacturer's instructions.

2. **Mechanical cleaning**

   Mechanical cleaning (scrubbing the surface) physically reduces the number of microorganisms on the surface. It is an important step in cleaning. Simply applying a cleaning product is not effective unless the product is physically scrubbed into the surface.

3. **Rinsing and drying**

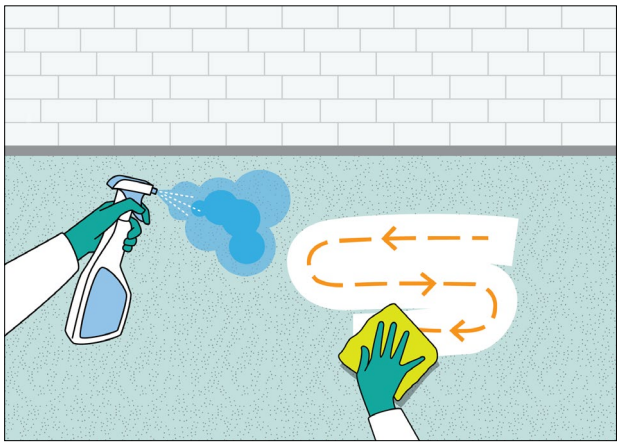
   Rinsing with clean water removes the loosened dirt/organic matter and any neutral detergent residues from the surface. *Drying* the surface (or waiting for the surface to dry) makes it harder for microorganisms to survive or grow.

Most microorganisms do not survive for long on **clean surfaces when exposed to air and light**; therefore, unless there is an increased risk of exposure (such as during an outbreak) or when there is a known infection, routine cleaning should be enough to reduce the number of microorganisms on hard surfaces to prevent the spread of infections.

Home and community aged care

In a home setting, cleaning can be performed using a standard household neutral detergent (any product commercially labelled as a neutral detergent) and water. The detergent can be supplied by either the organisation or the older person who is receiving services.

How to conduct routine cleaning



When performing routine cleaning of hard surfaces (for example, mopping) or equipment, always clean:

- High surfaces before low surfaces
- Clean areas before dirty areas (for example, clean bedrooms before bathrooms or vanity basins before toilets)
- In one direction using an S-shaped pattern to prevent going back over wiped surfaces.

Methods of cleaning

Automated cleaners

Automated cleaners (washer–disinfectors) reduce the need to handle equipment and are recommended for cleaning reusable equipment that can endure the process, such as bedpans and urine bottles.

Washer–disinfectors use neutral detergent solutions. The detergent is added at preset high temperatures and time periods to clean reusable equipment. When a washer–disinfector is used, care should be taken when loading items into the machine so that all equipment has sufficient contact with the neutral detergent solution. This can be achieved by not overloading the washer–disinfector and, if possible, disassembling equipment that has multiple parts.

Manual cleaning

Cleaning is done by hand for fragile or difficult-to-clean reusable medical devices (such as bladder scanners, blood glucose level machines and observation machines) and in settings without automatic disinfectors.

If there is a risk of exposure to blood, body fluids or chemicals, aged care workers should wear appropriate PPE – plastic apron, utility gloves and face protection (protective eyewear and mask or face shield). Care should be taken to prevent aerosols, splashes to mucous membranes or penetration of the skin by sharp instruments.

Cleaning equipment

Residential and centre-based aged care

Cleaning products and equipment should be intended for the purpose of cleaning and should be specifically labelled. Workers should only use cleaning products and equipment that are in good condition and working order and supplied and approved by the organisation (including mops, microfibre pads, buckets, appropriate PPE, cleaning cloths, and cleaning solutions). These products should be used as per the manufacturers' instructions.

Workers who undertake environmental cleaning should have access to an appropriate water supply, sink or floor drainage, and suitable facilities for equipment and chemical storage. All cleaning equipment should be cleaned and dried between uses. Mop heads or pads and reusable cleaning cloths should be laundered daily after being used in a care environment and after contamination with an infectious agent. If a cleaning cart is used, there should be separation between clean and soiled items and the cart should be thoroughly cleaned at the end of the day. Reusable cleaning equipment can be colour-coded to restrict the use of specific items, such as mops and cloths, to designated areas, such as bathrooms, kitchens or isolation rooms. Cleaning equipment that is designated as single-use should be appropriately disposed of immediately after use.

