



**York Teaching Hospital**  
NHS Foundation Trust

# **Guidelines for Decontamination of Reusable Communal Equipment and the Environment**

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## Version History Log

This area should detail the version history for this document. It should detail the key elements of the changes to the versions.

Version	Date Approved	Version Author	Status & Location	Details of Significant Changes
2	June 2014	Lynn Stokes	Horizon	
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## Contents

Section	Heading	Page
1	<a href="#">Introduction</a>	4
2	<a href="#">Scope</a>	4
3	<a href="#">Detail</a>	4
	<a href="#">3.1 Definitions</a>	4
	<a href="#">3.2 Decontamination methods</a>	4
	<a href="#">3.2(i) Cleaning</a>	5
	<a href="#">3.2 (ii) Disinfection</a>	5
	<a href="#">3.2(iii) HPV</a>	6
	<a href="#">3.3 Decontamination</a>	6
	<a href="#">3.3(i) Medical devices/ equipment</a>	7
	<a href="#">3.3 (ii) Environment</a>	7
	<a href="#">3.3(iii) Procedure for dealing with blood spills from any patient/ source</a>	9
4	<a href="#">Accountability</a>	10
5	<a href="#">Dissemination and Implementation</a>	10
6	<a href="#">Monitoring and Auditing</a>	11
7	<a href="#">Consultation</a>	11
8	<a href="#">Supportive Evidence</a>	11

## 1) Introduction

Bacteria, viruses and fungi (micro-organisms) are found everywhere, the hospital environment being no exception. The majority of these micro-organisms are not harmful but some, given suitable conditions, will infect and cause disease.

The effective decontamination of re-usable medical devices, clinical equipment and the environment is essential in reducing the risk of transmission of infection

## 2) Scope

These guidelines outline the principles of decontamination and the products recommended for use in cleaning and disinfection of reusable communal equipment and the environment.

This guideline is for the use of all staff using clinical equipment and/or involved in decontaminating the clinical environment.

## 3) Detail

### 3.1 Definitions

**Cleaning** – a process that physically removes infectious agents and the organic matter on which they thrive, but does not necessarily destroy infectious agents.

**Decontamination** – the combination of processes - cleaning, disinfection and sterilisation - used to make a reusable item safe for further use on patients and handling by staff.

**Disinfectants** – chemicals that destroy micro-organisms (not prions). They are not suitable for use on the skin or tissue.

**Disinfection** – a process used to reduce the number of viable infectious agents but which may not necessarily inactivate some microbial agents, such as certain viruses, bacterial spores and prions.

**Sterilisation** (NB: this is not covered in these guidelines – refer to Trust Decontamination of Reusable Medical Devices Policy) – a process used to render an object free from viable infectious agents including viruses and bacterial spores. Prion proteins are not removed by sterilisation.

### 3.2 Decontamination methods

All non-disposable equipment and the environment will require cleaning. Some will also require disinfecting or sterilising.

Decontamination will be difficult on items that are awkward to clean, and/or in a poor condition. These should be removed from use.

Manufacturers of medical devices are required to provide decontamination guidance for re-usable products. The choice of products for cleaning and disinfection needs to reflect manufacturers' advice and there must be a local Standard Operating Procedure for specialist equipment.

All products used for decontamination must be approved by the Infection Prevention Team (IPT).

### 3.2(i) Cleaning

Surface cleaning is the minimum requirement for any decontamination process and should precede disinfection unless the product cleans and disinfects.

Cleaning Products	Presentation
Detergent wipes (Clinell (yellow (detergent only) or green pack (includes disinfectant))	Pre-soaked wipe
Warm water and neutral detergent	Requires receptacle and disposable cloths
Microfibre system	Mops and cloths Requires receptacle for water

### 3.2(ii) Disinfection

Some disinfectants combine cleaning with disinfection.

Disinfection reduces the number of viable infectious agents and is required when

- The equipment or environment is visibly soiled
- The patient is known to have or suspected of having an infectious disease (including *Clostridium difficile* and Norovirus)
- Blood spills

## Key elements for effective disinfection

- Dilution - Chemical disinfectants must be used at the recommended strength.
- Preparation - Many disinfectants deteriorate after dilution. Solutions should always be freshly prepared, used once and thrown away.
- Contact time - No disinfectant acts instantaneously. Therefore, it is essential that the correct contact time be observed. Refer to the manufacturer's instructions

Disinfectant Products	Dilution regimens	Cleaning required?
Disinfectant wipes (Clinell green pack)	Pre-soaked wipe	No
Sporicidal wipes (Clinell red packet)	Pre-soaked wipe – needs to be moistened with warm water	No
Chlorine-containing cleaning agents (Chlor clean)	1 tablet diluted in 1 litre of water = 1,000ppm of available chlorine	No
Chlorine disinfection solution (Haz tabs)	4 tablets dissolved in 1 litre of water = 10,000ppm of available chlorine	Yes – <b>after</b> using chlorine disinfection

### 3.2(iii) Hydrogen Peroxide Vapour technology (HPV)

HPV eradicates bacteria, viruses and fungi.

