# SESLHD GUIDELINE COVER SHEET



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KEY TERMS	Multi-resistant organisms (MROs), transmission, equipment, MRSA, VRE, CRE, ESBL, cleaning, outbreak.
SUMMARY	This guideline outlines infection prevention and control principles with regard to the cleaning of non-critical equipment used in direct clinical care, rehabilitation and resuscitation training to minimise the transmission of pathogenic organisms and infectious diseases within SESLHD facilities.



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# **Infection Control: Cleaning (Shared) Patient Care Equipment Guideline**

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# Section 1 - Background

CEC Infection Control Practice Handbook states "Any reusable instrument or equipment that comes into contact with intact skin must be cleaned before it is used". Examples include equipment used for patient care, monitoring and activities of daily living.

Reports of outbreaks of multiple resistant organisms (MROs) and viral gastroenteritis have suggested an association between inadequate patient care equipment cleaning and transmission of infectious agents in healthcare settings. Shared equipment used in direct patient care and assessment that comes into contact with intact skin can act as a vehicle for transmission of pathogenic organisms and transmissible infectious diseases.

Surveillance has shown that shared patient care equipment can become contaminated with multiple resistant organisms including Methicillin Resistant *Staphylococcus aureus* (MRSA), and Vancomycin-resistant enterococci (VRE).

This Guideline outlines the requirements for the cleaning of common shared non-critical equipment that will come into contact with patient's intact skin.

The aim of this Guideline is to instruct staff on cleaning shared non-critical reusable patient care equipment after use. This will assist in the reduction of patients acquiring a healthcare associated infection and prevent the transmission of MROs and transmissible infectious diseases.



# **Section 2 - Principles**

#### **Exclusions**

- **1.** These guidelines **do not** attempt to provide cleaning instruction for all shared non-critical equipment, rather it provides working examples.
- 2. Specialised units such Dialysis, Operating Theatres, Endoscopy, Haematology, Intensive Care and Neonatology Units have their own procedures for cleaning and/or disinfection of specific shared equipment.
- **3.** Specialised equipment, that have specific documented manufacturer's instructions for cleaning and/or disinfection of shared patient equipment.
- **4.** Specialised patient care equipment that is at risk of biofilm growth require individual risk assessment and a documented cleaning procedure.



# **Section 3 - Definitions**

This guideline is applicable to all healthcare workers (HCWs) within South Eastern Sydney Local Health District (SESLHD) that use or provide shared patient care equipment. Staff are required to follow manufacturer's instructions/procedures for cleaning of specialised patient care equipment to ensure correct cleaning requirements are met and the equipment is not damaged by incompatible chemicals.

	damaged by incompatible chemicals.			
Term	Definition			
Cleaning	The physical removal of soil and reduction in the number of microorganisms from a surface by a process such as washing in detergent. In order to decontaminate patient care equipment effectively, all organic debris (for example, blood, tissue and other body fluids) must be removed from the item during the cleaning process.			
Biofilm	Biofilms can be defined as communities of microorganisms attached to a surface.			
Clean Between	Cleaning and [or] disinfecting shared patient equipment between use on more than one patient.			
Detergent wipe	A detergent-containing wipe used for cleaning lightly soiled shared patient equipment in between each patient use eg. Tuffie Wipe®.			
Discharge Clean	Room/bed zone are cleaned as soon as possible when a patient is discharged. All patient furniture, bathroom, patient care equipment and accessories eg. nurse call bell are cleaned with neutral detergent.			
<u>Disinfectant</u> Wipe	The wipe is impregnated with a disinfectant eg large isopropyl alcohol impregnated wipe (see disinfection).			
Disinfection	A process that eliminates many or all pathogenic micro-organisms, except bacterial spores, on inanimate objects. In health-care settings, objects usually are disinfected by liquid chemicals or wet pasteurization.			
Double Clean	A cleaning procedure consisting of a two staged process; neutral detergent followed by an approved chemical disinfectant. <b>NOTE</b> : A Double Clean may be recommended for shared patient care equipment used on or by a patient with a transmissible infectious disease/organism that will not be eliminated by detergent alone eg. Norovirus.			
Environmental surface disinfection	Relates to disinfection of frequently touched surfaces and shared non-critical patient care equipment.			
Indirect contact (transmission) Neutral Detergent	Involves transfer of an infectious agent through a contaminated intermediate object or person eg. hands of a health care worker contaminated by contact with equipment/items from one patient area, with contact to another patient or person. A detergent solution which acid has been fully neutralised by alkali to pH 7.0 eg. cleaning staff use neutral detergent for all general cleaning.			
Non-critical equipment	Those items that either touch only intact skin but not mucous membranes or do not directly touch the patient/resident/client. Thorough cleaning is sufficient for most non critical items after each individual use, although disinfection may be appropriate in specific circumstances.			
Standard Precautions	Involves the use of safe work practices and protective barriers; and are designed to reduce the risk of transmission of micro-organisms from both recognised and unrecognised sources of infections in health organisations.			
Semi-critical equipment	Semi-critical items contact mucous membranes or non-intact skin. Semi-critical items minimally require high-level disinfection using either thermal disinfection (first choice) or chemical disinfectants.			
Shared patient equipment	Shared patient equipment is equipment used on more than one patient.			

