

4. PROPERTIES AND USES OF CHEMICAL DISINFECTANTS

Disinfectants		
TYPE	EXAMPLE	COMMENTS
Chlorine Dioxide	Tristel	Rapidly bactericidal, virucidal and sporicidal. Achieves high level disinfection within 5 minutes. NB: Tristel currently used for Endoscopy disinfection within MCHT. Available in wipes and solution.
Quaternary Ammonium Compounds	Roccal, Zephiran Cetrimide, Cetavlon	Antibacterial – inhibits the growth of bacteria. Not bactericidal, which would kill bacteria. Ineffective against viruses and spores. Not recommended for use in the clinical area.
Phenolics	Stericol, Hycolin, Clearsol	Active against a wide range of bacteria. Fungicidal, but limited virucidal and sporicidal activity. Corrosive to instruments, too toxic for skin. Not widely used for disinfection.
Alcohol	70% Alcohol solutions - Cliniwipes - Azowipes - Mediswabs - Hand gel preparations	Effective, rapid acting disinfectants and antiseptics. Poor penetrative powers – should only be used on clean surfaces. Active against bacteria and not spores. Virucidal activity variable. Commonly used for skin disinfection and as agent for rapid disinfection of physically clean hands.

Disinfectants

TYPE	EXAMPLE	COMMENTS
Triclosan	Sterzac, Manusept, Cidal, Aquasept, Irgasan	Antiseptic agents used in hand rubs, soaps, bath concentrates and powders. Active against gram-positive organisms, eg, <i>Staphylococcus aureus</i> , <i>Streptococcus</i> . Less effective against gram-negative organisms, eg <i>Pseudomonas</i> and some Gastro-intestinal bacteria. Generally less effective than chlorhexidine preparations.
Chlorhexidine	Hibitaine	Skin antiseptic – Effective for surgical disinfection of hands with residual antimicrobial effect. Useful for pre-operative disinfection, not suitable for the soaking of equipment/instruments.
Iodine and Iodophors	Iodine Iodophors – Betadine, Disadine, Videne	Skin preparation. Skin reaction may occur in some individuals, 0.5% alcoholic chlorhexidine or an alcoholic iodophor solution is preferable. - Mainly used for hand disinfection.

5. RECOMMENDED DISINFECTANTS/ ANTISEPTICS

Disinfectants		
TYPE	EXAMPLE	COMMENTS
Chlorine Dioxide	Tristel	Endoscope disinfection
Sodium Hypochlorite	Titan Sanitiser	Spillages of blood/body substances – wards/departments
Alcohol 70%	Hand gel	For use on physically clean hands – refer to hand hygiene guidelines
	Alcohol solution	Skin preparation – not to be used for soaking items of equipment.
	Cliniwipes/mediwipes Mediswabs	Skin preparation wipes may be used for smooth, clean surfaces or equipment that cannot be immersed in solutions ALWAYS ALLOW ALCOHOL TO EVAPORATE TO ENSURE EFFECTIVENESS
Chlorhexidine	Hibitane	Skin preparation/surgical scrub Not necessary for routine handwashing – liquid soap adequate
Iodine	Betadine Disadine Videne	Skin preparation Hand disinfection (Theatres)

6. METHODS FOR DECONTAMINATION

COMMONLY USED EQUIPMENT/ITEMS – METHODS FOR CLEANING OR DISINFECTION			
ITEM	FREQUENCY	ROUTINE	ALTERNATIVE PROCEDURES OR OTHER RECOMMENDATIONS
Airways	After each patient	Disposable	
Ambu bags	After each use	Wash with detergent, dry thoroughly	
Ambulift		Detergent and hot water, dry thoroughly	Hypochlorite if soiled with blood/body substances.
Ampoules and vials		No preparation needed	Do not immerse ampoules in disinfectant solutions
Multi bottle/vial	Prior to use	Swab entry port with 70% alcohol swab Allow to dry	May not be reused unless new needle and syringe used
Auroscopes	After each use	Wash with detergent, dry thoroughly	Alcohol wipe
Baby feeding bottles	After each use	Wash with detergent. Soak in chlorine solution; 125 ppm e.g. Milton	Single use preferable Send to SSD
Baby security tag	After each use	Wash with detergent or detergent based wipe	Single use preferable
Baby scales	Daily and when visibly contaminated	Wash with detergent or detergent based wipe	Hypochlorite if soiled with blood/body substances
Baths and wash basins (see sinks)	Each time used	Clean daily and in between patients with detergent	Infected patients or patients with open wounds use Hypochlorite sanitizer
Bath mats	Each time used	Wash with detergent, rinse and hang over side of bath or rail. Allow to dry	Infected patients or contaminated with blood/body substances – use Hypochlorite sanitizer
Bath water		Antiseptics should not be added as a routine	
Bed frames	Between patients when visibly contaminated	Wash with detergent or detergent wipes	Infected patients or contaminated with blood/body substances use Hypochlorite sanitizer
Bed pan holders (plastic)	Between patients after each use	Wash with detergent and store dry. Slipper pans should be a disposable pulp material – not plastic	Infected patients or contaminated with blood/body substances use Hypochlorite sanitizer
Bed pan disposal units (macerators)	Daily and when contaminated	Wash exterior with detergent	
Breast Pumps and attachments	After each use	Send to Sterile Services for reprocessing after each use – detergent & cold water sterilant	Disposable breast pumps as an alternative

