

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

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## **INTRODUCTION & 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.

Bacteria, viruses and fungi (micro-organisms) are ubiquitous, the hospital environment being no exception. The majority of these micro-organisms are non-pathogenic but some, given suitable conditions, will infect and cause disease.

Decontamination is the combination of processes (including cleaning, disinfection and sterilisation) used to make a reusable item safe for further use on patients and handling by staff. The effective decontamination of re-usable medical devices, clinical equipment and the environment is essential in reducing the risk of transmission of infection

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

### **1. MANAGEMENT**

#### **2.1. ROLES AND RESPONSIBILITIES**

- 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.
- All staff must document when equipment has been cleaned
- All staff must follow decontamination guidelines using products approved by the Trust
- Matrons and clinical leads will be responsible for checking that there is a clean care environment. This is a requirement of the Hygiene code, Criterion 2.

#### **2.2. TRAINING**

- Where training is necessary this will be completed at ward/ department or theatre level.
- Infection Prevention Team will advise as necessary

- Infection Prevention Team training will include specific cleaning advice for cases of infection
- Domestic training will be completed by domestic management

### 3 MONITORING COMPLIANCE WITH THE GUIDELINE

Process for monitoring e.g. audit	Lead Responsible	Frequency of monitoring	Responsible Lead / Committee for review of results and development of action plan	Responsible Lead / Committee for monitoring of action plan
Environment audits	Matrons and clinical leads	Monthly	Directorate/ Division	Directorate/ Division
Domestic services monitoring	Domestic supervisors	Dependant on risk level of area	Domestic services managers	
PLACE inspections	PLACE team leader	As requested		
Clinical support visits	Infection Prevention Nurses	Annual or as required	Senior IPNs / Hospital Infection Prevention and Control Group (HIPCG)	Senior IPNs / HIPCG
High Impact Intervention 7 – Care of Patient with <i>Clostridium difficile</i>	Infection Prevention Nurses	All <i>Clostridium difficile</i> infected patients	Senior IPNs / HIPCG	Senior IPNs / HIPCG
AIRs reporting	Infection Prevention Nurses	As occur	Senior IPNs / HIPCG	Senior IPNs / HIPCG

### 4 LINKS WITH

Trust Decontamination of Reusable Medical Devices Policy

Standard Operating Procedure: Deployment of Hydrogen Peroxide Vapour (HPV/Bioquell) Decontamination

## 5 REFERENCES

Department of Health (2010) Health and Social Care Act 2008 Code of Practice on the prevention and control of infections and related guidance  
<https://www.gov.uk/government/publications/the-health-and-social-care-act-2008-code-of-practice-on-the-prevention-and-control-of-infections-and-related-guidance>

Department of Health (2010) Saving Lives High Impact Intervention 8 - Care bundle to improve the cleaning and decontamination of clinical equipment  
[http://webarchive.nationalarchives.gov.uk/20101125133833/http://clean-safe-care.nhs.uk/Documents/High\\_Impact\\_Intervention\\_No\\_8.pdf](http://webarchive.nationalarchives.gov.uk/20101125133833/http://clean-safe-care.nhs.uk/Documents/High_Impact_Intervention_No_8.pdf)

National Patient Safety Agency (NPSA) 2010 National cleaning standards  
<http://www.nrls.npsa.nhs.uk/EasySiteWeb/getresource.axd?AssetID=75245>

**Department of Health (2009)** *Clostridium difficile* infection: How to deal with the problem  
[http://www.hpa.org.uk/webc/HPAwebFile/HPAweb\\_C/1232006607827](http://www.hpa.org.uk/webc/HPAwebFile/HPAweb_C/1232006607827)

## Appendix 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.

### **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.

### **Disinfectants –**

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

**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.

## Appendix 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.

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

#### - 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 (eg Clinell wipes – yellow (detergent) or green pack (detergent and disinfectant))	Pre-soaked wipe
Warm water and neutral detergent	Requires receptacle and disposable cloths
Microfibre system	Mops and cloths Requires receptacle for water

#### - 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
- 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.

Some disinfectants combine cleaning with disinfection.