## Section 3 **Definitions**



Terminal	A thorough cleaning program undertaken when a patient with a MRO or
Clean	transmissible infectious disease is discharged. The cleaning program includes all
	shared patient care equipment.

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# Section 4 - Recommended Best Practice for Common Shared Patient Care Equipment

### 4.1 General principles for cleaning shared patient care equipment

The following principles apply to all equipment used in the assessment and delivery of patient care:

- Any non-critical reusable equipment that comes into contact with a patient must be cleaned before it is reused on another patient
- All non-dedicated (shared) equipment and accessories that come into contact with a patient or a patient's environment must be cleaned by the HCW that uses or transfers the item of clinical equipment between patients
- All equipment must be cleaned immediately if it becomes visibly soiled
- Equipment should have a smooth impervious surfaces that can be easily cleaned such as metal, plastic, vinyl and laminate
- Tape should not be applied to shared patient care equipment as it does not allow appropriate cleaning and leaves residue
- Appropriate risk assessments, including a review of available manufacturers guidelines, must be carried out prior to the decontamination of equipment with the correct detergent/disinfectant
- Only approved healthcare facility cleaning products to be used and be suitable to the cleaning process required
- Cleaning is still required if a cover has been used e.g. temperature probe cover
- Additional cleaning may be required in an outbreak situation. Procedures will be determined in consultation with the health service Infection Prevention and Control or delegate.

#### Shared equipment used for direct patient care and assessment

Cleaning of shared non-critical patient equipment (see Table 2) may differ depending on the type of infection control precautions implemented to care for the patient, i.e. Standard Precautions or Transmission based Precautions (refer Table 1).

The equipment listed in the following tables are common items but are by no means exhaustive



### Table 1: Level of infection control precautions and type of cleaning required

Recommended Best Practice for Common Shared Patient Care Equipment

Level of Precautions	Cleaning
Standard Precautions	Clean the equipment between patients with a neutral detergent
Transmission based:	Clean the equipment between patients with a neutral detergent with a double clean if required. Refer to ID Table.

### Table 2: Common patient care equipment and cleaning requirements

Item	Frequency of cleaning	With (solution)	Responsibility	Comments
Arm rests/supports	As required	Neutral detergent	All HCWs	NOTE: arm rests are covered at all times – no patient contact
Baby cots / cribs when in use	Daily and frequently touched surfaces beginning and end of shift	Neutral detergent	HCW User	
IV, Dressing or Procedure Trolley	Before and after use	Neutral detergent	HCW User	
Workstation on wheels (WOW) & Emed trolley	Before and after use, before moving to another patients bedspace or room	Neutral detergent	HCW User	
Examination Couch	After use In between patients if a paper or sheet cover not used	Neutral detergent	HCW User	Paper or sheet covers must be changed after each patient.
Eye Examination equipment	Before and after patient use	Neutral detergent	HCW User	
Glucometer	After use	Neutral detergent	HCW User	
Humidity cribs if water is used Terminal cleaning of humidity cribs	Change weekly	Neutral detergent then by an approved disinfectant agent	PSA & HCW user	Check Departmental Procedures
IV Stands	After use and daily	Neutral detergent	HCW User	On discharge from isolation room, to be cleaned by Environmental Cleaning Services
Medication Trolley	Daily clean (main surface areas) Weekly (full clean)	Neutral detergent	All HCWs	