The decision to deploy HPV will be taken by IPT.

Areas that require HPV must be effectively pre-cleaned prior to HPV deployment.

Refer to the HPV Standard Operating Procedure.

### 3.3 Decontamination of medical devices/ equipment and environment

All products used for decontamination must be approved by the IPT.

**3.3(i) Decontaminating medical devices/ equipment** - including items that come into contact with the patient or service user (eg commodes, beds, mattresses, hoists, slings, pumps).

For a complete list of items to be cleaned and the frequency of cleaning refer to the department/ ward/ theatre 'Clinical equipment cleaning schedule' poster on display in all clinical areas.

Level of contamination	Trust approved product
Visibly clean	Clinell wipes (green pack – also disinfects) Clinell wipes (yellow pack - detergent) – to be used only when agreed with IPT
Visibly soiled	Clinell wipes (green pack) or Chlor clean diluted to 1,000ppm available chlorine
Patient has known <i>Clostridium difficile</i> infection	Sporicidal wipes or Chlor clean diluted to 1,000ppm available chlorine
Minor blood splashes	Clinell wipes (green pack)
Major spill of blood or body fluids containing blood	Haz tabs diluted to 10,000ppm available chlorine then detergent clean

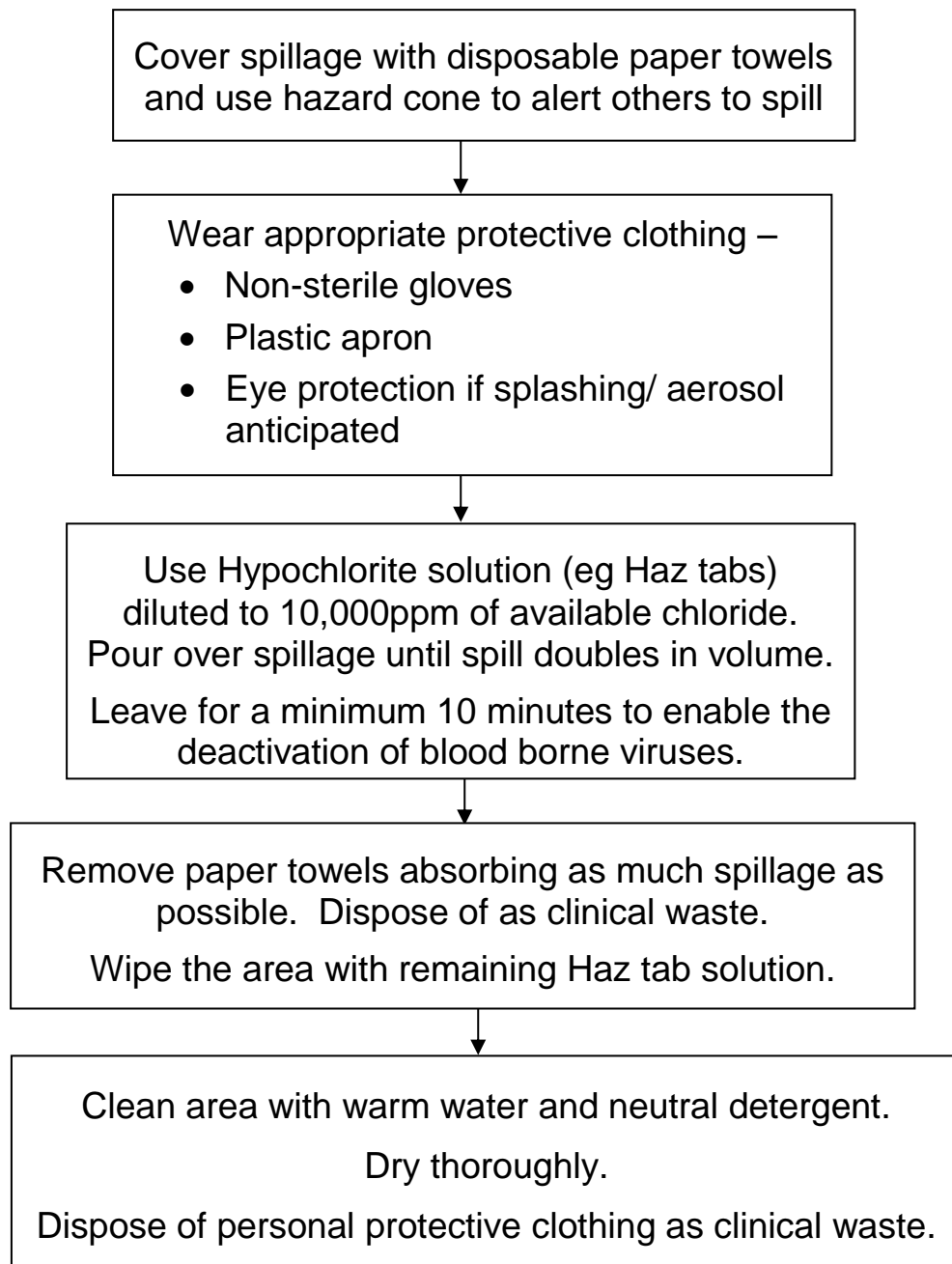
**3.3(ii) Decontaminating the environment** including fabric, fixtures and fittings of a building or vehicle (eg walls, floors, ceiling and bathroom facilities).