In the interest of environmental sustainability, reusable items should be used in preference to single-use items wherever it is safe to do so. Cleaning carts should be equipped with a locked compartment for storage of hazardous chemicals and each cart should always be locked when not attended.

Home and community aged care

Aged care organisations providing home and community services should train those responsible for IPC to use a risk-based approach when planning a cleaning service that considers each older person's preferences, situation and available equipment. In home settings, cleaning can be performed using a standard household neutral detergent (any product commercially labelled as a neutral detergent) and water. Disinfectant products can be considered for use if someone in the home is unwell and must always be used in accordance with the manufacturer's instructions. These products can be supplied by either the organisation or the older person who is receiving services but should always be stored and maintained according to the manufacturers' instructions.

Disinfection

Disinfectants are chemicals that rapidly kill most microorganisms. Disinfectants are only necessary if a surface may have been or is known to have been contaminated by an MRO or blood or other body fluids, or when transmission-based precautions are required (such as during an outbreak).

The process of disinfection

The process of disinfection must involve either a **two-step** or **two-in-one-step** process.

Two-step process

This type of disinfection uses two products and requires cleaning with neutral detergent followed by cleaning with a disinfectant.

- Step 1: All surfaces should be cleaned with a neutral detergent and water to remove dirt and dust. The surfaces are allowed to dry completely
- Step 2: If the surface has been contaminated with blood, body fluids or if someone in the room is suspected or known to have an infection, a disinfectant solution should be applied to the surface after the neutral detergent. Allow the disinfectant to remain on the surface for the recommended time advised by the manufacturer, then allow the surface to dry completely again.

Two-in-one-step process

This type of disinfection uses ONE product that contains both a neutral detergent and a disinfectant to clean and disinfect environmental surfaces.

After using a two-in-one disinfectant product, for example, a combined neutral detergent/disinfectant wipe, allow the surface to dry completely.

Other considerations

- Disinfectants are not to be used as routine cleaning products, unless combined with a neutral detergent as a two-in-one product, because they will be ineffective unless routine cleaning occurs as well
- Safety data sheets should be available in all locations where a disinfectant is in use
- If separate detergent and disinfectant solutions are used, they must be prepared fresh each day
- Never mix different cleaning products as in some instances chemical reactions can occur that could be harmful to people
- Avoid 'topping up' detergent or disinfectant containers as this can lead to contamination of the containers and solutions
- When preparing disinfectant solutions, workers must ensure that solutions are stored, handled and, if required, diluted as per the manufacturer's instructions for use
- PPE must be worn when handling or diluting disinfectants

Types of disinfectants

Disinfectants used in a healthcare setting must be listed on the Australian Register of Therapeutic Goods (ARTG) before they can be used in Australian healthcare facilities. This is to ensure that the product does what it claims to do. There are three primary grades (types) of disinfectants on the ARTG. These include household, commercial and hospital-grade disinfectants. The standards used to test the performance of hospital-grade disinfectants are higher than those for household- and commercial-grade disinfectants. Disinfectants used in residential and centre-based aged care settings must be listed on the ARTG as a **hospital-grade disinfectant.**

Chlorine-based products such as sodium hypochlorite can also be used as disinfectants. Sodium hypochlorite, commonly known as bleach, is a chlorine-based agent that is often used as a disinfectant. The level of disinfection provided by sodium hypochlorite depends on the:

- Surface it is applied to
- Amount of time allowed for the chemical to work
- Correct mixing of the product
- Disinfectant claims of the product (that is, its antibacterial action or activity against other microorganisms)
- Product's compatibility with the surface being cleaned.

Sodium hypochlorite (bleach) solutions are very effective disinfectants; however, bleach can cause damage to the eyes, skin and mucous membranes. It can also harm various surfaces and fabrics and corrode metals. Therefore, it should be used with the utmost care and strictly following the manufacturer's instructions. Users may wish to explore alternative disinfectant products, especially in home settings.

Home and community aged care

In a home setting, disinfection can be performed using a standard household disinfectant. If bleach is the preferred disinfectant of the older person or their carer, it should be used with the utmost care and strictly following the manufacturer's instructions, because it can cause damage to the eyes, skin and mucous membranes.

Disinfectants can be supplied by either the organisation or the older person who is receiving services.

A disinfectant may be considered for use in a home setting if someone in the home is or has been unwell, or a surface has been contaminated by blood or other body fluids. Disinfectants must always be used in accordance with the manufacturer's instructions.

