



# The Smae Institute Health and Safety Guidelines

## Hand washing

Considered one of the most important hygiene measures in preventing cross contamination.

### General

Hands must be washed and dried before and after contact with a patient and any activity where contamination may have occurred.

Hand washing used for general and non- surgical procedures includes washing the hands and wrists for 15 seconds using a lather of mild soap and rinsing under water.

Once washing is complete the hands should not touch the taps and should be dried using paper towels.

### Surgical

Surgical hand washing has the same technique as general above however it also involves antimicrobial soap for five minutes, scrubbing the forearms, allowing water and soap to drain to the elbows and drying with a sterile hand towel. This technique is performed before any invasive procedure and before using surgical gloves.

### Alcohol Rubs

Alcohol rub, gels or rinses are to be dispensed onto visibly clean dry hands and only utilised when hand-washing facilities are not available. The hands must be washed after every sixth application to remove product residue.

## Personal protective equipment

### - Gloves

Selected for comfort and fit with the hands washed before and after glove use. Gloves are single use items and must be changed after each patient procedure (or during treatment of the same patient if there is a risk of cross infection) and removed on procedure completion. The gloves must conform to European Community (EC) standards.

### - Non- sterile gloves

For procedures where there is the possibility of penetrating the skin, hand contamination or bodily fluid exposure. Powder free gloves are recommended as powder can cause skin sensitivity.

### - Sterile gloves

For all surgical, sterile or invasive procedures and applied with sterile technique.

### - Masks

To prevent inhalation of fine particles and fluid splashes masks are recommended.

### - Eye protection

Safety goggles are recommended to prevent foreign objects, dust and fluid splashes coming into contact with the eyes (contact lenses are not sufficient).

### - Aprons

Plastic single use aprons protect the practitioners clothing and prevent cross contamination. They are discarded after each patient.

### - Footwear

Covered toe box and enclosed heel counter of shoes are recommended to prevent sharp and chemical injuries.

## **Risk management**

- **Blood and fluid exposures**  
Documented procedural pathways for staff sharps/ bodily fluid or tissue exposure is recommended.
- **Immunisation**  
Current Hepatitis B, tuberculosis and chickenpox (varicella) immunisations are suggested.

## **Clinical workflow**

The clinical workflow and sterilisation areas should contain sterile, clean and soiled areas segregated to avoid cross contamination. Work surfaces should be non-porous, smooth, join free and easily cleaned.

## **Treatment field**

To prevent cross contamination every item in the treatment field should be cleaned/ sterilised between each patient and only the necessary items needed for the current patient should be in the immediate working environment. Establish a clutter free environment with separate areas for note taking, dressings, medicaments and other items away from the main treatment field.

## **Dressings, medicaments and adhesives**

Dressings and medicaments should be applied with aseptic technique and with clean or gloved hands where appropriate. Unwanted materials should be discarded to control cross contamination.

## **Single use items**

Single use items should be discarded after application and under no circumstances reused.

## **Waste disposal**

- **Clinical waste**  
Any human bodily fluid or tissues, discarded sharps and dressings removed from the patient. It must be removed by a contractor specialising in clinical waste and placed in the international yellow biohazard waste container/ bag with the black symbol.
- **Sharps Management**  
Caution should be undertaken when handling sharps they should be separated from clinical waste at the point of use. They should not be passed by hand between staff or re-capped/ wrapped, but placed in puncture proof sharps container and disposed of in an appropriate biohazard sharps removal facility.

## **Sterilisation and cleaning of reusable equipment**

To prevent cross infection sterilisation or appropriate cleaning of reusable equipment must be adhered to. All cleaning activities within a healthcare facility should conform to the requirements of the Health and Safety at Work Act 1974 and all staff should be aware of The Control of Substances Hazardous to Health (COSHH) regulations.

- **Sterilisation required**  
Any instruments or equipment that have the capability of penetrating the skin or that come into contact bodily fluids.
- **Disinfection required**  
For equipment that will not penetrate the skin or contact bodily fluids (This is not a substitute for sterilisation where sterilisation is called for).
- **Decontamination of reusable equipment**  
This is the initial step in both disinfection and sterilisation. Hands are washed (water should be of drinking quality). Personal protective equipment is used to prevent contamination and injury during all cleaning, decontamination and sterilisation processes, with the workflow moving from dirty-clean-sterile.