Side-rooms with infectious patients should be decontaminated after all other areas of the ward have been cleaned.

Level of contamination	Trust approved product	Minimum frequency
Visibly clean	York Hospital - Warm water and neutral detergent using microfibre system. Cloths and mops laundered daily by Domestic Services Scarborough and Bridlington Hospitals – Warm water and neutral detergent using disposable cloths and reusable mop heads laundered daily by Domestic Services Community Hospitals and sites - disposable cloths and mops disposed of after use	At least once daily and toilets at least 3 times a day
Visibly soiled with organic matter	Chlor clean diluted to 1,000ppm available chlorine	As required
Patient has known or suspected infectious disease	Contact IPT for advice	IPT will advise
Patient(s) symptomatic with diarrhoea +/- vomiting (including norovirus outbreaks)	Chlor clean diluted to 1,000ppm available chlorine	Ward once a day. Toilets x 4 per day Hand wash basins and high touch areas x 3 per day.
Patient has <i>Clostridium difficile</i> infection	Chlor clean diluted to 1,000ppm available chlorine	Ward once a day. Toilets x 4 per day Hand wash basins and high touch areas x 3 per day.
Blood or body fluids containing blood	Haz tabs diluted to 10,000ppm available chlorine	As required Clean with detergent after use



### 3.3(iii) Procedure for dealing with blood spillages from any patient/ source



#### **In the event of eye or skin contact with hypochlorite solution**

Wash area with copious amounts of water. Consult Occupational health or Emergency Department.

#### **4) Accountability**

All healthcare professionals and volunteers are responsible and accountable to the Chief Executive for the correct implementation of these guidelines.

Professional staff are accountable according to their professional code of conduct.

- Nursing managers are responsible for the decontamination of the re-usable clinical equipment in their ward, department or theatre and ensuring it is fit for purpose at all times.
- All staff are responsible for decontaminating the re-usable equipment that they have used so that it is ready for use by other staff members.

#### **5) Dissemination and Implementation**

These guidelines once agreed by the Infection Prevention Team and Infection Control Doctors will be approved at the Infection Prevention Operational Group (IPOG) and will then be disseminated trust wide via senior nurse meetings including the professional nurse lead forum (PNLF), domestic services managers, and via Statutory & Mandatory training and will be published on both Staffroom and the Trusts internet site.

## 6) Monitoring and Auditing

Minimum Requirements	Monitoring	Responsibility for monitoring	Frequency	Reported to
Monitoring of cleanliness of environment and clinical equipment	Environment audits	Matrons and clinical leads	Monthly	Directorate at Performance Management Meetings
	Accreditation audit		Annual	
	TAPE Surveillance (Managerial audits)	FM Compliance Team	Dependant on risk level of area	
	Technical Cleaning Audits (Synbiotix)	FM Compliance-Cleanliness monitoring team		
Monitoring of cleanliness of environment	TAPE Surveillance (Managerial audits)	FM Compliance Team	Dependant on risk level of area	
	Technical Cleaning Audits Synbiotix audits	FM Compliance-Cleanliness monitoring team		

## 7) Consultation

These guidelines will be circulated for comment between the Infection Prevention Team and the Infection Control Doctor, following consultation with clinical stakeholders the guideline will be approved at IPEOG

## 8) Supportive Evidence

National Patient Safety Agency (NPSA) 2017 National cleaning standards

<http://www.nrls.npsa.nhs.uk/resources/?entryid45=59818>

Epic 3 guidelines -

[https://improvement.nhs.uk/uploads/documents/epic3\\_National\\_Evidence-Based\\_Guidelines\\_for\\_Preventing\\_HCAI\\_in\\_NHSE.pdf](https://improvement.nhs.uk/uploads/documents/epic3_National_Evidence-Based_Guidelines_for_Preventing_HCAI_in_NHSE.pdf)

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