Resources

The ARTG is the public database of all therapeutic goods that can be legally supplied in Australia. It is maintained by the Therapeutic Goods Administration.

Terminal cleaning

Terminal cleaning is a cleaning and disinfection process required after an older person has left a room, either through transferring to another facility, moving rooms or when the room is no longer required. To perform terminal cleaning, follow several key steps:

- Wear PPE – for example, surgical mask, protective eyewear, gloves, and gown
- Prepare the room, clean, disinfect and remove all equipment that does not need to remain in the room. Pack up personal items and store them safely. Remove clutter and throw away disposable items and rubbish
- Remove bed screens, privacy curtains, and window curtains (if fitted), and send for laundering or dry-cleaning. Throw them away if they are disposable
- Perform the clean with a hospital-grade disinfectant or chlorine-based product using a two-step process or a two-in-one-step process
- Clean and disinfect all surfaces, furniture (including all surfaces of the bed and mattress), fittings and the bathroom(s) used by the older person
- Vacuum or mop the floor using a detergent solution. Assess the need for steam cleaning of carpets; steam clean soft furnishings
- Following cleaning and disinfection, remove PPE and perform hand hygiene
- Replace any bed and privacy screens and curtains and other fixtures and fittings as standard for the area or room
- In a separate area, put on fresh gloves and protective eyewear, then clean and disinfect any reusable cleaning equipment (for example, mop handles). Return cleaned equipment to the cleaners' room or storage area
- Remove gloves and other PPE and perform hand hygiene.

Reprocessing reusable equipment

Reprocessing involves a set of actions to make sure that each piece of reusable equipment is safe for use. This includes cleaning, inspecting and assembling, functional testing (if applicable), disinfecting (if required), packaging and labelling, and storing

Reusable equipment is that equipment that is intended by the manufacturer to be appropriately cleaned, disinfected (if needed) and reused. Reusable equipment can include blood pressure cuffs, stethoscopes, nail clippers, commode chairs and hoists, but can also include items such as smart phones and tablets. Any piece of equipment that is reusable requires reprocessing, meaning that it requires cleaning and (if needed) disinfection after each use.

Sterilisation is the use of a physical or chemical procedure to destroy all microorganisms including bacterial spores (spores are cells produced by bacteria or fungi that are highly resistant to cleaning and disinfection methods) to reprocess equipment. Sterilisation is not addressed in this Guide because it is rarely used in aged care settings. Information on sterilisation is included in the *Australian Guidelines for the Prevention and Control of Infection in Healthcare*.

All aged care organisations should develop local policies and processes for the management of reusable equipment to minimise the infection risk to the older person, aged care workers and the environment. The minimum level of reprocessing required for reusable equipment depends on the individual situation and the manufacturer's instructions.

For example, a reusable blood pressure cuff will require cleaning (neutral detergent and water or a neutral detergent wipe) unless it has been contaminated by blood or other body fluids, or if the older person requires transmission-based precautions.

Considerations for reprocessing of reusable equipment include:

- Before purchasing reusable equipment, aged care organisations should read and understand the manufacturer's reprocessing instructions to ensure the facility or service is able to effectively clean, disinfect (if needed) and reuse the equipment
- If a piece of equipment cannot be cleaned or disinfected, it cannot be reused. In this situation, single-use equipment should be used
- Equipment should be cleaned as soon as practicable after use and before soiled materials become dried onto it (consider a bed pan that is dirty and left for a period of time before placing into the washer) – leaving used or soiled equipment for an extended period before cleaning and/or disinfection can make cleaning difficult and ineffective and can damage the equipment
- Equipment that can be taken apart must be disassembled before cleaning and disinfection so that all components can be cleaned and disinfected effectively.

Methods of disinfection

The are two methods of disinfection – thermal disinfection (using heat) and chemical disinfection. Each method uses a different process to kill microorganisms. Thermal disinfection is usually the most effective disinfectant.

Chemical disinfection uses chemicals to kill microorganisms.

Chemical disinfection can be achieved with an appropriate ARTG-listed disinfectant, which may be a household-, commercial- or hospital-grade product. All products are designed for a specific

purpose (this may be to kill specific microorganisms such as a bacteria or virus), so it is important to read labels carefully to ensure the correct product is selected for the intended use, and is then applied appropriately.

Thermal disinfection uses heat (high temperature) and water to kill microorganisms.