COMMONLY USED EQUIPMENT/ITEMS – METHODS FOR DISINFECTION

ITEM	FREQUENCY	ROUTINE	ALTERNATIVE PROCEDURES OR OTHER RECOMMENDATIONS
Bowls (Surgical)	After each use	Send to Sterile Services for re-processing	
Bowls (Washing)	Between each use and after patient discharge	Individual bowls should be used Wash with detergent, rinse and store dry Avoid stacking inside each other	Infected patients or contaminated with blood/body substances – use Hypochlorite sanitizer
Carpets	Daily Carpets not suitable for clinical areas	Vacuum clean daily	Contaminated spillage – remove organic matter. Use Hypochlorite solution and rinse well to avoid discoloration
Cleaning equipment	After use or when visibly dirty	MOPS – rinse after use, wring and store inverted. Launder mop head daily. BUCKETS – Change hot water and detergent frequently. CLOTHS – Disposable FLOOR SCRUBBERS – Detergent and hot water (including scouring pads) Store all equipment dry	Use different cloths/mops in different areas e.g. Green – Kitchens Red – Toilets and Bathrooms Blue – General areas Yellow – Isolation/cohort areas NB – white mop for spillages - launder mop head after each episode
Cots	After each patient	Wash with detergent, dry Use detergent wipe	
Cot sides	After each patient when visibly contaminated	Wash with detergent, dry Use detergent wipe	
Commodes	After each patient use	Frame – wash with detergent/detergent wipe Seat- detergent unless soiled Remove faecal matter prior to using Hypochlorite sanitizer	Infectious patients must have individual commodes Use Hypochlorite sanitizer for spillages if enteric pathogens are isolated.
Crockery and Cutlery	After use	Ward dishwasher. Rinse cycle must exceed 80 °C	Hand wash with detergent and hot water if machine wash not available
Drains	As required	Chemical disinfectants are of no value. Flush with hot water and soda crystals when necessary	
Drip stands	Daily, in between patients and if contaminated	Wash with detergent	Additional wipe with 70% alcohol if contaminated

COMMONLY USED EQUIPMENT/ITEMS – METHODS FOR DISINFECTION

ITEM	FREQUENCY	ROUTINE	ALTERNATIVE PROCEDURES OR OTHER RECOMMENDATIONS
Dressing Trolleys	Thoroughly clean with detergent and hot water or detergent wipe before commencing dressings	Alcohol impregnated wipe or detergent wipe in between patients	Clean thoroughly if used for infected patients or contaminated with blood/body substances Ensure thoroughly cleaned at least daily
SCOPES;			Disposable scopes and accessories should be considered where possible
Endoscopes	At the beginning of each list and in between each patient Must be used within two hours of processing	Clean with detergent prior to processing in automated washer/disinfector with Tristel (chlorine dioxide)	
Bronchoscope	At the beginning of each list and in between each patient Must be used within two hours of processing	Clean with detergent prior to processing in automated washer/disinfector with Tristel (chlorine dioxide)	
Nasopharyngoscope	At the beginning of each list and in between each patient	Clean with detergent prior to wiping with chlorine dioxide (Tristel wipe) Ensure contact time of 30 secs Rinse and dry thoroughly	Use of alcohol wipe or solution NOT adequate
Fibre optic Laryngoscope	At the beginning of each list and in between each patient	Clean with detergent and hot water prior to sending to SSD.	Use of alcohol wipe or solution NOT adequate
Hysteroscope	At the beginning of each list and in between each patient	Central re-processing in SSD required	Local re-processing not to be performed
Cystoscope	At the beginning of each list and in between each patient	Rigid- Central re-processing in SSD required. Flexible- Clean with detergent prior to processing in automated washer/disinfector with Tristel (chlorine dioxide)	

