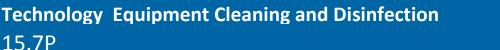


# **Medical Devices and Information Management/Information Technology Equipment Cleaning and Disinfection**





Policies are authoritative statements directing required organizational practice/behaviour

Purpose:	To mitigate the risk of Healthcare Associated Infections (HAI) from contaminated non-critical Medical Devices and Information Management/Information Technology (IMIT) equipment to the patient.
Scope:	All Island Health care providers including health care staff, physicians, contracted services, volunteers and students who work in clinical and support areas.

#### 1.0 **Policy**

To prevent the transmission of harmful microorganisms between patients, between patients and health care workers (HCW), and between patients and the clinical environment.

1.1 Policy Statement - Reprocessing includes the processes for cleaning, disinfecting, and sterilizing, and the level of reprocessing used depends on the risk of infection associated with the use of medical devices/equipment (Spaulding classification).

#### 1.2

Com	pliance	
1.2.1	Identification	1
	1.2.1.1	IMIT equipment and medical devices that are shared in clinical settings present risks of transmission of potentially harmful organisms.
	1.2.1.2	Contaminated equipment is that which is touched prior to hand hygiene and/or used at point of care in a patient environment.
	1.2.1.3	The frequency of cleaning and/or disinfecting will vary according to the healthcare setting and the amount of use.
1.2.2	Products	
	1.2.2.1	Thorough and regular cleaning and/or disinfection decreases the amount of microorganisms present on the object.
	1.2.2.2	Products must be compatible as per manufacturer's cleaning instructions with products approved for use in Island Health facilities.
	1.2.2.3	Current disinfection products approved for Island Health are Cavi Wipes (alcohol), AccelPrevention (AHP) and Virex 256. (quaternary ammonia)
1.2.3	Stakeholders	
	1.2.3.1	The user groups will clean and disinfect shared non-critical medical devices and IMIT equipment before and after use as per Island Health Protocol.
	1.2.3.2	The manufacturer must provide written information regarding the safe and appropriate reprocessing/cleaning of the medical equipment or devices.

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### 2.0 Monitoring and Evaluation

#### 2.1 New IMIT equipment and medical devices

2.1.1 Prior to purchase new IMIT equipment and medical devices will be reviewed by Infection Prevention and Control (IPAC), Medical Device Reprocessing (MDRD) and Environmental Services to ensure the product is capable of being cleaned and/or disinfected appropriately.

#### 2.2 Monitoring and Evaluation

- 2.2.1 All Island Health sites annually undergo at least two Facility Cleaning Audits which are random and unannounced. Audits address a cross section of the site based on Risk Category and Inspection Elements.
- 2.2.2 IPAC health care associated infections (HAI) active surveillance includes MRSA and CPO cases, VRE and ESBL infections only, Influenza like illnesses (ILI), CDI lab positive results for specimens taken in an Island Health Facility, Central Venous Catherter (CVC) BSI for RJH, VGH and NRGH intensive care units, and targeted surgical site infections (SSI).
- 2.2.3 IPAC reports monthly to the IPAC management team and quarterly to the Island Health Organization.

#### 3.0 Definitions

AHP: Accelerated hydrogen peroxide

**Bioburden:** The number and types of viable microorganisms that contaminate the device. **CPO Extended Spectrum Beta-Lactamase (CPO ESBL):** Bacteria that have produced an enzyme that makes them resistant to Carbapenem class of antibiotics.

**Cleaning:** The physical removal of foreign material (e.g., dust and soil) and organic material (e.g., blood, secretions, excretions, microorganisms). Cleaning physically removes rather than kills microorganisms. It is accomplished with water, detergents and mechanical action.

**Clinical environment:** Area relating to the bedside of a patient, the course of his disease, or the observation and treatment of patients.

**Cross Contamination:** Is the physical movement or transfer of harmful bacteria from one person, object or place to another.

**Detergent:** A synthetic cleansing agent that can emulsify oil and suspend soil. A detergent contains surfactants that do not precipitate in hard water and may also contain protease enzymes (see Enzymatic Cleaner) and whitening agents.

**Direct Transmission:** The immediate transfer of an organism from a reservoir to a susceptible host by direct contact (e.g., skin, mouth, open wounds, touch, or by droplet spread).

**Disinfection:** A chemical agent that kills most disease-producing microorganisms, but not necessarily bacterial spores. Medical devices must be cleaned thoroughly before effective disinfection can take place. There are three levels of disinfection: High, Intermediate and Low. **Extended Spectrum Beta-Lactamase (ESBL):** ESBL is a bacterial enzyme with the ability to break down specific beta-lactam antibiotics (cephalosporin's) rendering treatment more complicated. ESBL may be produced by any Gram-negative bacteria that have acquired an ESBL containing plasmid. It is most commonly produced by Escherichia coli and Klebsiella pneumoniae.

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**Hand hygiene:** A general term referring to any action of hand cleaning. Hand hygiene relates to the removal of visible soil and removal or killing of transient microorganisms from the hands. Hand Hygiene shall be accomplished using soap and running water or an alcohol-based hand rub (ABHR).

**Health care facility:** A facility where patients are accommodated on the basis of medical and/or nursing need.

**Healthcare-associated infections (HCAI):** A term relating to an infection that is acquired during the delivery of health care that was not present at the time of admission. (PIDAC 2014)

**Health Care Provider:** Any person delivering care to a client/patient/resident.

**Indirect contact:** The passive transfer of microorganisms to a host via an intermediate object, such as contaminated gloves, contaminated patient care equipment, surfaces or devices that are not appropriately cleaned and disinfected.

**Infection Prevention and Control (IPAC):** Evidence-based practices and procedures that, when applied consistently in health care settings, can prevent or reduce the risk of transmission of microorganisms to health care providers, clients/patients/residents and visitors.

**IMIT** (Information Management and Information Technology) or Medical Device: Any instrument, apparatus, appliance, material, or other article, whether used alone or in combination, intended by the manufacturer to be used by human beings for the purpose of diagnosis, prevention, monitoring, treatment or alleviation of disease, injury or handicap; investigation, replacement or modification of the anatomy or of a physiological process; or control of conception.

**Low-Level Disinfection (LLD):** A process capable of killing most vegetative bacteria, some viruses, and some fungi. Typical active ingredients include quaternary ammonium (quats) or hydrogen peroxide.

**Manufacturer's Instructions for Use:** The written directions provided by the manufacturer or distributor of a product that contain the necessary information for the safe and effective use of the product.

MRSA: Methicillin resistant staphylococcus aureus.

**Non-critical Medical Device:** Devices that either touch only intact skin (but not mucous membranes) or do not directly touch the patient. Reprocessing of non-critical devices involves cleaning and may also require low-level disinfection (e.g., blood pressure cuffs, stethoscopes). **Risk Assessment:** Is performed principally to rule out the presence of infectious disease and is completed where the patient, the healthcare worker and the environment interact. Its purpose is to assess the degree of exposure likely during an encounter and to determine the actions, additional precautions and equipment necessary to interact safely with the patient and their environment.

VRE: Vancomycin resistant enterococcus.

#### 4.0 Related Island Health Standards

**IPAC Reference Guide** 

Island Health Hand Hygiene policy

Housekeeping (ESS)

**Medical Device Reprocessing Manual** 

Protocol for cleaning and disinfection of shared medical device and IMIT equipment

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