To ensure thermal disinfection occurs, equipment must be exposed to a specified temperature for a specified amount of time. Thermal disinfection processes used in aged care include washer–disinfectors, steam cleaners, steam vacuums, commercial washing machines and drying machines. Equipment must be heat- and moisture-resistant if it is to undergo thermal disinfection. Thermal disinfection is nearly always more effective than chemical disinfection.

Levels of disinfectants

There are four levels of disinfectants that can be used. The level of disinfectant required is based on the types of microorganisms the disinfectant product claims to kill. The different levels of disinfection include:

- **Low-level disinfectants**; these kill most bacteria, as well as most viruses and fungi, but do not kill bacterial endospores
- **Intermediate-level disinfectants**; these kill all microorganisms, except bacterial endospores
- **High-level disinfectants**; these kill all microorganisms, except large numbers of bacterial endospores
- **Sterilisation** is the highest level of disinfection; it also kills endospores but is not routinely available or used in aged care settings.

Categorisation of equipment

The approach to disinfection of reusable equipment used in health care is known as the ‘Spaulding approach’, which is a categorisation system. Reusable equipment is categorised as critical, semi-critical or non-critical, according to the degree of infection risk associated with use of the items (**Table 19**).

For example, a reusable blood pressure cuff (non-critical item) is much less likely to present a high infection risk than are nail clippers (semi-critical item) that may contact non-intact skin or blood or body fluids.

Table 19: Categories of equipment and level of disinfectant required

Category	Description	Examples	Level of disinfectant
Non-critical equipment	These items come into contact with intact skin but not mucous membranes. Cleaning is sufficient for most non-critical items after each individual use, although either intermediate or low-level disinfection may be appropriate in specific circumstances. For example, if the item is contaminated with blood or body fluids.	Examples of non-critical equipment include blood pressure cuffs, stethoscopes, wheelchairs, commode chairs, computers, mobile phones and keyboards.	This type of equipment requires either low-level or intermediate disinfectants.
Semi-critical equipment	This type of equipment has contact with mucous membranes or non-intact skin or body fluids.	Examples of semi-critical equipment may include bed pans, respiratory therapy equipment and urine bottles.	High-level disinfection if single-use equipment is not available for use.
Critical equipment	This equipment comes into contact with sterile tissue or the vascular system (for example, veins and arteries). This equipment must be sterile at the time of use.	If required in aged care settings, this equipment will be single-use.	Appropriate sterilisation method.

For more information, refer to AS 5369:2023 *Reprocessing of reusable medical devices and other devices in health and non-health related facilities*, which outlines the requirements and practices necessary for the effective and safe reprocessing, storage, handling and transportation of reusable medical devices and other devices used in human health care and other treatments.

Storage of equipment

All reusable equipment must be stored in a way that maintains the level of reprocessing (cleaning/disinfection/sterilisation). Dry, sterile, packaged equipment (such as dressing packs) should be stored in a clean, dry environment and be protected from sharp objects, heat and sunlight that may damage the packaging. For example, if transporting sterile stock in the community, consider storing equipment and stock in cleanable dust- and moisture-proof containers.

Equipment should be regularly examined for breaks in either the packaging or the equipment itself that would impair either cleaning or disinfection (this should be a documented process). Equipment that no longer functions as intended or cannot be adequately cleaned and disinfected should be repaired or discarded.

Cleaning schedules

Aged care organisations should develop and implement a local cleaning schedule and policy that suits its environment.

Cleaning schedules should be determined by the risk of transmission of infection within each specific setting. All organisations should have a documented cleaning schedule that clearly outlines the responsibilities of all aged care workers, gives a roster of duties, and lists the frequency of cleaning required and the products that should be used to clean specific areas and surfaces. Aged care workers should be provided with appropriate education and training on cleaning.

General surface and fittings such as walls, floors, curtains, windows and blinds should be cleaned when visibly soiled and immediately after a spill has occurred. Frequently touched surfaces such as door handles, handrails, light switches, computers and telephones should be cleaned with neutral detergent solution at least daily, when visibly soiled and after each contamination. During an outbreak, these surfaces may need to be cleaned more often and disinfected (**Table 20**).

Home and community aged care

Home care is intermittent, with services depending on the care needs of the older person and the package of care. It is important that aged care organisations help to educate older people on the importance of cleaning, especially cleaning frequencies for surfaces.