Product	Dilution regimens	Cleaning required?
Clinell wipes (green pack)	Pre-soaked wipe	No
Sporicidal wipes	Pre-soaked wipe – needs to be moistened with warm water	No
Chlor Clean	1 tablet diluted in 1 litre of water = 1,000ppm of available chlorine	No
Hypochlorite solution i.e. Haz Tabs	4x2.5 gm tablets dissolved in 1 litre of water = 1% or 10,000ppm of available chlorine	Yes – <b>after</b> using Haz tabs

## - Hydrogen Peroxide Vapour Technology (HPV)

HPV eradicates bacteria, viruses and fungi.

The decision to deploy HPV will be taken by IPT in discussion with the Consultant Microbiologist.

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

Refer to the HPV Standard Operating Procedure.



## Appendix 3

### Decontamination of medical devices/ equipment and environment

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

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

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. This should be displayed in all clinical areas in York Hospital and community hospitals and units.

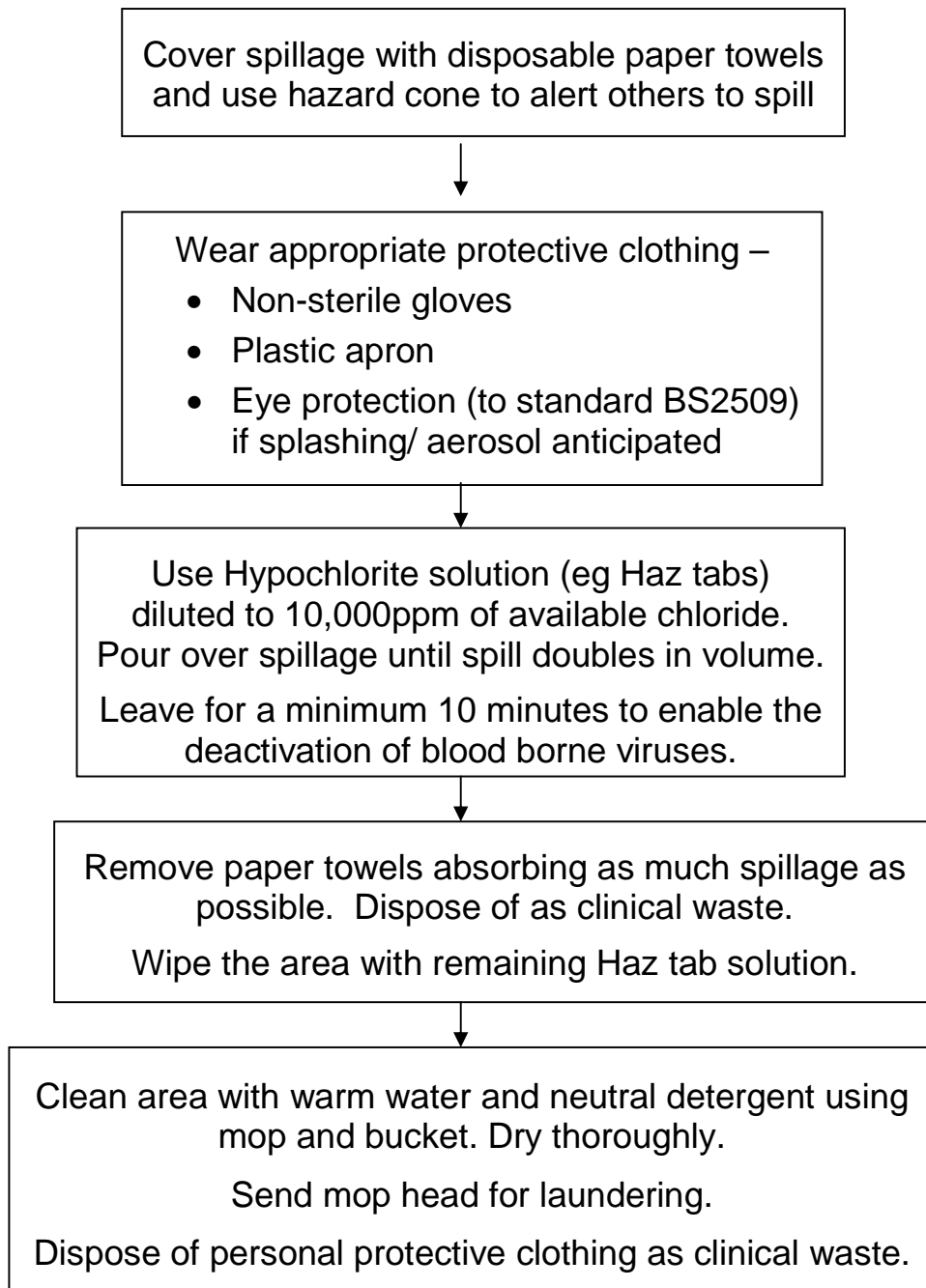
Level of contamination	Trust approved product
Visibly clean	Clinell wipes (yellow or green pack)
Visibly soiled	Clinell wipes (green pack) or Chlor clean diluted to 1,000ppm available chlorine
Patient has known <i>Clostridium difficile</i> infection	Sporicidal wipes or Chlor clean diluted to 1,000ppm 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