## Section 4 Recommended Best Practice for Common Shared Patient Care Equipment

Item	Frequency of cleaning	With (solution)	Responsibility	Comments
Patient call bells	Daily	Neutral detergent	Hotel services	
Patient weigh scales	After use	Neutral detergent	All HCWs Hotel services	Hotel Services to also include in regular clinical area cleaning program
Plaster bowls	After use	Neutral detergent	All HCWs	
PPE Trolley	Before and after use	Neutral detergent	HCW User	
Splint pan	Daily at end of list	Neutral detergent	All HCWs	
Stethoscope	Before and after patient use	Neutral detergent	HCW User	
Single use Tourniquet for use in blood collection	Use for one patient for duration of their admission, and dispose of on discharge	Discard when soiled	All HCWs	Use of single use tourniquet is encouraged e.g. IV Starter Kit
Urinary catheter or drain holder/bracket	After use	Neutral detergent	HCW User	



# 4.2 Biomedical Equipment

Table 3: Common biomedical equipment and cleaning requirements

Item	Frequency of	With (solution)	Responsibility	Comments
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Mechanical ventilator	Each shift and after use	Neutral Detergent	HCW User	NOTE: Submerging wires and sensors with excessive moisture on cleaning cloths could damage the internal working mechanisms of the
CPAP Machines	Follow manufacturer instructions			equipment, leading to corrosion and electrical shortages.
	Each shift			
IV Infusion pump	Daily and after use	Neutral detergent	HCW User	
Vital signs equipment	Before and after patient use	Neutral detergent	HCW User	
Bladder scanner	Before and after patient use	Neutral detergent	HCW User	
Cardiac Monitors	Each shift and on discharge	Neutral detergent	HCW User	
Spirometer	Single patient use mouthpieces			
	Machine to be wiped over between patients	Neutral detergent	HCW User	



## 4.3 CPR Equipment including equipment used for training purposes

Table 4: Common CPR equipment and responsibility for cleaning

Item	Frequency of cleaning	With (solution)	Responsibility	Comments
Manikin body & clothing (Excluding face)	Following each training session and whenever visibly soiled	Neutral detergent (allow to dry before reassembly & storage)	Trainers and trainees	Manikins to be kept in good condition & inspected for cracks & tears
Manikin faces & reusable masks.	Follow manufacturers recommendations		Trainers and Trainees	
(Send to SSD for thermal disinfection if				
Laryngoscope handles	After use	Neutral detergent	HCW use	

# 4.4 Equipment related to patient hygiene

Table 5: Common equipment related to patient hygiene and cleaning requirements

Item	Frequency of cleaning	With (solution)	Responsibility	Comments
Bowls (Washing)	After Use	Use a washer disinfector	HCW User	
Pans and Urinals	After Use	Use pan flusher sanitiser	HCW User	Check pan flushers and sanitiser for detergent requirements
Commodes	After Use	Chamber (same as pans) Chair clean with a neutral detergent	HCW User/ Hotel services	
Shower chairs	Before and After Use	Neutral detergent	HCW User/ Hotel services	Also to be cleaned by Hotel Services when cleaning ensuites /bathrooms

### 4.5 Patient Physical Mobility Aids

Table 6: Common physical mobility items and cleaning requirements

Item	Frequency of cleaning	With (solution)	Responsibility	Comments
Wheel Chairs	After use and in between patients	Neutral detergent	HCW User	NOTE: equipment can be labelled and allocated to
Walking Frames	After use and in between patients	Neutral detergent	HCW User	individual patients for their stay
Walking sticks	After use and in between patients	Neutral detergent	HCW User	



### 4.6 Manual Handling Equipment

Table 7: Common manual handling equipment and cleaning requirements

Recommended Best Practice for Common Shared Patient Care Equipment

Item	Frequency of cleaning	With (solution)	Responsibility	Comments
Patient slide sheets/board	After use and in between patients	Neutral detergent	HCW User	Material fabric slide sheets to be dedicated to one patient for the duration of their stay
Hoists	After use and in between patients	Neutral detergent	HCW User	Remove sling and send to laundry
Fabric hoist slings	The fabric sling can be dedicated to one patient for the duration of their stay	Send to commercial laundering service	HCW User	Fabrics Hoist slings require cleaning after use NOTE: check when slings require replacement