Aged care organisations should train the workforce to acknowledge the older person's expectations, and their ability to contribute to cleaning. If cleaning services are required, those responsible for IPC should collaborate with the older person to develop a cleaning schedule for each planned visit. Individual cleaning routines should be documented in the care plan that is accessible to both the older person and workers. It should outline the responsibilities of aged care workers attending the service, a roster of duties, the frequency of cleaning required and the products to be used when cleaning specific areas and surfaces.

Table 20: Cleaning schedules for aged care settings

Equipment	Standard cleaning frequency* *When there is no known or suspected infection or outbreak*	High-risk cleaning frequency *When there is a known or suspected infection or outbreak*
Blood pressure cuff	Clean after use	Clean after use
Bed	Clean frame daily Clean underneath weekly	Clean frame daily Clean underneath weekly
Bedside table	Clean daily	Clean twice daily and after use
Call bell	Clean daily	Clean daily
Ceiling	Spot clean† daily and wash yearly	Spot clean daily and wash yearly
Cleaning equipment	Clean after use	Clean after use

Equipment	Standard cleaning frequency* *When there is no known or suspected infection or outbreak*	High-risk cleaning frequency *When there is a known or suspected infection or outbreak*
Clinical equipment (for example, pulse oximeters)	Clean daily (when in use) and between individual use	Clean daily (when in use) and between individual use
Commode	Clean contact points after use Clean whole daily	Clean contact points after use Clean whole daily
Computer, electronic devices and keyboard	Clean daily, when visibly soiled or after use	Clean twice daily, when visibly soiled or after use
Curtains and blinds	Clean monthly. Change when visibly soiled, damaged or during a terminal clean	Clean weekly. Change when visibly soiled, damaged or during a terminal clean
Doorknobs	Clean daily	Clean twice daily
Floor (polished)	Dust removal and clean daily	Dust removal and clean twice daily
Hoist, bathroom	Clean contact points after use	Clean contact points after use
Manual handling (for example, hoists)	Clean contact points after use	Clean contact points after use
Medication and clinical trolleys (dressing trolleys)	Clean daily and after use	Clean daily and after use
Mobility aids (four-wheel walker, wheelchair and walking sticks)	Clean daily and after use	Clean daily and after use
Nebuliser and other oxygen delivery machines (when in use)	Clean daily and after use	Clean daily and after use
Sharps bin trolley and brackets	Clean daily	Clean twice daily
Shower	Clean daily and one spot check clean daily	Clean daily and one spot check clean daily
Surfaces (general horizontal) in bedrooms – for example, ledges	Clean twice daily and spot clean after use	Clean twice daily and spot clean after use

Source: Adapted from Table A2.2: Recommended cleaning frequency in Section 6.1 of the *Australian Guidelines for the Prevention and Control of Infection in Healthcare*.
* Recommended cleaning frequencies should be followed as much as is reasonably practicable.
† Spot clean means to clean off visible dirt or soiling on the environmental surfaces and equipment.

Auditing

An environmental cleaning audit is a way to check that environmental cleaning is performed to a high standard. Audits can help reduce the spread of infections. Residential and centre-based aged care organisations should develop and implement processes for environmental cleaning audits as part of their IPC system (**Table 21**).

Table 21: Environmental cleaning audit considerations

Consider	Description
Who will be undertaking the audit?	The auditor should have knowledge about environmental cleaning processes and be familiar with the organisation. The auditor may be an IPC lead or a person responsible for IPC.
When to audit?	Consider auditing at the times of the day and month needed to capture different cleaning activities.
Where to audit?	A random sample of different surfaces and equipment should be included in each environmental cleaning audit. For example, a mix of often and rarely touched surfaces such as light switches and handrails, bathrooms, care equipment, kitchens and floors. If comparing audit results for an individual surface over time (for example, the same tap handle in the same room in the same section of the organisation), it is important to record which sites have been reviewed at each audit.
Frequency of audits	The frequency of auditing for routine cleaning depends on the outcome of the risk assessment. In general, higher risk areas will require increased frequency of cleaning, which means that these areas should be audited more often. The timing of cleaning audits should be based on how often cleaning is occurring, as well as: • Local risks (for example, higher infection risk areas may require more frequent auditing in response to identified gaps in cleaning processes) • Commencing new cleaning processes or staff • Outbreak management.
How to undertake cleaning audits	Visual inspections measure the visual cleanliness that is apparent to older people and visitors and help to identify maintenance issues and the need for repairs. Objective methods, such as fluorescent gel markers and adenosine triphosphate bioluminescence detection systems, can be used to measure the amount of dirt on a surface and the effectiveness of individual cleaning techniques. Frequently touched surfaces should be cleaned more often due to an increased risk of contamination, and objective methods should be considered for audits. Minimally touched surfaces should be audited by visual inspection.