COMMONLY USED EQUIPMENT/ITEMS – METHODS OF DISINFECTION

ITEM	FREQUENCY	ROUTINE	ALTERNATIVE PROCEDURES OR OTHER RECOMMENDATIONS
Proctoscope	At the beginning of each list and in between each patient	Central re-processing in SSD required	Clean with detergent prior to processing in automated washer/disinfector with Tristel (chlorine dioxide)
Colonoscope	At the beginning of each list and in between each patient	Clean with detergent prior to processing in automated washer/disinfector with Tristel (chlorine dioxide)	
ERCP scope	At the beginning of each list and in between each patient	Clean with detergent prior to processing in automated washer/disinfector with Tristel (chlorine dioxide)	
Enteral feeding pumps	Wash pump daily with detergent Syringes- DISPOSABLE Giving sets- DISPOSABLE		
Fans	Discouraged from clinical areas due to volume of dust/pathogenic matter dispersed. If essential, must be cleaned in between each patient.	Wipe exterior with detergent wipe. Estates to dismantle and clean interior thoroughly when build up of dust noted, or used for patient with MRSA.	Risk of dispersal to other patients if not cleaned after each use
Floors	Daily or when contaminated/visibly dirty	Detergent only unless spillage of blood/body substance present – refer to spillage policy	Detergent only in isolation rooms/bays unless blood/body substances present
Flower vases	After each use	Detergent, hot water, rinse and dry. Do not leave to soak. Do not use sterilising solution or tablets, e.g. Hypochlorite/Milton	Do not wash in the kitchen, bay area or side rooms Do not use the hopper for this purpose Use the stainless steel equipment sink in the sluice, or a designated flower sink.
Food/drinks trolleys	After each drinks round, more frequently if self-serve system is operated	Detergent and hot water Ensure all surfaces are dried thoroughly	Ensure water tank is drained, sluiced through and re-filled daily.
Furniture	See local cleaning schedules	Wash with detergent and water	Contact the Infection Control Team for specific decontamination requirements
Hands	Before and after each patient contact	Soap and water, rinse and dry well Alcohol gel on physically clean hands	See hand hygiene guidelines
Humidifiers	Daily where practical Before and after each patient use	Short term humidifier – disposable Long term humidifier -wash equipment with soap and water	Disposable attachments
Incubators	After each use	Detergent and hot water Rinse and dry thoroughly	Clean exterior daily whilst in use

COMMONLY USED EQUIPMENT/ITEMS – METHODS OF DISINFECTION

ITEM	FREQUENCY	ROUTINE	ALTERNATIVE PROCEDURES OR OTHER RECOMMENDATIONS
Instruments	Immediately after use	Return to SSD for reprocessing in accordance with SSD policy. For instruments with narrow lumen, parts that are difficult to clean – use disposable if available	Contact the Infection Control Team for specific decontamination requirements or heat sensitive instruments/equipment
Intravenous equipment e.g. pumps, syringe devices.	To be wiped daily and in between each patient	Follow manufacturer's instructions for cleaning regime and method Ideally equipment to be wiped between patients with an alcohol impregnated swab or wipe	For giving sets; cut off sharp end and dispose in sharps bin, remainder in clinical waste
Jugs - measuring urine and body fluids - hairwashing/ bathing - for use with suction	Disposable only Use for 24hrs only	Single use, then dispose of in ward macerator 24 hour use, then return to SSD	
Laryngoscope blades	After each use	Disposable blades or send to SSD after single use	
Lockers (Bedside)	Surfaces daily and following spillage	Detergent and water, Ensure dried thoroughly	Clean inside and out after each patient
Mattresses: Refer to manufacturer's instructions for specialist mattresses or covers	Following spillage, after each patient use or prior to leaving ward area	Detergent and hot water or detergent wipe Dry thoroughly See Spillage Policy for procedure for checking mattress integrity	Examine mattress in between patient for staining, cover integrity and moisture collection. Renew mattress if cover is no longer impervious to body substances
Medicine pots	After each use	Disposable or detergent and hot water Rinse and store dry DO NOT LEAVE TO DRAIN	Medicine pots to be washed in the kitchen May be suitable for ward dishwasher if racking system available

COMMONLY USED EQUIPMENT/ITEMS – METHODS FOR DISINFECTION

ITEM	FREQUENCY	ROUTINE	ALTERNATIVE PROCEDURES OR OTHER RECOMMENDATIONS
Manual handling aids- Machinery	Following spillage and as part of ward schedule for equipment. Twice weekly clean preferable	Detergent and hot water, dry thoroughly	Disinfect with Hypochlorite if blood/body substances present
Manual handling aids- Slings	Single patient sling if available	Laundry centrally, label appropriately to ensure return to ward	Do not use a visibly contaminated sling on any patient. Where possible do not use a sling used for isolated patients on other patients unless it has been laundered
Nail Brushes	Disposable only	Disposable only	Not recommended for use except in Theatres
Nebuliser chamber and mask	After each use	Wash with detergent and hot water Rinse and store dry For single patient use only. Can be used as a disposable item if decontamination not achievable	Do not leave to drain – ensure dried thoroughly.
Notices	Following contamination. After each use for isolation Weekly as part of ward schedule	Wipe with detergent and dry	
Ophthalmoscope	After each use	Wash with detergent or wipe with alcohol impregnated wipe	
Razors – Electric Wet	After each use Disposable	Not for communal use Disposable type only – if patients own; rinse and store dry	Clean patients razor with brush after each use Ensure disposal of wet razors into Sharpsbin
Resuscitation mask	After each use	Wash with detergent Store dry	
Rooms	Daily according to ward cleaning schedule Isolation cleans in between as requested	Detergent and hot water Hypochlorite for blood or body substances	For isolation rooms or bays detergent and hot water Hypochlorite for blood or body substances Ensure disposable cloths are used.
Scissors	According to task and at the end of each shift if own scissors are used Disposable scissors or return to SSD if able to be processed	When sterility not required, wash with detergent and water and clean with 70% alcohol (Mediswab)	

