

## Contents

Policy.....	2
Purpose .....	2
Scope.....	3
Roles and responsibilities .....	3
Associated documents.....	3
Policy statement .....	4
1. Consultation process in new build.....	4
2. Construction, renovation and maintenance.....	5
Risk Management .....	5
Work flow.....	6
Demolition and disturbance .....	6
Environmental monitoring.....	6
Recommendations for the control of contamination risks.....	7
Post completion of work.....	9
Measurement or evaluation .....	9
References .....	9
Appendix A Construction Risk Assessment and Action Plan.....	10
Appendix B CDHB Infection Prevention & Control Variations from Australasian Health Facilities Guidelines.....	13
1. Wash Hand Basins (AusHFG 02.03).....	13
1.1. Hand basin types.....	13
1.2. Pedestal Wash Hand Basins .....	13
1.3. Stainless Steel Sinks .....	13
1.4. Taps.....	13
Elbow-operated.....	13
Sensor Taps .....	14
Pros and cons of sensor versus elbow operated .....	14
1.5. Plugs.....	14
1.6. Soap Dispensers .....	14
1.7. Paper Towel dispensers .....	15
1.8. Alcohol Based Hand Rubs .....	15

2.	Baths and Showers (AusHFG 02.05).....	15
2.1.	Baths .....	15
	Baby Baths.....	15
	Plugs.....	15
2.2.	Showers.....	15
	Shower bases .....	15
	Shower Handsets and Rails .....	15
3.	Air Conditioning, Ventilation and Water Systems (03.01).....	16
3.1.	Ceiling Fans .....	16
3.2.	Water systems .....	16
4.	Sanitisers and Bowl Disinfectors.....	16
4.1.	Bowl Washer .....	16
4.2.	Flusher Sanitisers .....	17
5.	Surfaces and Finishes (AusHFG 04.00).....	17
5.1.	Curtains .....	17
5.1.1.	Antimicrobial Impregnated Fabric Curtains:.....	17
5.1.2.	Disposable Curtains.....	17
5.2.	Roller Blinds: .....	17
5.3.	Venetian Blinds: .....	17
5.4.	Floors (04.03) .....	18
5.4.1.	Carpet:.....	18
5.4.2.	Vinyl: .....	18
5.4.3.	Other floor coverings .....	18
6.	Ward based dishwashers .....	18

## Policy

Construction, redevelopment, renovation and maintenance activities within a healthcare facility impose infection risks, in particular, to immunocompromised patients. These activities must be managed to prevent patient exposure to dust, debris, contaminants and moisture resulting from work.

## Purpose

This document outlines the requirements necessary to ensure that adequate infection prevention measures are taken in line with New Zealand Health & Disability (Infection Prevention & Control) Standards 8134.3: 2008 when construction, redevelopment, renovation and maintenance activities are carried out within CDHB facilities.

## Scope

All persons involved in project managing works including:

- Maintenance and Engineering Services
- Site Redevelopment
- Facilities Development
- Construction or renovation projects
- Information Services Group
- Any other designated CDHB representative
- External contractors and staff

## Roles and responsibilities

Staff/stakeholders have a responsibility to have an awareness of the infection prevention & control risks associated with renovations, repairs, structural works of premises and facilities during any demolition, design, construction, new builds, refurbishment and planned preventative maintenance in the area in which they work.

All precautionary measures outlined in this document must be complied with to protect patients, staff, visitors and contractors during this type of activity.

Departments listed under 'Scope' are responsible for notifying the Infection Prevention Control (IPC) Service early in the process of any new construction or planned work which may impact on clinical areas or clinical support departments e.g. sterile services, catering.

## Associated documents

CDHB documents;

- [Appendix A: Construction Risk Assessment and Action Plan](#)
- [Infection Prevention & Control Construction & Maintenance Work Approval Form](#)
- [Wellbeing Health and Safety](#)
- [Standard Precautions](#)
- A19 Requirements for Contractors, M&E Department

## Policy statement

The [Australasian Health Facility Guidelines \(AusHFG\)](#) are the primary reference documents used for design, construction and renovation of CDHB facilities.

[Part D Infection Prevention and Control](#) has been written to assist project teams in the planning, design and construction of healthcare facilities and was developed following a comprehensive review of infection prevention and control literature and with input from experts in the field of infection prevention and control.