Consider	Description
What should be included in cleaning audits?	Cleaning audits may include a combination of visual inspection and objective methods. The approach used will depend on the types of services provided by each aged care organisation. Besides auditing the cleaning processes within the different areas in each setting, such as non-clinical and clinical areas, audits may also include assessing: • Compliance with linen storage and handling policies • Compliance with waste management, storage, and handling policies • Cleaning and storage of shared equipment.
What should be done with audit results?	Audit results should be fed back to all aged care workers who are involved in environmental and equipment cleaning (clinical staff, non-clinical staff, support staff and managers). This information can then be used to: • Change cleaning processes if needed • Assess compliance with environmental policies, procedures and protocols • Identify and repair damaged equipment and surfaces • Improve stock and equipment storage systems. Auditing cleaning can be used to identify and set priorities for organisational strategies to prevent and control infections and manage infection risks.

Resources

There are several existing cleaning audit tools such as:

- Tasmanian Environmental Cleaning Assessment Program
- NSW Clinical Excellence Commission Templates for External and Internal Cleaning Audits
- SA Health Environmental Cleaning External Audit Tool.

Refer to the Fact sheet – Principles of Environmental Cleaning Auditing for further information. Further information on auditing and monitoring infections can be found in **Chapter 9.**

Spill management

Prompt removal of spots and spills of blood and body fluids, followed by cleaning and disinfection of the contaminated area, is a fundamental infection control practice that helps organisations meet work health and safety requirements. When emergency procedures or urgent transport are under way, spills should be attended to as soon as it is safe to do so.

Process of spills management

Strategies for cleaning spills of blood and other body fluids differ based on the setting in which they occur and the volume of the spill. **Table 22** outlines the appropriate processes for managing spills based on the volume of the spill.

Table 22: Appropriate processes for managing spills

Volume of the spill	Process
Spot cleaning	• Select appropriate PPE* • Wipe up spot immediately with a damp cleaning cloth, tissue or single-use paper towel • Discard contaminated materials • Perform hand hygiene
Small spills (up to 10 cm diameter)	• Select appropriate PPE* • Wipe up spill immediately with absorbent material such as a paper towel • Place contaminated absorbent material into container or plastic bag for disposal • Clean the area with warm neutral detergent solution, using disposable cloth or sponge • Wipe the area with TGA-listed* disinfectant and allow to dry • Perform hand hygiene
Large spills (greater than 10 cm diameter)	• Select appropriate PPE* • Cover area of the spill with an absorbent clumping agent and allow to absorb • Use disposable scraper and pan to scoop up absorbent material and any unabsorbed blood or body substances • Place all contaminated items into a container or plastic bag for disposal • Discard contaminated materials • Mop the area with neutral detergent solution • Wipe the area with TGA-listed* disinfectant and allow to dry • Perform hand hygiene

PPE = personal protective equipment; TGA = Therapeutic Goods Administration
* In residential and centre-based aged care settings, a TGA-listed hospital-grade disinfectant with specific claims should be used for routine management of spills. The disinfectant chosen must have label claims against the microorganism of concern and should be compatible with the surface material where the spill has occurred to avoid damage to the surface.

Spill kit

A spill kit should be readily available in certain areas (such as care environment and laundry or waste rooms) or to those aged care workers providing services in the community where exposure to blood or body fluids may occur. A spill kit should include a scoop and scraper, single-use gloves, protective apron, surgical mask and eye protection, absorbent agent, clinical waste bags and ties, and neutral detergent. All parts should be disposable to ensure that cross-contamination does not occur.

Practice point

Outsourcing cleaning services

If cleaning is outsourced to external agencies, it is important that the cleaning procedures are documented and that an explanation is provided about how each procedure should be undertaken. This will assist the external agency to support maintenance of safe quality of care. Documentation should cover:

- Minimum requirements for cleaning frequencies, methods and reporting
- Staffing including rosters for full-time, part-time and relief staff and for management and supervisory positions
- Equipment and products to be used to deliver each cleaning service.