### **Step 1 Initial rinse**

Rinse instruments in cool running water to remove debris, holding low in the sink to avoid splashing. The instruments can be lightly scrubbed to remove any visible contamination

### **Step 2**

#### **Ultrasonic cleaning**

Effective on coarse and hinged instruments to remove debris. The cleaner should be filled/refilled with fresh solution daily/or if the solution becomes cloudy during the course of the day.

Instruments are disassembled prior to cleaning where appropriate.

#### **Manual scrubbing**

Either ultrasonic or manual cleaning of instruments is acceptable. Manual cleaning involves using a firm plastic bristled instrument brush to remove any visible debris. The instruments are disassembled where appropriate and immersed in warm water with suitable solution recommended by the steriliser manufacturer.

### **Step 3 Final rinse**

The instruments are rinsed under hot running water, with the hinged instruments moved through their working motion.

### **Step 4 Drying**

Instruments are dried with a dedicated lint free cloth immediately after rinsing and inspected for function.

#### **- Bagging of instruments**

Recommended to maintain sterility during storage and transportation of instruments. Hinged instruments are packed in the opened position. The pouch is placed flat on the sterilisation tray with the paper side resting on the tray and the hollow section of hollowware facing the paper section of the bag.

#### **- Sterilisation**

The device bulletin DB 2002[06] from the Medicines and Healthcare products Regulatory Agency (MHRA) giving specifications on operating temperatures, times and service schedules for sterilizers can be found on their website [www.mhra.gov.uk](http://www.mhra.gov.uk)

- **Steam bench top steriliser**

Suitable for the sterilisation of not bagged and solid items only.

- **Steam pre vacuum bench top steriliser**

Suitable for all bagged and not bagged items solid, porous or hollow.

- **Centralised sterile service facility**

Where available use a sterile service facility to process contaminated instruments.

- **Cooling**

The usage of heat protective gloves or tray lifters prevents burns when removing trays from the sterilizer.

## **Validation of the sterilisation process**

- Indicators should be discussed with the steriliser manufacturer or sterilisation technician.

- **Packaged instruments**
  - **Process indicator**
    - Placed in every pack to demonstrate the instruments have been exposed to the sterilisation process distinguishing between sterile/ non sterile packs (however, they do not necessarily not indicate the contents are sterile).
  - **Multi parameter, integrating or emulating indicator**
    - Validates content sterility with the steriliser reaching sufficient temperature/ steam penetration and time. It is best practice to place one of these in every load and every surgical pack.
- **Non- wrapped instruments**
  - **Multi parameter, integrating or emulating indicator**
    - Validates content sterility with the steriliser reaching sufficient temperature and time. It is best practice to place one of these in every load.
- **Biological indicator**  
Performed annually, after steriliser repairs and at installation by a trained service technician.
- **Monitoring sterilizer efficiency**  
Documentation consisting of indicators, printouts and annual servicing/ biological indicators. All recorded and the data carefully stored.

## Transportation of equipment

All instruments transported must be in designated solid walled container, there should be one container that is for sterile instruments and one for non-sterile instruments. Sterile instruments should be bagged to ensure valid sterility.

## Maintenance of equipment

Maintain equipment and instruments in an acceptable working condition with the manufacturers guidelines.

## Material safety data sheets

A folder containing the safety/ emergency information of all products and their composition is recommended (The Control of Substances Hazardous to Health Regulations 2002 COSHH).

## Patient record keeping

It is the practitioner's legal responsibility to have clear, accurate and up to date documented patient records. All entries must be dated, signed including all personal, medical and treatment information. Patient records should be stored in a secure location. If you use electronic patient records you shall need to register/notify the data protection commissioner and the fee for this is currently £35 per year.

([www.dataprotection.gov.uk](http://www.dataprotection.gov.uk))

References and further reading:

[www.dataprotection.gov.uk](http://www.dataprotection.gov.uk)

[www.healthandsafety.co.uk/haswa.htm](http://www.healthandsafety.co.uk/haswa.htm)

[www.hse.gov.uk/coshh/](http://www.hse.gov.uk/coshh/)

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[www.rcn.org.uk/resources/mrsa/healthcarestaff/infectioncontrol/handhygiene.php](http://www.rcn.org.uk/resources/mrsa/healthcarestaff/infectioncontrol/handhygiene.php)

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