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

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	Affected areas once daily and toilets 4 times a day
Patient has <i>Clostridium difficile</i> infection	Chlor clean diluted to 1,000ppm available chlorine	Whole ward twice daily and toilets 4 times a day
Blood or body fluids containing blood	Haz tabs diluted to 10,000ppm available chlorine	As required Cleaning required after use
<b>Enhanced decontamination of the environment</b>		
Intensive Care and acute admission wards Wards with extra beds in bays	Chlor clean diluted to 1,000ppm available chlorine	Whole ward daily and toilets 4 times a day

## Appendix 4

### 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.

Name of Document	
1.	<p><b>What are the intended outcomes of this work?</b>  <i>To inform all staff of decontamination requirements of reusable equipment and the environment</i></p>
2	<p><b>Who will be affected?</b> <i>e.g. staff, patients, service users etc</i>  <i>All staff who use reusable equipment</i></p>
3	<p><b>What evidence have you considered?</b>  <i>See references</i></p>
a	<p><b>Disability</b>  <i>Not applicable</i></p>
b	<p><b>Sex</b>  <i>Not applicable</i></p>
c	<p><b>Race</b>  <i>Not applicable</i></p>
d	<p><b>Age .</b>  <i>Not applicable</i></p>
e	<p><b>Gender Reassignment</b>  <i>Not applicable</i></p>
f	<p><b>Sexual Orientation</b>  <i>Not applicable</i></p>
g	<p><b>Religion or Belief</b>  <i>Not applicable</i></p>
h	<p><b>Pregnancy and Maternity.</b>  <i>Not applicable</i></p>
i	<p><b>Carers</b>  <i>Not applicable</i></p>
j	<p><b>Other Identified Groups</b>  <i>Not applicable</i></p>

<b>4.</b>	<b>Engagement and Involvement</b>	
<b>a.</b>	Was this work subject to consultation?	Yes
<b>b.</b>	How have you engaged stakeholders in constructing the guideline	<i>Not applicable</i>
<b>c.</b>	If so, how have you engaged stakeholders in constructing the guideline	
<b>d.</b>	For each engagement activity, please state who was involved, how they were engaged and key outputs	
<b>5.</b>	<b>Consultation Outcome</b> <i>Now consider and detail below how the proposals impact on elimination of discrimination, harassment and victimisation, advance the equality of opportunity and promote good relations between groups</i>	
<b>a</b>	Eliminate discrimination, harassment and victimisation	<i>Not applicable</i>
<b>b</b>	Advance Equality of Opportunity	<i>Not applicable</i>
<b>c</b>	Promote Good Relations Between Groups	<i>Not applicable</i>
<b>d</b>	What is the overall impact?	<i>Not applicable</i>
	<b>Name of the Person who carried out this assessment:</b> Jane Balderson	
	<b>Date Assessment Completed</b> June 2014	
	<b>Name of responsible Director</b> Alaistair Turnbull	

If you have identified a potential discriminatory impact of this guideline, please refer it to the Equality and Diversity Committee, together with any suggestions as to the action required to avoid/reduce this impact.