The Infection Prevention & Control Service shall provide position statements on any variance/addition from the AusHFG Guidelines (refer Appendix B).

Maintenance Department follow relevant standards and manufacturer's recommendations.

This policy applies only to the infection prevention aspects of a project and in no way detracts from, or substitutes for, other building requirements as laid out in relevant legislation and standards.

### 1. Consultation process in new build

Documentation and implementation of IPC principles is critical to the planning, design and construction or refurbishment process. IPC staff have a fundamental role at each stage of a redevelopment project and must be involved at the earliest opportunity in the design phase. Ongoing liaison is required until completion of the facility.

Designers and planners should minimise risks of healthcare associated infection by practising good design in relation to:

- Ensuring there are adequate single rooms to facilitate transmission based precautions in accordance with accepted best practice
- Adequate and well organised storage facilities to minimise clutter in the environment and provide safe storage of essential equipment and consumables
- Choice of materials, avoiding unnecessary surfaces that may become reservoirs for infectious agents
- Ensuring materials and surfaces can be cleaned and maintained easily
- Attention to the prevention of waterborne infections, including Legionella, through design, disinfection and engineering methods.
- Attention to the prevention of airborne infection by the use of ventilation in specialist areas.

- Elimination of other environmental sources of infection e.g. pests, insects, birds, small animals which carry micro-organisms and disposal of litter and waste should be considered throughout the project

## 2. Construction, renovation and maintenance

### Risk Management

A formal approach to risk identification and management strategies are a part of building and renovation activities. (Refer Appendix A)

The risk-management approach should address, as a minimum:

- the extent of work;
- the identification of the patient population at risk
- the location of the patient population in relation to the site and construction
- the air flow and pressure differentials in the area (differentials may be varied by external wind strength and direction).
- ventilation systems and potential impact
- water systems and quality
- traffic and supply routes
- the requirement for air monitoring if applicable
- the identification of possible contaminants and their locations.
- the requirements for extra cleaning services
- precautions required for staff and contractors

Infection prevention and control measures to be considered include:

- Infection prevention and control being presented as a major component of the OHS induction for building workers, at the time of site induction. This induction process should be documented and signed off by each participating worker and held on file;
- Monitoring worker compliance with procedures. Any concerns should be raised with facility project manager. The results of this monitoring should be communicated to the workers routinely through the project manager /site foreman.
- A systematic approach should be in place to ensure the management of major breaches
- installation of barriers to contain the impact of construction;
- inspections by the nominated representatives during the construction of the barriers.

- documenting all inspections, including a non-conformance system for defaults, complete with a corrective and preventative action loop.

### **Work flow**

Work flow and agreed timescales are important to prevent incidents that potentially put patients, staff and visitors at risk

Where work is being undertaken whilst patient services continue consideration must be given to the level of dust produced and appropriate dust control be put in place in addition to the cleaning programme

Frequent monitoring of the area is required to highlight any problems or systems failures with regard to cleaning during the project

### **Demolition and disturbance**

When any demolition work is indicated, no matter how small, it is essential that precautions are taken to minimise the level of dust. These precautions will depend on the amount of dust anticipated. Any disturbance of the environment caused by maintenance, demolition, construction and renovation presents risk of infection to the occupants including:

- Exposure to air-borne micro-organisms and fungal spores such as *Aspergillus* species
- Water entry and absorption into building materials leading to increased microbial contamination
- Access for insect pests and vermin
- Increased traffic through the facility
- Dust and debris in patient care areas

Project managers are required to refer to the Construction Risk Assessment and Action Plan (Appendix A) to assess the risk of the intended activity.

The CDHB Representatives must complete an [Infection Prevention & Control Construction & Maintenance Work Approval Form](#) and forward to the CNS IPC prior to the work commencing.

### **Environmental monitoring**

The robustness of the environmental control measures should be monitored regularly;

- Dust proof barriers should be inspected daily to ensure they remain intact
- Observation of immediate areas for dust/tracking

- Air sampling may be considered

### **Recommendations for the control of contamination risks**

Communication with all parties including the IPC team is essential to reduce the risks of infection through all stages of the demolition /construction or maintenance work

The IPC team must be contacted when there are cross infection risks identified related to maintenance and engineering e.g.