COMMONLY USED EQUIPMENT/ITEMS – METHODS FOR DISINFECTION

ITEM	FREQUENCY	ROUTINE	ALTERNATIVE PROCEDURES OR OTHER RECOMMENDATIONS
Sharps containers *Sharps trays	When visibly contaminated, or if in use for longer than a week eg; used in an isolation room	Wipe any blood contamination with alcohol impregnated wipe *Sharps trays to be cleaned twice weekly with detergent, alcohol wipe when visibly contaminated	Dispose of Sharps bins used in isolation rooms following patient discharge
Shaving brushes	After each use if patient's own	Communal use not recommended, use aerosol foam unless patient's own	
Shower cubicle/curtain or chair	Shower cubicle and chair after each patient use. Shower curtain weekly as part of routine cleaning schedule	Detergent and water unless blood or body substances present	Shower screens preferable to curtains due to cleaning difficulties
Sinks – Handwash basins	Daily, unless greater frequency required	Detergent, hot water clean inside and outside. Dry thoroughly	Hypochlorite sanitiser for stains and build up Scouring pad and detergent for build up of lime scale and soap
Equipment sinks (sluice area) and Bucket sluice (Domestic's room)	Daily, unless greater frequency required	Detergent, hot water and dry.	Hypochlorite for blood or body substances Scourer for build up of deposits/lime scale
Hopper/body substances disposal unit (sluice area)	Daily, unless greater frequency required	Hypochlorite sanitiser, rinse and wipe surfaces dry where possible	
Sphygmomanometer cuffs	Dependent on material	Alcohol wipe if material allows	Avoid material cuffs on non-intact skin
Stethoscopes	At least daily if used communally between staff. Encourage single staff use	Wipe head with alcohol wipe between patients. Ear pieces to be cleaned daily with Steret or hot soapy water	
Stands/holders for urine bags etc	In between patient use or when visibly soiled. Twice weekly for longer stay patients	Detergent and water, dry thoroughly	Hypochlorite for blood or body substances.
Suction Units	After each use and in between patient use	Detergent and water, dry thoroughly	Use disposable liners for fluid collection

COMMONLY USED EQUIPMENT/ITEMS – METHODS FOR DISINFECTION

ITEM	FREQUENCY	ROUTINE	ALTERNATIVE PROCEDURES OR OTHER RECOMMENDATIONS
Theatre footwear	Automated wash daily or following theatre session Must be cleaned when visibly contaminated	Automated wash preferable. Adequate PPE required for manual cleaning	Specialist areas to develop local protocols for the cleaning of theatre footwear
Thermometers; tympanic	Disposable cover must be disposed of after each patient use and not re-used	Wipe handpiece with detergent wipe when visibly contaminated, after use in each bay and after use in an isolation area	
Tonometer heads	Single use for each patient	Disposable products only advocated by the Infection Control team	
Toys	When visibly contaminated, or after use by each patient	Vinyl/plastic – wash with detergent weekly or when visibly soiled Fabric toys not suitable for communal play areas	Fabric toys not suitable for use in isolation rooms
Vaginal specula	After each use	Disposable preferred. If not, return to SSD for processing	
Vaginal ultra sound probe	After each use	Wash thoroughly with detergent. Wipe with Tristel wipe (Chlorine dioxide) allowing contact time of 30 secs Rinse and dry thoroughly prior to use	Disposable sheath to be used additionally
Wash bowls	Each patient to have an individual wash bowl for the duration of their stay. Ensure thoroughly cleaned on discharge and after each use.	Detergent and hot water Dry thoroughly inside and store dry after each use. Do not stack whilst wet	
W.C.	Twice daily unless greater frequency required	Inside of bowl and rim with Hypochlorite sanitiser and toilet brush. Rinse brush in clean flush water Disposable cloth for cistern, handle, seat and bowl	
X-Ray equipment	Twice weekly. After patient use if visibly contaminated	Damp dust with detergent and water according to frequency of use, or use detergent wipes	If disinfection or a less moist wipe is required, use a wipe impregnated with 70% alcohol