## 4.7 Rehabilitation and Gym Equipment

Table 8: Common rehabilitation and gym equipment

ltem	Frequency of cleaning	With (solution)	Responsibility	Comments
Treadmill	Clean areas touched by patient after use Daily cleaning	Neutral detergent	HCW User	Ask patients to perform hand hygiene prior to using equipment
Exercise Bike	Clean areas touched by patient after use Daily cleaning	Neutral detergent	HCW User	Ask patients to perform hand hygiene prior to using equipment
Free Weights	Clean areas touched by patient after use Daily cleaning	Neutral detergent	HCW User	Ask patients to perform hand hygiene prior to using equipment
Other Gym equipment	Clean areas touched by patient after use Daily cleaning	Neutral detergent	HCW User	Ask patient to perform hand hygiene prior to their gym program

### 4.8 Use of Neutral Detergents

The use of a neutral detergent solution or wipe on reusable, non-dedicated patient equipment is generally sufficient for cleaning, if the cleaning process is rigorous and effective.

Appropriate neutral detergents for non-dedicated patient equipment include the use of chemical disinfectants.



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### Section 5 - Use of Chemical Disinfectants

#### 5.1 The Australian Register of Therapeutic Goods (ARTG)

Only disinfectant specified in the ARTG may be used by healthcare workers for disinfection and the disinfectant must only be used for the approved purpose.

Healthcare workers involved in the purchase or use of disinfectants must, prior to purchase, seek a copy of the Therapeutic Goods Administration (TGA) "listing certificate" or "registration certificate".

### 5.2 Use of Chemical Disinfectants on Reusable Patient Equipment

The use of chemical disinfectants on reusable, non-dedicated patient equipment is generally unnecessary if the cleaning process is rigorous and effective. Chemical disinfectants should only be used in consultation with Infection Control or delegate.

Any item that is to be disinfected must be first thoroughly cleaned with a neutral detergent. Appropriate surface disinfectants for non-dedicated patient equipment include:

- Alcohol wipes with 70% isopropyl alcohol
- Sodium hypochlorite solution (check with Infection Control for dilution rates).

# **Section 6 - Loan Patient Care Equipment**

Borrowed reusable equipment used in direct patient care and assessment must undergo cleaning prior to its initial use and after each patient use.

This applies to equipment loaned by sponsors and other health organisations or brought to a healthcare organisation by a healthcare worker.

Following use and before being returned all loan items must be cleaned.

#### Cleaning of equipment prior to service or repair

All medical equipment must be cleaned with a neutral detergent solution or wipe prior to being sent for service or repair and on return from repairs.

# **Section 7 – Compliance Evaluation**

NSW Ministry of Health Environmental Cleaning SOP and Audit Tools



# Section 8 – Documentation, References, Revision and Approval History

#### **Documentation**

CEC Infection Prevention and Control Practice Handbook - Section 8

NSW Ministry of Health Environmental Cleaning SOP and Audit Tools

#### References

<u>CEC Infection Prevention and Control Practice Handbook – section 4.7.1 Single use or single patient use equipment</u>

NSW Ministry of Health Policy Directive 'Infection Prevention and Control' PD2017 013

NSW Ministry of Health Policy Directive 'Environmental Cleaning Policy' PD2012 061

<u>Clinical Excellence Commission 'Environmental Cleaning Standard Operating Procedure – Module 3 and 4'</u>

NHMRC Infection Control Guidelines: B5.1 Recommended Routine Cleaning Frequencies for Clinical, Patient and Resident Areas in Acute Settings

O'Toole G, Kaplan HB, Kolter R., Biofilm formation as microbial development, *Annual Review of Microbiology*, 2000;54:49-79

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Ong, Chong W, Norovirus: A Challenging Pathogen, *Healthcare Infection*, Vol. 18, No. 4, Dec 2013: 133-142

## **Revision and Approval History**

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