- positive legionella samples
- water supply issues
- sanitiser malfunction
- sewer/flooding issues
- vermin e.g. mites from pigeon guano

During construction/renovation, the CNM / Service Manager must ensure that:

- Supplies and equipment are removed from the construction area or covered to prevent contamination from construction dust /debris.
- Sterile stock is removed from the area prior to the start of construction/renovation.
- Waste including sharps containers are removed from the work area prior to the start of construction.

Barriers are required for dust control where work is to be carried out near patient areas e.g. during:

- Demolition of walls, plaster and ceilings
- Removal of flooring, carpets , windows and doors
- Routine maintenance activities
- Any work with water which may aerosolise water droplets in high risk areas
- Exposure of ceiling voids
- Repairing water damage

Actions:

- The construction/demolition area should be sealed fully and erection of airtight plastic and dry wall barriers around the site, a dust barrier should be created from floor to the 'true ceiling' and edges sealed; for more long-term projects consider a solid sealed barrier.

- Cover all air intake and exhaust vents in the 'construction zone' to prevent the introduction of contaminated air into the healthcare environment including heating, ventilation and air conditioning (HVAC) systems, capping open ends of any existing ventilation ducts in the zone.
- It may be necessary to create an anteroom at the entrance / egress for construction workers
- Windows, doors, vents, plumbing penetrations, electrical outlets and any other source of potential air leak should be sealed in the construction zone
- Air pressure in the construction zone should be negative compared with adjacent areas; an extract fan may be used for this purpose. Air from the construction zone should be exhausted directly outside, if this is not possible it should be filtered through HEPA filters before being re-circulated.
- Redirection of construction traffic away from patient areas with workmen having separate access to the construction site where possible.
- Wherever possible patients, staff and visitors should be prevented from entering construction/ demolition sites or where debris or dust is being removed from the works area
- Regular removal of construction debris from the site in sealed containers (or covered with an impermeable moistened sheet) before removing for disposal, done at least daily. All skips used for temporary storage and disposal of waste materials should be covered to prevent dust release and unauthorised disturbance
- Cleaning – damp dusting is recommended. Vacuum (HEPA) and wet mop area as needed to maintain an environment as free from dust as possible. Wipe horizontal and vertical work surfaces with warm water and detergent. Increase the existing cleaning regimes to prevent dust accumulation on surfaces, ceilings and air duct grilles
- Multi-layer sticky/tacky mats to be used at site entrance/egress to trap dirt, dust and possible contaminants from footwear and wheels before entering clean areas. This should be changed frequently if visibly soiled or no longer tacky
- Overshoes/overalls may be required including facilities for their disposal and facilities for the decontamination of hands following their removal.
- All windows, doors (apart from essential access points) and vents should be sealed in areas of the healthcare environment as advised by the IPC Team
- Alternative routes should be identified during the planning stage.



- Clean or sterile supplies or equipment should be transported by a route that minimises contamination risks; this may involve reviewing delivery schedules

### Post completion of work

- Upon completion the contractor is responsible for the first level of cleaning
- Thereafter the facilities team are to undertake a clean and/or terminal clean of the area
- In categories III/IV (refer Appendix A, table 4) , the area will only be declared fit for use once a member of the IPC Team is satisfied with the level of cleanliness

### Measurement or evaluation

Notification from Site Redevelopment and Maintenance via email and receipt of IPC work approval forms by CNS-IPC.

Audits/evidence of dust mitigation procedures being utilised.

### References

[NZ Standard Health & Disability \(Infection Prevention Control\) 8134.3:2008](#)

Australian Health Facility Guidelines, 01 March (2016)  
<https://healthfacilityguidelines.com.au/full-guidelines>

Australasian Health Facility Guidelines: Part D- Infection Prevention and Control Revision 7.0 01March (2016)  
<https://healthfacilityguidelines.com.au/part/part-d-infection-prevention-and-control-0>

Australian Guidelines for the Prevention and Control of Infection in Health care. Australian Commission on Safety and Quality in Healthcare NHMRC (2010)  
[https://www.nhmrc.gov.au/files/nhmrc/publications/attachments/cd33\\_infection\\_control\\_healthcare\\_140616.pdf](https://www.nhmrc.gov.au/files/nhmrc/publications/attachments/cd33_infection_control_healthcare_140616.pdf)