Workforce training and education

Staff, including contractors, who provide cleaning services in aged care settings should receive initial and ongoing training. This training should include information on the basic principles of IPC including hand hygiene, IPC signage, specific cleaning and equipment processes, correct selection of cleaning products, handling and storage of cleaning solutions and the appropriate use of PPE.

Details about staff training on cleaning and IPC 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. Contracted cleaning staff should be trained by their employer in the appropriate use of cleaning and disinfection procedures, products to be used and in the use of PPE.

Risk assessment and cleaning

Each person and environment presents different challenges for the maintenance of a clean and safe environment. Risk assessment is essential to support cleaning. As described in **Chapter 2**, the risk of infection changes depending on the type of service and the settings where care is provided.

If there are concerns arising from an environmental risk assessment about the safety or cleanliness of the environment, especially in home and community settings, it is important to discuss these concerns with the older person, their family or carers when possible. This discussion should outline key concerns about the environment, whether for the worker entering the home or the older person living in the home and include possible risk-reduction strategies to eliminate, reduce, replace, isolate or control the risk. **Table 23** includes examples of a variety of environmental hazards and possible risk-reduction strategies and resources.

Table 23: Environmental hazards and risk-reduction strategies

Environmental hazards	Examples	Possible risk-reduction strategies and resources
Biological hazards	Blood and body fluids or animal waste	Standard and transmission-based precautions including hand hygiene and PPE should be used to reduce the risk of worker exposure to biological hazards.
Falls hazards	Loose carpet or rugs, uneven floor edges, electrical cords or cables, steps or stairs, wet or slippery surfaces	Organisations should consider reducing the risk of slips, trips and falls through an environmental risk assessment. Staff should wear slip-resistant footwear and make sure that floors have time to dry after cleaning before people walk in the area to prevent falls. Further information is available from Safe Work Australia – Slips, trips and falls.
Harmful chemicals or substances	Gardening or cleaning products	When using, handling, generating and storing hazardous chemicals, organisations should consider work health and safety requirements such as correct labelling, maintaining a safety data sheet and training. Further information is available from Safe Work Australia – Managing risks of hazardous chemicals in the workplace.
Electrical safety	Broken or damaged electrical cables, cords or safety switches	Aged care organisations must do what is reasonably practicable to ensure the safety of the workers and put measures in place to ensure that workers do not use unsafe electrical equipment, whether supplied by them or the older person. This could include disconnecting or removing equipment that is believed to be unsafe. Further information is available from Safe Work Australia – Electrical risks at the workplace fact sheet.
Hoarding and squalor	Hoarding is a mental health condition and involves a person having trouble discarding a large volume of possessions which others would consider useless or of limited value. It is different from chronic messiness and collecting. Squalor describes an environment that is cluttered, filthy and dirty by a person neglecting the space. It describes a living environment.	If hoarding or squalor is noticed during the initial environmental review, aged care organisations can discuss the concerns with the older person, their family, or carers, and if needed escalate to appropriate local service providers that are trained to support these situations. There are a variety of assessment tools that can be used to screen or assess for hoarding or squalor behaviours: • Hoarding & squalor program screening tool • Environmental cleanliness and clutter scale tool • New hoarding & squalor rating scale • Clutter image rating scale – update.

PPE = personal protective equipment

An environmental cleaning program

Developing an environmental cleaning program (also referred to as a cleaning program) can be a complex process. As a minimum, cleaning programs should:

- Identify, assess and respond to relevant environmental risks
- Provide aged care workers responsible for cleaning with training on the basics of IPC, and how to correctly use PPE and perform hand hygiene
- Include cleaning schedules that describe the recommended cleaning frequencies, procedures and roles and responsibilities of all staff
- Routinely evaluate and monitor cleaning processes
- Use suitable cleaning equipment and products for the service. This includes using products according to manufacturers' instructions for use.

Tables 24 and **25** outline how to implement the basic principles of cleaning in a residential and centre-based aged care organisation, and a home and community aged care organisation.

