



Disinfectants Procedure

Procedure Number

CHC-IC-0016

Version Nos:

6

1. Purpose

This Procedure outlines the process for the use of disinfectants by West Coast District Health Board (WCDHB) staff members.

2. Application

This Procedure is to be followed by all clinical throughout West Coast District Health Board (WCDHB).

3. Definitions

For the purposes of this Procedure:

Decontamination is taken to mean the removal of obvious tissue, blood and body fluids. It also involves any other foreign bodies (cork, dust, hair, and packaging). The process of decontamination is achieved by washing surfaces and/or objects with soap and water, followed by thorough rinsing and drying.

Disinfection is taken to mean the process of the inactivation of microorganisms (bacteria, virus fungi). It does not necessarily kill the organisms but reduces the number and virulence. Disinfection is applicable to the treatment of inanimate objects, materials, skin and other body membranes.

Sterilisation is taken to mean the complete destruction of all living organisms (including spores). Sterilisation is only achieved by the use of accepted heat or Ethylene Oxide gas exposure.

4. Responsibilities

For the purposes of this Procedure:

Clinical Nurse Specialist – Infection Control is required to:

- oversee all aspects of this Procedure
- monitor the performance of WCDHB staff members in relation to this Procedure;

Staff Members are required to:

- ensure they abide by the requirements of this Procedure;
- abide by all WCDHB Infection Control Policy and Procedures;
- abide by all WCDHB Health and Safety Policy and Procedure.

5. Resources Required

This Procedure requires no specific resources.

6. Process

- 1.00 All disinfectants and detergents must be approved by the WCDHB Infection Control Committee before they can be used in a WCDHB Facility.
- 1.01 In choosing a disinfectant the following factors are to be considered:
 - i) The spectrum of activity.
 - ii) Compatibility with the materials to be disinfected.
 - iii) Stability under the conditions of use.
 - iv) Toxicity.



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- v) Time taken to be effective.
vi) Cost.
- 1.02 There is no known chemical disinfectant which, under practical conditions of use, can be guaranteed to kill all micro organisms found in hospitals, but used properly, disinfectants can substantially reduce contaminating microorganisms. Disinfectant choice depends on its suitability for the purpose.

Skin, mucous membranes.

A diguanide - Chlorhexidine

An Idophor – Providone iodine

Alcohol- Methylated Spirits.

Acceptable combinations of the above.

A diguanide and QAC mixtures i.e. Savlon (Chlorhex & Cetramide) or Chlorhex & Alcohol.

Surgical instruments (affected by heat).

Glutaraldehyde.

Steris (Paracetic Acid) (Acetic Acid and Hydrogen peroxide formula). Ethylene oxide.

Lab Care Machine (for Endoscope disinfection).

Clorodux Bleach (Sodium Hypochlorite 5%).

Food preparation areas.

Non toxic agents – which imparts no taint to food or makes the food unsafe, i.e. Hypochlorite (bleach).

QAC – used only after decontaminating with a suitable cleaner.

Cleaning surfaces, i.e. trolley tops, furniture, walls, floors and general cleaning.

Presept bleach.

Alcohol

Detergent

FibreClean / Forward Disinfectant.

High risk and contaminated areas, MRSA decontamination etc.

Presept.

Oxivir Disinfectant

Blood and body spills, contaminated areas, bed pans, kidney dishes.

Handydet detergent.

Presept.

Baths, showers, toilets.

Ajax crème.

Mr Muscle chlorinated crème cleanser.

- 1.03 A disinfectant with a wide range of activity should be chosen as some bacteria are more readily destroyed than others. Gram positive bacteria e.g. Staph are most readily killed. Gram negative bacteria e.g. Pseudomonas, are more resistant to disinfectants. Some bacteria and spores such as Tubercle bacillus, demonstrate an even greater resistance to disinfectants.

- 1.04 It is important to choose the most appropriate disinfectant to destroy the bacteria likely to be present. Oxivir has a wide range of activity and when the specific bacteria present are not known, it is the agent of choice for Bacterial disinfection.



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- 1.05 No soap or detergent should be added to a disinfectant and no disinfectants should be mixed unless specified.
- 1.06 Any organic material (blood, pus, vomit, urine, faeces), including foodstuffs, reduces or abolishes the activity and efficiency of detergents. Bleach products and QAC'S (Savlon) are more seriously inactivated by organic material. Organic material should be cleaned from all surfaces or equipment before disinfectant is applied.
- 1.07 Cork, wood, cotton, paper and rubber materials should not be allowed to contact disinfectants for any period of time, as this could reduce the potency of the disinfectant.
- 1.08 Many plastics inactivate disinfectants. Therefore, items such as squeeze mop heads, scrub brushes, nail brushes, buckets, bowls, and squeeze bottles should not contact disinfectants for any period of time i.e. they should not be allowed to soak in the disinfectant.
- 1.09 As disinfectant may be less effective when prepared several days prior to use, disinfectants should be prepared as close as practicable to use and discarded after 24 hours. Expiry dates on containers should be checked and adhered to.
- 1.10 The following guidelines for using chemical disinfectants are to be followed:
 - i) never mix two different chemical solutions.
 - ii) always wear gloves.
 - iii) avoid splashes by wearing eye protection where appropriate.
 - iv) avoid creating a fine mist (aerosol) when handling chemicals.
 - v) always read and follow instructions carefully before use.
 - vi) close lid of disinfectant container after use.
 - vii) never return disinfectant to container after use - discard down sink.
 - viii) ensure there is adequate ventilation.
 - ix) follow first aid procedures outlined on the container if there is an accident and seek medical advice.
- 1.11 Action must be taken on any substance that is shown to be contaminated. A full investigation into the possible source, mode of contamination must be carried out by the Clinical Nurse Specialist (CNS) Infection Control and a full report made to the Infection Control Committee.

7. Precautions and Considerations

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8. References

- New Zealand Standard – Infection Control (NZS 8142:2008)
- Australian/ New Zealand Standard (AS/NZS 4187:2003) Cleaning, disinfecting & sterilizing reusable medical & surgical instruments and equipment, and maintenance of associated environments in health care facilities.
- Australian/ New Zealand Standard (AS/NZS 4815:2006) Office-based healthcare facilities-
- Reprocessing of reusable medical and surgical instruments and equipment, and maintenance of the associated environment.

9. Related Documents

WCDHB Health and Safety Procedure Manual

WCDHB Infection Control Procedure Manual

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