Black County Partnership, NHS Foundation Trust: Infection Prevention and Control in the Built Environment (2016),  
<http://www.bcpft.nhs.uk/documents/policies/i/1179-infection-prevention-and-control-assurance-sop-15-infection-prevention-and-control-in-the-built-environment/file>

[Health and Safety at work act \(HSWA\) 2015.](#)

## Appendix A Construction Risk Assessment and Action Plan

### STEP 1 - IDENTIFY THE CONSTRUCTION ACTIVITY TYPE

**Table 1: Definitions of the Construction Activity Types**

<b>Type A</b>	<b>Inspections and general upkeep activities:</b> includes but not limited to: removal of ceiling tiles for visual inspection (limited to 1 tile per 5 m2); painting (but not sanding); installation of wall covering; electrical trim work; minor plumbing; any activities that do not generate dust or require cutting into walls or access to ceiling other than for visual inspection.
<b>Type B</b>	<b>Small scale, short duration activities, which create minimal dust:</b> includes, but is not limited to, installation of telephone and computer cabling, access to chase spaces, cutting into walls or ceiling where dust migration can be controlled
<b>Type C</b>	<b>Any work that generates a moderate to high level of dust:</b> includes, but is not limited to, demolition or removal of built-in building components or assemblies, sanding of wall for painting or wall covering, removal of floor covering/wallpaper, ceiling tiles and casework, new wall construction, minor ductwork or electrical work above ceiling, major cabling activities.
<b>Type D</b>	<b>Major demolition and construction projects:</b> includes, but is not limited to heavy demolition, removal of a complete ceiling system, and new construction.

### STEP 2 – SELECT THE PATIENT RISK GROUP

**Table 2: Infection Control Risk Groups**

Group 1 - Low	Group 2 - Medium	Group 3 - Medium/High	Group 4 - Highest
<p><b>Office areas</b></p> <p>Non-patient/low risk areas not listed here</p>	<p>All patient care wards, units, services and other areas <b>not listed under Groups 3 or 4</b></p> <p>Linen Services Cafeteria and kitchens Materials management Allied Health Admissions/discharge services General outpatient services Laboratories not specified under Group 3 Public corridors used by patients and to transport linen &amp; supplies Mortuary</p>	<p>Emergency department Gynaecology Assessment Unit (GAU) Childrens Acute Assessment (CAA) Medical Imaging including MRI / Echocardiography Spinal Unit Birthing Suite Delivery/labour rooms Paediatrics (except paediatric ICU) Long stay-sub-acute units Pharmacy Gastro Intestinal investigation Unit Respiratory Wards Renal and Dialysis Units Hyperbaric Unit Oral Health Procedure rooms Nuclear medicine</p>	<p>All intensive care units – adult, paediatric, NICU Oncology wards / services Haematology: BMTU / CHOC Oncology Centre Coronary Care Unit High dependency units Radiation therapy Chemotherapy Transplant Pharmacy sterile/ cytotoxic rooms All perioperative areas including Recovery Anaesthetic and pump rooms Cardiac catheterisation / Angiography rooms DSA / Interventional Radiology Outpatient invasive procedure rooms Sterile Supply Services</p>

**STEP 3 - DETERMINE THE CONSTRUCTION CLASSIFICATION CLASS**

Select from the matrix below to determine the construction classification class.

**Table 3: The Construction Classification Matrix**

Construction Activity Risk Level	Type A	Type B	Type C	Type D
Group 1	Class I	Class II	Class II	Class III/IV
Group 2	Class I	Class II	Class III	Class IV
Group 3	Class I	Class III	Class III/IV	Class III/IV
Group 4	Class III	Class III/IV	Class III/IV	Class IV

**STEP 4 - IMPLEMENT THE INFECTION CONTROL CONSTRUCTION GUIDELINES (pg 11)**

Infection control construction guidelines (Table 4) outline procedures to control the release of airborne contaminants resulting from construction, demolition or renovation activities.

Implement the appropriate infection control construction guideline based on the construction activity type as identified using the construction classification matrix (Table 3).

