



# Decontamination Policy

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## **Introduction**

All medical devices and equipment used in healthcare environments may become contaminated with biological, chemical or radioactive material and thus can present a risk to patients, as well as to those subsequently handling or using them.

Decontamination is an umbrella term used to describe processes that make equipment safe for re-use which includes the destruction or removal of micro-organisms. Inadequate decontamination is frequently associated with outbreaks of infection.

Safe and effective decontamination and handling of medical devices / equipment is essential in reducing the risk of cross infection.

Decontamination is a combination of processes – cleaning, disinfection and/or sterilisation – that are used to ensure a reusable medical device or patient equipment is safe for further use.

Accumulation of dust, dirt and liquid residues in the environment will increase infection risks and should be reduced to a minimum. This can be achieved by regular and thorough cleaning. Cleaning is the critical element of the process and should always be undertaken thoroughly regardless of the level of decontamination required.

## **Decontamination of Equipment**

Equipment used in health care may be designated as single use, single patient use or reusable multi-patient use. Any equipment not designated as a single use item must be made safe following use to prevent micro-organisms being transferred from equipment to patients and potentially resulting in infection.

**Single use items** must be disposed of after use and will always be marked with this symbol



### ***Reusable multi-patient use equipment***

The required method/level of decontamination will be determined by the degree of infection risk the equipment/device poses. Risk of infection from equipment can be classified into three categories.

<b>RISK</b>	<b>USE OF ITEM</b>	<b>MINIMUM DECONTAMINATION REQUIRED</b>
<b>HIGH</b>	<ul style="list-style-type: none"><li>• In close contact with a break in the skin or mucous membrane</li><li>• For introduction into sterile body areas</li></ul>	<b>STERILISATION Or SINGLE USE ITEM</b>
<b>MEDIUM</b>	<ul style="list-style-type: none"><li>• In contact with intact mucous membrane</li><li>• Contaminated with particularly virulent or readily transmissible organism. Prior to use on immunocompromised patients</li></ul>	<b>DISINFECTION Preceded by cleaning</b>
<b>LOW</b>	<ul style="list-style-type: none"><li>• Items in contact with healthy skin or</li><li>• Not in direct contact with patient</li></ul>	<b>CLEANING</b>

## **Stages of Decontamination**

There are three stages of the decontamination process – cleaning, disinfection and sterilisation.

### **Cleaning**

- Cleaning is the physical removal of dirt and organic matter
- Cleaning removes up to 80% of micro-organisms and is an essential part of an infection control programme. Given that organic matter will inactivate some disinfectants, all items must be cleaned before disinfection or sterilisation can be achieved.
- The item must be cleaned thoroughly using neutral detergent and warm water, rinsed and dried. Alternatively, hard surface detergent wipes may be used – these are single use and must be discarded in between each activity/surface/item.
- Where wipes are used the cleaning process must be as thorough as with neutral detergent and water.
- Cleaning must always be carried out in a way so as to minimise the risk of recontamination. Staff should work from the cleanest surface to the dirtiest.
- Always follow the manufacturer's recommendations for dilution of neutral detergent. The usual strength for environment cleaning is 0.1% e.g 5mls of Hospesec neutral detergent in 5litres of water.

**For items contaminated with blood and blood stained fluids, refer to the blood and body fluid spillage policy.**

### **Disinfection**

Disinfection is the removal and destruction of adequate numbers of potentially harmful micro-organisms to allow the item to be handled, transported or used safely.

The most effective method of disinfection is heat disinfection. However, chemical disinfection is more widely used e.g alcohol or chlorine releasing agents. It should be noted that spore-forming organisms such as *Clostridium difficile* are not destroyed by disinfection alone.

Manufactures instructions must always be followed regarding the recommended disinfection method/product.

Where alcohol wipes are used for medical device decontamination, the wipes must be CE marked. Under no circumstances must alcohol hand rub be used to disinfect equipment, devices or surfaces.

**Thorough cleaning must always precede disinfection.**

### **Safe Use of Disinfectants**

- When handling disinfectants wear appropriate personal protective clothing e.g. plastic aprons, gloves and face/eye protection.
- Work in a well ventilated area with easy access to running water and eye wash solutions.
- Staff handling disinfectants must be trained in their use
- Disinfectants are stored in the locked cupboard in the treatment room.

Some bacteria can grow in disinfectants. To prevent this from happening the following should always be observed:

- The expiry date on each solution should be checked before use. Out of date solutions must not be used and should be disposed of.
- A sterile solution, once opened, should be regarded as non-sterile
- Replace container caps securely after use
- Water must never be left standing in clean buckets, even if it contains a disinfectant
- All mop heads should be colour coded and disposable or able to withstand laundering in a washing machine and stored clean, with head uppermost
- Partially full bottles of disinfectant should never be 'topped up'

### **Disinfectants Used**

Chlorine-releasing Agents (e.g. NaDCC tablets such as Haztabs, Chlor-Clean, Hypochlorites e.g. Milton)

Chlorine releasing agents are relatively cheap and effective disinfectants which act by releasing available chlorine. They are rapidly effective against viruses, fungi, bacteria and most spores. They are particularly recommended for use where there is a hazard of viral infection, such as hepatitis B virus or HIV. However, chlorine-releasing agents are inactivated by organic matter. They should not be mixed with other chemicals, unless directed by the manufacturer.

- Care is necessary with metals as chlorine is corrosive. Chlorine powders or granules may be applied directly to small spillages of blood or body fluids. Refer to the policy for the management of blood and body fluid spillages policy.
- Anti microbial detergent eg. Chlor-Clean or Virkon and is a one stage process, eliminating the need to clean separately before disinfection.
- Hypochlorites such as Milton will lose their efficacy once opened and any remainder must be discarded.
- The concentration of hypochlorite solutions is expressed as parts per million of available chlorine.

<b>USE OF CHLORINE RELEASING AGENT</b>	<b>Available Chlorine (parts for million ppm)</b>	<b>Examples of chemicals</b>
Blood Spillages	10,000	Haz Tbas
General environment cleaning and disinfection	1,000	Chlor-Clean

### ***Antimicrobial 2 in 1 Wipes***

- These are wet wipes impregnated with a detergent and a disinfectant, which is effective against viruses, fungi, bacteria and most spores, including *Clostridium difficile*. This is a one-stage process, eliminating the need to clean before disinfection.

### ***Alcohol***

- Alcohol is available as a gel for hand decontamination. (See hand hygiene policy)
- Alcohol has a variable efficacy against viruses and is ineffective against spores (See hand hygiene policy).
- Ethyl alcohol 70% (ethanol) and 60% isopropyl alcohol (isopropanol) are both effective and rapidly acting disinfectants, with the advantage of evaporation, leaving the treated surface dry. However, they have poor penetrative powers, therefore must **only be used on clean, dry surfaces**.

### **Individual Cleaning Policies**

The practice uses disposable paper roll for covering examination couches, which is changed between patients and the paper roll is stored off the floor. The examination couches are cleaned at the end of the day and after patient use if required.

The patient privacy curtains are thermally disinfected every 6 months at the local dry cleaners.

The practice has separate decontamination protocols and cleaning schedules for individual items, including the INR testing machine, Coaguchek and Ear Irrigator.

### **Environment Cleaning**

All staff are responsible for ensuring that the individual environment they work in is kept clean and free from clutter.

The practice has a cleaner every morning. Detailed cleaning schedules and audits of cleaning are recorded separately.

### **Covid**

Additional cleaning will take place to wipe down any touch points after each patient contact.

If any patient with confirmed Covid enters the building, thorough cleaning will take place in line with current National Covid Infection Control Policies.