Table 24: Cleaning program – suggestions for a residential and centre-based aged care home

Component	Implementation
Cleaning and disinfection	• Implementing policies and processes for appropriate cleaning, disinfection and product selection • Ensuring that disinfectant products used in a residential and centre-based aged care setting are listed on the ARTG as hospital-grade disinfectants; chlorine-based products (such as sodium hypochlorite) may also be used • Providing staff responsible for cleaning with training on the principles of IPC
Reprocessing reusable equipment (such as commode chair and dressing trolleys)	• Identifying reusable equipment that requires reprocessing • Documenting the processes for reprocessing each piece of equipment and who is responsible for reprocessing • Ensuring those responsible for reprocessing are adequately trained • Ensuring that cleaning equipment and products are assessed for their suitability for cleaning in the setting; this includes using products according to manufacturers' instructions
Cleaning schedules and frequencies	• Developing a detailed cleaning schedule for the entire workforce; it must describe recommended cleaning frequencies, cleaning procedures and policies, and roles and responsibilities of all aged care workers
Auditing	• Implementing regular cleaning audits and making sure outcomes are routinely evaluated and monitored by routine auditing • Aligning with jurisdictional requirements, if required • Using the data to improve cleaning practices

Component	Implementation
Spill management	• Ensuring spill kits are readily available where there is a higher risk of spills (such as the care environment and laundry or waste rooms) • Ensuring all contents of spills kits are disposable, to reduce the risk of cross-contamination
Workforce training and education	• Ensuring staff and contractors who provide cleaning services in aged care organisations receive initial and ongoing training in local cleaning policies and procedures

Common barriers	The built environment in which aged care services are provided can influence the transmission of infections by air, water and contact with the physical environment. IPC requirements should be considered during the planning, design and construction of aged care homes. Key design features that minimise the risk of transmission of infection include:
	• Surface finishes that are easy to maintain and clean (floors, walls, benches, fixtures and fittings)
	• Ventilation, air conditioning, cooling towers and water systems that meet Australian standards for the building they are to service
	• The ability to isolate infectious older people in a single room with bathroom or ensuite; this entails
	  ○ appropriate workplace design
	  ○ separation of procedural and cleaning areas
	  ○ movement and workflow systems
	  ○ ready access to hand hygiene facilities
	  ○ storage for all items used for care of the older person
	  ○ easily accessible storage for PPE
	  ○ adequate waste management procedures and linen handling
	• Involvement of a multidisciplinary team that includes IPC staff to coordinate preventive measures in demolition, construction and renovation projects

ARTG = Australian Register of Therapeutic Goods; IPC = infection prevention and control; PPE = personal protective equipment

Table 25: Cleaning program – suggestions for a home and community aged care service

Component	Implementation
Cleaning and disinfection	• Document policies and processes for appropriate cleaning, disinfection and product selection • Make sure that all cleaning products are appropriate for use on the surfaces they are being used on • As part of an organisation's IPC system, staff responsible for cleaning in the community are provided with training on the principles of IPC
Reprocessing reusable equipment	• Identify equipment that is reusable and taken to different homes (such as commode chairs, blood pressure machines, blood glucose monitors) that requires reprocessing • Document the processes for reprocessing each piece of equipment and who is responsible (for example, blood pressure machines must be cleaned and disinfected in between uses on individual people and this should be done by the worker using the machine) • Make sure that those responsible for reprocessing are adequately trained • Cleaning products should be stored and maintained according to manufacturers' instructions (for example, have processes for checking expired products)
Cleaning schedules and frequencies	• Aged care workers should educate the older people being cared for on the principles of cleaning frequencies, especially for heavily used surfaces • Prioritise frequently touched surfaces including tables, door handles, taps and toilets, and surfaces that are visibly dirty • It is important that the aged care worker acknowledges the older person's expectations, and their ability to contribute to routine cleaning. The aged care worker should collaborate with the older person to develop a cleaning schedule for each planned visit
Auditing	• Not required in home and community settings
Spill management	• Aged care workers should be equipped with a spill kit for community visits; it should include waste bags and ties
Workforce training and education	• Staff and contractors providing cleaning services in aged care organisations should receive initial and ongoing training
Other considerations	• Linen management and waste management may be considered as part of an organisation's cleaning program in home and community aged care organisations. See Handling of linen in **Chapter 4** for more information

IPC = infection prevention and control

Resources

More information on these recommendations can be found at Safe Work Australia: Cleaning.

For further information, refer to the *Australian Guidelines for the Prevention and Control of Infection in Healthcare*; specifically, for:

- **Environmental cleaning, refer to Section 3.1.3**
- **Influence of building design on healthcare-associated infection, refer to Section 4.6**
- **Cleaning schedules, refer to Appendix 2, Section 6.1, Table A2.2: Recommended cleaning frequency**
- **Emerging disinfectants, refer to Section 3.1.3.1: Emerging disinfection methods.**

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