**Table 4: The Infection Control Construction Guidelines**

<b>CLASS I</b>	<ol style="list-style-type: none"> <li>1. Execute work by methods to minimise dust from construction operations.</li> <li>2. Immediately replace any ceiling tile that has been displaced</li> <li>3. Clean work area on completion</li> </ol>
<b>CLASS II</b>	<ol style="list-style-type: none"> <li>1. Isolate HVAC as required / provide active means to prevent air-borne dust from dispersing in atmosphere e.g. water mist</li> <li>2. Seal unused doors with duct tape</li> <li>3. Block off and seal air vents</li> <li>4. Contain construction waste before transporting in tightly covered containers.</li> <li>5. Wet mop / vacuum with HEPA filtered vacuum before leaving work area.</li> <li>6. Place sticky dust mat at entrance and exit of work area – replace when no longer effective.</li> <li>7. CDHB Project Manager to arrange with cleaning service to clean area</li> </ol>
<b>Obtain approval from IP&amp;C Service before construction begins.</b>	
<b>CLASS III</b>	<ol style="list-style-type: none"> <li>1. Isolate HVAC system in area where work is being done to protect the duct system.</li> <li>2. Erect and seal hoardings/barriers and anterooms around work site.</li> <li>3. Place sticky dust collection mats at entrance/exit of work area, replace regularly.</li> <li>4. Contain construction waste before transporting in tightly covered containers, or institute appropriate dust suppression methods.</li> <li>5. Airflow patterns need to be considered to minimise dust dispersion.</li> <li>6. Wet mop or HEPA vacuum twice per 8 hour period of construction activity or as required</li> <li>7. Contractor to undertake initial clean including wet mop of area</li> <li>8. Do not remove barriers from work area until the completed project is thoroughly cleaned.</li> <li>9. Remove barrier materials carefully to minimise spreading of dirt and debris associated with construction. (Barrier material must be wet wiped, HEPA vacuumed or water misted prior to removal.)</li> <li>10. CDHB Project Manager to arrange terminal clean of area with cleaning service and final inspection by IP&amp;C</li> </ol>
<b>CLASS IV</b>	<ol style="list-style-type: none"> <li>1. Isolate HVAC system in area where work is being done to protect the duct system.</li> <li>2. Erect and seal hoardings or barriers around work site.</li> <li>3. Construct anteroom for all personnel to pass through for entry/exit from room. Clean regularly</li> <li>4. Airflow patterns need to be considered to minimise dust dispersion. maintain negative pressure and exhaust externally where possible</li> <li>5. Place sticky dust collection mat at entrance and exit of work area and replace regularly</li> <li>6. Seal holes, pipes, conduits, and punctures appropriately.</li> <li>7. Contain construction waste before transporting in tightly covered containers, or institute appropriate dust suppression methods.</li> <li>8. During demolition, dust producing work or work within the ceiling space, disposable shoes/coveralls should be worn and removed prior to exit</li> <li>9. Vacuum work area with HEPA filtered vacuums at least twice daily and as necessary.</li> <li>10. Contractor to undertake initial clean including wet mop of area</li> <li>11. Do not remove barriers from work area until the completed project is thoroughly clean</li> <li>12. Remove barrier materials carefully to minimise spreading of dirt and debris associated with construction. (Barrier material must be wet wiped, HEPA vacuumed or water misted prior to removal.)</li> <li>13. CDHB Project Manager to arrange terminal clean of area with cleaning service and final inspection by IP&amp;C.</li> </ol>

## Appendix B CDHB Infection Prevention & Control Variations from Australasian Health Facilities Guidelines

This document provides CDHB specific Infection Prevention and Control recommendations which may vary from the Australasian Health Facility Guidelines (AUSHFG) related to construction, renovation and/or maintenance projects.

### 1. Wash Hand Basins (AusHFG 02.03)

- should be positioned adequate distance from adjacent shelving or storage areas to prevent potential contamination from splash risk
- must be separate in areas where food preparation occurs
- must not include an overflow outlet
- must not be fitted with an integrated / engineered plug device

#### 1.1. Hand basin types

- TYPE A basin: Caroma Vitreous China Hospital Basin, Nominal size 600mm x 515mm is an accepted style in CDHB facilities
- Type B
- Type C

#### 1.2. Pedestal Wash Hand Basins

The use of pedestal basins are permitted provided that:

- the pedestal is enclosed in a cowling of impervious material which withstands frequent washing and does not deteriorate through wear and tear during cleaning on or around the area
- the pedestal is positioned on the back wall to reduce the requirement for cleaning behind the basin

#### 1.3. Stainless Steel Sinks

- Must be fitted with an approved sluice guard if used in a dirty utility room for disposal of body fluids

#### 1.4. Taps

- Tap spouts must be positioned so that water flows forward of the drain aperture to minimise back splash

Elbow-operated

- Elbow operated taps must be positioned so that there is elbow room behind the taps – i.e. there is enough room between the wall and the back of the tap unit for the arm.

### Sensor Taps

- For scrub bays and Type A basins, it is preferable to locate the sensor device adjacent to the hand basin rather than under the tap.
- The Galvin sensor tap is the accepted model for new build facilities
- Sensor taps must incorporate a self- flushing capability

### Pros and cons of sensor versus elbow operated

Pros and cons of different types of outlet

<p><b>Sensor outlet</b></p> <p>Pros</p> <ul style="list-style-type: none"><li>- Removes the risk of touching outlet.</li><li>- Can be programmed to flush automatically little-used outlets.</li></ul> <p>Cons</p> <ul style="list-style-type: none"><li>- More complex internal components increasing risk of biofilm formation.</li><li>- Flushing of outlets may be difficult as individual must stand in front continually activating sensor.</li><li>- More complex increasing risk of malfunction.</li><li>- No consistency to location of sensor.</li><li>- Requires electrical supply.</li><li>- Risk of contaminating outlet with hands if unfamiliar with location of sensor.</li></ul> <p><b>Elbow-operated outlet</b></p> <p>Pros</p> <ul style="list-style-type: none"><li>- Simpler design potentially lowering risk of biofilm formation.</li><li>- Increased reliability.</li><li>- Potential to use outlets without a thermostatic mixer valve but opportunity rarely realized.</li></ul> <p>Cons</p> <ul style="list-style-type: none"><li>- Potential to recontaminate hands if not used correctly.</li><li>- Frequently set up incorrectly (tap handles set at wrong angle).</li><li>- Staff often only operate one of the hand levers (usually the blended water), creating a functional deadleg on the cold side.</li><li>- Often used in conjunction with a thermostatic mixer valve.</li></ul>
--

(Ref: [Giving the tap the elbow? An observational study](#), Journal of Hospital Infection, Pages 328-330. M. Weinbren, L. Bree, S. Sleight, M. Griffiths

## 1.5. Plugs

- Plugs are not recommended - however where there is a specific request for a plug, these must not be attached to the basin, but be supplied as a single plug to enable adequate decontamination

## 1.6. Soap Dispensers

- A single soap dispenser is required at every hand basin

- An additional soap dispenser is required in all treatment / procedure rooms e.g. type A basin

### 1.7. Paper Towel dispensers

- Clinical areas to be fitted with interleaved disposable paper towel dispensers
- Paper drum rolls are only suitable for kitchen areas

### 1.8. Alcohol Based Hand Rubs

- Should be positioned away from the hand basin area
- Should be included at beverage bays and in kitchen areas where there is no access to separate hand washing facilities

## 2. Baths and Showers (AusHFG 02.05)

### 2.1. Baths

#### Baby Baths

- Baby baths should be integrated with the bench top

#### Plugs

- Plugs must not be attached to the bath, but be supplied as a single unit to enable adequate decontamination

### 2.2. Showers

#### Shower bases

- Shower bases should be continuous and of a design which enables the healthcare worker to assist the patient in and out of the shower avoiding unnecessary strain to either when using a shower chair/bed i.e. the slope of the ramp must be considered and the materials must be appropriate to avoid slip risk

#### Shower Handsets and Rails

- The shower rose should be of a design that the jets are flush mounted against the head of the shower where possible (should not have massage points). A removable head is the preferred to enable microbiological sampling.
- The shower hose texture should be of smooth design
- Hand showers must be installed so they cannot touch the shower tray / floor

- The RADA SF1 10 EV Shower kit has been approved by IPC for use in existing CDHB facilities. In new build facilities, there may be a variation to this.

### 3. Air Conditioning, Ventilation and Water Systems (03.01)

#### 3.1. Ceiling Fans

- Must be accessible for routine cleaning
- A routine maintenance schedule should be available and this be available to the CNM/Service Managers

#### 3.2. Water systems

- All hot water taps should be run daily for at least 1 minute
- Where clinical areas are closed for a week or more, run hot taps for at least 5 minutes.

### 4. Sanitisers and Bowl Disinfectors

#### 4.1. Bowl Washer

These washers are designed for low level disinfection of items used on intact skin e.g. wash bowls, tooth mugs

They do not meet requirements for sanitising of items which come in contact with gross human body fluid

- The MEIKO TOP CLEAN 60 is the accepted model for new build facilities or replacement of bowl sanitisers.
- TopClean 60 attains an A<sub>0</sub>60 value as it maintains a temperature of 75°C for 5 minutes. This is an acceptable level of disinfection from an IPC perspective for the intended use in the CDHB and does not put the patient at risk.
- The TopClean 60 does not reach the upper range limits for temperature and A<sub>0</sub> as written in the ISO 15883-6: 2011 (Para 5.1.4). However this product still meets the IPC requirements for a bowl washer / sanitiser and which does not pose a risk for patients.
- The TopClean 60 does not meet requirements for sanitising bedpans or items used to contain gross body fluids and must not be installed if this is the intended purpose.



#### 4.2. Flusher Sanitisers

- Flusher sanitisers are required to meet ISO600 standards.

### 5. Surfaces and Finishes (AusHFG 04.00)

#### 5.1. Curtains

- Not be a heavily-textured fabric
- Able to withstand commercial laundering (71°C)
- Non-shrinkable fabric (samples will be laundered at CDHB commercial laundry to test shrinkage and heat tolerance)
- Privacy curtains around beds not pleated
- Window curtains pleated at top
- Be easy to remove and hang
- Be able to be labelled with clinical area identifier (preferably sewn in)

##### 5.1.1. Antimicrobial Impregnated Fabric Curtains:

- IPC do not promote for routine use
- May be used in areas with high turnover of infectious patients – always consult with IPC first

##### 5.1.2. Disposable Curtains

- In some situations, disposable curtains may be installed where access to laundry facilities are not readily available.

#### 5.2. Roller Blinds:

- Must be made of an impervious material that can be wiped clean
- Able to withstand sodium hypochlorite 1000ppm (10% solution of 5% bleach)
- Able to be commercially cleaned if grossly soiled
- Be designed to allow easy cleaning
- Designed to discourage accumulation of dust i.e. few horizontal surfaces

#### 5.3. Venetian Blinds:

- IPC do not recommended for clinical wards/departments as they attract dust and are difficult to clean.

- Where venetian blinds are considered necessary, these must be contained in double glazing.

## 5.4. Floors (04.03)

### 5.4.1. Carpet:

- Recommended for non- clinical areas only where there is no risk of blood or body fluid contamination
- Manufacturer must provide further information on carpet properties including backing / porosity / replacement process and cleaning

### 5.4.2. Vinyl:

- Nil concerns

### 5.4.3. Other floor coverings

- 

## 6. Ward based dishwashers

Dishwashers are used in wards for washing lightly soiled crockery and cutlery (e.g., cups, jugs) or used to sanitise toys. The temperature needed to destroy infectious diseases present on an eating or drinking utensil or a food contact surface is not clearly indicated in the literature.

Non-commercial (domestic) dishwashers may be used if they meet certain parameters of time and temperature. However current NZ food safety guidelines do not state the requirements in relation to time and temperature.

The ANZFS code states the following:

...domestic dishwashers that met certain criteria could provide the same cleaning and sanitising outcome as a commercial dishwasher. These criteria were that:

- (a) dishwashers should have properly functioning temperature-activated sanitising cycles that have to sense a temperature of 65.6°C or higher before the machine advances to the next step; or
- (b) dishwashers with either no sanitising cycle or a time-controlled sanitising cycle and forced airflow drying should only be operated with inlet water temperature above 68°C.

Domestic dishwashers that met the above criteria were able to provide an equivalent outcome because, although they operated at lower temperatures, their cycles were much longer — about one hour in relation to domestic dishwashers used to sanitise crockery”

Suggested models include:

Starline XU

Asko D5906

## REFERENCES

ANZFS Code Chapter 3

<https://www.foodstandards.gov.au/publications/documents/Appendi3.pdf> (2001)

MPI Food Safety Programme